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Protecting the poor

A microinsurance compendium Volume II

Edited by
Craig Churchill and Michal Matul



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Lastly, we dedicate this book to the memory of our colleague José Navarro, an actuary and humanitarian, whose passion for protecting the poor continues to inspire us all.

Craig Churchill and Michal Matul
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Table of acronyms

AABY	Aam Admi Bima Yojana (India)
ACORD	Association for Cooperative Operations Research and Development
AD&D	accidental death and disability
ADB	Asian Development Bank
AIC	Alternative Insurance Company (Haiti)
AIC	Agriculture Insurance Corporation (India)
AIDS	acquired immune deficiency syndrom
AIG	American International Group
AIO	African Insurance Organisation
AKAM	Aga Khan Agency for Microfinance
AKDN	Aga Khan Development Network
ALMAO	All Lanka Mutual Assurance Organization (Sri Lanka)
APRA	Australian Prudential Regulatory Authority
ASR	Aseguradura Rural (Guatemala)
ATP	ability to pay
AWS	automated weather stations
BIP	Base Insurance Product
BG	bidding game
BHI	basic health insurance
BMZ	Federal Ministry for Economic Cooperation and Development (Germany)
BoP	bottom of the pyramid
BPL	below poverty line
BRS	Belgian Raiffeisen Foundation
CARD	Center for Agriculture and Rural Development (Philippines)
CaribRM	Caribbean Risk Managers Limited
CARICOM	Caribbean Community
CBHI	community-based health insurance
CCIS	Comprehensive Crop Insurance Scheme
CCRIF	Caribbean Catastrophe Risk Insurance Facility
CDA	Cooperative Development Authority

Cenfri	Centre for Financial Regulation and Inclusion
CEO	Chief Executive Officer
CGAP	Consultative Group to Assist the Poor
CHAT	Choosing Health-plans All Together
CHF	community health fund
CIC	Cooperative Insurance Company (Kenya)
CIF	Confédération des Institutions Financières (West Africa)
CIGNA	Connecticut General Life Insurance Company of North America
CIRC	China Insurance Regulatory Commission
CIRM	Centre for Insurance and Risk Management (India)
CLIMBS	Coop Life Insurance and Mutual Benefit Services (Philippines)
COP	Conferences of the Parties
CRED	Centre for Research on the Epidemiology of Disasters
CSC	common service centers
CSR	corporate social responsibility
CV	contingent valuation
DBCV	double-bounded contingent valuation
DC	dichotomous choice technique
DECSI	Dedebit Credit and Savings Institution
DFID	Department for International Development (United Kingdom)
DGA	Denis Garand & Associates
DHAN	Development for Human Action Foundation
DNA	deoxyribonucleic acid
DRP	Disaster Response Product
DRTV	direct response television
ENT	ear, nose and throat
EPSS	Empresa Promotora de Servicios de Salud (Guatemala)
EU	European Union
EUDN	European Development Research Network
FAIS	Financial Advisory and Intermediary Services Act (South Africa)
FAO	Food and Agriculture Organization of the United Nations
FAQ	frequently asked questions
Fasecolda	Federación de Aseguradores Colombianos
FEWS NET	Famine Early Warning System Network
FGD	focus group discussion
FICCO	First Community Cooperative
FIDES	Federación Interamericana de Empresas de Seguros
FINCA	Foundation for International Community Assistance
FINO	Financial Information Network and Operations
FMiA	First Microinsurance Agency (Pakistan)

FMD	foot and mouth disease
FSA	Financial Services Authority
FSB	Financial Stability Board
FUNDASEG	Fundación de Aseguradores Colombianos
GDP	gross domestic product
GESS	Global Extension of Social Security (ILO)
GFDRR	Global Facility for Disaster Risk and Reduction
GFEP	Global Financial Education Program
GIIF	Global Index Insurance Facility
GIZ	Gesellschaft für Internationale Zusammenarbeit (Germany)
GNP	gross national product
GoI	Government of India
GPRS	general packet radio service
GRET	Groupe d'échange et de recherche technologique (Cambodia)
GTZ	Gesellschaft für Technische Zusammenarbeit (Germany)
HARITA	Horn of Africa Risk Transfer for Adaptation
HH	household
HIS	health insurance scheme
HIV	human immunodeficiency virus
HMI	health microinsurance
HR	human resources
IAA	International Actuarial Association
IAIS	International Association of Insurance Supervisors
IBLI	index-based livestock insurance
IC	Insurance Commission (Philippines)
ICARD	International Center for Agricultural and Rural Development
ICMIF	International Cooperative and Mutual Insurance Federation
ICP	insurance core principles
ICRISAT	International Crop Research Institute for the Semi-Arid Tropics
ICT	information and communication technology
ICU	intensive care
ID	identification
IDB	Inter-American Development Bank
IEI	in-patient expenses insurance
IFAD	International Fund for Agriculture Development
IFC	International Finance Cooperation
IFFCO	Indian Farmers Fertiliser Cooperative Limited
IFMR	Institute for Financial Management and Research (India)
IFPRI	International Food Policy Research Institute
ILAL	Insure Lives and Livelihood Programme (India)
ILO	International Labour Organization

IMF	International Monetary Fund
INR	Indian Rupee
IOM	International Organization for Migration
IP	in-patient
IPCC	Intergovernmental Panel on Climate Change
IRAM	Institut de Recherche et d'Applications des Méthodes de Développement (Mozambique)
IRDA	Insurance Regulatory and Development Authority (India)
IRDП	Integrated Rural Development Programme
IRI	International Research Institute for Climate and Society
IT	information technology
ITGI	IFFCO Tokio General Insurance Company, Ltd. (India)
JBT	Jamii Bora Trust (Kenya)
JBY	Janashree Bima Yojana (India)
KES	Kenyan Shilling
KFW	Kreditanstalt Für Wiederaufbau (Germany)
KPI	key performance indicators
LIC	Life Insurance Corporation (India)
LIC	low-income countries
LIS	Livestock Insurance Scheme (India)
LPS	Livestock Protection Scheme (India)
MAS	Manipal Arogya Suraksha Yojana (India)
MBA	mutual benefit association
MCCO	mutuals, cooperatives and community-based organizations
MCDI	Medical Care Development International
MCII	Munich Climate Insurance Initiative
MFI	microfinance institution
MFIC	Microfinance International Corporation
MGA	managing general agents
MIA	Micro Insurance Academy
MiCRO	Microinsurance Catastrophic Risk Organization
MIS	management information system
MNAIS	Modified National Agricultural Insurance Scheme (India)
MNO	mobile network operator
MNYL	Max New York Life
MOLISA	Ministry of Labour, Insurance and Social Affairs (Viet Nam)
MTA	money transfer agent
NABARD	National Bank for Agriculture and Rural Development (India)
NAIS	National Agriculture Insurance Scheme (India)
NASFAM	National Smallholder Farmers' Association of Malawi
NCMS	New Cooperative Medical Scheme (China)

NCMSL	National Collateral Management Services Limited
NDVI	normalized difference vegetation index
NGO	non-governmental organization
NHIF	National Health Insurance Fund (Ghana)
NHIF	National Hospital Insurance Fund (Kenya)
NIC	national identity card
NICE	National Insurance Corporation of Eritrea
NSCB	National Statistical Coordination Board (Philippines)
NSSF	National Social Security Fund (Kenya)
OE	open-ended formats
OECD	Organisation for Economic Co-operation and Development
OEI	outpatient expense insurance
OOP	out-of-pocket
OP	outpatient
PA	partner agent
PACC	Programa de Atención a Contingencias Climatológicas (Climate Contingencies Programme, Mexico)
PACE	product, access, cost, experience
PACS	primary agricultural credit societies
PC	payment card
PHFI	Public Health Foundation of India
PHP	Philippines Pesos
PIA	partner intermediary agent
PICC	People's Insurance Company of China
PoS	point-of-sale
PPP	public-private partnership
PRADAN	Professional Assistance for Development Action
PWDS	Palmyrah Workers Development Society (India)
RCT	randomized controlled trial
REST	Relief Society of Tigray (Ethiopia)
RFID	radio frequency identification device
RMB	Chinese Yuan
ROSCA	rotating savings and credit association
RP	revealed preferences
RPLI	Rural Postal Life Insurance (India)
RSBY	Rashtriya Swasthya Bima Yojana (India)
SaaS	Software as a Service
SACCO	savings and credit cooperative organization
SACCOL	Savings and Credit Co-operatives League
SAHB	State Animal Husbandry Department (India)
SAIA	South African Insurance Association

SBS	Superintendencia de Banca, Seguros y AFP (Peru)
SCC	Swedish Cooperative Centre
SDA	state designated agency (India)
SDC	Swiss Development Corporation
SEC	Securities and Exchange Commission
SECP	Securities and Exchange Commission of Pakistan
SEED	Save, Earn, Enjoy Deposits
SEEP	Small Enterprise Education and Promotion Network
SEGURO	Solvency/stability, Efficiency, Governance, Understanding of the Product, Risk-based capital and Outreach
SES	socio-economic status
SEWA	Self Employed Women's Association (India)
SFDA	Small Farmers' Development Agency (India)
SICL	Sanasa Insurance Company, Ltd.
SI-CUN	Self-Insured Credit Union Network
SI-MFI	self-insurance microfinance institution
SHEPHERD	Self-Help Promotion for Health and Rural Development
SHG	self-help group
SIM	subscriber identity module
SINCAF	Sindicato Carioca dos Fiscais de Renda
SKDRDP	Sri Kshetra Dharmasthala Rural Development Programme
SKY	Sokhapheap Krousar Yeung (Health for Our Families, Cambodia)
SLDB	State Livestock Development Board (India)
SMS	short message service
SP	stated preferences
SRF	social risk fund
SSP	Swayam Shikshan Prayog (India)
SSS	Sarva Shakti Suraksha
SSS	Social Security Software (DHAN Foundation, India)
SUSEP	Superintendência de Seguros Privados (Brazil)
TA	technical assistance
TCF	treating customers fairly
TIOLI	"take it or leave it" approach
TPA	third-party administrator
TPD	total and permanent disability
TPP	third-party payment
TSKI	Taytay Sa Kauswagan, Inc. (Philippines)
UEMOA	Economic Community of West African States
UMASIDA	Umoja wa Matibabu Sekta Isiyo Rasmi Dar es Salaam (United Republic of Tanzania)

UMSGF	Union des Mutuelles de Santé de Guinée Forestière (Guinea)
UN	United Nations
UNDP	United Nations Development Programme
UNIFEM	United Nations Development Fund for Women
USAID	United States Agency for International Development
VCI	vegetation condition index
VHC	village health champion
VHI	Vietnam Health Insurance
VOIP	voice over internet protocol
WASP	wireless access service provider
WBCIS	Weather-based Crop Insurance Scheme (India)
WFII	World Federation of Insurance Intermediaries
WFP	World Food Programme
WHO	World Health Organization
WMO	World Meteorological Organization
WRMS	Weather Risk Management Services (India)
WTP	willingness to pay
WWB	Women's World Banking
XBRL	eXtensible Business Reporting Language
XML	eXtensible Markup Language

Introduction

Craig Churchill and Dirk Reinhard

The poorest citizens of the poorest countries are typically exposed to the greatest risks. Earthquakes, floods, drought, disease, crime all tend to hit the poor hardest. Vulnerability and poverty go hand in hand, but microinsurance holds out the promise of breaking a part of the cycle that ties them together.

Jonathan Morduch, 2006

Five years after the publication of the first volume of *Protecting the poor: A microinsurance compendium*, the publishers felt that it was time to look at recent developments and achievements and consider where the industry stands now.

The intervening years have seen a significant transformation. In 2008, the launch of the ILO's Microinsurance Innovation Facility, financed initially by the Bill & Melinda Gates Foundation, substantially increased the number of microinsurance pilots and research activities. In 2009, the CGAP Working Group on Microinsurance became the Microinsurance Network to formalize its efforts to share experiences and collaborate on improvements. In addition, in 2009, the Access to Insurance Initiative was launched – the second offshoot of the Network after the Facility – to help strengthen the understanding of insurance supervisors and their ability to create an environment more favourable to inclusive insurance. Microinsurance providers evolved as well. While many of the schemes discussed in the first book involved small organizations, there is now active involvement by governments and the insurance industry, which contributes to the attainment of significant scale.

The quotation above from Morduch talks about the promise of microinsurance to contribute to breaking the cycle of vulnerability and poverty. As described throughout this book, significant progress in fulfilling that promise is being made, though it still remains an aspiration. The promise of microinsurance can be seen at various levels as it benefits the working poor and their service providers, and contributes more broadly to economic development.

Benefits for the working poor

At the household level, the potential contribution of microinsurance to breaking the cycle of poverty has both protective and productive roles (e.g. Collins et al., 2009, Dercon, 2005, Cohen and Sebstad, 2005). There are many challenges in measuring these benefits, but initial evidence presented in Chapters 3 and 15 illustrates that some of those benefits are being realized.

On the protective side, insurance can protect policyholders from the financial consequences of various risks, including illness and death. If a risk is insured, the poor can cope more efficiently when they experience large losses. Regular payments of small premiums are easier to afford than the large immediate expenses that accompany crises.

On the productive side, insurance can be a means through which the poor can amass a lump sum of savings, for example through a long-term life insurance policy that allows them to build assets. Alternatively, insurance can help unlock access to productive inputs such as credit by covering some of the risks (e.g. drought, excess rain and livestock death) that a lender does not want to assume. There is also the peace-of-mind effect whereby the poor may feel less compelled to set aside unproductive funds in contingency saving under the mattress if they are insured, and therefore they may make larger investments, possibly in higher-risk, higher-return activities.

Benefits for the providers

A diverse range of organizations are involved in the provision of insurance to low-income households. Although these organizations have a variety of motivations and interests, they all can, or at least should, be able to benefit from providing insurance to the working poor.

Insurance can help cooperatives, unions, non-governmental organizations (NGOs), self-help groups, and other organizations that are primarily interested in helping their members manage risks, to achieve their social objectives. As such, insurance can be an ideal tool to complement other services they might be providing, including loss prevention, financial education and the provision of savings and emergency loans.

Microinsurance can assist more commercially minded organizations in entering a new market or expanding their services to an existing market. For example, microinsurance provides insurers with a bottom of the pyramid (BoP) strategy (Prahalad, 2005) to effectively reach and serve the next generation of policyholders today. For delivery channels, such as retailers, utility companies and providers of agricultural inputs, microinsurance is not only an additional source of revenue, but if designed properly, can also generate additional turnover for their core business.

Even governments can fall into this category of provider. Where they have an interest in extending social protection cover to excluded populations, such as workers in the informal economy, microinsurance may be a means to achieve that objective. Additionally, the proliferation of microinsurance should provide governments with more efficient means of expanding social protection, providing better cover against the increasing threat of natural disasters, and achieving public policy objectives including several of the Millennium Development Goals (Churchill, 2006).

Benefits for the community and the country

Various studies have demonstrated a causal link between the development of the insurance industry in general – not specifically microinsurance – and national economic development (Arena, 2006; Haiss and Sumegi, 2008). This is accomplished in part by supporting entrepreneurial activity. For example, by enabling businesses to operate with less volatility, insurance can promote economic stability. Since insurers and reinsurers have an incentive to reduce claims, they contribute to development by promoting risk reduction measures. Insurance can be used to manage certain risks faced by creditors and borrowers more efficiently than other financial instruments, thereby facilitating access to credit and stimulating entrepreneurial effort. Insurance also facilitates investment in higher-risk, higher-return business opportunities by helping measure and manage high-risk exposures. Investment in higher-return activities in turn contributes to higher productivity and economic growth.

More broadly within the economy, by mobilizing long-term savings insurers are an important source of long-term finance that can be invested in initiatives such as infrastructure improvements, as well as acting as a significant stimulator for the development of debt and equity markets. As prominent investors in equity markets, insurers can compel listed companies to adopt stronger corporate governance measures and greater transparency. In summary, according to Brainard (2008), “The net result of well-functioning insurance markets should be better pricing of risk, greater efficiency in the overall allocation of capital and mix of economic activities, and higher productivity.”¹

An important item missing from the literature thus far is the possible specific contribution of microinsurance to the deepening and strengthening of the insurance industry in general. Insurance industries in developed countries were largely built on a strong foundation along retail lines, perhaps with roots that can be traced back to friendly societies or industrial life assurance. The insurance sectors

¹ For more details on the impact of insurance development on economic development, see USAID (2006), Brainard (2008) and Skipper (1997).

in many emerging and developing economies evolved in the second half of the 20th century, and focused largely on corporate clients, with little effort made to build the infrastructure required for retail or personal lines.

Since many countries have missed out on this initial stage of insurance development and leapfrogged to more sophisticated lines, the insurance sectors may be thin and not well developed. Microinsurance, however, can provide them with an opportunity to rebuild from the bottom up and create a foundation of retail insurance, and ultimately make a stronger contribution to the country's general economic development. It is interesting to note that developing countries in which the insurance industry did have a strong retail base, such as India and South Africa, have emerged among the microinsurance leaders.

The contribution of microinsurance to the community and the country extends beyond its involvement in deepening the insurance industry. As microinsurance lies at the intersection between social protection and financial inclusion – two critical agenda items for the G-20 – its contribution to economic development will be greatest where these forces are well coordinated. For example, public-private partnerships seem to be an important way to get the best of both worlds, although it is easier said than done. Similarly, as suggested by Dercon (2011), cash transfers that provide a steady income stream for low-income households could be supplemented by insurance to help those same households to manage risk more efficiently as well.

Microinsurance is unlikely to break the cycle of poverty by itself, but it is a valuable tool in the poverty alleviation toolkit. When coupled with risk prevention and mitigation, and supplemented by other risk-managing financial services such as savings and emergency loans, insurance can play a critical role at multiple levels to efficiently manage risks, reduce vulnerability and, it is hoped, contribute to poverty alleviation.

Target audience

As described in Chapter 1, for microinsurance to succeed it requires the commitment of a host of stakeholders. Without the cooperation of insurance professionals, distribution channels, policymakers and supervisors, technical assistance and service providers, donors, community organizations and academics, it would hardly be possible to provide sustainable insurance solutions to huge numbers of low-income households. This book is therefore intended for persons from any of these groups who want to learn from experience and are keen to glean insights into how to provide viable and valuable cover to the working poor.

Structure of the book

This book is organized into eight parts. Part I highlights major developments in the sector, explains the relationship between insurance and social protection, describes the potential impact of microinsurance, and considers the challenge of providing microinsurance in light of climate change. In particular, Chapter 1 provides an overview of the contents of the book by discussing the main trends and referring to other chapters for more details.

Parts II through IV cover specific lines of business: health, life, and agricultural and livestock insurance. Part V summarizes important topics specific to the low-income market such as the psychology of microinsurance, consumer education and client value. It also explores the design of microinsurance for specific target groups, notably women and migrants. Part VI considers the profitability of microinsurance for the insurance industry and the experience of commercial insurers in serving the low-income market. This part of the book also describes how to price microinsurance products with limited data and provides a detailed analysis of microinsurance in India, which is a bastion of innovation and a beacon for government involvement. Part VII focuses on distribution and intermediation, and the book concludes with Part VIII, which provides information on the infrastructure necessary for microinsurance to succeed, including technology, conducive regulations and appropriate consumer protection.

I Emerging issues

I Current trends in microinsurance

Craig Churchill and Michael J. McCord

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Microinsurance is developing at a breathtaking pace, with numerous innovations emerging to meet the challenge of providing insurance to low-income people. New products covering a variety of risks are being launched and distributed to poor households through an increasing diversity of channels. Entertaining consumer education tools are being used to create better-informed consumers. Insurance authorities are adapting their regulations to facilitate the expansion of insurance to the poor. In short, millions more low-income households now have access to better insurance cover.

To introduce this second volume of *Protecting the poor*, this chapter describes five trends that reflect the dramatically changing state of affairs for microinsurance:

1. The definition of microinsurance is becoming operational.
2. More low-income households are covered by insurance.
3. Stakeholders in microinsurance are becoming more diverse.
4. Providers are offering an expanding and varied range of products.
5. There is greater concern that insurance provides real value to the insured.

I.1

The definition of microinsurance is becoming operational

The first of the five trends is that the definition of microinsurance is becoming operational. In the first volume, microinsurance was defined as follows:

Microinsurance is the protection of low-income people against specific perils in exchange for regular premium payments proportionate to the likelihood and cost of the risk involved. This definition is essentially the same as one might use for regular insurance except for the clearly prescribed target market: low-income people ... How poor do people have to be for their insurance protection to be considered micro? The answer varies by country, but generally microinsurance is for persons ignored by mainstream commercial and social insurance schemes, persons who have not had access to appropriate products.

Churchill, 2006, pp. 12-13.

While this is a sound conceptual definition, it is not sufficient. A clear distinction is necessary, for example, for an insurance company with a microinsurance department that needs to define the boundaries where that department's work starts and stops. Insurance supervisors also require operational definitions. For example, if policymakers create requirements for insurers to serve the poor, or propose incentives for insurers to go down-market, then they need a means of determining whether these objectives have been achieved.

There are four main ways to make the definition of microinsurance operational:

1. **Target group:** The original definition was a target-group approach, indicating that microinsurance was for low-income people. However, because it did not provide guidance on how to measure or determine whether the "low-income" group was actually being served, the definition could not be used effectively by insurers or regulators. It is not realistic to expect insurers to assess whether prospective policyholders are sufficiently poor to warrant microinsurance.¹
2. **Product definition:** The most common operational definition uses product parameters based on the assumption that placing a cap on the sum assured and/or premium will ensure that the product is relevant only for low-income households. As illustrated in Table 25.2, this approach is commonly used by regulatory authorities, and it is particularly relevant if their intention is to compel or entice existing insurers to go down-market. However, simply defining microinsurance on the basis of premium and benefit caps can be problematic if it inhibits innovation by restricting the insurer's options in product design. Furthermore, many products within the specified parameters are not intended for the target group, such as credit card or travel insurance with their relatively small premiums.
3. **Provider definition:** A third way to define microinsurance is based on the type of organization that can provide it. Apart from formal insurers, microinsurance could be provided by burial or friendly societies, mutuals, cooperatives and community-based organisations. This approach is used, for example, in the Philippines, where mutual benefit associations (MBAs) have lower capital and technical requirements and can provide a restricted range of products. However, definitions that focus exclusively on providers could hinder the expansion of microinsurance because a range of institutional arrangements are necessary to reach the vast unserved market.

¹ For some social protection programmes, such as Rashtriya Swasthya Bima Yojana (RSBY), a mass health scheme in India, a means-testing mechanism is used to determine whether households are vulnerable enough to be eligible for the government subsidy. To identify the households below the poverty line (BPL) who can access government assistance in India, a series of parameters are used, with different criteria for rural and urban areas. The survey to determine BPL eligibility uses various socioeconomic indicators such as the size of landholding, type of housing, access to water and sanitation, type of employment, and educational status.

4. **Distribution channel:** A fourth approach, sometimes used by insurance companies, is to define microinsurance by the intermediary involved. For example, if products are distributed by microfinance institutions (MFIs), low-cost retailers or other organizations that typically reach the low-income market, then they could be considered as microinsurance by the insurer.

All of these ways of defining microinsurance have advantages and disadvantages. Consequently, a mixed approach – looking at the concept of serving the low-income market, coupled with a quantitative product definition and allowance for provider and distribution types – may be most appropriate. For example, Allianz is piloting a microinsurance “stress test” that considers 12 parameters to assess if an insurance product qualifies as micro, which includes elements of the target group, product and distribution channel definitions.

Regardless of how one defines microinsurance, product design and access are key differentiators. The focus on simplicity and accessibility, and the efficiency of processes, separates microinsurance from traditional insurance. For example, insurance with a long application form, numerous exclusions, and other requirements may not qualify as microinsurance, even if the premiums are low and the product is intended for the low-income market.

Microinsurance should be defined in a manner that responds to the national or corporate objectives of regulators and insurers respectively, and thus the definitions will vary. Indeed, the trend is important not simply because the definition itself is becoming operational, but because insurers and policymakers are actually interested in putting it into practice in their operations. This indicates that they are taking this target group more seriously, and possibly creating incentives or special structures to protect the poor.

There is nothing magical about the term “microinsurance”. Popular insurance provided through financial cooperatives for many years could be called microinsurance where the members of those cooperatives are poor. The mass-market insurance delivered by insurers through affinity groups – such as the members of unions or the customers of retailers or utility companies – could qualify as well. Nevertheless, the term “microinsurance” continues to be used because it emphasizes the importance of understanding the needs, preferences and characteristics of this target group: the low-income household, the working poor and the under-served.

In this book, an inclusive definition is used because the primary concern is to ensure that low-income households can manage important risks more effectively. A market-based approach is relevant for some target groups, such as the working poor with small disposable incomes that insurers have not reached in the past, but it will not effectively reach the poorest of the poor.

As emphasized in Chapter 2, both market-led approaches and social protection initiatives are critical and complementary, and therefore, from a public policy perspective, they need to be considered holistically. One of the interesting trends in recent years is the increase in public-private partnerships (PPPs) and the willingness of policymakers to subsidize premiums for vulnerable households. Indeed, in some countries the boundary between market- and government-driven initiatives is becoming quite blurred, and both are necessary to ensure that vulnerable households have adequate risk protection.

1.2 More low-income households are covered by insurance

The second trend is that microinsurance is expanding dramatically, from 78 million low-income persons identified as having some cover in the 100 poorest countries in 2006 (Roth et al., 2007), to 135 million insured in 2009 (Lloyd’s, 2009). Today, back-of-the-envelope estimates suggest that the sector is approaching 500 million risks covered, including the lives and health of low-income people, as well as protection for their crops, animals and other assets (*see Table 1.1*). This massive increase is in part attributable to expansion, and some markets are growing by leaps and bounds. Besides growth, a big boost comes from the inclusion of countries and schemes that were not identified or included in the previous studies for which a narrower definition of microinsurance had been used.²

Indeed, one of the main challenges in assessing growth stems from the first trend, the definition. Without a universal definition of microinsurance, it is difficult to tally the numbers, but estimates provide useful insights into how the sector is evolving (*see Table 1.1*). This section reviews regional differences and considers the primary drivers of growth.

Table 1.1

Estimated outreach of microinsurance: Millions of risks covered

	<i>Asia</i>	<i>Latin America</i>	<i>Africa</i>	<i>Total</i>
2006 ¹	66	8	4.5	78
2009 ²			14.7	
2011	350 to 400	45 to 50	18 to 24	<500

¹ Roth et al., 2007, 100 poorest countries only.

² Matul et al., 2010.

² For example, the 2006 study looked only at the poorest 100 countries and thus excluded figures from some significant microinsurance countries, such as Brazil, Mexico and South Africa.

1.2.1

Scale, growth and geography

In the 2006 study, 85 per cent of the insured were in Asia, 10 per cent in Latin America and a mere 5 per cent in Africa (Roth et al., 2007). While that distribution has not changed dramatically, different developments are contributing to the expansion in each region.

Asia

In the 2006 study, the scale of microinsurance in Asia was driven by 30 million persons covered in India – where the volume was boosted by regulatory requirements obliging insurers to serve this market – and 28 million in China, which was the result of a bundled product promoted by a single trade union.

Both of these microinsurance powerhouses have seen dramatic growth in the years since then. As mentioned in Chapter 20, one study estimated that by 2010, 300 million low-income persons were covered just under state-supported mass health insurance schemes in India. In addition, 163 million poor persons had life, agriculture or livestock insurance, often partly subsidized by the Government. Although the chapter considers the first number as overly optimistic, and it overlaps considerably with the second figure since many persons enrolled in the health schemes also have other types of insurance, it is still reasonable to estimate that 60 per cent of the persons covered by microinsurance around the world live in India.

Data from China are harder to come by, but perhaps another 40 million low-income persons have access to insurance cover there. For example, according to Qureshi and Reinhard (2011), over 11 million low-income persons are covered by China Life and 600 000 through the People's Insurance Company of China (PICC). The Government is actively encouraging microinsurance pilots by insurance companies that have expanded from 3.8 million insured lives in 2008 to more than 14 million in 2010.

However, growth and scale in Asia are not limited to the two most populous countries in the world. The Philippines provides an interesting example because of the diversity of approaches. Private insurers are active in the market, with Malayan Insurance Company expanding its outreach from 4.1 million to over 5 million low-income lives from 2007 to 2009 by distributing through pawnshops (*see Chapter 18*) and Country Bankers Life covering nearly one million persons. During that same period, MicroEnsure, a specialized broker, facilitated cover for 1.2 million lives (*see Chapter 23*) and PhilHealth's KaSAPI programme, the Government's social protection scheme for the informal economy, covered nearly 30 000 persons (Qureshi and Reinhard, 2011). However, the Center for Agriculture and Rural Development (CARD), an MBA, eclipsed them all, covering 7.0 million low-income persons.³

³ CARD data from August 2011 as reported on <http://cardbankph.com>.

Significant growth is also apparent in Bangladesh and Pakistan, while countries like Cambodia, Indonesia and Sri Lanka are beginning their journey and already have significant outreach. Overall, with roughly 350 to 400 million risks insured, Asia is spearheading microinsurance development, in part because of large and dense populations, interest from public and private insurers, willing aggregators or distribution channels, and, perhaps most importantly, active government involvement, for example through subsidies.

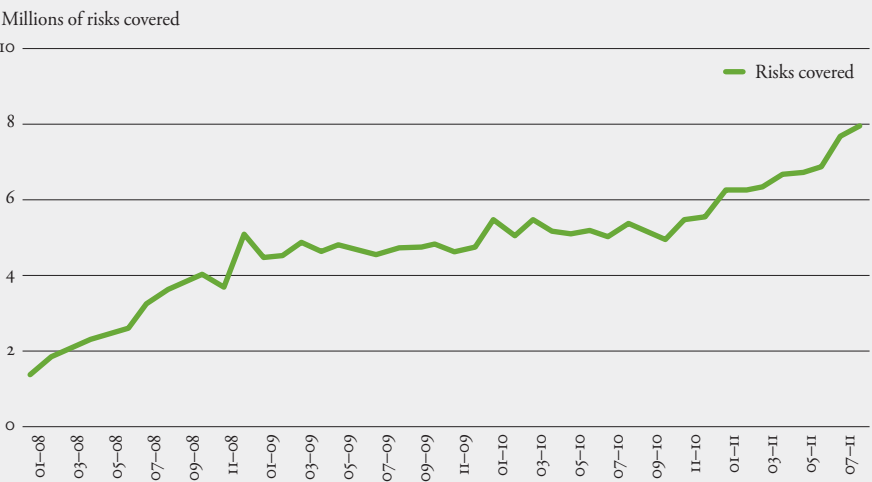
Latin America

In Latin America, the bulk of the almost 8 million insured lives in 2006 were in Peru and Colombia. Peru had primarily credit life cover, which reflected its mature microfinance industry, while the figures from Colombia suggested that microinsurance was essentially based around a single insurance company with a popular funeral policy.

Although growth data are generally unavailable, Colombia is an exception because the insurance association, Fasescolda, has been collecting microinsurance performance data for years. According to Fasescolda, microinsurance grew from less than 1.5 million risks covered in 2008 to nearly 8 million in July 2011 (see Figure 1.1). Initially, the growth was attributed to the group life and personal accident products distributed via public service companies, but in 2010–11 unemployment and home insurance products experienced strong take-up.

Figure 1.1

Microinsurance risks covered in Colombia



Source: Data provided by Fasescolda, Colombia, 2011.

Brazil and Mexico, which are huge markets, were not part of the original study. In an exhaustive analysis of microinsurance in Brazil, Bester et al. (2010) estimated that between 23 and 33 million low-income persons had cover, including funeral assistance schemes that were not regulated by the insurance authorities. Brazil is one of the fastest growing markets in the region, in part because of the proactive approach adopted by policymakers (*see Box 25.2*).

Indeed, several Latin American governments are actively promoting an enabling environment for microinsurance to facilitate the involvement of the private sector at the bottom of the pyramid (BoP). In this region, microinsurance is mainly a commercial endeavour. Growth stems from insurers moving down-market where there is less competition and more space for innovation. Volumes in Latin America, which are probably in the 45-to-50 million range, also come from a broader definition of microinsurance than in Asia, including upper poor and lower middle class.

Africa

More data are available for Africa following a survey in 2009 (Matul et al., 2010). The 2006 data, which did not include South Africa, identified 4.5 million lives covered mostly by basic credit-linked cover. The 2009 study identified 14.7 million people covered by microinsurance, of which 8.2 million were in South Africa. The growth outside South Africa during this period was nearly 13 per cent per annum, which was primarily attributed to the expansion of life cover in East Africa. The provision of microinsurance was led by commercial insurers in the East and South, and by health mutuals in the West.

The experience in South Africa, described in Box 1.1, is atypical for the continent. Perhaps the biggest outreach by an African insurer is Hollard, which is insuring four million low-income lives (Coydon and Molitor, 2011), mostly through funeral cover, mostly in South Africa. Sanlam Sky also covers more than one million persons through one delivery channel (*see Chapter 19*), and Old Mutual has one product line that insures nearly 0.5 million persons (*see Chapter 18*).

Although the continental figure may not exceed 24 million persons, microinsurance is picking up steam in several countries. Ethiopia, for example, has seen the number of low-income lives covered grow from almost nothing in 2006 to one million in the 2009 study and 2.5 million in 2011 (Zelege, 2011), primarily due to controversial regulations that allow microfinance institutions to carry insurance risk. In Ghana and Zimbabwe, microinsurance cover has soared through member benefit-type products offered by mobile phone companies covering millions of people. In Kenya, Smith et al. (2010) estimate that the

voluntary microinsurance market is 150 000 to 200 000 policyholders, while credit life cover increases the market to 650 000 to 700 000 persons covered, or more than 3 per cent of the Kenyan adult population.⁴

Box 1.1

Supply of and demand for microinsurance in South Africa

Microinsurance in South Africa is quite different from in the rest of the continent, in part because there is both a supply of and a demand for cover. Due to the high social and cultural value placed on dignified funerals, many low-income households have funeral insurance, even multiple policies. On the supply side, many South African insurers are sophisticated and entrepreneurial – the country has one of the highest penetration rates in the world (Swiss Re, 2011). The combination of sophisticated insurers and the demand from low-income households results in a growing and innovative market.

In South Africa, under the Financial Sector Charter that encouraged insurers to go down-market, the low-income market was defined as those earning a monthly income below approximately US\$400. The proportion of this population that has some form of risk cover (formal or informal) grew substantially from 33 per cent in 2006 to 38.5 per cent in 2010. This expansion was almost exclusively driven by an increase in formal funeral insurance. However, in absolute terms, the number of insured lives actually fell from just under 6.5 million in 2006 to just over 4.5 million in 2010. From 2006 to 2010, the population living below US\$400 per month fell from just over 19.5 million to less than 12 million people. Consequently, the drop in the number of persons covered in South Africa can be perceived as a positive development outcome.

Source: Adapted from Chamberlain et al., 2011.

1.2.2 Growth drivers, big and small

This section briefly reviews growth drivers for microinsurance, including the sources of major leaps forward and incremental improvements that lay the foundation for future growth.

⁴ Most of the outreach figures cited in this chapter are derived from self-reported data, usually by the risk carriers. However, these estimates for Kenya, and the data from South Africa in Box 1.1, are based on FinScope, which analyses financial service usage through large sample surveys and then applies the findings to the total population. This explains the discrepancy between the supply data cited in Matul et al. (2010) and the usage data in Box 1.1.

Major leaps

There are four factors that have contributed to this exponential expansion. The first and by far the most significant factor is government support, notably in Asia, which has fostered considerable growth in several ways:

- 1) subsidies, for example in India aimed at extending health insurance to workers in the informal economy and protecting low-income farmers from weather risks and livestock mortality;
- 2) public-private partnerships to apply private-sector expertise to implement government programmes;
- 3) mandates or targets for private-sector insurers (e.g. India, South Africa) to compel or entice them to reach under-served market segments; and
- 4) involvement of public-sector insurers such as the Life Insurance Company and Agriculture Insurance Company in India, and in China, PICC and China Life. While private-sector companies get attention for their innovative approaches, the public-sector companies are the ones achieving massive scale.

Indeed, without the leadership of the Indian Government, the growth story would be downgraded from extraordinary to only noteworthy.

The second driver is automatic enrolment or mandatory cover. Group policies are a common means to make significant step-like increases in scale, as they are easy to manage, reduce adverse selection and create a larger risk pool. Automatic microinsurance also includes cover given for free, as a member benefit or loyalty incentive, such as the basic term life by Compartamos in Mexico that covers nearly three million persons (Qureshi and Reinhard, 2011); and the personal accident cover provided by IFFCO-Tokio with the sale of fertilizer, covering 3.5 million Indian farmers (*Chapter 20*). Similarly in China, all members of a village can become automatically enrolled based on a decision by the village's leadership.

A recent incarnation of this approach has been adopted by mobile phone companies in Africa. In 2010, Trustco Mobile in Zimbabwe introduced life insurance as a loyalty incentive in partnership with EcoLife and First Mutual Life Assurance, and within one year it covered 1.6 million subscribers (Trustco Group, 2011). In Ghana, the specialized microinsurance intermediary MicroEnsure and a mobile phone company, Tigo, launched Tigo Family Care in 2011 and it is growing by more than 4 500 new lives insured per day (Gross, 2011b). With such products, it is not possible to know what percentage of those covered are poor, but given high levels of poverty and strong penetration of mobile phones into low-income markets, it is a fair bet that the vast majority qualify under the target-group definition of microinsurance.

A third key driver is the development of effective payment systems. Collecting microinsurance premiums can be a challenge, but emerging payment systems, such as M-PESA mobile money in Kenya, are substantial drivers of growth. In environments where e-money is not allowed, bill payment systems, point-of-sale (PoS) networks and banking correspondents give insurers access to large numbers of low-income households. For example, Aon Affinity, a subsidiary of Aon, reports covering 12 million mostly low-income people through mass-market schemes in six Latin American countries that access the client bases and use the payment systems of electricity, telephone and water companies (Baptistini, 2011).

The experience of Aon highlights the fourth driver, the capacity of multinational insurers and brokers to replicate their successes across jurisdictions. Brokers Marsh and Guy Carpenter are involved in government schemes in India covering tens of millions of low-income persons, and now they are taking those experiences to other jurisdictions (*see Chapter 23*). In 2010, Allianz covered six million low-income persons in eight countries (Coydon and Molitor, 2011), while Zurich had 2.3 million policies covering “emerging consumers” in seven countries, up from 1.8 million in 2009 (*see Chapter 19*).

Incremental improvements

The expansion of insurance to protect millions of low-income people is not only happening through major leaps forward, but also through incremental improvements that are gradually expanding microinsurance markets. Take-up continues to expand because of a confluence of factors that bolster both the supply of and demand for cover. Some incremental drivers include:

- The demonstration effect of positive claim payment experiences may have the greatest impact on helping people to appreciate and purchase microinsurance.
- Enabling regulatory environments for financial inclusion in several countries are removing barriers and even creating incentives for insurers to go down-market, while creating pathways for informal insurers to participate in the formal market (*see Chapter 25*). Unlike the government support described above, changes in the regulatory environment generally result in incremental improvements rather than major leaps forward, although there are some exceptions.
- Consumer education is reported to have helped people in some areas to better understand microinsurance and its role in household risk management (*see Chapter 14*).
- An improving value proposition for clients is resulting from insurers having greater exposure to and familiarity with the low-income market (*see Chapter 15*).

Like the fable of the tortoise and the hare, these slow and steady incremental improvements are not as captivating as the major leaps, but they are perhaps more important for fostering a culture of insurance in low-income markets and creating a firm foundation for future expansion. Ultimately these incremental improvements are signs that stakeholders in some countries are getting the fundamentals right – an enabling environment, an informed consumer and responsive insurers, which combine to produce a vibrant microinsurance market.

To avoid painting an overly rosy picture, it is useful to note that progress remains patchy. For every developing country that is experiencing significant growth, there are at least three or four that are stagnant or have limited microinsurance activity. The growth inhibitors are largely the converse of the enablers, including the lack of demand and limited capacity of the insurance industry to innovate. The process of creating a culture of insurance can take years, if not a generation.

1.3 Stakeholders in microinsurance are becoming more diverse

In the realms of public policy and international development, microinsurance is interesting because of its potential to support many different efforts. Few agencies have microinsurance departments. Instead, insurance is a sub-theme that cuts across various domains, including health and social protection, agricultural and livestock development, climate change and disaster management, microfinance, and small enterprise and cooperative development. As a result, more types of organization are becoming involved in microinsurance.

In the first volume, there was a preponderance of experiences that involved community-based mutual schemes and partnerships between insurance companies and MFIs. While these arrangements still account for a sizable portion of microinsurance outreach, they have been eclipsed by other institutional arrangements including public-private partnerships and alternative distribution channels. Furthermore, other players are also taking on important roles in creating the conditions for microinsurance to succeed, through proactive public policies, supportive regulations, or as meso-level enablers such as consultants, technology providers, funders and promoters.

This section examines the third trend – the greater involvement of a diversity of stakeholders – including: 1) insurers and reinsurers; 2) delivery channels; 3) governments; and 4) enablers.

1.3.1 Insurers and reinsurers

The insurance industry has microinsurance in its genes. From the risk-pooling by artisans' guilds and friendly societies to the introduction of industrial assurance

(see Box 1.2), insurers have recognized that the risk management needs of lower-income people could form the basis for a viable business model. Historically, approaches to providing the working poor with specialized cover have often characterized the industry. As formal employment expanded, and as people opened bank accounts, it became easier for insurers to provide cover more efficiently through employers and banks. The resultant efficiency, coupled with expanded social security programmes in many countries, moved insurers away from the labour-intensive collection of small premiums, and over time away from the low-income market. Today, microinsurance is a way for the industry to get back to its roots and become relevant again for the majority of the world's workers and their families.

Box 1.2

Origins of microinsurance

“Thus industrial assurance was ... simply life assurance adapted to the special circumstances and requirements of the masses of people. As compared with ‘ordinary’ life assurance its essential distinguishing feature is the manner in which premiums are paid, the modification having been introduced solely for the convenience of the small wage-earners for whom it is designed ... A household to which wages are brought home weekly frames its budget accordingly; it seldom has a reserve of income from which to make large payments at infrequent intervals, and still more seldom a bank account on which cheques can be drawn. If systematic contributions to assurance are to be kept up in these conditions, they must be related to the weekly or monthly pay envelope and collected when the money is in hand. Failing this, the odds are that the money will be used in other ways. The surplus remaining after provision for such essentials as rent, food and clothes is generally small, and the temptation to spend it on entertainment, luxuries or immediate pleasures is often too strong to be resisted without the moral support of the industrial assurance collector. These were the conditions of working-class thrift in 1854.”

Source: Morrah, 1955, p. 25.

In the contemporary version of microinsurance, there have been three primary risk takers: a) community-based and mutual insurers managing the insurance risk of their members; b) commercial insurers adjusting products and processes to cover the insurable risks of the low-income market; and c) governments with national social protection schemes. This section considers the first two, while the latter is covered in section 1.3.3.

Mutuals provide some key advantages in microinsurance especially related to their proximity to members, which permits a better understanding of their needs, facilitates claims settlement with better controls for fraud, and tends to engender significant trust from policyholders. They also appear to be particularly well suited to providing superior client value, as evidenced by an evaluation of microinsurance providers in three countries (*see Chapter 15*).

Even with these advantages, however, most mutuals do not appear to constitute an effective means to reach millions of low-income households as they are often limited by membership, governance, capacity, small capital reserves, and regulation. Although they are still common in some regions, they are being displaced in many countries by the entry of commercial insurers into the low-income market. Mutuals are also being forced to make adjustments from the other side as well, as more governments pursue universal health cover. For example, in India, health insurance was pioneered by several mutuals and community-based organizations, which now need to reposition themselves in view of the expansion of mass health cover from the Government (*see Chapter 20*).

This trend does not mean that mutuals are becoming irrelevant. Experience in India suggests that these schemes are effective innovators that can test new approaches and provide valuable lessons that others can take to scale. Some countries, particularly in Africa, have initiated efforts to achieve universal health cover, and the infrastructure that mutuals have built up over the years, for example in Ghana, Mali and Rwanda, serves as an important foundation to extend coverage to rural areas and workers in the informal economy (*see Box 2.1* and Kundra and Lago-marsino, 2008). Indeed some exceptional cases, such as CARD MBA in the Philippines and Cooperative Insurance Company (CIC) in Kenya (*see Chapter 18*), have shown that the cooperative model can be a basis for scale in microinsurance.

The big news is the tidal wave of commercial insurers entering the low-income market. A Microinsurance Network study shows that at least 33 of the world's largest 50 commercial insurance companies offer microinsurance, but many started recently. Of the 24 respondents that provided longitudinal data, only five had relevant products in 2000, and seven in 2005. The rest have started since then, clearly demonstrating that microinsurance is being offered by an increasing number of commercial companies, with perhaps more still to come (Coydon and Molitor, 2011). While they lack important advantages enjoyed by locally based mutuals, some have managed to compensate for their deficiencies through partnerships, technology and other means. This group of insurers is well positioned to achieve massive scale, although it remains to be seen whether their products will provide value to the poor.

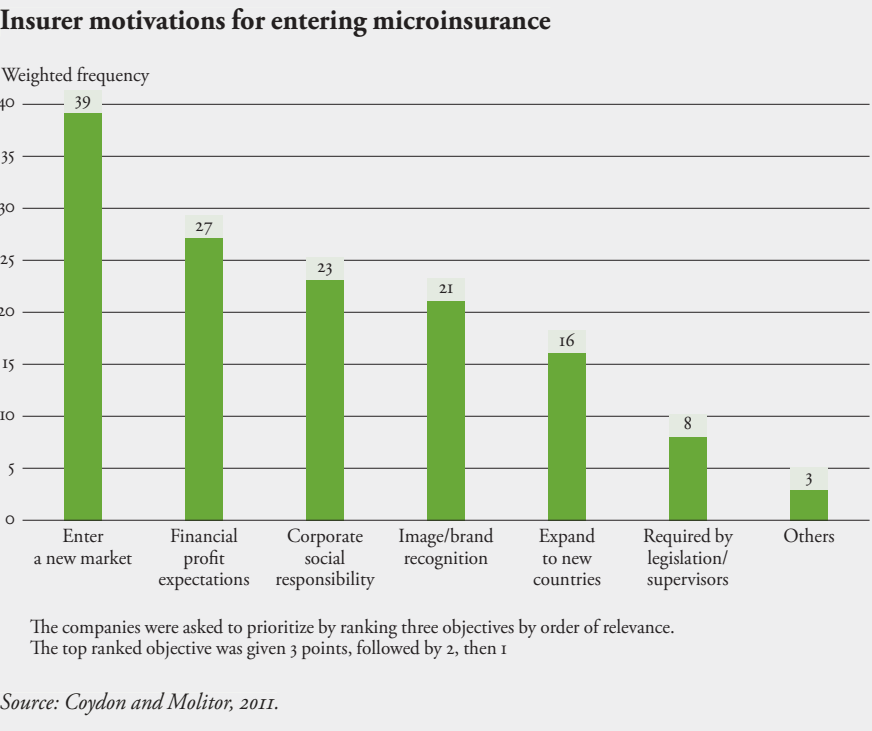
The insurers' motivations for entering this market, shown in Figure 1.2, illustrate the interesting combination of social and commercial objectives, BoP profits and corporate social responsibility (CSR). It is also important to consider

the underlying assumptions that lead insurers to invest in microinsurance. Market-entry decisions are substantially influenced by the demonstration effect, which appears to be enhanced by several factors:

- witnessing other insurers, especially competitors, active in microinsurance and not wanting to be left behind;
- increasing availability of microinsurance information, especially tips and lessons learned, widely disseminated through electronic media; and
- participation in a growing number of microinsurance conferences and meetings.

The impact of this demonstration effect on commercial insurers is a powerful trend. When the first volume of *Protecting the poor* was published, if insurers were not in the market to satisfy regulatory requirements, then they were involved primarily for CSR reasons. They wanted to show that they were doing something good for society, and microinsurance was a logical CSR endeavour because of its proximity to their core business. They were often not particularly focused on profitability, though many hoped this would be an eventual outcome.

Figure 1.2



The entry of more insurers into this market has shifted the social versus commercial equation to a more balanced approach, which should be more sustainable. A spokesperson for Allianz, for example, notes the importance of both the

social and financial impact by saying, “Microinsurance is a double bottom-line business: it has an immediate social impact and, importantly from our perspective, also has a long-term financial impact. With microinsurance, we tap a huge market of low-income households at the bottom of the economic pyramid” (Allianz Group, 2011).

Insurers can find easier ways to make money than microinsurance. The pull of profitability helps to keep them focused on efficiency and market satisfaction, while the CSR angle provides some space for experimentation. Chapter 19 explores this tension between being good corporate citizens and expanding market share, while Box 1.3 highlights the reputation risk to which insurers are exposed as they pursue BoP profits.

Box 1.3

Critique of the BoP approach

The first volume of *Protecting the poor* applied Prahalad’s “bottom of the pyramid” (BoP) business strategy to the insurance industry, suggesting that it might be an effective means to provide cover to low-income markets that could benefit both the insured and the insurer. In the following years, Prahalad’s treatise has also attracted some criticism, warranting a closer investigation.

Some critics challenge the motivations of corporations, and do not believe that they really can achieve a double bottom-line result. Others are concerned that selling consumer goods to the poor may do little to eradicate poverty, and could even harm small businesses and threaten local jobs, for example if they buy from multinationals instead of from local producers. Another line of questioning relates to the target group, where perhaps Prahalad’s business model may apply to the upwardly mobile poor and emerging consumers, but not to the poorest of the poor. One of the most vocal critics, Aneel Karnani from the University of Michigan (2009), believes the BoP approach does not recognize that poor people often act against their own self-interests and leads to a romanticized view of BoP people as value-conscious consumers and resilient entrepreneurs (which) are not only false, but also harmful.

The assumption that all the poor need is an opportunity to improve their livelihood is dangerous, according to Karnani, because it leads states to build too few legal, regulatory, and social mechanisms to protect the poor, as well as to rely too heavily on market solutions to poverty. The failure of this approach was evident in the Andhra Pradesh microfinance crisis, where the lack of supervision of lending institutions enabled borrowers to take multiple loans that they did not have the capacity to understand or repay.

Criticism of the BoP approach, and the microfinance crisis, certainly raise alarm bells for microinsurance. Given the complex nature of insurance, it is difficult for consumers to understand, and they are vulnerable to mis-selling by agents

and to being misled by disreputable firms. These observations highlight the importance for insurers going down-market of carefully considering whether they are providing client value (*Chapter 15*), for policymakers and insurance associations of promoting effective consumer protection (*Chapter 26*), and for regulators of cracking down on illegal insurers that could undermine the fledgling insurance culture in low-income markets (*Chapter 25*).

Insurers need to be aware of the BoP criticisms, and respond accordingly. Few insurers would claim that they had any intention of reaching the very bottom of the pyramid, but were more interested in expanding the insurance market by including under-served segments. In addition, the provision of insurance should not replace local risk-management strategies, but rather enhance their effectiveness. In fact, insurance is fundamentally different from shampoo or salt, the consumer goods often highlighted in BoP business models, because it provides an essential risk-management service that really can enable low-income families to stave off destitution.

The emerging focus on the profitability of microinsurance, analysed in Chapter 18, has spawned efforts to reduce operational costs and have effective processes to serve masses of clients. To support scale, insurers recognize the need to efficiently process huge volumes of data, while securely linking into delivery channels' systems to facilitate data transfer. At the same time, front-office technology, from handheld and point-of-sale devices to mobile phones, are beginning to improve sales, premium collection and even claims settlement. The role of technology in microinsurance is explored in Chapter 24.

Some reinsurers have been interested in finding a role in microinsurance for years. With supply dominated by simple life covers, most commercial schemes had little need for reinsurance. However, as client demand has been better understood, and insurers have been interested in addressing those needs, reinsurers have become more important to the equation. Insurers in many cases have needed not only the reinsurers' financial safety net, but also their expertise in navigating the risks of more complex products. As noted by a senior person at Swiss Re, "Insurance is a cornerstone of economic growth and stability, and [we] ... are proud to contribute our expertise so that even the poorest farmers and their families can cope when crops are ruined by drought, flood or other climate-related impacts" (Swiss Re, 2011). Reinsurers have contributed to developing more complex products, such as health and index-based insurance, and enabling disaster covers to be written. Indeed, with index insurance, most if not all of the risk is ceded to the reinsurer (*see Chapters 4 and 11, and section 20.2*).

1.3.2

Delivery channels

The way in which insurance is delivered to low-income households has evolved considerably since the publication of the first volume. Experience thus far suggests that any organization that already has financial transactions with the poor, and has their trust, could be a prospective delivery channel. The rationale for insurers to use delivery channels is three-fold. First, insurers can gain credibility in the market by exploiting the relationship that the channel has with low-income households. Second, because of the small premium, it is difficult for a full-time agent to generate sufficient commission to sustain a livelihood. Consequently, many microinsurance channels do other things as their main business, such as providing loans, selling groceries or distributing agriculture inputs, with insurance commission providing a supplementary income. Third, the microinsurance business model has a greater chance of success if risk carriers can quickly achieve scale, which they can do by working in partnership with a delivery channel that already aggregates large numbers of low-income persons.

In the first volume, microfinance institutions were the most common delivery channel, so common in fact that they are no longer considered alternative. However, since MFIs reach only a small percentage of the potential microinsurance market, in recent years insurers have been testing other approaches. As illustrated in Figure 1.3, insurers now use an incredibly broad range of channels, although financial institutions remain the most prevalent. Distribution issues are addressed throughout this volume, notably in Chapter 22, which describes alternative channels primarily in Brazil, Colombia and South Africa; section 20.3, which recounts the Indian experiences; and section 24.2, which considers the role of technology to create an interface between the insurer and policyholder.

Besides the automatic cover described above, many alternative distributors are introducing voluntary cover, using their infrastructure to facilitate the payment of insurance premiums. Utilities, telecommunications companies, post offices, payment administrators and retailers have added insurance to their menu of services, and customers who are interested can easily enrol and pay premiums. For insurance to be sold through these channels, however, there is a need for an active sales process to encourage customers to buy the product, perhaps from a call centre or a visit from an agent. Another important limitation, identified in Chapter 22, is that these channels usually deal only with sales and premium collection, but do not have the infrastructure or expertise to manage claims. Consequently, the claims processes can be inconvenient and arduous, which undermines the important demonstration effect that is so critical to fostering the low-income market's trust and confidence in insurance.

Figure 1.3

Distribution channels for commercial insurers



Source: Coydon and Molitor, 2011.

The retail channels such as grocery and clothing stores are interesting because they can be either formal or informal. While the formal retail chains have the advantage of a well-known brand, client data and transaction systems, they are often less convenient than informal retailers. Informal outlets, such as “mom and pop” shops, may have an advantage of proximity and frequency of use, but thus far have not been particularly successful with regard to sales volumes, perhaps because people do not expect to buy insurance where they get their milk and bread, and top up their mobile phone. Insurers have also found it difficult to develop an effective value proposition for informal retailers, leaving them with limited motivation to sell insurance (Smith et al., 2010a).

The emergence of mobile phones as a means of delivering and servicing microinsurance is also an important trend (*see section 24.5*). The ability of insurers to access a technology platform that reaches into low-income communities and facilitates sales, premium collection and claims settlement opens a huge potential market. Once transaction costs have been worked out, mobile phones have the potential to massively expand microinsurance outreach. For example, Micro-Ensure and Tigo have doubled the total number of insured people in Ghana in one year (Gross, 2011b).

Three important lessons have emerged with regard to delivery channels. First, sooner or later, delivery channels realize that they essentially control access to the client, which means that they can negotiate advantageous arrangements for themselves or for their customers, particularly in competitive insurance markets. Where delivery channels choose to negotiate on their own behalf, client value is likely to suffer. Second, these channels will take insurance much more seriously if the product enables them to increase sales of their core service in some way. For

example, a grocery store is likely to be more interested in promoting an insurance product if the benefit includes a year's worth of groceries instead of just a cash benefit. And third, the relationships between insurers and distribution channels can be challenging to manage. Significant investments need to be made up-front and at relevant stages to clarify expectations, roles and responsibilities, and to align incentives. Perhaps one of the most effective means of aligning incentives is through profit-sharing mechanisms or joint ventures.

1.3.3

Governments

As noted in section 1.2, some governments have been instrumental in supporting the growth of microinsurance, both through major leaps and incremental improvements. The involvement of governments in microinsurance has seen a dramatic increase in recent years. As described in Chapter 25 on regulation, Chapter 26 on consumer protection, Chapter 2 on social protection, and illustrated in Chapter 20 in some detail from the experiences in India, governments can play three key functions with regard to microinsurance:

1. **Provider of social protection:** Governments have an obligation to provide social protection to their citizens, including health insurance. However, as described in Chapter 2, this obligation is not being met in many countries, often due to financial constraints. In this context, microinsurance can play several different roles, namely:
 - a) providing a platform to pursue universal health cover, such as the health mutuals in Ghana, Mali and Rwanda;
 - b) extending government benefits to workers in the informal economy, such as KaSAPI in the Philippines, or by adding value to government schemes, as with CIC's Bima ya Jamii (*see Chapter 18*);
 - c) providing a supplementary cover to complement social protection benefits; or
 - d) offering an alternative if government programmes do not reach certain target groups.

Also, within the context of financial constraints, some governments are engaging the private sector through public-private partnerships to assist them in implementing social protection schemes with the expectation that they can be managed more cost-effectively (Ramm, 2011).

2. **Stimulator:** The government can also play an important role in stimulating market development by encouraging public and private insurers and delivery channels to reach under-served segments. In fact, several regulators have a market development mandate in addition to their supervisory function. They may implement that mandate by stimulating the demand side, through premium subsidies, consumer education and awareness-raising activities. For example, in

Colombia, the President has promoted microinsurance on television, and in the Philippines the Government sponsors a “Microinsurance Month” each year. The government may also strengthen the supply side, for example, by organizing workshops or training seminars on microinsurance to help the local industry develop relevant expertise, as in Egypt, Ghana and Zambia.

3. **Regulator and consumer protection advocate:** As discussed in Chapter 25, it may also be necessary for regulators to make adjustments to laws and regulations to reduce obstacles to financial inclusion. Some countries have even created a special category for microinsurance companies (e.g. the Philippines), although others (e.g. Colombia) have succeeded in stimulating inclusive insurance markets without making regulatory changes. An important development in this arena was the creation of the Access to Insurance Initiative (*see Box 1.4*), which supports regulators and facilitates discussion among them to reach better-informed policy decisions, and to create a demonstration effect for policymakers in other countries.

Box 1.4

The Access to Insurance Initiative

The Access to Insurance Initiative is a global programme aimed at facilitating financial inclusion through effective and proportionate regulation and supervision of insurance markets. The Initiative was launched in 2009 by the International Association of Insurance Supervisors (IAIS), the global standard-setting body, in collaboration with development agencies to promote regulatory frameworks that support inclusive insurance while being consistent with international standards. The IAIS leadership of this Initiative is critical because it sets global standards through the Insurance Core Principles and provides capacity-building support to implement those principles in various jurisdictions.

The Initiative endeavours to disseminate knowledge and build awareness of how an enabling environment can encourage innovation for financial inclusion while protecting financial stability and consumers. At the policy level, it provides a platform for regulators and industry leaders in developing countries to contribute to the IAIS processes of setting standards and providing guidance.

Within countries, the Initiative’s main contribution is to support diagnostic studies that assess the current and potential supply and demand of microinsurance, as well as macro-level conditions that might inhibit its development. With this evidence, the Initiative facilitates stakeholder dialogue with policymakers and industry leaders to spur the development of adequate products, delivery and consumer protection approaches for low-income clients.

Source: Adapted from Access to Insurance Initiative, 2011.

1.3.4

Enablers

“Enabler” is a general term used here to refer to all other important stakeholders that contribute to enhancing the availability of better insurance services to more low-income households. In the past five years, there has been growing interest and commitment by these enablers, and their contributions have been essential to the creation of an effective ecosystem to support the advancement of microinsurance. These enablers fall into four categories: a) capacity builders; b) operational specialists; c) funders; and d) promoters.

Capacity builders

Actuaries: In the late 1990s, there were a handful of radical actuaries who actually took time to understand the needs, characteristics and preferences of the low-income market. Then they provided advice and guidance to microinsurers to help them to design better products and systems, to improve data capture and analysis, and to provide improved insurance services to their policyholders. Since the publication of the first volume, there has been increased interest among the actuarial community. For example, the International Actuarial Association and some national associations have organized events and created working groups and task forces to channel their expertise into solving microinsurance challenges. Now the sector can boast several handfuls of actuaries with keen microinsurance insights, some of whom contributed to several chapters in this book including one on pricing (*see Chapter 21*).

Technical assistance (TA) providers: A series of studies in the mid-2000s showed that the primary need of microinsurance risk carriers was not capital but technical assistance.⁵ However, at the time there were not enough experienced microinsurance consultants to supply the required assistance. The dearth of experienced TA providers was holding back the development of microinsurance, as new entrants were making the same mistakes as their predecessors. Since then, many insurance companies have recognized that microinsurance products are not just downscaled versions of traditional products, which has stimulated a demand for consultancy services. This demand has been partly addressed by the emergence of specialized TA providers, such as the MicroInsurance Centre, Micro Insurance Academy, Cenfri, GlobalAgRisk and the Centre for Insurance and Risk Management (CIRM), but even mainstream insurance consulting firms like Milliman and Risk Management Solutions are venturing into this territory.

Academics: The microinsurance community is also fortunate to welcome the growing involvement of academics. As evidenced by the volume of microinsurance articles in peer-reviewed journals, the topic has piqued the interest of many

⁵ From 2004 to 2006, Kreditanstalt Für Wiederaufbau (KfW, German Development Bank) contracted the MicroInsurance Centre to conduct pre-feasibility studies in the following countries: Albania, Azerbaijan, Georgia, India, Indonesia, Lao People's Democratic Republic, Romania, Uganda and Ukraine.

scholars. These researchers generally fall into one of two camps. First, there are the development economists who have made major contributions to the field through their studies on determinants of demand at the household level and assessments of impact (*see Chapter 3*). Second, insurance scholars are also taking an interest in the topic. For example, in 2011, the *Journal of Risk and Insurance* published a special issue on microinsurance, bringing the topic to the attention of insurance academics.

Operational specialists

Intermediaries: As detailed in Chapter 23, both specialized microinsurance brokers and general insurance intermediaries are now filling an important gap in some markets. These intermediaries assist by designing products that are appropriate for the low-income market, bringing together risk carriers and delivery channels, and facilitating communication between two parties that are not accustomed to speaking each other's language or understanding the other's perspective. The specialized intermediaries have assumed a broader range of responsibilities than traditional brokers to enhance their value proposition. However, it is not yet clear whether a business case can be made for this vital function because the premiums are already so small that it is difficult to pay for all of the parties involved while still providing decent value to the policyholders.

Third-party administrators: Although some intermediaries have become involved in policy and claims administration, specialized third-party administrators (TPAs) have also made contributions to the expansion of microinsurance, particularly health insurance in India (*see Chapter 20*). As described in Chapter 6, administrative systems are particularly important for low-income households because they can enable them to access "cashless" healthcare benefits, instead of paying the healthcare costs and then being reimbursed by the insurer.

Technology suppliers: One of the great challenges for microinsurance is to keep administration costs low while managing huge volumes of data. As described in Chapter 24, there is great hope that technology will help the sector overcome this challenge through improvements to back-office software and systems, as well as client-interface mechanisms to support enrolment, premium collection and claims processes.

Extension services and infrastructure: For some products, microinsurers use existing infrastructure or extension services to increase outreach and enhance efficiency. This development is particularly relevant for livestock insurance (*Chapter 12*), where insurers can be supported by agricultural extension agents. Similarly, with weather index insurance (*Chapter 11*), the involvement and support of meteorological departments are critical. Even with health insurance (*Chapter 5*), a number of schemes have engaged community health workers as sales agents, or to promote improved health practices to reduce claims, or both.

Funders

Donors: This book does not directly discuss the issue of donors since it was well covered in the first volume (see Latortue, 2006), but there have been positive trends in donor involvement in microinsurance in the intervening period. A Microinsurance Network study shows dramatic growth in the number of donors involved in microinsurance (Marquaz and Chassin, 2012).

The sector's most sizable donor support, by the Bill & Melinda Gates Foundation, led to, among other things, the creation of the ILO's Microinsurance Innovation Facility. The Facility has supported more than 50 organizations, enabling them to experiment with new approaches to reducing the vulnerability of the working poor through insurance – many of those innovations are highlighted throughout this book and available online in its Knowledge Centre. The Facility has also actively supported the building of capacity by microinsurance consultants and professionals, and the financing of academic research.

The role of donors in microinsurance should not be underestimated. Donors significantly improve the potential for microinsurance success by supporting the following interventions:

- stimulating innovation and experimentation;
- attracting reluctant players into the market through seed funding;
- enhancing regulatory environments;
- supporting new product development;
- developing consumer education programmes;
- providing technical assistance and capacity building to stakeholders throughout the value chain; and
- analysing findings, managing knowledge and disseminating the results.

The last point is important because it enables donors to accelerate the evolution of microinsurance. Through donor-supported knowledge-sharing activities, micro-insurers become exposed to lessons learned and successful innovations that can shorten the learning curve.

Investors: Even more than donors, the most important funders have been insurance companies that use their own capital to expand their involvement in low-income markets. There have even been a few mergers and acquisitions that have had a microinsurance dimension. For example, Sanlam spent roughly US\$250 million to buy African Life, where the bulk of its portfolio was funeral insurance in the low-income sector (*Sanlam Annual Report, 2006*). More than any other indicator, these investments suggest that microinsurance can be viable.

In 2008 the first microinsurance private equity fund, LeapFrog Investments, was launched. Capitalized with US\$135 million by social and commercial investors, the fund aims to reach 25 million low-income and vulnerable people with insurance products and inclusive financial services. With an initial investment of US\$6 million in South Africa's AllLife in December 2009, LeapFrog's profit-with-purpose strategy promises investors "robust returns".

Some development financial institutions have also made microinsurance investments. For example, in 2008, the International Finance Corporation invested in 16.5 per cent of Protecta Seguros, the first specialist microinsurance company in Peru, and the Multilateral Investment Fund invested US\$3 million in ParaLife, a microinsurance venture in Mexico. These investor interventions suggest that microinsurance may have the potential to generate attractive returns for investors.

Promoters

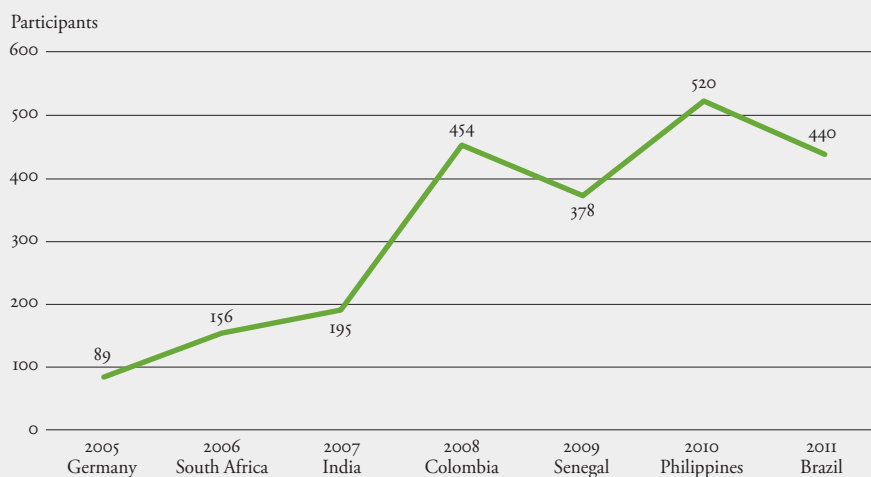
Insurance associations: Another development is the involvement of national insurance associations in microinsurance. These associations, for example in Brazil, Colombia, Kenya and South Africa have typically played two important roles. First, they have raised awareness among their members of BoP business strategies and facilitated access to technical resources to help insurers to understand how to serve the low-income market profitably. Second, as described in *Chapter 14*, many of them have also launched innovative consumer education efforts targeting the working poor so that they better understand how insurance works and how it might fit into household or enterprise risk management strategies.

International insurance associations, such as the International Cooperative and Mutual Insurance Federation (ICMIF), and regional associations, like the African Insurance Organisation (AIO) and Federación Interamericana de Empresas de Seguros (FIDES) in Latin America, also play an important role in raising awareness among their members. They facilitate information exchange among people with different experiences allowing a cross-pollination of ideas and lessons, which is not likely to occur at a national level among competing firms.

Conferences and meetings on microinsurance have proliferated since the first volume was published. The flagship event, the International Microinsurance Conference sponsored by the Munich Re Foundation and the Microinsurance Network, has seen a steady increase in interest (*see Figure 1.4*). Microinsurance has been the focus of academic and professional conferences, and even for-profit conference conveners have organized numerous microinsurance events. Besides the increase in participation at these events, the composition of participants has also shifted to include more insurers looking for ways to improve and expand their product lines.

Figure 1.4

International Microinsurance Conference attendance



Source: Munich Re Foundation, 2011.

The Microinsurance Network: Although the Network is an organization and not a type of enabler, it is mentioned specifically because it plays a unique global role in the sector, raising awareness of the potential of microinsurance, and facilitating dialogue among practitioners and other stakeholders. Through events, publications and electronic media, the Network contributes to improved coordination among various agencies working on microinsurance, enabling limited resources to be used more efficiently. The formalization of the Network in 2008, evolving out of its previous incarnation as the CGAP Working Group on Microinsurance, reflects the changing dynamics in the sector.

To summarize, microinsurance is reaping the benefits of the involvement and commitment of a host of enablers whose financial and technical resources have contributed significantly to improving outreach and effectiveness to protect the poor from financial losses due to risks.

1.4

Providers are offering an expanding and varied range of products

The first volume of *Protecting the poor* only covered life and health products. These were the most common products available to low-income households and demand studies suggested that they covered the priority risks of the poor. However, risk covers for low-income persons have changed significantly in recent years. In this fourth trend, the microinsurance community has seen life and health products improving while experimenting with a broader array of covers, including more voluntary products. This trend is largely intended to respond to

the range of risks to which the poor are exposed, while improving design so that products are more relevant for the target market.

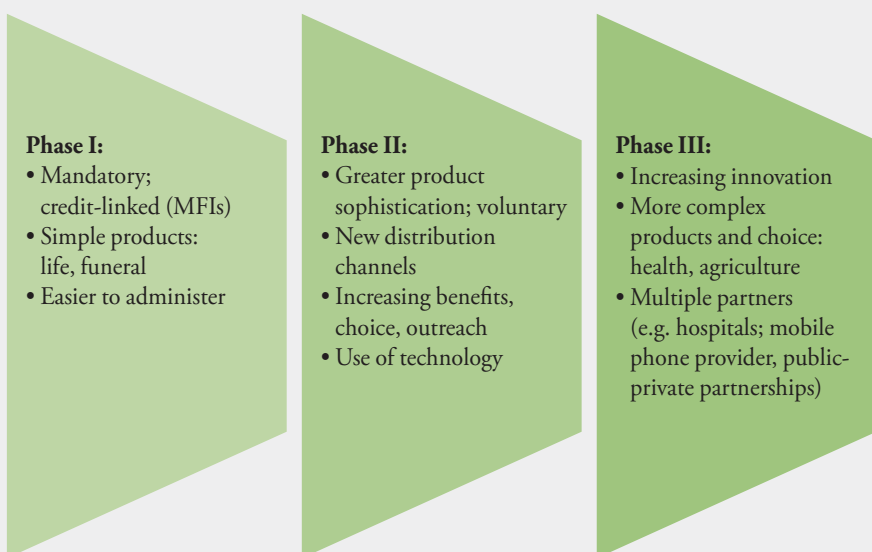
1.4.1 The evolution of product types

As illustrated in Figure 1.5, microinsurance started with basic products, particularly credit life, which helped to demonstrate the viability of microinsurance. Besides being simple to offer and manage, credit life provided risk carriers with the opportunity to develop a quantitative understanding of the market. This was a huge step in product evolution because – from an insurer’s perspective – one of the biggest problems was the lack of data, which inhibited them from serving an unfamiliar market.

When products were offered, the lack of data often resulted in relatively high premiums, since additional loadings were added to compensate for the uncertainty (*see Chapter 21*) and the unnecessarily high premiums further hindered demand. Through this initial experience, the ability of insurers to gather data on risk and the potential for profitability built a foundation for the development of more complex products. With a growing understanding of client demand, some delivery channels also pushed insurers for better products. Each time insurers ventured into new products for this market, more was learned and this facilitated the evolutionary advancement to the next level.

Figure 1.5

Evolution of microinsurance products and processes



Source: ILO's Microinsurance Innovation Facility, 2011.

Even basic products, such as credit life (*Chapter 9*) and funeral insurance (*Chapter 10*), have evolved to provide greater client value. Instead of just covering the loan, or paying only for the funeral service, additional benefits are being added to enable these products to help low-income families cope better with the loss of a breadwinner. These products are also being used as entry points to cover other persons and/or provide protection against additional risks.

More sophisticated life insurance that has a savings element may be well suited to the poor because it builds up value over time, so that policyholders do not feel that they have wasted their money if the insured event does not occur. However, the previous generation of these products provided poor customer value because of high commissions and frequent lapses (Roth et al., 2006). Consequently, new variations are being developed, as described in Chapter 8, which may provide a better value proposition to the market, while still being viable for insurers.

An evolution is occurring with health covers in some countries (*see Chapter 5*), although not all schemes follow the same trajectory. Hospital cash products are reasonably straightforward. Experience with these products can make it possible to offer hospitalization covers on a reimbursement basis, which may evolve into “cashless” benefits, as described in Chapter 6. Another dimension to this evolution is how health insurance can support or complement social protection benefits provided by the government (*Chapter 2*). Moving forward, the vanguard are pushing the frontier to cover outpatient risks or integrating non-insurance value-added benefits, such as health education, telemedicine services and pharmaceutical discounts.

The trend towards more complex covers, including index insurance and disaster cover (*Chapters 4 and 11*), and composite products that cover multiple risks, is consistent with the risk management needs of poor households. This trend is not necessarily consistent, however, with their ability to pay (*see Chapter 7*), or with the basic tenet of microinsurance product design: keep it simple. Microinsurance enablers and delivery channels have long advocated simple products that are easy for policyholders to understand, where there is no ambiguity or misunderstanding about what is and is not covered. The primacy of simplicity cannot be lost in the evolution towards more comprehensive covers.

1.4.2 The evolution of product design

Besides the greater variety of products, the products themselves have been transformed along this evolutionary path. Group covers, often on a mandatory basis, were the most common type of microinsurance, and probably still are. However, there is more experimentation with other approaches, including voluntary group

insurance where members of the group opt in or out, and even voluntary individual covers.

While previously many products were downscaled versions of traditional lines, product evolution has embraced reengineering to respond better to the realities of the low-income market. For example, past policies might have included a list of exclusions, whereas many insurers now recognize the benefits of minimizing them to simplify policies and reduce the work involved in checking exclusions in small policies. Even small changes to products and their delivery can have important effects on marketability and demand, as discussed in Chapter 13.

A small change that has the potential to make a significant impact is the awareness that products need to be more than just risk covers. As in the example of life insurance that accumulates savings and health insurance with free outpatient coupons, low-income households need to get some value from the product even if they do not make claims. If that value-added benefit can also reduce claims – for example by providing weather information to insured farmers or health education to reduce the occurrence of preventable diseases – then everyone benefits.

Since the low-income market is not homogeneous, a related trend is towards greater market segmentation. Sometimes this happens naturally, since certain distribution channels reach certain market segments. However, microinsurers are also considering the requirements of specific segments, including women (*Chapter 16*), migrants (*Chapter 17*), smallholders (*Chapter 11*) and livestock keepers (*Chapter 12*), and designing products that are relevant for them.

For products to succeed, they need to be at scale with streamlined administrative costs, which is partly why credit life took off. Besides bundling insurance with credit, more organizations are linking insurance with other transactions to reach poor households, such as buying seed or fertilizer, or purchasing mobile phone minutes, or becoming a member of an organization, though these products can typically only provide very basic insurance with small benefits. This linkage is often positioned as a free member benefit, a way of distinguishing the distribution channel's core product from the competition; consequently, the premium has to be so small that it does not increase the price of the core product. If this arrangement enables low-income households to have a positive experience with insurance, and if the products evolve to include voluntary options, then the approach could revolutionize the supply and demand sides of the microinsurance equation – that has not happened yet, but perhaps it will be the next trend.

Instead, one often finds a lack of product education among people who “buy” group cover. Since clients do not make choices and there is no financial transaction specifically for the premium payment, intermediaries often do not provide

the necessary information. Such products generally have excessively low claims ratios, seemingly the result of people not knowing that they are covered. As one rural banker in Ghana noted, “If we tell people all about the cover, we’d be flooded with claims.” Apparently, there remains greater scope for raising awareness for intermediaries as well as for the insured, because bad practices can fuel distrust that will affect all players on the market.

1.5 **There is greater concern that insurance provides value to the insured**

The fifth trend is the increasing interest in ensuring that the poor are obtaining value from insurance, and that they are protected from possible abuse. The focus during the early days of microinsurance was on understanding how it worked, the operational tricks of the trade, and improving access. Now that nearly half a billion low-income persons have cover and the sector is maturing, more attention is being paid to assessing whether they are actually benefiting from insurance.

Interest in value is coming from different stakeholders and is articulated in different ways. Donors and policymakers are keen to understand **impact**. If, for example, they are going to provide subsidies, they want to know whether these interventions really benefit low-income households. In theory, insurance is an efficient way to manage certain risks, and there is considerable anecdotal evidence to support the theory. Moving from theory into practice, findings from rigorous research now provide evidence that microinsurance actually benefits poor households, although the findings are limited to the impact of health insurance for the time being (*see Chapters 3 and 5*). A number of additional impact studies with rigorous methodologies are currently under way, suggesting that more tangible results will be emerging in the coming years.

The Microinsurance Network is tackling this client value issue from two angles, which coincide with efforts to prove and improve impact. To support efforts to prove the value of insurance, the Network’s Impact Working Group is developing guidelines on how to conduct impact studies properly, not only to improve the effectiveness of the studies, but also to promote common approaches that will facilitate meta-analyses across studies (Radermacher et al., 2012). Second, the Performance Working Group has proposed a set of social performance indicators that practitioners, donors and investors can monitor (Simanowitz and Sandmark, 2011). These indicators will not prove that insurance has an economic and social impact, but they can enable stakeholders to monitor whether their performance is efficient as well as socially relevant so that it can be improved over time.

Given the rapid evolution of microinsurance products described in the previous section, it might be premature to invest heavily in the “proving” agenda at this stage, since rigorous methodologies also tend to be expensive. Efforts now

should focus on understanding the components of client value and improving products so that we will have mature products at scale that can be assessed by more comprehensive longitudinal studies in the future. Chapter 15 presents such a framework for assessing **client value**, which can help risk carriers and delivery channels demonstrate to the market that they are providing sufficient value to warrant low-income households spending part of their limited income on premiums. By assessing client value, insurers can also better understand client preferences, understand their willingness and ability to pay for cover (*Chapter 7*), seek to continue to improve their value proposition to enhance renewals, and increase the effectiveness of their sales practices:

Another promising method of rapidly understanding value is the client math methodology developed by the MicroInsurance Centre, which aims to understand the value of insurance relative to other risk management options (see Mor-sink and Geurts, 2011).

Lastly, regulators and insurance associations are keen to ensure that sufficient **consumer protection** is in place so that the industry can forge and maintain the trust of the market. Consequently, Chapter 26 provides some preliminary guidance on improving transparency, fair treatment and recourse in microinsurance markets.

1.6

Conclusion

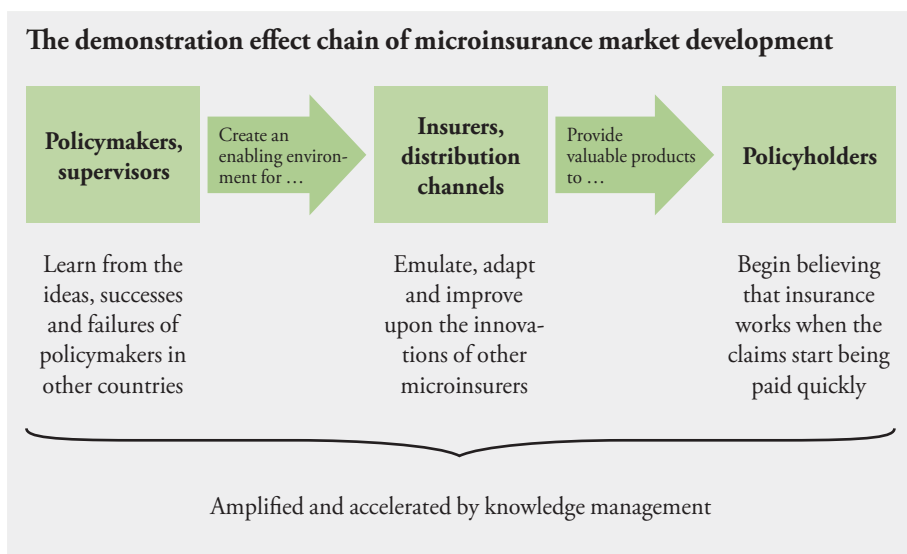
The optimal trend is for more low-income families to have better access to a greater variety of valuable risk management products. The trends explored in this chapter reflect a move towards this ideal. There has indeed been substantial growth in outreach, with greater access to an expanding variety of products. More insurers and intermediaries are becoming involved, leading to competition in some markets, which has the potential to enhance the value proposition for clients. As the definition of microinsurance becomes clearer, there is a greater effort to understand what it means to provide intangible risk management services to the low-income market effectively and profitably. All this feeds the trend towards a focus on value for low-income markets. Together, these trends reflect a sector that is maturing into adolescence.

The trends that have propelled microinsurance are likely to continue and even increase in importance because of the powerful demonstration effect under way at several different levels, where first movers set an example for others (*see Figure 1.6*).

Growth thus far has been driven by a few committed countries, but microinsurance has not yet taken root in numerous jurisdictions. As more policymakers and insurance supervisors follow the lead of pioneering countries and learn from their experiences, there will be a new boost in global microinsurance outreach.

Furthermore, even in States where microinsurance is already growing, it may expand further if policymakers promote subsidies and expand their involvement in PPPs to achieve public policy objectives with limited budgets. To increase their impact, policymakers can also do more to support knowledge management to make good practices widely available, and promote data standardization, collection and aggregation so that pricing is based on relevant experience. They can also advance customer protection without undermining innovation, and encourage consumer education so that the public understand what they are being offered, appreciate how it can help them, and know where to turn if they are not satisfied with the results.

Figure 1.6



As for insurers and delivery channels, in some markets microinsurance will become increasingly competitive, especially given the broad emergence of more effective payment systems. As enrolment and premium collection becomes easier and cheaper, the potential for insurers will expand dramatically. This expansion should lead to better pricing and a broader range of voluntary products as insurers link with new collaborators such as dairies and agricultural suppliers, pharmaceutical companies and healthcare providers, telecommunications companies and retailers. Yet with growth and visibility comes responsibility. Operating under the radar meant that microinsurance providers and promoters were allowed significant latitude. Maturity is making many take a closer look at the results to carefully consider the consumer protection implications.

A critical challenge in building a market is on the demand side, creating conditions that encourage low-income households to turn to insurance naturally as part of their risk management toolkit. In environments where microinsurance is prevalent, and providers are cultivating the trust of that market through efficient

claims payments, such conditions are emerging. However, microinsurance providers need to continue to recognize that their most important function is to pay claims, and build on the emerging demonstration effect.

Much of what moves people, institutions, and industries from infancy to adolescence and adulthood is simply how they turn experiences into lessons. In microinsurance, many lessons are being learned and there are expanding efforts to disseminate those lessons to improve future results. The rest of this book is an effort to synthesize those lessons to bolster microinsurance trends with practical experience and expand them with new knowledge.

2 The potential of microinsurance for social protection

Yvonne Deblon and Markus Loewe

The authors wish to thank Christine Bokstal (ILO), Valerie Schmidt-Diabate (ILO), Iddo Dror (Micro Insurance Academy), Gaby Ramm (consultant), Anja Smith (Cenfri) and John Woodall (ILO) for their review of the chapter.

Social protection is recognized internationally as a human right.¹ However, this right is not well enforced by most countries around the globe for different reasons, leaving large segments of their populations without access to adequate social protection measures and vulnerable to numerous risks. In addition, vulnerable people are often unable to improve their socio-economic situation: they are reluctant to invest excess income into productive physical capital or education. Instead, they accumulate “rainy day” funds, savings in cash or in assets (e.g. gold, livestock) that can be accessed if a risk event occurs. As a result, their savings yield only limited returns, which are too small to enable them to build a better life and escape poverty.

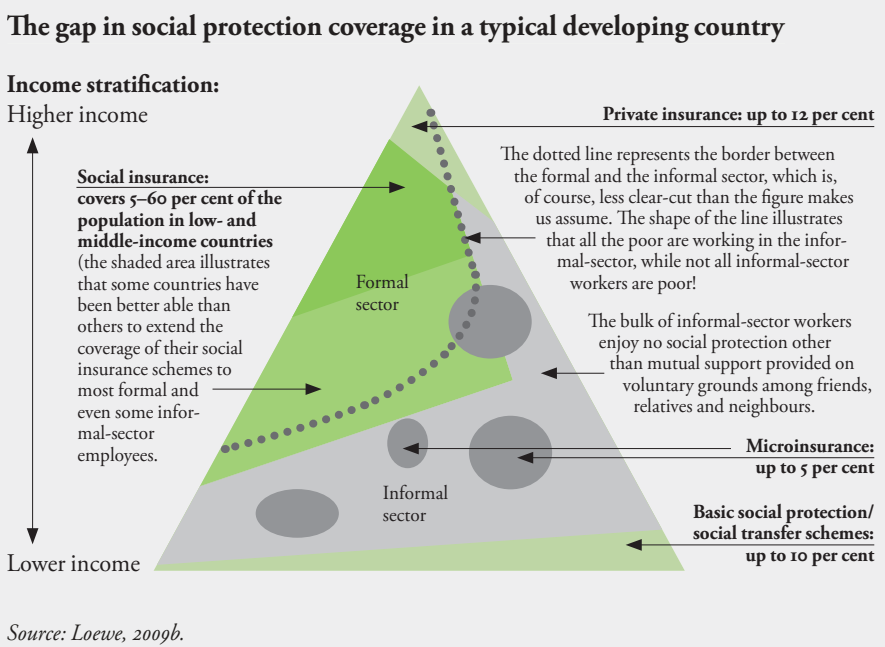
People who work in the informal economy are particularly prone to becoming marooned in the perpetual circle of vulnerability, risk-aversion and low income. They fall into the widening gap in coverage that exists between the different kinds of social protection schemes found in most developing countries (see *Figure 2.1*). Wealthy households can afford to buy private health, life, liability and asset insurance. Civil servants are usually entitled to tax-funded pensions and free medical treatment in government hospitals. Other formal-economy employees in many countries are covered by social insurance. Some of the extreme poor may benefit from targeted social assistance. All other people – especially the inhabitants of rural areas, the urban poor, and those working in the informal economy – often have no access whatsoever to any such formal social protection schemes.

Workers in the informal economy rely on, and often benefit from, the support provided by relatives and neighbours within their communities. In addition, some households are organized in groups that have the explicit goal of helping their members to manage risks – such as health mutuals and burial societies. While such non-formalized social protection schemes are of considerable importance for their members, they remain limited in terms of their scope and scale.

¹ See the Universal Declaration of Human Rights, 1948 (Article 22) and the International Covenant on Economic, Social and Cultural Rights, 1976 (Article 9). Also, the constitutions of more than 110 independent States make reference to the right to social protection in one way or another.

Moreover, it is often the case that such schemes are insufficiently reliable because they are based on moral obligations and goodwill rather than on any formal obligation. There is no mechanism that allows for members to enforce the provision of benefits in the event of default, and these schemes are also often highly susceptible to economic stress. Finally, the combined effect of trends towards migration, urbanization and the diminishing importance of traditional values and norms are resulting in the evident erosion of, in particular, mutual support networks.

Figure 2.1



Microinsurance is one potentially effective instrument for overcoming this situation. Unfortunately, microinsurance is often discussed in isolation and is in many cases implemented without consideration of the underlying context. Its ultimate goal is to reduce the vulnerability of people living on low incomes by enabling them to manage risks more efficiently. It is thus a social protection instrument, which should not be overlooked when a social policy strategy is developed. There are alternatives to microinsurance for reaching this goal, which may be more or less effective depending on the particular context concerned, but it still warrants consideration.

This chapter strives to answer three questions: 1) to what extent can microinsurance contribute to closing the gap in social protection coverage in developing countries; 2) how should it be designed for maximum impact; and 3) under what conditions would it be preferable to other social protection instruments?

The chapter argues that a systemic perspective on social protection is crucial for analysing the effects of microinsurance and for optimizing its design. It is just one possible social protection tool and should be well embedded in a country's overall social protection framework. Microinsurance is no substitute for social transfers, which are financed by taxes and intended to support the poorest and most vulnerable members of society. In addition, it is not a priori superior to social insurance (especially for risks such as illness and old age), as long as both instruments are realistic options, i.e. where the State has both the political will and the institutional capacity required to build up social insurance schemes for low-income households.

The potential for microinsurance is huge in most developing countries, especially if many governments are unwilling or unable to extend public social protection schemes to excluded segments of the population. In addition, countries are generally unable to provide comprehensive social protection systems against all relevant risks faced by each and every household. Thus, there is plenty of room for microinsurance in the majority of developing and emerging countries.

This chapter proceeds as follows: section 2.1 defines social protection, with an overview of its scope and functions. Section 2.2 explains why many households in developing countries lack access to adequate social protection. Section 2.3 portrays microinsurance as a social protection instrument and discusses possible roles of microinsurance within the overall social protection framework. Section 2.4 concludes with an appeal for a systemic perspective to be employed when analysing and implementing microinsurance schemes.

2.1 Scope and functions of social protection

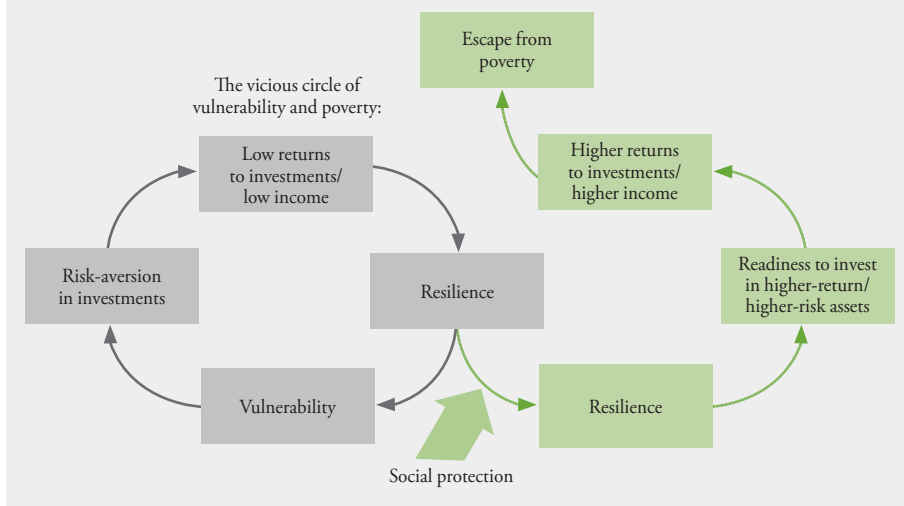
People everywhere are confronted with manifold risks. A risk is the possibility of an event with negative effects leading to a decline in income for a person or household (as in the case of unemployment) or a rise in expenditure (as in the case of a price shock), or both (as would be the case when an illness leads to disability that prevents employment and results in healthcare costs).

The existence of risk and the lack of preparedness for that risk leads to vulnerability, which is the likelihood that a person or household will suffer a significant decline in well-being due to a risk event. This likelihood rises with 1) the probability of a risk event; 2) the expected magnitude of its effects; and 3) the lack of resilience of the persons or households, which depends, among other things, on asset endowment, including cash and property.

Vulnerability and poverty are thus not the same, but they mutually reinforce one another (see Figure 2.2). On the one hand, poor people are more vulnerable: than those who are better off they are exposed to a higher number of risks, to more severe risks, and to a higher probability of a risk occurring because of their more hazardous living and working conditions. In addition, the poor have fewer assets that can be sold to cover emergency spending, or to diversify their sources of income (e.g. from labour to capital income), or to offer as security for a loan. Risks that may lead to losses that are independent of income or assets represent a more serious threat to low-income households than for households that are better off because the possible loss is greater in relative terms. However, even risks that are associated with a loss that grows proportionally with income or wealth are normally considered more serious by poor people than by rich people. This phenomenon is due to the fact that the marginal utility of income diminishes as it rises, as was proven theoretically as early as 1964 by Pratt (Pratt, 1964; Loewe, 2005b; Zweifel and Eisen, 2000).

Figure 2.2

The promotional function of social protection: Breaking the vicious circle of poverty and vulnerability



On the other hand, vulnerability exacerbates poverty in three ways:

- 1) The occurrence of a risk decreases people's well-being.
- 2) It may force people to use their financial, physical, human and social assets to cope with the corresponding effects. They may, for example, have to draw on their savings, sell productive assets (e.g. land or machinery), take children out of school and put them to work, or use social networks for financial support. In doing so, they would use up the very resources that might otherwise help them

to develop the future income-earning activities that could enable them to recover and improve their socio-economic situation.

- 3) Vulnerability reduces people's readiness to extend their economic activities and thus improve their socio-economic well-being. People who are vulnerable to risks such as illness or unemployment are reluctant to invest any excess income in productive capital or education. This would help them to increase their income but also imply some additional risks. Instead, they tend to accumulate funds or assets so that these can be accessed easily whenever a risk event occurs (e.g. to pay for medical treatment). Similarly, an awareness of their vulnerability to uninsured risks can lead to the use of outdated, though less risky, production technologies.²

The objective of social protection is to break this vicious circle. This chapter defines social protection as the total set of actions that are carried out by the State or other players (e.g. commercial companies, charitable organizations and self-help groups) to address risk, vulnerability or chronic poverty. This description constitutes a compromise between the different positions taken by the relevant international players with regard to the meaning of this term. The ILO's definition is comparatively narrow. It sometimes uses the term "social protection" as a synonym for "social security".³ In most cases, however, it prefers to use "social security", which involves only risks that are typical for people who derive their income from paid labour.⁴

However, most other definitions are broader. The World Bank, for example, considers that social protection encompasses all "public interventions to 1) assist individuals, households, and communities to better manage risk, and 2) provide support to the critically poor" (Holzmann and Jorgensen, 2000, p. 3). Similarly, the Organisation for Economic Co-operation and Development (OECD) refers to social protection as the "policies and actions which enhance the capacity of poor and vulnerable people to escape from poverty and enable them to better manage risks and shocks" (OECD, 2009, p. 10).

² For empirical evidence on these effects see Bird (2001); Fafchamps and Minten (2008); Lichand (2010).

³ In at least one publication, social protection is defined as "the set of public measures that a society provides for its members to protect them against economic and social distress that would be caused by the absence or a substantial reduction of income from work as a result of various contingencies (sickness, maternity, employment injury, unemployment, invalidity, old age, and death of the breadwinner); the provision of health care; and, the provision of benefits for families with children" (García and Gruat, 2003, p. 13).

⁴ In a recent major publication, for example, the term "social security" is taken to cover "all measures providing benefits, whether in cash or in kind, to secure protection, inter alia, from (a) lack of work-related income (or insufficient income) caused by sickness, disability, maternity, employment injury, unemployment, old age, or death of a family member; (b) lack of access or unaffordable access to health care; (c) insufficient family support, particularly for children and adult dependants; (d) general poverty and social exclusion" (ILO, 2010, p. 13).

Meanwhile, there is a growing consensus that social protection has three key functions:

- 1) **Prevention:** To provide security to vulnerable households by reducing the likelihood of their suffering a serious decline in well-being and possibly even falling into absolute poverty. This goal can be achieved by a) reducing the likelihood of risk occurrence (risk prevention); b) reducing the possible effects of risk occurrence (risk mitigation); or c) supporting households in their efforts to cope with the effects of risks once they have materialized (see below).
- 2) **Protection:** To extend financial or in-kind support to the poor through the redistribution of income within society.
- 3) **Promotion:** To expand the opportunities for the poor and vulnerable to raise their productivity and income by encouraging them to take on the additional risks that are associated with investing their savings in education and productive assets.

These three functions can be performed by social protection schemes in three different ways:

- 1) by reducing ex-ante the likelihood of a risk event (risk prevention);
- 2) by limiting ex-ante the possible effects of a risk event (risk mitigation) through the accumulation of savings (risk provisioning), insurance (risk sharing) or self-insurance (risk diversification); and
- 3) by absorbing ex-post the effects of a risk event (coping with risk).

By fulfilling these tasks, social protection contributes to development in three different ways (Cichon and Scholz, 2009; de Neubourg, 2009; Loewe, 2005a). Firstly, it contributes to socio-economic justice by preventing people from falling into poverty, by providing support to people in poverty and by helping people to escape from poverty. Secondly, social protection contributes to productive investment and economic growth. It encourages low-income households, in particular, to invest excess income in education and tools of production, and thereby mobilizes local savings for productive purposes. Lastly, social protection contributes to political stability and social cohesion. In the 19th century German Chancellor Otto von Bismarck initiated the world's first social insurance scheme mainly to contain opposing socialist forces, to appease an underprivileged industrial workforce and to build a German nation state, rather than out of any concern for the poor or a feeling of solidarity. Indeed, politicians in many countries around the world have since then followed this example.

Social protection is thus a cornerstone of a country's social, economic and political development.

2.2 Social protection in developing countries

Social protection can be organized by the State, commercial companies, self-help groups or other players. Most countries have social protection systems run by all of them.

State-run social protection schemes are financed either by the contributions of their members or by general tax revenues. Social insurance schemes, in particular, are financed by regular contributions and are usually linked to formal (contractual) labour relationships. They are based on specified rules, often underpinned by law, and provide benefits when a member of the household experiences a sudden shock due to a specific risk that is predefined by law (e.g. old age, a disability, or the death of a breadwinner). Social insurance schemes can thus effectively reduce the vulnerability of households that can afford to pay some regular contribution in exchange for a reduced exposure to risk. Nonetheless, they address only a specific set of risks, which may not always include the risks that constitute the most serious threats for their members. For example, such schemes do not, in general, provide protection against harvest failure resulting from weather-related risks – even though these risks constitute a more serious problem for many rural households than old-age or work injuries, which can be managed through the mutual support of relatives and neighbours. In addition, social insurance generally fails to help the extreme poor, who are unable to pay even very small contributions, and thus tend to be excluded from social insurance schemes.

Social transfer schemes help to prevent and alleviate both chronic and transitional poverty. In addition, they normally address all kinds of risks, but they tend to be less powerful in terms of reducing the vulnerability of households. Since they are financed by tax revenues, benefits are usually quite limited and aim to prevent households from falling into severe poverty. However, they are not able to prevent any deterioration in the well-being of richer households because the benefits provided by social transfer schemes fall well short of replacing their former income – something that social insurance schemes are often able to do.

There are two types of social transfer schemes: “targeted” and “universal” schemes. Targeted schemes grant benefits only to people in need, while universal schemes pay out to all households. Although the sum of the benefits provided by targeted schemes is, as a rule, considerably smaller than the total expenditure of universal schemes, their budgets are sometimes even higher because of the targeting costs involved (i.e. the costs of identifying eligible households).

Likewise, a distinction can be made between cash transfer schemes (e.g. social assistance, social pension and basic income grant), vouchers (e.g. for education or health services), and in-kind transfers (e.g. food rations or free public health care).

In general, non-public social protection schemes are financed by contributions. This is particularly the case for schemes that are run by commercial companies (including private insurers, in which case the contributions are “premiums”), by self-help groups (such as savings, credit and insurance groups) and by micro-finance institutions. Even mutual support networks expect their members to give their relatives and neighbours approximately as much as they have received from others, the only exception being the charitable support provided by rich households to the poor for philanthropic reasons (*see Table 2.1*).

Table 2.1

Overview of social protection schemes organized by the various players

<i>Organized/ administered by:</i>	<i>Financed by members' contributions (addressing vulnerability and specific risks)</i>	<i>Financed by taxes or the voluntary donations of other households (addressing transient and chronic poverty and a broad range of risks)</i>
Government/public authority	<ul style="list-style-type: none"> – Social insurance schemes – National provident funds – Public credit schemes 	<ul style="list-style-type: none"> – Social assistance schemes – Universal cash transfer schemes – Cash/food-for-education schemes – Cash/food-for-work schemes – “Free” public healthcare systems
Commercial/private companies	<ul style="list-style-type: none"> – Commercial savings schemes – Commercial credit schemes – Private insurance contracts 	
Semi-formal self-help groups	<ul style="list-style-type: none"> – Savings and credit clubs – Mutual insurance associations 	
Traditional networks	Mutual support networks	Charitable support provided by the rich to poor households

The main challenge for social protection policies in developing countries results from the fact that the coverage of many schemes is quite limited, in terms of both scale and scope. Indeed, social insurance schemes reach only a minority of the population (*see Figure 2.1*). With only a few exceptions, old-age insurance covers no more than 40 per cent of the labour force in middle-income countries and 10 per cent of the labour force in low-income countries (ILO, 2010). At the same time, less than 12 per cent of the population have private health or pension insurance (Drechsler and Jütting, 2005), and less than 5 per cent receive public social assistance benefits (Barrientos and Holmes, 2007).

Efforts to extend social insurance coverage are often constrained for financial, administrative and political reasons:

- 1) Most existing schemes are based on formal employment relationships and contributions are shared by employees and employers. These rules are difficult to apply in relation to people in unstable, informal employment, especially those who are self-employed.
- 2) Social insurance organizations face administrative problems in terms of monitoring the enrolment of workers in the informal economy, collecting their contributions and properly administering their claims.

- 3) Groups of employees that are already insured often oppose the inclusion of additional groups in social insurance schemes, as they are afraid it will have an adverse effect on them – especially when the new groups are on average poorer than they are.

Likewise, few countries have extended the outreach of their social transfer schemes. Low-income countries are particularly constrained by budgetary considerations. However, even middle-income countries are often reluctant to provide more cash or in-kind support to those in need. Politicians often lack the commitment needed for allocating public resources to population groups that are usually not well organized and thus unable to exert pressure on their governments.

As illustrated throughout this book, commercial insurers also face difficulties in attracting low-income customers:

- 1) Their administrative costs are usually relatively high, so they have to charge premiums that are too expensive for low-income earners.
- 2) Commercial insurers face difficulties in obtaining important information on the risk profiles and behaviour of people working in the informal economy and living in informal settlements. Also, if they offer products to such customers, they risk being confronted with the problems of adverse selection and moral hazard.
- 3) Many low-income households have little understanding of how insurance works, mistrust insurance companies and hence often display little demand for insurance.

At the same time, insurance companies have few incentives to target low-income households. In many developing countries, insurance markets are protected against foreign competitors, and the market of high- and medium-income customers is more attractive. As a result, insurers do little in these countries to make poor people understand their customary, sometimes complicated, products and to raise awareness about the necessity to insure against risks. Finally, their payout mechanisms are also often slow, which makes them rather unattractive for poor people, who need rapid access to funds.

Community-based schemes represent a possible instrument for extending social protection to the informal sector. However, such schemes also face a number of constraints that may threaten their very survival. Indeed, they are usually marked by low subscription rates, insufficient financial capacity, and organizational and managerial problems (Fonteneau and Galland, 2006; Jütting, 2002; Meesen et al., 2002).

Social protection schemes in developing countries tend to cover only a limited range of the relevant risks. For example, they normally address only health and life-cycle risks such as old age, a disability that prevents employment, or the death of the main family breadwinner. Few feature unemployment insurance. Hardly any schemes provide protection against natural risks, which are more of a threat to many rural households than life-cycle risks.

2.3

Microinsurance as a social protection tool

One possible instrument for filling these gaps is microinsurance. As a risk-pooling tool, financed mainly by premiums, microinsurance involves a horizontal redistribution of income between peers with comparable risk profiles, rather than on a vertical redistribution from the rich to the poor. At the same time, the prefix “micro” indicates that the contribution rates are affordable for low-income earners, with correspondingly limited benefits. Ideally, the scheme’s benefit package, enrolment conditions and transaction formalities should meet the specific needs of the target group.

A tremendous diversity of organizations have set up microinsurance schemes that operate in line with this definition. This would include social insurance corporations (e.g. the Comprehensive Social Insurance Scheme in Egypt), public insurance companies (e.g. Janashree Bima Yojana offered by the Life Insurance Corporation in India), commercial insurance companies, some healthcare providers (e.g. the Chogoria Hospital in Kenya), many microfinance institutions, private welfare organizations (e.g. IRAM in Mozambique or Activists for Social Alternatives in India), cooperatives (e.g. the Asociación Mutual Los Andes in Colombia) and community networks (such as *harambees* in Kenya).

If properly designed, microinsurance constitutes an efficient means of providing workers in the informal economy with social safeguards. In this way, it can potentially contribute to closing the gaps in coverage that exist with the social protection schemes operating in developing countries (*see Figure 2.1*). Empirical studies from Bangladesh and India provide evidence that microinsurance can (though it does not always) have a significant positive impact on several aspects of multidimensional poverty (Hamid et al., 2010). For more on the impact of microinsurance, see Chapter 3.

In addition, microinsurance can also play an important role in empowering its members. Microinsurance contracts are often the product of a dialogue between providers and the target groups, whereas public social protection schemes are often created by purely top-down processes. As a result, microinsurance can be responsive to the specific needs and preferences of low-income earners. In addition, successful microinsurance projects have a demonstration effect: they raise awareness about the significance of providing protection against risks and of pre-empting the likely consequences should they actually materialize. Similarly, they show that collaboration within groups can strengthen the opportunities and position of the individual (Loewe, 2009b).

There are, however, some limitations to the potential of microinsurance (*see Loewe, 2006*).

Firstly, microinsurance is not a substitute for a social transfer scheme because microinsurance addresses vulnerability rather than chronic poverty, while social transfers provide immediate support to people in poverty. Microinsurance

schemes (in a broadly similar way to social insurance schemes) are financed by their members' contributions and are intended to mitigate the impact of any possible future downturns in a member's income and any unexpected rise in his/her essential expenditure. Thus, they are not a suitable instrument for people who have difficulty meeting their most basic daily needs, let alone making provision for future social needs. The extreme poor can only be safeguarded through transfers financed by tax revenue.

In addition – again, unlike tax-transfer schemes and also unlike social insurance systems – microinsurance schemes cannot (and are not meant to) redistribute funds from rich members of society to the poor. This weakness is explained by the fact that enrolment in a microinsurance scheme is typically restricted to low-income households. If a microinsurance scheme used contributions made by rich members to cross-subsidize the benefits provided to poor members, it would be attractive only to the poor.

Secondly, many households lack the opportunity to join a microinsurance scheme because no such scheme operates in their vicinity. Microinsurance schemes contribute in a way to equality and social justice: they provide people with low and fluctuating income, who often cannot access other kinds of social protection instruments, with the opportunity to mitigate their risks as well. However, today microinsurance schemes cover only a limited portion of the population in their respective countries. Indeed, many experts believe that microinsurance will never reach a majority of the population, even under the most optimistic of assumptions (Roth et al., 2007).

Governments and donors may support the expansion of microinsurance by providing advice and promoting the creation of sound basic conditions. However, the fairness of providing financial subsidies to these schemes should be carefully considered, as they would favour the clients of the schemes at the expense of households who do not even have a chance to join. Subsidies are problematic because microinsurance customers are often not from the lowest income strata – for example, because the very poor cannot afford even the premiums payable under microinsurance schemes. However, government budgets in developing countries are normally mainly financed from indirect taxes, which are borne by all segments of the population, including the very poor. As a result, the subsidization of microinsurance makes the very poor co-finance the benefits of households who are less poor than they are. Replacing indirect taxes with direct taxes would improve the situation, but many countries face administrative difficulties in collecting direct taxes.

Things look different if a large majority of the population, including the very poor, has physical access to a microinsurance scheme and if only the premiums of the poorest are subsidized. In this case, subsidies can be an instrument of progressive redistribution and eliminate concern about equity.

Thirdly, microinsurance is more suitable for some risks than for others. Experience indicates that the problems tend to be least in life and disability insurance. Insurance against extreme weather events is currently offered in a number of countries, although this is much more difficult to design and manage (*see Chapter 4*). Offering a micro-pension is also difficult as it requires a high degree of customer trust in providers, especially since the benefits are payable decades after the first premiums have been paid, not to mention the difficulty for the provider of managing investments to yield the long-term returns that make future pension payments possible. Until now, what has been sold in India under the label of “micro-pension” differs little from a simple savings product, which contains no pooling of risks. Contributions are defined while benefits depend on the interest achieved by the insurer investing member funds in the capital markets. In addition, benefits are either lump-sum or annuities that are paid only until accumulated funds are exhausted (although entitlements can be inherited when a customer dies before her/his funds have been completely paid out). As a result, clients bear the entire risk of interest rate instability and longevity of members (Shankar and Asher, 2009).

As illustrated in Chapter 5, health microinsurance also poses serious challenges. Health microinsurance generally refunds the costs of medical treatment to policyholders, irrespective of their income or assets. That means that for any given indemnification package the insurer expects to spend on average the same amount on the benefits provided to all policyholders. Consequently, it cannot sell the package to low-income clients at a lower price than that for high-income clients. At best, it can offer poor clients a slimmed-down package that does not cover certain illnesses, excludes very expensive medical treatments or is restricted to a certain maximum annual amount. Insurance is most effective when it covers very high expenditure: typically, many policyholders can provide for small expenses through their own savings. Nevertheless, for low-income clients a limited-benefits package that refunds at least some healthcare costs (e.g. only in-patient services) can still help in the absence of social health insurance schemes.

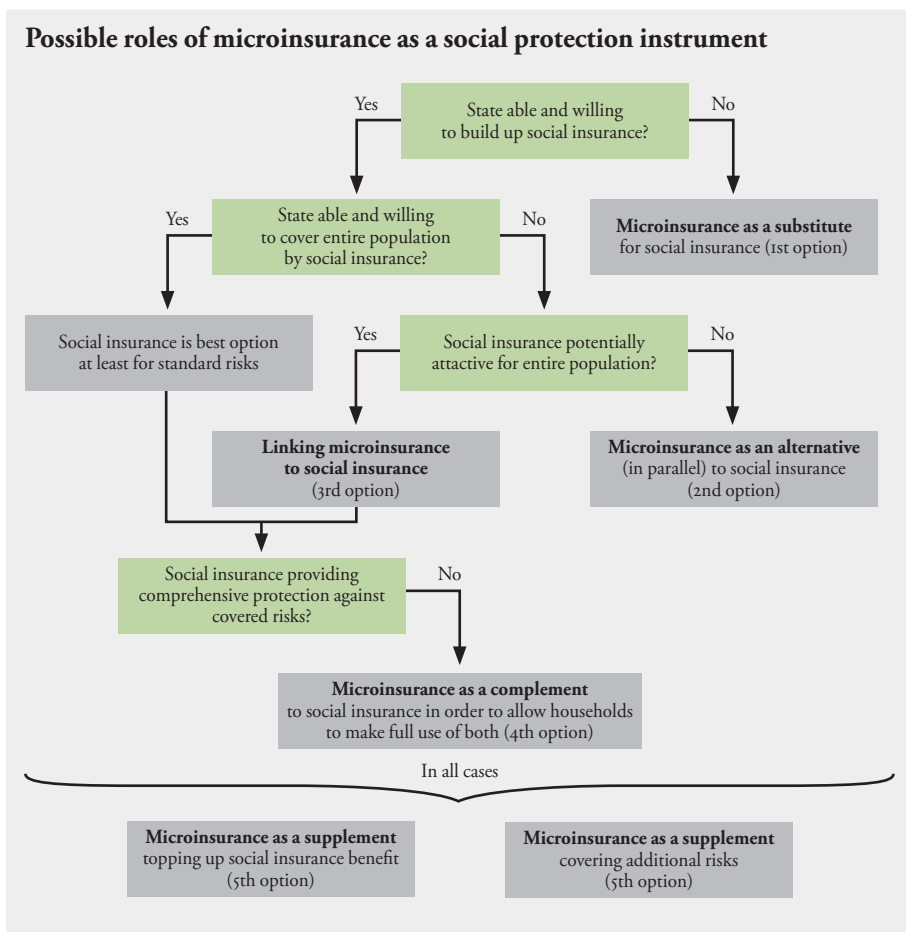
These considerations demonstrate how important it is to analyse the possible effects of microinsurance using a systemic approach to social protection. Only a holistic analysis can capture, for example, the interplay between health financing and healthcare provision. Health microinsurance makes no sense if healthcare services are not offered in the region concerned or if the services provided are of very poor quality. Additional attention must also be paid to the contractual arrangements and payment mechanisms agreed between microinsurers and healthcare providers (*see Chapter 6*). A holistic analysis is needed to serve the three public goals of equity, affordability and access to (quality) health services.

Furthermore, under normal circumstances microinsurance constitutes only a second-best option when compared with social insurance. Membership of the

latter can be prescribed by law, making redistribution among the insured possible. The same health insurance package can then, for example, be sold to poor and rich members alike, with payments made to poor members being partially financed by the contributions of the richer ones. Moreover, social insurance schemes give their members more legal certainty, as they are backed by the State, which must ultimately take responsibility for all liabilities.

Despite these limitations, microinsurance can be a useful approach to social protection in some very different settings, as illustrated in Figure 2.3.

Figure 2.3



First, as a substitute for social insurance: microinsurance can be an option where the State is unable or unwilling to build up social insurance schemes or does not want to extend them to those working in the informal economy. Under such circumstances, microinsurance can fill at least part of the widening gap that results from a lack of governmental action. The mutual insurance schemes in remote rural areas of Western and Central African countries are typical examples of such a strategy.

Second, as an alternative to social insurance: microinsurance can also play a crucial role where social insurance schemes do exist, but are not (and unlikely to become) attractive for all informal-sector employees. This may be due to the fact that the risks covered constitute a major threat only for workers in the urban formal sector, whereas farmers and workers in the informal economy are vulnerable to other types of risk. Likewise, the contribution rates may be too high or the payment procedures may not be appropriate for people with an irregular income. Furthermore, the population may mistrust the systems administered and organized by public institutions.

In these cases, microinsurance can be built up in parallel as an alternative to social insurance, with the result that households can opt for the kind of social protection instrument that best suits their specific needs and preferences, i.e. social insurance, microinsurance or traditional commercial insurance. For example, in Viet Nam, a few cooperatives offer health microinsurance despite the fact that every citizen not legally covered by the country's standard social health insurance scheme can enrol voluntarily at a moderate contribution rate in a separate social health insurance scheme, which is also run by the official social insurance corporation to meet the needs of people outside the formal economy (World Bank et al., 2007). Similarly, Ghana allows independent mutual health insurance schemes to co-exist with district health insurance schemes affiliated with the National Health Insurance Fund (*see Box 2.1*).

Third, it can be linked to social insurance: microinsurance can help even where social insurance is potentially attractive for the entire population. Some countries face difficulties in integrating informal-sector employees into their social insurance schemes even though – and this is in contrast to the second scenario described above – their enrolment in them would benefit the large majority of households in the country. The problem may be that the social insurance administration is unable to reach rural areas, serve informal urban settlements or convince low-income households of the merits of enrolment. Informal economy workers may also be reluctant to enrol because they are not sufficiently aware of their risks or mistrust the State. In Viet Nam, for example, many individuals do not enrol in the country's voluntary social health insurance unless they are suffering from serious health problems. In Tunisia, the number of informal-sector employees contributing to the social insurance scheme increased only after the Government added child allowances to the benefit package of the social insurance scheme. Previously, these had only been part of the benefit package for formal-sector employees and proved to be very popular among informal workers (*see Loewe, 2009*).

In cases such as these, social insurance corporations may consider cooperating with microinsurance providers, who act as their local agents. The task of these agents is to convince households of the advantages of enrolling in social insurance

schemes, foster trust in these schemes, register new members, collect their contributions and pay out benefits to them. For example, some years ago, Thailand considered extending the coverage of its voluntary social pension insurance to informal-sector employees in this way. To ensure that premium collection and benefit payment mechanisms are tailored for the target group, the social insurance administration recognized the advantages of cooperating with local agents – not just occupational organizations and trade unions, but also with microinsurance institutions.

In addition, new social insurance schemes can be built on the basis of existing microinsurance schemes, as in the case of Ghana's national health insurance system (*see Box 2.1*). The public social insurance entity can serve as an umbrella organisation that provides expertise and reinsurance to microinsurers and coordinates their activities. Furthermore, the umbrella organization can harmonize the benefit conditions of the affiliated schemes to create equal opportunities for all members. The microinsurance organization can then take on the role of an agent that acts as the local representative of the national social insurance entities. Finally, the microinsurance schemes can be fully integrated into the social insurance scheme.

Box 2.1

The National Health Insurance Act of Ghana

After independence, Ghana built up a tax-financed public health system providing essential health services free of charge to the entire population. However, in 1985, the Government introduced user fees in the health system as part of a broader structural adjustment programme. Equity in access to essential services deteriorated rapidly. As a consequence, more than 150 mutual health insurance schemes were founded between 1990 and 2003, mostly providing protection against the catastrophic healthcare costs for in-patient medical treatment for more serious illnesses.

In 2003, the Government announced the National Health Insurance Act, making it compulsory for all citizens to enrol with either 1) a district mutual health insurance scheme; or 2) a private commercial insurance scheme; or 3) a private mutual health insurance scheme. Existing mutual health insurance organizations had to choose whether to remain independent or to become a district scheme affiliated to the newly established National Health Insurance Fund (NHIF), which acts as both a reinsurer and the supervisor of the district schemes. In the latter case, the mutual health insurers must offer a fairly comprehensive package of services, including the reimbursement of at least 95 per cent of the costs of most in-patient and outpatient services and a number of drugs (i.e. with the exception of antiretroviral drugs, assisted reproduction, and cancer treatment). Their sources of funding include member contributions (a payroll deduction of 2.5 per cent for formal-sector employees and a flat premium of about €6 (US\$8.50) per annum for informal-

sector workers), donations, donor grants and a significant government subsidy financed by a special levy of 2.5 per cent on the sale of selected goods. In districts without any mutual health insurance scheme cooperating with NHIF, the Government itself established a mutual health insurance scheme.

Ghana thus provides an example of microinsurance schemes operating both as an alternative to the public social insurance scheme and being linked with it for mutual advantage.

In 2008, the district health insurance schemes affiliated with the NHIF covered 42 per cent of the urban and 36 per cent of the rural population. Poor households in particular refrained from enrolling in the system because contribution rates appeared to be too expensive. For this same reason, only about 20 formerly independent mutual health insurance schemes had linked themselves to the NHIF by 2007. Most others continued to offer much smaller benefit packages at much lower contribution rates. It should be noted, however, that these independent schemes covered an even smaller share of the population: 1.3 per cent in urban areas and 0.9 per cent in rural areas.

Nevertheless, the long-term solvency of the NHIF is at risk. Three-quarters of its spending is covered by the Government, while only a quarter is covered by member contributions. One reason for this is that only 38 per cent of all members actually pay their premiums. Children and very poor households are covered at no charge. In addition, the administration costs of the affiliated mutual health insurance schemes are rising, partly because the readiness of their members to manage their schemes for free vanished once they had to use uniform benefit packages and conditions imposed by the State.

Sources: Adapted from Gehrke, 2009; Lethourmy, 2010; Brugiavini and Pace, 2010.

Fourth, as a complement to social insurance: microinsurance can be crucial even where social insurance schemes cover the most serious risks faced by households. This is particularly true where social insurance only covers a part of the costs incurred due to the negative shocks associated with these risks. Viet Nam's social security organization, for example, runs an attractive voluntary social health insurance scheme for workers in the informal economy. Having said this, the scheme only reimburses health treatment costs and not the transportation costs incurred for a visit to a hospital. Hence, the package offered is almost worthless for poor households in remote rural areas because of high transportation costs. The Vietnamese Ministry of Labour, Insurance and Social Affairs (MOLISA) has therefore decided to support – in cooperation with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) – poor rural communities in setting up social risk funds that provide, among other things, compensation to their members for health transportation costs (*see Box 2.2*).

These funds and the national health insurance scheme are thus “complementary” in a very narrow sense of this word, as both would be obsolete for many rural households in rural Viet Nam without the presence of the other.

In the same way, microinsurance providers could cover the cost of essential drugs. Social health insurance schemes in many developing countries pay for all kinds of medical care, but often not for medication, which is particularly expensive. However, without drugs, many medical therapies are useless. So here again microinsurance can prove an effective complement to other health insurance arrangements.

Box 2.2

The Viet Nam social risk funds

Under the poverty reduction programme, GIZ supports MOLISA in developing and piloting social risk funds (SRFs) in four communes in Viet Nam. Their aim is to provide relief when certain events negatively impact households in the communities concerned and thus to reduce the vulnerability of the poor.

The SRFs are another far-from-perfect example of microinsurance, as they have been heavily subsidized and therefore are a type of social transfer programme rather than a microinsurance scheme. However, they are intended to reduce reliance on subsidies and illustrate how social insurance and other social protection schemes (those financed both by subsidies and by member contributions) can function as real complements.

The SRFs provide death benefits if either of a family's two main breadwinners dies, and reimbursement of the costs of transporting a patient to hospital and accommodation and food for one accompanying caregiver.

This list of benefits is based on target group preferences. Its composition can only be understood against the background of Viet Nam's public social insurance agency offering a comparatively cheap health insurance product, which covers most medical treatments, but not travel costs. The product is thus attractive for people living in towns, but less so for the inhabitants of remote areas who would have to travel a long way to make use of the health insurance package offered by the State. Buying it only makes sense in rural areas in combination with the SFR coverage.

The SRFs are financed by member contributions, government subsidies and the financial support provided by GIZ. Currently, about 70 to 80 per cent of the total cost of running the SRFs is covered by member contributions. This might be the reason why MOLISA and GIZ rightly avoid using the term “insurance” for these funds. However, contribution rates have already increased significantly over the last few years and should cover almost all expenditure in the near future.

Source: Adapted from GTZ, 2009.

Fifth, as a supplement to social insurance: in all cases, the role of microinsurance may also be to top up the benefits granted by social insurance schemes. This option may sound similar to the previous option (microinsurance as a complement). The difference is that in the former case, the presence of both microinsurance and social insurance are crucial for each to have a significant positive impact on the members. While here, microinsurance and social insurance simply cover different risks or different effects of the same risk, microinsurance may, for example, grant a supplementary pension to retirees. Or microinsurance may cover specific illnesses such as cancer or HIV/AIDS if they are excluded from the cover provided by commercial and social insurance schemes. However, their treatment is often excluded on the grounds that it is exceptionally expensive, and therefore cover might be too expensive for microinsurance. For example, a microinsurance scheme in Jordan, exclusively covering the treatment of cancer, has thus far attracted only middle- to high-income households, as low-income people consider premiums too expensive (Loewe, 2001).

In the same way, microinsurance may provide protection against risks that are currently not covered by social insurance, i.e. droughts, animal diseases, earthquakes, floods, typhoons and crop pests. These risks are not among those that international agencies, including the ILO, identify as the core household risks for which governments should provide social protection for their citizens. As a result, they are often neglected in social policy strategies, despite the fact that they may constitute a more serious threat to many people than many of those listed in the ILO's Social Security (Minimum Standards) Convention, 1952 (No. 102). One reason is that it is possible to manage risks such as old age, work disability or illness through financial pooling, even among rural communities, while weather-related risks are covariant, i.e. they affect all the people in a given region at the same point in time. In addition, it is perilous for an insurer to offer compensation for harvest failure due to weather events (e.g. drought, a severe cold spell or a flood) because the potential for moral hazard would be enormous: once farmers have signed a contract for harvest insurance, they have less of an incentive to ensure that their harvest remains good even when an extreme weather event occurs. In addition, they may exaggerate the extent of a harvest failure, and it would be difficult for insurers to detect such misreporting (Loewe, 2009b).

For this reason, many recently established weather insurance schemes are index-based (*see Chapters 4 and 11*). They cover only one or two risks that may lead to harvest failure, and compensation for insureds depends on an objective trigger that is easy to monitor. Many are thus deficit and excess rainfall insurance schemes rather than direct compensation for a farmer's actual loss in terms of harvest failure or loss of assets. For example, under the deficit rainfall insurance offered by the Horn of Africa Risk Transfer for Adaptation (HARITA) scheme in Ethiopia (*see Box 4.3*), benefits are granted to all policyholders within a region if in any single

year precipitation fails to exceed 50 or 70 per cent of its long-term annual average. Certainly, the indicators used by such insurance schemes are imperfect proxies for the losses incurred by farmers. Some may experience significant harvest losses even when precipitation is higher than 30 per cent of average levels, while others may have acceptable harvests even after droughts. The identification of an indicator that is easy to monitor and still a good proxy for harvest failure is, therefore, crucial for the attractiveness and success of weather insurance schemes (Gehrke, 2011).

2.4

Conclusion: The need for a systematic approach

This chapter shows how important it is to view microinsurance within a broader social protection framework. Microinsurance has the ultimate goal of providing social protection, i.e. reducing poverty and vulnerability through the provision of support to low-income households in their efforts to manage risks. However, it is just one of several options for reaching this goal, and not necessarily the most efficient one. Therefore the potential of microinsurance should always be assessed in relation to other social protection instruments: Can the goal of reducing the vulnerability of households against risks be better achieved by other social protection instruments? Does the building up of a microinsurance scheme undermine the attractiveness and financial viability of other, existing social protection schemes? In addition, microinsurance schemes should not be evaluated purely on the basis of technical criteria such as financial sustainability and rates of return, but also in terms of their impact on the poor and vulnerable groups in society.

The promotion of microinsurance should also be part of a systemic approach that is oriented towards the ultimate goal of protecting as many households in a country against as many of their risks as possible. From a social protection perspective, it is crucial to keep in mind that the benefits of microinsurance are often most effective when combined with other complementary social protection instruments such as social insurance or social cash transfers, and when it is embedded into a broader social protection framework. These linkages create synergies that maximize the potential of microinsurance as a risk management tool, especially for those population groups that are most vulnerable. Different segments of the population would be able to choose between several social protection instruments and to select the one that best fits their specific needs and preferences. The main question to be answered in each national context is, therefore, the role that microinsurance should play among the plethora of social protection instruments available.

What is the impact of microinsurance?

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Insurance is not an end in itself. Households purchase (and donors support the development of) microinsurance because they want to manage risks better. Does microinsurance improve risk management and reduce the vulnerability of low-income households? Does microinsurance improve the well-being of clients, their families and communities?

Based on a systematic literature review, this chapter takes stock of what we know so far about the impact of microinsurance on low-income households and their livelihoods. After defining impact and reviewing its importance, it describes the challenges involved in performing accurate impact evaluations and summarizes the currently available literature on the impact of microinsurance. Using insurance theory, it explains the expected impact of microinsurance and compares it to evidence from the literature. The chapter concludes with trends observed thus far and describes the remaining knowledge gaps in the hope of catalysing additional work in this field.

Most of the rigorous impact assessments available focus on health insurance in Africa and Asia. The evidence is mixed. There are robust findings proving that health microinsurance reduces out-of-pocket health expenditure and increases the utilization of healthcare services. Knowledge on other impacts and impacts of other products is limited. Given the complexity of health insurance, the insights presented below should be considered as a contribution to our understanding of microinsurance benefits, rather than an evaluation of whether health insurance can revolutionize protection against health shocks in developing countries.

What is impact?

Impact encompasses the changes that microinsurance makes to the economic or social circumstances of insured people or their households, enterprises or communities. It can be positive or negative, affect both insured and uninsured populations, occur either before, ex-ante, or after, ex-post, insured events happen, and have micro-, mezo- and macro-level implications, often in ways that are linked. For example, livestock cover can provide payouts that smooth household consumption ex-post after animals become sick or die, but can also

pre-emptively encourage households to reallocate money they may have saved for such emergencies to other more profitable ends ex-ante, before any problems occur. Similarly, health microinsurance can improve policyholders' health through increased access to care, which can additionally reduce local disease burdens and thus improve the health of nearby uninsured people too. As impact is multi-faceted and manifests itself in different ways, we need to be aware of each intervention's myriad potential effects and their relationships to each other.

3.1.1

Why is impact (and evaluating impact) important?

Impact defines the value of microinsurance for clients and by extension its worth to microinsurers. In the absence of impact (or the degree of impact that customers expect given the premiums they pay), people will neither purchase nor renew policies and the market will fail. Impact is therefore crucial to achieving profitability, as well as important poverty-alleviation objectives for commercial- and development-oriented microinsurance providers.

Impact analysis should also be discussed within the broader client value framework presented in Chapter 15, creating an iterative cycle whereby the analysis of product impact feeds back naturally into product and process design. A process of impact evaluation is designed to allow microinsurance products to be developed, refined and improved over time. In this respect, impact assessments complement other, often less rigorous, market research and client satisfaction studies that provide information for microinsurance product development. While the latter studies focus on improving impact, the impact assessments attempt to prove the impact of microinsurance.

Different stakeholders assess impact for a variety of reasons. Donors do so to gauge the success of funded projects and determine which prospective interventions to support. By contrast, governments evaluate impact to assist them in defining national policy and specific regulations. Investors want to ensure that their microinsurance investments are well placed to capture the market by providing value to clients. Lastly, microinsurers perform impact assessments to evaluate and improve their products' effectiveness. Taken together, impact and its evaluation are key to the successful development of microinsurance.

3.1.2 **How is impact assessed?**

The challenge of impact assessment is to properly attribute causality to the intervention in question (in this case insurance). For example, if a person purchased a health product and subsequently used more medical care, would the insurance cover be responsible? What if the price of clinic consultations had simultaneously dropped, or if the person's subscription had coincided with the beginning of the rainy season, and by extension the increased incidence of diseases such as malaria? Given these possibilities, the best way to determine impact involves studying the same person twice – once with insurance and once without – over the same period. Since this is impossible however, researchers use various techniques to select uninsured comparison groups to determine what would have happened in the absence of insurance.

However, choosing comparison groups is also difficult because a mere comparison of the results of insured and uninsured individuals, for instance, disregards characteristics that can influence both the insurance purchasing decisions and outcomes of the people in question. If those buying insurance are generally more ill, for example, they might use more medical care regardless – a phenomenon known as self-selection in impact analysis and adverse selection in insurance. Impact assessments that fail to take account of self-selection are susceptible to bias, or the systematic over- or under-estimation of an intervention's actual effects.

Impact evaluations must therefore create suitable control groups – a challenge that different study designs overcome with varying degrees of success. Randomized controlled trials (RCTs), for example, are considered in this respect the most rigorous approach available. By randomly allocating study subjects to receive insurance or not, RCTs distribute the observable and unobservable characteristics that could potentially influence the outcomes equally on average across the insured treatment group and uninsured control group, for sufficiently large sample sizes.

RCTs are often complicated, expensive and impractical to implement, and subsequently less robust techniques predominate instead. Of these, “quasi-experimental” approaches, which use statistical or econometric procedures to improve the affinity between comparison groups, are considered more rigorous.

However, the majority of currently completed microinsurance impact assessments merely contrast study subjects' results without correcting for the self-selection bias. As such – and even after using a method called regression analysis to take account of mitigating factors such as income, race or gender – they produce information that is susceptible to bias and thus have to be considered with caution.¹

¹ For a more in-depth discussion of research design for microinsurance impact assessment, see Radermacher et al. (2012).

3.2 The current literature

Since microinsurance is a relatively new intervention few impact assessment studies have been performed, which is exacerbated by a lack of standard indicators and research protocols for evaluating programmes.² Many of the existing studies also faced methodological problems that make it difficult to determine whether the reported effects were caused by the policies under consideration. These approaches include evaluations that merely compare the levels of variables of interest, such as the incidence of incurring catastrophic expenditure across groups of insured and uninsured individuals or households, which is extremely exposed to the bias described above. While some studies take account of extraneous influential factors such as levels of education, household incomes and the proximity to medical facilities using regression analysis, this is often not enough to establish the magnitude (or even direction) of the effects in question.

The studies presented here were selected because they were sufficiently rigorous impact assessments of microinsurance schemes. To qualify as sufficiently rigorous, only studies using a minimum of regression analysis were considered.³ Microinsurance is defined as the contractual protection of low-income people in developing countries against specific, pre-defined risks and in exchange for premiums (Churchill, 2006) – a definition with four facets that merit elaboration. First, low-income people are classified as those earning either less than two US dollars per day or half of a country's average per-capita annual income. Second, developing countries are those designated as such by the World Bank (2011a). Third, qualifying risks include cover for health, funerals, life, livestock, accidents, disability, property, natural and man-made disasters, and agriculture. And fourth, premiums are paid by the insured for a specific cover and term.

² In 2006, Pamela Young and co-authors proposed twelve intermediate and long-term indicators for evaluating health-related microinsurance schemes. While some of these measures were incorporated into subsequent studies, the microinsurance field still lacks generally accepted indicators for common use. Impact Working Group of the Microinsurance Network (2011a) is currently developing standard measures for health, agricultural, life, disaster, property and accident or disability-related microinsurance to correct this problem.

³ While efforts were made to locate all qualifying studies, the selection analysed in this chapter is not necessarily exhaustive. The authors would have preferred to include only experimental or quasi-experimental evaluations, but these were scarce at the time of publication.

The 21 evaluations that were retained for the final analysis and are discussed in this chapter assessed approximately 110 schemes, of which all but three were health insurance schemes. Nine studies assessed schemes in sub-Saharan Africa, three in the Indian sub-continent, four in China, four in South-East Asia and one in the former Soviet Union. All of the studies were published after 2000 and more than half either during or after 2008. This bias is due to the fact that health policies are easier to assess because they cover events that occur more frequently than the deaths of beneficiaries. Therefore, it is faster, and hence cheaper, to gather the volume of claims data necessary to perform accurate analyses of health insurance schemes.⁴ On the other hand, as described in Chapter 5, health insurance is also one of the most difficult products to deliver in a viable way. Consequently, the results presented below should be considered as a contribution to the sector's understanding of microinsurance benefits, rather than an evaluation of whether health insurance can revolutionize protection against health shocks in developing countries.

While the authors identified numerous other evaluations of Indian microinsurance offerings,⁵ these studies were not analytically robust enough to merit inclusion according to the selection criteria outlined above. Similarly, seven methodically rigorous evaluations of Latin American policies were located,⁶ but the schemes in question were all fully subsidized and thus were not considered in this review.

The increasing number of studies employing regression or more sophisticated analytical techniques parallels a growing trend towards determining the precise causal effects of anti-poverty interventions in the economic development community. Of the 20 current and on-going assessments of microinsurance schemes listed online by a stocktaking initiative of the Microinsurance Network's Impact Working Group, 16 use randomized controlled trials, which will vastly improve the availability of credible information on the impact of microinsurance (Impact Working Group of the Microinsurance Network, 2011b).

⁴ Interestingly, health scheme assessments are not immune to the attribution problems that plague evaluations of other types of microinsurance. If measures of subscribers' health status fail to improve after they have purchased a micro-health policy, for example, both the product itself and the quality of its benefits package could potentially be responsible. Put another way, increased access to health care will not provide dividends if the scheme's contracted doctors are poorly-trained or under-equipped.

⁵ Devadasan et al., 2004; Devadasan et al., 2007; Dror et al., 2009; Ranson, 2002; and Ranson et al., 2006.

⁶ Barros, 2008; Fitzpatrick, Magnoni and Thornton, 2011; Gakidou et al., 2006; Galarraga et al., 2008; King et al., 2009; Thornton et al., 2010; and Trujillo, Portillo and Vernon, 2005.

Hence, this chapter considers primarily market-based health insurance in Africa and Asia. The evidence is mixed. There are robust findings proving that health microinsurance reduces out-of-pocket health expenditure and increases the utilization of healthcare services. Knowledge on other impacts and impacts of other products is limited. Unless otherwise specified, too little information is available to draw conclusions about the presence, direction and magnitude of the impacts considered. Interestingly, as presented in Box 3.1, a parallel review of subsidized (social) health protection schemes yielded very similar results.

Box 3.1

Impact of social health insurance schemes

Acharya et al. (2011) summarizes the literature on the impact of subsidized health insurance schemes that have been offered, mostly on a voluntary basis, to the informal sector in low- and middle-income countries. A substantial number of papers have provided estimations of the average intention-to-treat effect on those insured. In this review, only those papers that took into account the problem of self-selection in insurance were selected and a few that estimated the average intention-to-treat effect. In general, the take-up of the insurance schemes is in many cases less than expected and the evidence of impact on utilization, protection against financial risk and health status inconclusive. However, once taken up, a few insurance schemes afford significant protection against incurring high out-of-pocket expenditure. Many of the schemes provide lower protection for the poorest. More information is needed to understand the reasons for low enrolment and why the insured poor do not seem to have consistently lower out-of-pocket expenditure than those who are uninsured. Summarizing the literature was difficult due to the lack of (i) uniformity in the use of meaningful definitions of outcomes that indicate welfare improvements and (ii) clarity in how selection issues were taken into account.

3.3

Expected and observed impact of microinsurance

According to insurance theory, microinsurance works – like all insurance – by replacing “the uncertain prospect of losses with the certainty of making small, regular premium payments” (Churchill, 2006). This is because individuals want to “smooth” or balance their consumption across different “states of nature” or possible real-world outcomes such as health, sickness, abundant harvests and droughts. For example, when comparing the experience of one year of excessive consumption and one year of starvation, most individuals would choose – and purchase insurance to secure – two years of average consumption. This is because excessive consumption does not increase satisfaction (or what economists call utility) as much as starvation lowers it (Gruber, 2007).

By equalizing consumption across variable states of nature, microinsurance provides policyholders with four main categories of possible benefits: financial protection, access to services, psychological effects and impact on the community. Financial protection is two-fold, occurring both ex-post when microinsurance cushions households from the economic implications of actualized risks, and ex-ante when it permits the reallocation of resources to more effective and profitable uses. Access to services, on the other hand, encompasses the beneficiaries’ ability to efficiently utilize insurance, the quality of benefits provided and changes to related outcomes like health status or school enrolment rates. Psychological effects comprise changes to subscribers’ emotional well-being such as developing feelings of empowerment or peace of mind. And finally, impact on the community includes spill-over effects that concern the entire population living in areas where microinsurance is provided, for example creation of jobs or improved healthcare infrastructure. Across these categories, microinsurance is believed to affect people by introducing new benefits and displacing or reducing the need to pursue traditional, but theoretically less efficient, risk management strategies.

Table 3.1 overleaf summarizes the framework and outlines the main results from the 21 studies, which are presented in more detail in the following subsections.

Table 3.1

Impact assessment framework and evidence from studies reviewed

Author(s)	Year	Scheme	Type	Countries	Financial protection				Access to services			Community impact
					Expenditure	Raising funds	Income/consumption smoothing	Asset accumulation/resource allocation	Waiting times	Utilization rates	Health status	Type/quality of care
Aggarwal	2010	Yeshasvini	Health	India	o/-	+	+		o	+		+ +/o
Cai et al.	2009	n.a.	Livestock	China				+				
Chankova et al.	2008	32 West African schemes	Health	Ghana, Mali, Senegal	+/o					+/o		+/o
Diop et al.	2006	32 West African schemes	Health	Ghana, Mali, Senegal	+/o					+/o	+/o	+
Franco et al.	2008	Four Equity Initiative schemes	Health	Mali	+					+	+/o	+
Gine and Yang	2007	n.a.	Weather index	Malawi				–				
Gnawali et al.	2009	Nouna Health District Scheme	Health	Burkina Faso						+/o		
Gumber	2001	VimoSEWA	Health	India	o							+ –
Jowett et al.	2004	Vietnam Health Insurance	Health	Viet Nam						+		+
Jütting	2004	Four “mutuelles”	Health	Senegal	+					+		
Lei and Lin	2009	New Cooperative Medical Scheme (NCMS)	Health	China	o					+	+/o	+/o
Morsink et al.	2011	PAID Plan	Natural disaster	Philippines	+/o	+						
Msuya et al.	2004	Community Health Funds	Health	United Republic of Tanzania						+		
Polonsky et al.	2009	Nine Oxfam-funded schemes	Health	Armenia						+		+
Ranson	2001	VimoSEWA	Health	India	+					o		
Schneider and Diop	2001	54 community health schemes	Health	Rwanda	+					+		
Sepehri et al.	2006	Vietnam Health Insurance	Health	Viet Nam	+							
Smith and Sulzbach	2008	32 West African schemes	Health	Ghana, Mali, Senegal	+/o					+/o		
Wagstaff et al.	2009	New Cooperative Medical Scheme	Health	China	+/o/–					+/o		+
Wagstaff and Pradhan	2005	Vietnam Health Insurance	Health	Viet Nam	+		+			+/o	+/o	
Yip et al.	2009	Rural Mutual Health Care, NCMS	Health	China						+/o	+	

Note: The results relating to equity are not included for the reasons discussed in the text.

3.3.1**Financial protection**

Financial protection occurs when microinsurance safeguards low-income households from using inefficient coping mechanisms in response to shocks and stress. These mechanisms can include depleting savings and additional supplies of goods like food and livestock, selling valuable and sometimes income-generating possessions, borrowing at typically high interest rates, adjusting labour supply, altering purchasing and consumption patterns, engaging in reciprocal mutual support practices, capitalizing on self-help group memberships and withdrawing children from school to generate the resources necessary to handle the shocks involved.

As such, microinsurance is primarily aimed at preventing undesirable events from exacerbating and entrenching policyholders' poverty. The extent to which microinsurance reduces the need for people to employ these coping mechanisms is explored below, both directly and as measured by three commonly assessed ex-post financial protection metrics: expenditure on goods and services, raising funds and the ensuing changes to people's income and consumption-smoothing patterns.

Besides reducing reactive measures taken by households in crisis, the financial protection provided by microinsurance theoretically allows individuals to proactively make decisions that improve their incomes and standards of living. These include choices related to asset accumulation and resource allocation. Regarding asset accumulation, individuals are believed to be more likely to purchase productive goods, such as ovens or tractors, when the financial repercussions of losing or breaking them are mitigated.

Similarly, microinsurance is believed to encourage "households to allocate resources to more profitable ends (which were previously precluded for being too risky)" (Morduch, 1995). For example, in the absence of agricultural insurance, farmers hedge against uncertainty by planting a variety of crops that can survive diverse weather conditions. Thus, if particularly poor weather ruins a portion of the harvest during the growing season, farmers will still be in a position to sell or consume. While this arrangement protects them from growing a single crop that fails completely or falling victim to a collapse in commodity prices, it also prevents people from growing more of the most high-value items or from achieving economies of scale in purchasing crop inputs—circumstances which microinsurance is supposed to alleviate.

In this context, labour is thought to be another allocable resource, with low-income people engaging in several income-generating activities to manage uncertainty in the absence of insurance. Therefore, if flour prices soar or rains make the roads impassable, for example, bakers and taxi drivers can rely upon other lines of work. While these arrangements are appropriate if risks are unmitigated, they prevent people from maximizing their incomes and productive output and therefore present another conduit through which microinsurance can impact clients.

Expenditure

Indicators of microinsurance's impact on policyholders' expenditure, including out-of-pocket (OOP) and catastrophic spending, provide key measures for financial protection. Besides coinsurance and deductibles paid to obtain covered goods and services, OOP costs encompass charges incurred while accessing these benefits, including transportation, bribes, and related products and procedures, such as drugs and laboratory testing that are not insured. OOP costs exclude the value of opportunities (like paid labour) forgone while accessing insurance cover because they constitute direct monetary outlays. Similarly, they are calculated after policies are purchased and do not include premiums.

OOP expenditure becomes catastrophic when it absorbs a considerable amount of annual household income (often defined as 10 per cent).⁷ While frequently used in the context of expensive hospitalization, this measure is applicable to all insurable risks, including death, disability, theft and disasters. When microinsurance absorbs the costs of these events, it reduces or avoids the incidence and depth of the resulting outlays and accompanying descent of households into (deeper) poverty.

Twelve of the reviewed studies examined the effects of microinsurance on OOP spending: of these, six, three and three found unambiguously positive, mixed positive and insignificant, and completely insignificant results, respectively. In the positive category, for example, Jütting (2004) detected a 45 to 51 per cent decrease in OOP spending among the policyholders of four Senegalese community-based health insurance organizations ("*mutuelles*") in comparison to non-members. Conversely, among the mixed results, Chankova et al. (2008) found that while Ghana's Nkoranza scheme and those Senegalese *mutuelles* which provided in-patient coverage significantly reduced members' hospitalization costs, neither the *mutuelles* nor four of Mali's Equity Initiative plans protected clients against OOP expenditures incurred for outpatient care (the Ghanaian and Malian policies did not provide outpatient and in-patient care benefits, respectively) – a result the researchers attributed to coinsurance rates ranging from 25–50 per cent per visit. Of the wholly insignificant findings, meanwhile, Wagstaff et al. (2009) determined that China's New Cooperative Medical Scheme (NCMS) had no statistically significant effect on average household OOP expenditures – a result confirmed by each of Lei and Lin's (2009) five estimation strategies and attributed by Wagstaff's team to "narrow cover and high coinsurance rates".

⁷ There is some debate on what parameters most accurately capture catastrophic expenditure: researchers for the World Health Organization, for example, define catastrophic costs as exceeding 40 per cent of a household's "capacity to pay", which in turn constitutes total household income minus subsistence expenditure (Xu et al., 2003).

Evidence of microinsurance's impact on the incidence and extent of catastrophic expenditure is conversely scarce. Of the studies considered here, only Wagstaff et al. (2009) ascertained that while China's New Cooperative Medical Scheme reduced the occurrence of catastrophic spending among its poorest tenth of subscribers, it increased the incidence amongst members in deciles 3 to 10, an observation they attributed to supply-side factors like price schedules that incentivized the provision of costlier high-tech care.

Mobilizing funds

Three of the well-documented ways that low-income people raise funds to afford the OOP expenses following adverse events are selling assets, depleting savings and borrowing (Lim and Townsend, 1998). While selling assets, particularly productive ones, reduces future income and/or consumption, each of these techniques further slows households' progress out of poverty and lowers their ability to absorb future uninsured shocks and can perpetuate these problems across generations if the loan cannot be repaid easily or quickly. By enabling policyholders to mitigate the effects of unfortunate events without resorting to these practices, microinsurance is believed to protect their assets and savings. Schemes that provide cashless claims arrangements (see Chapter 6) instead of reimbursing the insured are believed to be more effective in this respect because they eliminate the need to pay out a lump sum before the insurance reimburses the cost of the service.

Since just two studies have analysed microinsurance's impact on raising funds, it is hard to provide a conclusive answer. Aggarwal's (2010) investigation of India's Yeshasvini scheme found that subscribers borrowed approximately 30 to 36 per cent less to finance surgery than their uninsured counterparts. With the inclusion of asset sales, Yeshasvini's lower-income policyholders were additionally determined to borrow and sell at a statistically significant 61 per cent less to fund their use of primary health care (*see Box 3.2*). Similarly, an assessment of a Filipino typhoon re-housing scheme by Morsink et al. (2012) found that it mitigated the extent to which policyholders pursued coping strategies that included selling assets and exhausting savings after typhoons damaged their homes.

*Box 3.2***Impact of “Yeshasvini” Health Insurance Programme in India**

Aggarwal (2010) evaluated the Yeshasvini scheme that provides voluntary health microinsurance to members of rural cooperative societies and their families in India's Karnataka state. Its benefits include surgery, free outpatient consultations and discounted laboratory tests when ill. At the time of Aggarwal's research, its 2.7 million members paid annual premiums of US\$2.40 for cashless coverage of up to US\$4 000 available in a network of 349 specially-selected hospitals. The plan is administered by a tripartite alliance of public, private and cooperative sector organizations and subsidized by the state government and private contributors.

The main evaluation question was: How does the Yeshasvini scheme impact out-of-pocket expenditures, fund mobilization, income and consumption smoothing, healthcare utilization rates and treatment outcomes? Aggarwal used a quasi-experimental technique called propensity score matching, whereby uninsured comparison households are individually matched to participating households based on their probability of enrolling given the presence of particular observable characteristics (like earnings and years of education). This approach reduces bias by creating more comparable treatment and control groups, but does not account for the effects of self-selection based on unobservable factors (like risk-aversion or engagement in unsafe activities). The study used a sample of 4 109 randomly-selected households covering 21 630 people in 82 villages in rural Karnataka state.

In the event of surgery involving catastrophic expenditures, Yeshasvini subscribers borrowed 30 to 36 per cent less than uninsured patients and spent up to 74 per cent less from sources including personal incomes and savings. Besides a higher incidence of surgery, member households reported 6 to 7 per cent more medical consultations concurrent with a 19 per cent reduction in the share of visits made to public facilities. While treatment outcomes varied according to members' socio-economic status, no appreciable impact on maternal health care was detected (possibly because the scheme did not historically cover deliveries). Perhaps most interestingly, average annual income growth (over the prior three years) was determined to be significantly higher among policyholding households.

Source: Adapted from Aggarwal, 2010.

Income and consumption smoothing

Adverse events and the need to raise funds to meet related OOP expenditure can affect households' patterns of income and consumption in several ways. Many shocks, such as the illness or death of breadwinners or income-generating livestock, the theft or breakdown of productive assets and the destruction wrought by disasters, can curtail earnings while imposing the twin challenges of both coping with the expense of the events in question and continuing to meet on-going household needs. Under these circumstances, low-income people take a range of undesirable actions such as eating less or less nutritious food. By reducing the financial burden of shocks, microinsurance aims to enable policyholders to maintain their incomes and standards of living in times of crisis. Microinsurance can also stabilize, and in some instance even increase, subscribers' incomes and subsequent consumption in other ways. If cover improves members' health or the productivity of livestock or equipment, for example, through better access to health or veterinary care or information on optimal maintenance, the people, animals or products in question might be capable of producing more or higher-quality goods and services.

Two papers provide support for these presumed effects. Aggarwal (2010) estimated that the average annual income growth of households covered by Yeshasvini's health microinsurance scheme was significantly higher than that of their uninsured counterparts over a three-year period. Wagstaff and Pradhan (2005) determined that Vietnam Health Insurance (VHI) increased policyholding households' consumption of non-medical goods, such as food and education, and the "use value" of consumer durables.

Asset accumulation and resource allocation

Regarding the ex-ante financial protection impact of microinsurance, researchers have also studied the intervention's effects on potential asset accumulation and resource allocation. While Cai et al. (2009) attributed policyholders' increased acquisition of sows to a Chinese government livestock insurance scheme, Gine and Yang (2007) concluded that rain-indexed insurance reduced Malawian farmers' take-up of loans for purchasing higher-yielding hybrid maize and improved peanut seeds (*see Box 3.3*) – an unexpected outcome given that microinsurance is intended to encourage riskier, but presumably more profitable, production decisions.⁸

⁸ Here, the distinction between borrowing under stress (to raise funds after the occurrence of shocks) and borrowing pre-emptively to facilitate investment should be noted.

Box 3.3

Insurance, credit and technology adoption in Malawi

In their study *Insurance, credit and technology adoption: Field experimental evidence from Malawi*, Gine and Yang (2007) evaluated a scheme, which was created specifically for the study and discontinued afterwards, that bundled weather index-based coverage with loans to purchase higher-yielding maize and groundnut hybrid seeds. The policy paid a proportion (or the totality) of the loan's principal and interest, depending upon the rainfall in each of the growing season's three phases (planting, flowering and harvest). It was priced at actuarially fair rates based on historical local meteorological information and underwritten by the Insurance Association of Malawi.

The main evaluation question was: Does the provision of microinsurance against a major source of production risk (rainfall) encourage farmers to borrow to adopt riskier but potentially more profitable crop technologies? Half of the study subjects were randomly selected to be offered credit for purchasing higher-yielding maize and groundnut hybrid seeds. The remaining half were offered the same credit package, but bundled with weather index-based insurance that partially or fully forgave the loan in the event of poor rainfall. The sample consisted of 787 maize and groundnut farmers in 32 localities in central Malawi.

Surprisingly, the take-up of uninsured loans was 13 percentage points higher. The researchers offered a number of potential explanations for this observation, including the limited liability inherent in stand-alone loan contracts, farmers' lack of familiarity with growing hybrid seeds, perceptions of different default costs across the two credit packages and basis risk. In contravention of insurance theory, microinsurance purchasing was additionally negatively associated with farmers' self-reported risk-aversion and positively with their levels of education, income and wealth.

Source: Adapted from Gine and Yang, 2007.

Income and consumption

Gine et al. (2009) shed light on the unexpected finding from Malawi with their examination of participation rates in a weather-based index insurance policy in Andhra Pradesh, India. Contrary to theoretical predictions, risk-aversion significantly decreased smallholders' demand for microinsurance – a finding the authors attributed to “household uncertainty about the product” coupled with resource constraints typically faced by low-income families. If accurate, this observation suggests that the effects of microinsurance regarding asset accumulation and resource allocation might take longer to materialize, whereas more risk-seeking, or possibly wealthier, households initially experiment with microinsurance products

and share important information on them throughout their communities. To improve the impact of policies within a shorter timeframe, microinsurers can speed the adaptation process in various ways. For example, Gine et al. (2008) noted that the most quantitatively significant predictor of take-up was the households' familiarity and prior experience with the microinsurance provider, in this instance a microfinance institution called BASIX.

3.3.2 Access to services

Microinsurance is believed to have several basic effects in terms of access to services. Foremost among these is improving policyholders' and beneficiaries' ability to obtain covered benefits quickly and cost-effectively, which in turn theoretically increases service utilization rates. Second, for health-related cover, higher utilization rates mean potentially better health outcomes, an important achievement given that healthier people can work longer hours, command higher salaries, enjoy increased immunity and more easily acquire human capital through learning. Third, health microinsurers often contract with, or otherwise encourage policyholders to use, modern medical providers, which is further believed to bolster health outcomes by enabling them to bypass traditional, religious and "quack" healers.⁹ Since microinsurers sometimes negotiate service standards with selected providers in advance, place customer advocates in hospitals, build new facilities and employ skilled personnel for their clients' use, they are similarly assumed to facilitate the provision of higher-quality care. Finally, by improving low-income people's access to these services, microinsurance is also thought to increase equality both spatially and between economic and gender groups.¹⁰

While these effects have been almost exclusively researched in a healthcare context, they are also applicable to other insured risks. For example, minimizing waiting times for and increasing utilization rates of veterinary services can be key aspects of livestock policies.

⁹ Of 35 health policies assessed by the "Good and Bad Practices" project of CGAP's Working Group on Microinsurance, for example, only two – Sri Lanka's Yasiru and Bangladesh's Society for Social Services – are reported to cover treatments offered by traditional practitioners (in this case, Ayurvedic healers and Bangladeshi "dai" birth attendants, respectively: Enarsson and Wiren, 2006; Ahmed et al., 2005).

¹⁰ Spatial equality relates to the accessibility of services for those located at different distances from the points of service provision. People living closer to a hospital, for instance, might have easier access and thus higher utilization rates than those living far away – a classic example of spatial inequality. By incentivizing the most distant clients with lower premiums, transportation subsidies and telemedicine (among others), microinsurance schemes can correct these imbalances and promote more consistent utilization across geographic regions.

Utilization rates

By removing cost and other barriers to accessing covered goods and services, microinsurance theoretically encourages and thus increases clients' utilization of these benefits. In contrast, due to factors ranging from the unavailability of funds to non-functioning transportation options, uninsured individuals may delay or completely forgo seeking solutions even when their situations become dire.

The impact of microinsurance on utilization rates is evaluated fairly frequently. On the basis of this evidence, it appears that microinsurance improves policyholders' utilization rates for health-related plans. Sixteen studies reported positive findings or mixed positive and insignificant findings, whereas only one study had insignificant findings. Among the affirmative results, for example, Msuya et al. (2004) determined that policyholders of the United Republic of Tanzania's Community Health Fund were 15 per cent more likely to seek formal care than their uninsured counterparts. Similarly, Polonsky et al. (2009) found that members of nine Oxfam-operated Armenian schemes visited health posts with 3.5 times the frequency of non-members.

Of the studies with mixed findings, Smith and Sulzbach's (2008) assessment of the maternal health service utilization patterns of members of 27 Senegalese *mutuelles*, four Malian mutual health organizations and Ghana's Nkoranza Health Insurance Scheme found that membership was associated with significantly higher use of prenatal and delivery care in Mali. While policyholders of Senegalese schemes that provided baby delivery cover were more likely to have facility-based births, the *mutuelles* did not appreciably increase already high rates of prenatal care-seeking; neither did the Ghanaian plan, which only covered Caesarean sections. Contrasting results were also obtained by Gnawali et al. (2009) in an assessment of Burkina Faso's Nouna District Health Scheme. While the overall increase in outpatient visits given illness was 40 percentage points higher among subscribers, this increase was only significant among the richest quartile of policyholders. In his data on India's VimoSEWA Ranson (2001) could not show any significant difference in the probability of insured being hospitalized. Interestingly, Diop et al. (2006) uncovered unexpected collateral effects among microinsurance plan members. Although Ghana's Nkoranza plan did not cover outpatient care, the researchers calculated that subscribers increased their consumption of such services nonetheless.

Despite being one of the most commonly assessed indicators, experts debate whether increased utilization unequivocally demonstrates the positive impact of microinsurance. Poorly designed microinsurance schemes can encourage moral hazard or adverse selection, while improved use of services by policyholders could instead represent the misallocation of resources and crowding-out of access to people with more legitimate needs. Others argue that increased subscriber

utilization rates, initially at least, represent the resolution of long-term lack-of-access issues for newly insured low-income people (Schneider and Diop, 2001).

Waiting times

Reduced waiting times for accessing covered benefits can limit the effects of shocks across insurable risks. When households have health cover, for example, they can forgo the potentially lengthy process of raising funds to seek care more immediately when ill, which limits the duration and financial repercussions of the issues in question. The composition of benefits is key in this respect. For example, if plans only cover hospitalization, households may eschew seeking medical attention or turn to cheaper and less effective interim strategies like self-medication until their problems become exacerbated enough to warrant hospital admission. Ultimately, situations like these result in problems of longer and more expensive duration and thus in inefficient resolution.

Limited number of studies examined this issue. For example, Aggarwal's (2010) analysis of the Yeshasvini scheme found that "the waiting time before the first appointment with a doctor did not appear to have been affected by insurance".

Health status

Health microinsurance promises to improve policyholders' health. As health status is relatively difficult and expensive to measure objectively, proxy indicators are often used (Thomas and Frankenberg, 2002). Only one study assessed the effect of microinsurance on direct indicators of health. Wagstaff and Pradhan (2005) used anthropometric measurements from the national Living Standards Survey and determined that Vietnam Health Insurance significantly affected the height and weight of young children and the body mass index of adults.

Several other papers used substitute measurements for health status, including study subjects' self-reports and commitment to health-promoting behaviour. For example, Lei and Lin (2009) estimated that enrollees in China's New Cooperative Medical Scheme (NCMS) were a significant 2.8 per cent less likely to report feeling ill. In Mali, Franco et al. (2008) similarly determined that while enrolment in four Equity Initiative policies did not appear to influence the use of child vaccinations or vitamin A supplements, it was a significant predictor of the use of mosquito nets by children and pregnant women.

Type and quality of care

Other commonly used, but also indirect, measures of health status include microinsurance's impact on the type and quality of care received. Since modern (allopathic) medicine is widely believed to produce better health outcomes than the traditional or alternative care options available to many low-income people, the effect of microinsurance on subscribers' utilization of modern providers is

also measured.¹¹ In their evaluation of China's NCMS, for example, Lei and Lin (2009) indicated that members made less use of traditional Chinese folk doctors. Similarly, Yip et al. (2009) found that membership in China's Rural Mutual Health Care reduced the probability of self-medication when sick by about two-thirds. Policyholders of Mali's Equity Initiative programmes sought modern care to treat fevers at 1.7 times the rate of their uninsured counterparts (Franco et al., 2008). Chankova et al. (2008) established that Equity Initiative subscribers were considerably more likely to seek modern care for a range of medical problems. However, they could not prove that similar patterns observed among Senegalese *mutuelle* clients were statistically significant, a result confirmed by Diop et al. (2006). While admittedly limited, this evidence suggests that microinsurance has a positive impact on members' use of modern medical treatment.

In places where certain kinds of facilities are believed to provide poor services, where policyholders seek care is a proxy for access to services. In India, for example, Aggarwal (2010) found that Yeshasvini's members made 19 per cent fewer visits to public providers despite their care being largely free, a change that was attributed to the poor services, absenteeism and corrupt practices in government hospitals. Among insured households, clear evidence of increased use of private health services was noted. However, not all microinsurance policies allow subscribers this freedom. In an assessment of Vietnam Health Insurance (VHI), Jowett et al. (2004) observe that plan beneficiaries were almost three times as likely as uninsured individuals to use public providers, precisely because the treatments covered by VHI were available in government facilities.

Unfortunately, the only study that examined the impact of microinsurance on quality-of-care measures used an extremely small sample size in which the comparison groups, insured and uninsured individuals, differed significantly from each other on measures like age distribution and surgical history. Based on a small household survey and interviews with lead doctors of Uplift India's network and non-network facilities, examination of patient records and assessment the facilities' infrastructure, Bauchet et al. (forthcoming) did not find statistically significant evidence that patients insured by Uplift received better care.

Equity

A further hypothesized impact of microinsurance regarding access to services involves equity, and the belief that well-designed policies can address historic, economic, spatial, and gender disparities in the provision of insured goods and services by extending access to members of excluded groups.

¹¹ Here, "modern providers," "modern medicine" and "modern care" denote healthcare professionals whose qualification, recognition and performance are government-regulated and thus (although by no means universally) likely to be of higher quality.

Two dimensions are important for this analysis: who accesses insurance and who receives its benefits (both among policyholders themselves and between policyholders and non-policyholders). The income level is the determinant most often studied.

While equitable enrolment and access to services among members do not constitute impact as defined above, they are explored below as equitable access to the insurance is a precondition for potential benefits reaching the poor. To avoid confusion, none of the results reported in this sub-section are included in Table 3.1.

Of the evaluations considered for the review, ten reached mixed conclusions about the economic egalitarianism of enrolment across schemes. Interestingly, the two with unambiguous positive findings both assessed India's VimoSEWA scheme, with Gumber (2001) and Ranson (2001) reporting that wealth did not significantly predict membership.

Other results were more nuanced: across 27 Senegalese *mutuelles*, four Malian Equity Initiative policies and Ghana's Nkoranza scheme, for example, Chankova et al. (2008) established that while the probability of enrolment was significantly higher among those in the top income quintile, there was no evidence that the probability of enrolment for the poorest quintile is different than that for the other four quintiles grouped together. In a more detailed analysis of the Malian Equity Initiative plans, Franco et al. (2008) reached similar conclusions: "while enrolment for all categories ... was significantly higher in the rich household wealth quintile, enrolment rates did not differ between the poor, middle poor, middle or middle rich households". Still, Jütting (2004) and Msuya et al. (2004) conclude that income levels unequivocally and significantly influenced enrolment in four Senegalese *mutuelles* and the United Republic of Tanzania's Community Health Fund (CHF). Msuya and colleagues, for instance, showed that a one percentage point increase in household income raised the probability of joining CHF by approximately 12.5 percentage points. While Jütting indicated that even households in his sample's richest quintile still earned below the area's monthly minimum wage, these results indicate that certain schemes could potentially target a more inclusive client spectrum in their regions of operation.

Regarding the use of covered services, five out of six studies reported egalitarian or even progressive arrangements. Aggarwal (2010), for example, reported a significant 2 per cent increase in the intensity of healthcare use among Yeshasvini lower socio-economic status members. Similarly, Schneider and Diop (2001) concluded that the clients' probability of visiting did not significantly vary by income quartile after taking account of other factors when assessing 54 Rwandan community healthcare schemes. In Viet Nam, Jowett et al. (2004) actually observed that lower-income clients used insured services more frequently, presumably to resolve issues that had long gone unaddressed. Wagstaff et al. (2009) alone found unevenly (and regressively) distributed changes to utilization rates

among members of China's NCMS. More specifically, they could not discern among the poorest 10 per cent of the scheme's subscribers the significant positive impact on outpatient or in-patient care-seeking behaviour that was evident among members in other income deciles. Despite the results from the latter study, the evidence tentatively suggests that, with the barrier of joining behind them, scheme members enjoy some degree of economic equality in accessing benefits.

Of the studies evaluated here, five examined spatial equity through enrolment and utilization rates. Regarding enrolment, for example, Chankova et al. (2008) performed regressions to determine that the presence of nearby health facilities positively influenced microinsurance enrolment in Senegal and Mali, which was not addressed in surveys involving Ghana's Nkoranza scheme. Similarly, Wagstaff et al. (2009) used probit analysis to establish that "households living far away from facilities are less likely to enrol" in China's NCMS, but noted that "increasing distance reduces the probability only up to a point". Regarding utilization, similar results were obtained among Equity Initiative members; for instance, Franco et al. (2008) found that distance to the health facility was a significant negative predictor for healthcare seeking, particularly regarding assisted deliveries. In Rwanda, Schneider and Diop (2001) also established that members of 54 community schemes visited providers directly according to their geographical ease of access. While limited in number, these results suggest that the policies under consideration have not effectively addressed distance-based discrepancies in access to insurance and service utilization.

Evaluators have studied two key questions relating to gender inequities: how microinsurance enrolment and access to services varies by gender, and whether plans that cover women's health concerns result in better outcomes by gender than have been historically obtained. Regarding the first issue, researchers have reached varying conclusions on the rates at which women, or households headed by females, purchase microinsurance. In Ghana, Mali and Senegal, Chankova et al. (2008) determined that households headed by females were more likely to enrol after taking account of other factors, while in Rwanda, Schneider and Diop (2001) could find a statistically significant effect. Wagstaff et al. (2009) established that the gender of a household's head was unrelated to its likelihood of joining China's NCMS. Schneider and Diop (2001) were the only ones to disaggregate members' care-seeking behaviour by gender and they found that the probability of visiting a provider did not vary by sex for policyholders in Rwanda.

In terms of women's health outcomes the results were likewise mixed, Aggarwal (2010) found no appreciable impact of India's Yeshasvini scheme on maternal health care, while Franco et al. (2008) observed that members of Mali's Equity Initiative were twice as likely to make four or more prenatal visits as women in

the overall population when pregnant. Smith and Sulzbach (2008) found that scheme membership most effectively influences maternal health-seeking behaviour when the applicable services are covered as benefits. Because these results were obtained in the context of prevailing cultural norms and other factors, directly comparing them is difficult.

While the evidence remains inconclusive and contradictory about whether microinsurance mitigates economic disparities in respect of scheme membership and possibly also access to care, several points merit discussion. First, equity effects demonstrate the importance of determining the distribution of impact alongside the more commonly calculated “average treatment effect on the treated”. This indicator establishes the average causal differences in outcomes between the treatment and control groups (Heckman et al., 1997). However, interpreting and comparing equity-related evaluation results can be difficult. For example, after observing that households headed by females were more likely to enrol than those headed by males in Ghana, Mali and Senegal, Chankova et al. (2008) speculated that factors related to women’s traditional status as family caregivers may have produced these findings. Without additional information, researchers cannot determine what caused these observations or whether they actually represent change.

Second, the initial findings suggest that achieving equity is more complicated than merely accommodating, or even actively encouraging, the participation of specific client groups. Barriers to registration, accessing benefits and submitting claims must often be specifically addressed to make policies more egalitarian. While enrolment, utilization rates and beneficiary outcomes differ along economic, spatial or gender lines, this does not mean that microinsurance is discriminatory or provides poor value for low-income, rural, female or other traditionally excluded clients. Schemes could be poorly designed, marketed or administered, and thus unintentionally perpetuate divisions. Interestingly, during their evaluation in Mali, Chankova et al. (2008) discovered that 71 per cent of uninsured individuals had not enrolled because they had never seen the scheme’s promotional materials. In other words, despite being lower-income people, they did not join because they did not know that the plan existed.

Finally, the treatment of equity presented by the papers analysed here is incomplete in several ways. Besides economic, spatial and gender-related disparities, for example, historical inequalities between people of different ages, races, colours, ethnicities, religions, sexualities and levels of disability, *inter alia*, can merit exploration based upon the circumstances under which specific plans operate. Additional design-related questions also deserve study, such as whether specific delivery models (for example, community-based or for-profit) are more conducive to achieving equity among policyholders (and between policyholders and community members overall).

3.3.3 Psychological effects

Psychologically, microinsurance is thought to promote increased peace of mind and individual empowerment. As regards peace of mind, for example, microinsurance hypothetically alleviates fear and stress by increasing members' sense of security about the future. Policyholders involved with community-based schemes, through which local people design and administer benefit packages themselves, might further be empowered by the bargaining, communication, social and financial skills that they develop while participating. Unfortunately, none of the studies considered here assessed either of these presumed effects.

3.3.4 Community impact

Microinsurance is believed to cause six types of spill-over effect that impact non-members in microinsurers' wider communities of operation. While these outcomes are described below, none of the studies cited here assessed them unless specified.

- **Job creation** – The most visible manifestation of a microinsurance-related spill-over effect is job creation. Simply put, microinsurers need sales people, actuaries, plan administrators, claims adjudicators, premium collectors, IT providers and personnel such as doctors and meteorologists to create, implement and oversee their product range. Since some plans have millions of policyholders, the amount of employment generated is potentially significant, though many microinsurers also, and sometimes exclusively, rely on volunteers.
- **Investment** – Similarly, the premiums collected by microinsurers can be saved or invested either locally, for example, in microinsurers' related microcredit activities, or in national and international markets. This effect is more likely with long-term policies that have savings components (*see Chapter 8*).
- **Infrastructural and regulatory changes** – Uninsured community members benefit from infrastructural and regulatory changes that microinsurers help create. For example, Aggarwal (2010) noted that the shift to private providers precipitated by India's Yeshasvini scheme created space in public facilities for uninsured individuals. Similarly, Wagstaff and colleagues (2009) determined that China's New Cooperative Medical Scheme had a significant impact on staffing and capital investments at township-level providers. However, given their observation of supply-side moral hazard, they were concerned that "increased stocks of expensive equipment" might result in "patients ... getting tests and treatments that are medically unnecessary, or which the [health centres are] insufficiently skilled to deliver".
- **Changing local disease burdens** – Highly subscribed health-related plans are also thought to reduce local disease burdens and produce potential collateral behavioural changes among uninsured individuals in their regions of operation. For

example, Polonsky et al. (2009) established that the healthcare utilization rates of uninsured people increased in Armenian villages. Yip et al. (2009) similarly found that non-members in Rural Mutual Health Care's regions of operation engaged in less risky self-medication.

- **Group solidarity** – Because of the emphasis on group solidarity and cooperation, community-based plans are further believed to increase community cohesion. However, by supplanting traditional coping mechanisms, which strongly rely on established family and social ties, microinsurance might also undermine local practices and relationships.
- **Financial literacy** – Through their activities microinsurance providers and related organizations are thought to increase overall financial literacy and nurture an insurance culture in their areas of operation. For example, many microinsurers and advocacy institutions host public insurance information events tailored to potentially illiterate low-income people with little formal education. BRAC, for instance, trains members to create street performances about real-world stories they collect from villagers that illustrate the benefits of insurance (Ahmed et al., 2005). Individuals also absorb information from microinsurers' marketing materials and hear word-of-mouth spread from policyholders through their extended social and family networks. Thus, the expansion of microinsurance hypothetically enables even uninsured people to develop an awareness and understanding of risk management tools and principles.

3.4

Conclusion

Few studies, and still fewer methodologically rigorous ones, have explored the impact of microinsurance. The vast majority assess health-related policies predominantly in Asia and sub-Saharan Africa. The evaluations presented examine a variety of outcomes, but only three with the frequency necessary for trends to emerge: expenditure, utilization and equity. Of these, microinsurance tentatively seems to positively affect expenditure and utilization rates. It appears to perform less successfully vis-à-vis issues of economic and spatial egalitarianism, however, insofar as households with relatively low economic status or dwellings remote from the relevant facilities enrol and claim benefits less frequently. Taken together, though, and in comparison to microinsurance's many assumed effects, this is extremely sparse evidence.

A combination of four steps will improve the development community's understanding of microinsurance's impact. First, more robust research designs and analytical techniques are necessary to increase the validity of assessments' results. As attested by the more recent studies presented here and those listed from taking stock of on-going assessments (Impact Working Group of the Microinsurance Network, 2011b), there fortunately appears to be movement in

this direction. Second, evaluations of a broader variety and geographical distribution of microinsurance products are required. Third, studies must examine the full range of microinsurance's theoretical effects, together with comparative issues that remain unexplored. These include investigating how different microinsurance schemes compare under a variety of conditions, and how they fare in comparison to or in combination with other risk-mitigating strategies such as informal coping mechanisms. Fourth, improved and standard outcome indicators are needed because not all of the commonly cited effects in the evaluation literature presently communicate useful information on impact. Besides being less ambiguous, newly developed indicators must likewise be widely adopted to facilitate the comparability of findings and by extension the strength of subsequent systematic reviews. The Microinsurance Network's Impact Working Group is developing these indicators and will disseminate them in a handbook for performing microinsurance impact assessments (Impact Working Group of the Microinsurance Network 2011a).

By facilitating the creation and distribution of accurate information on the impact of microinsurance, these steps will enable development practitioners to successfully enable low-income people in poor countries to manage risks and thus safeguard or increase their incomes and standards of living.

Microinsurance and climate change

Thomas Loster and Dirk Reinhard

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The year 2010 went down in history, along with 2005 and 1998, as the warmest year since instrumental climate records were introduced, with new record high temperatures being regularly recorded all over the world (WMO, 2010). According to the Intergovernmental Panel on Climate Change (IPCC), over the next 100 years the mean temperature of the atmosphere is set to increase significantly, by up to 6.4°C in the worst-case scenario, with higher sea levels and an exacerbation of weather extremes (IPCC, 2007, 2011).

The loss statistics of insurers and evidence emerging from experts, including the Centre for Research on the Epidemiology of Disasters (CRED), are already showing strong trends indicating that global warming will lead to risk situations deteriorating in many parts of the world, especially developing countries. Data for natural catastrophes since 1980 show that more than 80 per cent of fatalities caused by weather-related disasters were in developing and newly industrializing countries.¹ Within developing countries, poorer regions are particularly at risk due to weak infrastructure. For example, the poor often live in sub-standard housing in exposed locations, such as on the margins of settlements where they are vulnerable to flash floods, landslides or storm surges.

The insurance of natural hazards is a particular challenge for insurance companies because of the exposure to major damage (Swiss Re, 2010a). Natural events often affect huge areas and can devastate thousands of square kilometres of land. This quickly leads to an accumulation of losses and possible solvency problems for insurers.

Microinsurance is also vulnerable to natural disasters and must acknowledge the risks associated with them. Although earthquakes have had a major impact on some microinsurance schemes, such as Alternative Insurance Company (AIC) in Haiti in 2010 and India's VimoSEWA in 2001, this chapter focuses on disasters that are becoming more frequent and more powerful due to climate change. An example of this was Cyclone Nisha, which hit India in November 2008 and required Bajaj Allianz to settle some 16 000 microinsurance claims (Kunzemann, 2010).

¹ See, for example, CRED (EM-DAT), Swiss Re's Sigma or the Munich Re NatCatSERVICE.

This chapter begins by reviewing some of the key data associated with climate change to illustrate the emerging risks, particularly in developing countries where microinsurance is taking root. It then considers the role of microinsurance in weather-related risks, at the micro, meso and macro levels, as illustrated by numerous examples from around the world. The third section summarizes the key operational challenges including accessing and managing data, designing indices and managing claims. Section 4.4 provides a series of recommendations for key stakeholders.

4.1 The impact of climate change

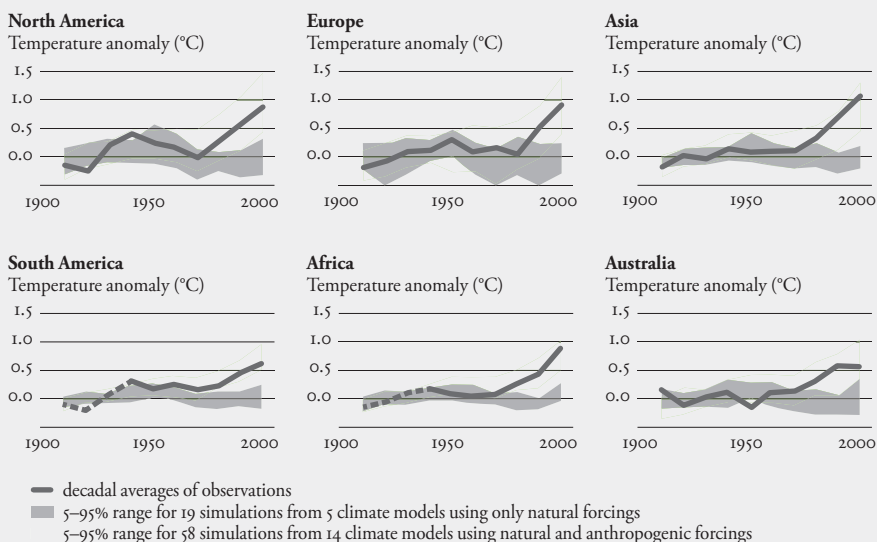
4.1.1 Evidence of climate change

According to the IPCC, temperature trends worldwide are pointing in the same direction: up (IPCC, 2007):

- Temperatures have risen on all of the world's continents in the last 100 years (*see Figure 4.1*), in some cases significantly.
- Human influence on climate change is largely demonstrable.
- Warming is particularly strong in high latitudes.

Figure 4.1

Global and continental temperature change¹



¹ In this figure, the black lines show the actual change in temperatures on six continents. The grey space depicts the range where temperatures should have been found based purely on natural changes, while the green band shows the temperature ranges based on the impact of human and natural factors on the climate.

As summarized in Table 4.1, significant changes such as increases in the incidence of droughts and cyclones appear imminent, which will have a huge impact on local and regional risks. The high levels of scientific validation in the table are noteworthy. Thus, “very likely” means that the level of scientific certainty is over 90 per cent. “Likely” means greater than 66 per cent and “More likely than not” means greater than 50 per cent.

Table 4.1

Projections of extreme weather and climate events

<i>Phenomenon and direction of trend</i>	<i>Likelihood that trend occurred in late 20th century (typically post 1960)</i>	<i>Likelihood of a human contribution</i>	<i>Likelihood of future trends based on projections for 21st century</i>
Warmer and fewer cold days and nights over most land areas	Very likely	Likely	Virtually certain
Warmer and more frequent hot days and nights over most land areas	Very likely	Likely (nights)	Virtually certain
Warm spells/heat waves. Frequency increases over most land areas	Likely	More likely than not	Very likely
Heavy precipitation events. Frequency (or proportion of total rainfall from heavy falls) increases over most areas	Likely	More likely than not	Very likely
Area affected by drought increases	Likely in many regions since 1970s	More likely than not	Likely
Intense tropical cyclone activity increases	Likely in many regions since 1970	More likely than not	Likely
Increased incidence of extreme high sea level (excludes tsunamis)	Likely	More likely than not	Likely

Source: Adapted from IPCC, 2007.

To date, meaningful evidence for countries, regions or even cities is available only in individual cases. For example:

- intensification of heat waves in the United States (Peterson et al., 2008), Australia (Bureau of Meteorology Australia, 2011) and Europe (Robine et al., 2007);
- increase in extreme precipitation in the United States (US Climate Program, 2008) and in India (Munich Re, 2010).

So far, there has been limited quantitative analysis of the world’s poorer countries because time series weather data are often not available. Descriptions of the impact on climate are impressive nonetheless. Africa, for example, is a frequent victim of drought. In Ethiopia alone, around 600 000 people died in the 1970s and 1980s, and about seven million were exposed to long periods of drought. Across the continent today, drought remains a major challenge. In 2011, Chad, Malawi, Mozambique, the Sudan and the Horn of Africa struggled with extreme drought, and UN scientists expect climate change to further exacerbate such extremes.

In many regions, global warming will alter the frequency and intensity of weather events. This is particularly clear in the case of tropical cyclones. For example, warmer sea surfaces can lead to the development of more intense tropical cyclones as these storm systems draw their energy from warmer water. If areas with sea surface temperatures above 27°C expand, new risk zones for cyclones will be created. The appearance of cyclones off the coasts of Brazil (2004) and Spain (2005) are evidence that the range of the risk is changing in the wake of global warming.

4.1.2

Classes of business affected

The climate cannot be insured. It is also impossible to insure all the effects associated with global warming. This is true of both traditional and microinsurance. The melting of glaciers or the accelerated rise in sea level cannot be insured based on the insurance principles of unpredictability, calculability and sudden occurrence. However, some effects of climate change, such as floods or even droughts, are insurable.

When discussing insurance and climate change, one often means the insurance of weather-related catastrophes, which are very likely to increase in the future. Natural catastrophes can be particularly detrimental to microinsurance portfolios, as small or regionally focused portfolios can be devastated by a major natural disaster. Natural hazards, such as the wave of flooding in Pakistan in 2010 or Cyclone Nargis in Myanmar in 2007 that devastated huge areas, have to be taken seriously in microinsurance.

The impact of climate change also affects other insurance business lines, as summarized in Table 4.2. The biggest correlation between weather and losses is in agriculture insurance, as discussed in detail later in the chapter. However, hundreds of thousands of people might die or be injured in extreme weather events, so there is also an impact on health and life insurance. Buildings or their contents can also be affected by weather events. Cyclones (in Southern India in 2008) and typhoons (in the Philippines in 2010) have shown that a weather disaster can be a challenge for property and buildings microinsurance covers, which are often not developed for weather events, let alone climate change.

While natural disasters are certainly the most urgent threat, changing climatic conditions will also have more subtle, long-term effects. Gradual increases in temperature, for example, can affect germination periods or determine which crops can be grown in certain regions. They also will affect mortality and morbidity, by changing the ranges of different diseases or creating the conditions for new ones.

Table 4.2

Possible effects of climate change in classes of insurance, 2030–2050

<i>Insurance class</i>	<i>Possible effects</i>	<i>2030</i>	<i>2050</i>
Agriculture	Rapid-onset (weather catastrophes)	+/++	+++
	Slow-onset (temperature changes)	+/++	+++
	Frost	—	—
Health	Rapid-onset (weather catastrophes)	o/+	o/+/++
	Slow-onset (temperature changes)	o/+	o/+/++
	Health patterns, expanding disease ranges	o/+	o/+/++
Life/Funeral	Rapid-onset (weather catastrophes)	+	+
	Slow-onset (temperature changes)	o/+	+
Property	Rapid-onset	+/++	++
+/++/+++	increasing risk		
o	neutral		
-/-/---	decreasing risk		

Source: Adapted from Munich Re Foundation, 2011.

4.2 Microinsurance and weather events

4.2.1 Brief history of “climate microinsurance”

Climate change has a major impact on weather conditions – weather being the present state of the temperature, humidity, rainfall and wind, while climate is the state of these weather elements over time. Consequently, most microinsurance experiences that are relevant in the context of climate change are protection against the occurrence of specific weather conditions, typically measured by some sort of index.

Weather-index or parametric insurance has been developed in the context of microinsurance since the beginning of the 21st century. The first known example was introduced in Mexico in 2001 to provide drought cover for farmers. Since then, several covers have been introduced in Asia, beginning with a rain-based index insurance in India in 2003 (*see Box 4.1 and section 20.2*) and a livestock insurance in Mongolia in 2006 (*see Box 12.3*). In Africa, drought insurance was introduced in Malawi in 2005 (*see Box 4.2*) and Ethiopia in 2006. These covers were subsequently adjusted or further developed, and new ones were added (e.g. HARITA in Ethiopia in 2008, *see Box 4.3*).

Box 4.1

ICICI Lombard's rainfall index cover, India*Hard facts***Start:** 2003**Scale:** Micro**Model developers:** ICICI Lombard General Insurance Company, World Bank, International Finance Corporation (IFC), BASIX**Risk carriers:** ICICI Lombard, Swiss Re**Risk covered:** Any kind of crop**Number of clients:** 25 000 farmers in 2005, 45 000 in 2007, 250 000 in 2009**Distribution channels:** initially BASIX, a microfinance NGO; later other banks and MFIs were also included*Context*

Despite its long history of crop insurance, the Indian Government has failed to protect farmers against weather risks. In 2003, ICICI Lombard and BASIX introduced crop-specific, index-based rainfall insurance for castor and groundnut farmers. The product was restructured in 2004 to further enhance the benefits of the farmers insured and to cover other types of crops. The new contracts were based on a cumulative rainfall trigger specified for each of the three growing seasons. Farmers can purchase the policy per acre, protecting up to 100 per cent of their land. Each crop has its specific upper and lower threshold. Accumulated rainfall below or above the threshold triggers a payout. The policy was sold through the BASIX network as a combined loan-insurance product.

Challenges

Financial viability: Depends on the take-up of the product by the farmers and access to the international reinsurance market. State subsidies and the link to a government-sponsored agriculture loan programme substantially enhance scale and viability (*see Chapter 18*).

Demand: Higher premiums than the state-run National Agriculture Insurance Scheme (NAIS) product – the absence of subsidies limits demand from small-holders. This situation changed dramatically when government subsidies were made available for weather-index insurance, including cover offered by private insurance companies.

Client awareness: Awareness-raising campaigns by BASIX and intensive interaction help adapt the product to the farmers' needs and raise demand.

Basis risk: The World Bank installed digital weather stations. A limited number of weather stations can increase basis risk.

Preliminary lessons learned

1. A combined product (credit plus insurance) protects farmers and the MFI against loan defaults due to crop failure, which helps the product quickly attain scale.
2. Automatic weather stations enable the insurer to have access to data in real time, which facilitates faster claims payments.
3. Efficient restructuring of the contract design broadens the scope of potential clients that benefit from rainfall policies, e.g. agribusiness intermediaries.
4. Continuous adaptation to clients' needs builds a basis for sustainability.
5. Government subsidies make the product more affordable, allowing the scheme to go to scale.

Sources: Adapted from Hellmuth et al., 2009; Levin and Reinhard, 2007; Valvekar, 2007; Aggarwal, 2011.

Most of these examples remain in their pilot stage, or have been discontinued because they struggled to achieve sufficient scale to be viable. Clarke (2011) argues that the low take-up for index-based agriculture insurance is not necessarily related to lack of trust or financial illiteracy, but is simply an economically rational choice where the price is above a certain threshold compared to the expected payout. In addition, many currently available weather-index insurance products show low correlation with actual losses, warranting better indices with lower basis risk.² However, even indemnity-based products may have little effect on the risk management of the poor if the product does not properly reflect the target group's perception of risk (Karlan et al., 2011).

By contrast, the experience in India seems more promising. In 2010, India's weather-index insurance market was the second largest weather market in the world, following only the United States. As described in Chapter 20, innovations in weather-index insurance developed by the private sector have been embraced by the Indian Government, which now provides premium subsidies to make credit-linked cover more affordable to low-income farmers. Consequently, in 2011, more than nine million Indian farmers had index insurance cover (Ruchismita, 2011).

² Basis risk, defined in more detail in section 4.3.2, is the difference between the actual losses incurred by the insured and the amount of benefit that they are actually paid.

The involvement of reinsurers is particularly critical to the success of such schemes, since they pool risk at a global level. In Asia, experts from Munich Re developed concepts suitable for typical climate-change risks, including a flash-flood cover in Jakarta, Indonesia, and a “typhoon cover” for torrential rain and wind in the Philippines. Swiss Re introduced an index cover for rice farmers in Viet Nam, a country particularly affected by climate change. According to its developers, the programme should reach 500 000 households (Lai, 2010).

Box 4.2

Drought insurance, Malawi

Hard facts

Start: 2005

Scale: Micro

Model developers: World Bank, International Research Institute for Climate and Society (IRI), MicroEnsure

Risk carrier: Insurance Association of Malawi

Risk covered: Drought

Number of clients: 1710 groundnut and maize farmers (2006 to 2007); 2 500 tobacco and maize farmers (2008 to 2009)

Distribution channel: National Smallholder Farmers' Association of Malawi (NASFAM)

Context

As 90 per cent of crop production in Malawi is rain-fed, smallholders are highly vulnerable to weather-related risks. Productivity is low, as farmers have limited access to credit to buy drought-resistant seeds or invest in better technology. In cooperation with NASFAM, the World Bank designed index-based drought insurance that would protect groundnut farmers against lack of rainfall and improve access to credit. Two MFIs, Malawi Rural Finance Company and Opportunity International Bank Malawi, were willing to provide loans. NASFAM provided access to improved seed input, guaranteed to buy its members' harvest at a higher-than-market price and ensured loan recovery. Loan contracts included a weather premium that was paid to a risk pool managed by the insurance association. Farmers agreed to sell their harvest exclusively to NASFAM. They received no cash in advance and instead NASFAM used the proceeds of the harvest to repay the loan and pay the surplus to the farmers. The product was expanded to include maize and, as of 2007/08, it has moved to the tobacco sector instead of groundnuts.

Challenges

Financial viability: Financially stable, as no on-going subsidies included, but limited affordability for the poorest farmers. Side-selling by farmers to traders other than NASFAM threatened financial viability and the programme therefore moved from groundnut production to the tobacco sector.

Demand: The product has been difficult to sell to low-income farmers due to its price, so take-up has been slow.

Client awareness: Training of field staff is needed to provide financial literacy workshops to the population. Where policies are in place, clients tend to understand the concept of index insurance.

Basis risk: Insufficient number of rainfall stations; the World Bank and the Earth Institute are installing digital weather stations to overcome this constraint.

Preliminary lessons learned

1. Infrastructure challenges can be tackled by drawing on the financial and technical capacities of all project partners.
2. Cooperation among key stakeholders (insurance companies, farmers' associations, MFIs) expands the range of financial products available for the rural population.
3. The existence of organized markets (e.g. NASFAM) is crucial for distributing insurance policies.
4. Combining insurance with loans increases the efficiency of insurance delivery.

Sources: Adapted from Hellmuth et al., 2007; Mapfumo, 2009; Agroinsurance, 2011.

Box 4.3

HARITA (Horn of Africa Risk Transfer for Adaptation), Ethiopia*Hard facts***Start:** 2008**Scope:** Micro**Model developers:** Oxfam America, Swiss Re, IRI, Relief Society of Tigray (REST)**Risk carriers:** Nyala Insurance Ethiopia, Swiss Re**Risk covered:** Drought**Number of clients:** 200 households in 2009, 13 000 in 2011**Distribution channel:** Partner-agent model with Dede-bit Credit and Savings Institution (DECSI)*Context*

In Ethiopia, 85 per cent of the population rely on smallholder, non-irrigated farming for their livelihood. The people are therefore highly vulnerable to drought-related risks. Initially targeting *teff* farmers in the village of Adi Ha, the index insurance product was linked to the Government's employment generation scheme, and therefore allowed farmers to pay the premiums either in cash or in kind by contributing labour to projects that increased the community's resilience to climate change. Farmer participation is assured by a management team of five village members and financial literacy workshops. To overcome data limitations, new techniques such as satellite data or simulation models are being explored.

Challenges

Financial viability: Low, as the HARITA project is mainly funded by international donors.

Client awareness: Focus on farmer participation from the very beginning, e.g. local management team, workshops on financial literacy or experimental games.

Basis risk: Exploration of new techniques such as satellite data or rainfall simulators is intended to overcome weather data limitations.

Preliminary lessons learned

1. Education and exposure to microinsurance, increased access to credit and improved risk management techniques are necessary for vulnerable populations to adapt effectively to the changing climate.
2. Provision of clearly needed insurance in poor communities was hindered by the inaccessibility of formal financial services.
3. Concerns of scale can be dealt with by using a model that focuses on weather insurance in the context of subsistence farming.
4. Innovative approaches to premium collection such as paying premiums in kind makes insurance accessible to everyone, including chronically poor sub-

- sistence farmers, where corresponding employment generation schemes are available.
5. Collaboration of local, national and global stakeholders contributes to successful results.
 6. Client participation and education are crucial for the sustainability and later scale-up of insurance products.
 7. Drought-related risks are a primary concern throughout Ethiopia where 85 per cent of the population is dependent on smallholder, rain-fed agriculture. Even highly-exposed areas such as Ethiopia can be insured against key risks, e.g. heat waves or droughts.

Sources: Adapted from Hellmuth et al., 2009; Agroinsurance, 2011; Swiss Re, 2010a.

4.2.2 Micro, meso and macro

Insurance can be organized in different ways and at different levels – from individual direct insurance to the state-organized insurance of large groups of people – as illustrated in Table 4.3. By definition, microinsurance may only be applicable at the micro level. However, insurance organized at the meso- or macro-levels can be a more relevant way of protecting the poor against risks associated with weather and climate change. The inclusion of meso- and macro-level interventions enables insurance to cover not just farmers and agriculture risks, but also to be relevant to protecting other target groups from disasters.

Table 4.3

Dimensions of insurance: Scale, products, beneficiaries

	Micro	Meso	Macro
Insured	Individual, group of people, up to several hundred people	Larger community, associations, cooperatives, etc.; thousands to millions of people	Nation/government, hundreds of thousands to several million people
Geography	House, village, town, districts	Districts, regions	Regions, country
Tools and products	Microinsurance: health, life, property, crops, livestock; index insurance	Derivatives, index insurance	Catastrophe bonds, pools
Range of sum insured	US\$50–5 000	US\$200 000 to several million	US\$ millions to billions

Source: Adapted from Munich Re Foundation, 2007.

Thousands of people are insured through meso-level covers. Beneficiaries are often organized in trusts, associations or cooperatives. Box 4.4 provides an example of an index-based meso solution, which started in 2011 to cover the loan losses of cooperatives in the Philippines in the event of extreme weather events and enables the affected borrowers to start again. The cooperative insurer CLIMBS acts as the risk carrier and thus covers the portfolios of its

member cooperatives. The payout is not related to the individual loss adjustment, but depends on defined thresholds for the weather event. Each cooperative receives a pre-defined percentage of its loan portfolio as a payout once a certain wind or rainfall trigger has been reached. The cooperatives insured will then use these funds to make favourable emergency loans available to affected borrowers.

Box 4.4

CLIMBS (Coop Life Insurance and Mutual Benefit Services), Philippines

Hard facts

Start: 2011

Model developers: Munich Re, CLIMBS

Scale: Meso

Insurance type: Wind and rain index insurance to cover loans

Risk covered: Typhoon

Risk carriers: CLIMBS, Munich Re

Clients: Member cooperatives of CLIMBS (umbrella organization)

Distribution channel: CLIMBS

Challenges

No evaluation yet.

Preliminary lessons learned

1. Even complex weather risks such as typhoons or extreme events such as flash floods can be insured if appropriate product design is in place.
2. Pre-existing social structures, e.g. cooperatives or associations, increase the likelihood that a scheme will be successful.
3. Dialogue with people at risk is crucial for tailor-made solutions.
4. Regional payouts help product acceptance and reduce the basis risk.
5. The use of modern weather observation methods like satellite data broadens the range of tools and facilitates administration.

Source: Authors.

Morsink et al. (2011) identified several of these meso-level index schemes, covering both the idiosyncratic risks of clients and the aggregated risks of aggregators. The emergence of these efforts, in Burkina Faso, Ghana, Haiti, India, Mali and Peru (*see Box 4.5*), indicate an increasing interest in such an approach to protecting the poor, to expand the scope of who can be covered, beyond farmers, to include microentrepreneurs and other low-income groups. Although most meso-level schemes are relatively new, their potential for viability and scale seems quite promising.

Box 4.5

MiCRO (Microinsurance Catastrophic Risk Organization), Haiti

Hard facts

Start: 2011

Scale: Meso

Model developers: Local insurance providers and MFIs, such as Fonkoze

Funding: Inter-American Development Bank (IDB), UK Department for International Development (DFID), Mercy Corps, Caribbean Risk Managers Ltd, Guy Carpenter & Company, LLC, Swiss Agency for Development and Cooperation (SDC)

Risk carrier/Reinsurer: Swiss Re

Risk covered: Rainfall, wind speed or seismic activity

Number of clients: 55 000 Fonkoze microcredit clients

Cover: Reimbursement of Fonkoze loan in the event of natural disaster. A lump sum of US\$125 is provided if home or premises are destroyed, or all or most of their business stock is lost as a result of a natural disaster.

Distribution channel: Fonkoze loan officer

Context

Following the 2008 hurricane season in Haiti, Fonkoze realized that sustaining MFI operations would become difficult if natural disasters were to be recurring. Fonkoze actively started looking for financial protection against natural disasters and started organizing MiCRO to help Caribbean (especially Haitian) MFIs protect their clients against damages from natural disasters. Besides providing cover at the meso level, the innovation combines parametric cover based on rainfall, wind speed or seismic activity, plus an assessment of actual losses on the ground by the loan officers. If there is basis risk – if the payout based on the parametric trigger is not sufficient to cover actual losses – then MiCRO will cover the difference, up to US\$1 million per year.

The importance of this financial protection was illustrated by the earthquake in Haiti on 12 January 2010, which killed more than 200 000 people and left the country in a shambles, with future generations even more vulnerable to risk. For

the extended rains that occurred in Haiti during May and June 2011, a parametric-only payout of US\$1.05 million was made to Fonkoze. Fonkoze independently assessed borrowers' damage and paid out US\$1.01 million to over 3 800 clients, including loan write-offs. Fonkoze's microloan clients have all been informed of and received training in the catastrophic insurance cover.

Challenges

Hazard: Haiti is exposed to various natural hazards with significant loss potential. Earthquakes and hurricanes, as well as heavy rain, tend to occur from time to time.

Basis risk: MiCRO covers 85 per cent of estimated basis risk up to US\$1 million per annum on annual aggregate basis.

Preliminary lessons learned

1. Public-private partnerships are a necessity for protecting the poor against natural disasters.
2. Insurance targeted at low-income populations can be offered in a region significantly exposed to natural hazards.
3. Insurance can both offer protection for an MFI and create value for its clients.
4. Parametric covers can be supported when funding is available to absorb mismatches between the parametric cover and real losses experienced.
5. Training of clients is important. Fonkoze's borrowers have all been informed of and received training in the catastrophic insurance cover.

Source: Adapted from Morsink et al., 2011.

The "macro" dimension can involve millions of people, and is typically organized at a national or international level. Important systems are found in the Caribbean, where the first risk pool insures the governments of 16 Caribbean countries against hurricanes and other disasters (*see Box 4.6*). The poor are intended to benefit from this cover, but it is the governments that are insured. In Mexico, the state-organized *Fondos* have been insuring farmers since 1988 (*see Box 4.7*), although these tend to be richer farmers. Access for small farmers continues to be difficult.

Box 4.6

Caribbean Catastrophe Risk Insurance Facility (CCRIF)

Hard facts

Start: 2007 after 18-month development

Scale: Macro

Model developers: Caribbean Community (CARICOM) Heads of Government, World Bank

Risk carriers: CCRIF, international reinsurers including Swiss Re, Munich Re, Paris Re, Partner Re and Lloyd's of London syndicate Hiscox

Risk covered: Hurricane, earthquake, excess rainfall

Number of clients: 16 countries

Financial background: Capital from donors (~US\$65 million) and annual premium (US\$200 000 to US\$3 million) by member countries

Distribution channel: Caribbean Risk Managers Limited (CaribRM)

Context

Following the huge losses caused by Hurricane Ivan in 2004, the Caribbean Community Heads of Government, with the help of the World Bank, decided to implement a risk transfer programme for member countries to mitigate the effects of natural disasters. Started in 2007, CCRIF insures its 16 member countries against earthquakes, hurricanes and excess rainfall. Country risk profiles were created based on historical data to determine each country's premium. Once a predefined level of shaking, wind speed or amount of rain is reached, payout occurs within 14 days.

Payouts to date:

2007: ~US\$1 million to the islands of Dominica and St Lucia

2008: ~US\$6.3 million to the Turks & Caicos Islands

2010: ~US\$7.75 million to Haiti (earthquake) and US\$12.8 million for Hurricane Tomas (Barbados, St Lucia, St Vincent and the Grenadines); US\$4.2 million for Hurricane Earl (Anguilla)

CCRIF is unique, as it is the first index insurance scheme linking various countries that have different levels of development and different risk exposure.

Challenges

Complexity: Pooling the risk of 16 countries raises the complexity of the product due to individual risk profiles and calls for increased communication and public relations regarding awareness-raising among member countries.

Financial viability: The combination of the pooled reserves of the participating countries and the financial capacity of the international financial market ensures sustainability, but mostly due to relatively low payouts compared to actual damage.

Demand: Tool for climate-change management as money flows for faster relief, but only at governmental level, no involvement of population.

Other: Need to address agricultural sector, as CCRIF provides greater value to areas of economic value (major economic centres).

Preliminary lessons learned

1. Insurance pools reduce transaction costs due to coherent legal framework and insurance conditions for all members.
2. As pools allow cover of high-level risks, they can constitute an element of climate change adaptation.
3. Parameters are difficult to design for smaller events, so that losses do not necessarily trigger payouts (e.g. Hurricane Dean, Jamaica, 2007). In addition, parametric insurance can be difficult to explain.
4. Pools provide greater opportunity for risk transfer to capital markets.

Sources: Hellmuth et al., 2009; Young, 2010; UNFCCC, 2011.

4.3

Operational challenges and solutions

As most of the schemes highlighted in this chapter have only been operational for a few years, some only on a pilot basis, the lessons and experiences remain preliminary, but there is a growing body of evidence from which to begin to draw initial conclusions. Certainly, the most obvious conclusion is that there are considerable challenges. In particular, this section considers the challenges and solutions associated with collecting weather data, developing and using indices, claims management, stakeholder education and sustainability.

Box 4.7

Catastrophic farming insurance for climatic events, Mexico

Hard facts

Start: 2005

Scale: Macro

Model developer: Agroasemex

Risk carriers: Government of Mexico, Agroasemex

Risk covered: drought, flood

Number of clients: 800 000 farmers (in 2008)

Distribution channel: Federal/state governments

Context

Subsistence farmers in Mexico frequently suffer from excess or lack of rainfall. To mitigate the effects for the rural population, federal assistance funds are provided by Programa de Atención a Contingencias Climatológicas (Climate Contingencies Programme or PACC). To improve risk management, Agroasemex, the state reinsurance company, developed an index insurance programme available to federal and state governments. The insurance premium is borne mainly by the federal government. The percentage covered by the state government depends on the level of marginalization of its insured population. For municipalities with a high level of marginalization, the federal government covers 90 per cent of the premium, while the remaining 10 per cent is covered by the corresponding state government. If payout is triggered, the funds are distributed to the farmers by the corresponding governments.

Challenges

Financial viability: Fully subsidized, state-run programme. According to the International Fund for Agriculture Development (Hazell et al., 2010), it has been cheaper for governments to purchase and operate index insurance than to pay disaster assistance funds directly to farmers.

Client awareness: Very low, as farmers do not participate in the decision to purchase insurance. From a farmer's perspective, this programme is seen as disaster relief rather than insurance.

Data availability: Lack of historical data, limited number of weather stations and limited technical capacity constrain further scale-up.

Basis risk: According to the IFAD study there have been two instances of basis risk so far, one where the payout was made without losses being incurred, and one where losses were incurred and no payout made. After the later event, the state involved, Michoacán, lost confidence in the scheme and withdrew. To decrease basis risk, the distance between weather stations would need to be reduced to 10 to 20 kilometres, but there were insufficient resources to do so.

Preliminary lessons learned

1. Governments can tackle climate change effects by using index insurance, which can function as an efficient tool for risk management and risk transfer using federal assistance funds.
2. The scope of index insurance depends greatly on the availability of reliable data.
3. Aggregation of clients and geographical risk-spreading provides incentives for the international reinsurance market to participate in insurance products.

Sources: Hellmuth et al., 2009; Levin and Reinhard, 2007; Hazell et al., 2010; AGROASEMEX, 2011.

4.3.1**Weather data**

Data are pivotal to the development of insurance products. In the informal economy, data on customers – let alone data series – are almost non-existent. With risk-related data, especially weather data, the situation is often no better.

The sparse data available in developing countries makes it particularly difficult for microinsurers. To develop indices for weather insurance, meteorological data should span a period of 30 years. It is practically impossible to develop products and relevant triggers using time series of 10 years or less. Missing data can be extrapolated using computing processes, which create realistic approximations to real conditions (Corbett, 2006), though the use of calculated data is difficult, particularly in microinsurance.

In a world in which an awareness of the importance of insurance must first be created, abstract figures and formulae can contribute to uncertainty. For example, drought cover in Ethiopia (*see Box 4.3*) used data from just 26 weather stations. It is not easy to convey to a farmer that the value to which the agricultural cover refers was measured some distance away from his plot. One solution is to increase the number of weather stations so that they are closer to more farmers, but there is certainly a cost involved, and there is no consensus as to how close to each other the stations should be.

Another solution may be remote-analysis methods, which are expected to make it easier to design relevant indices in the future. Developments such as area-wide satellite images and aerial photographs of a region should improve crop yield and loss estimates, giving a boost to agricultural microinsurance. It remains to be seen whether it will be easier or harder to explain such an approach to farmers.

4.3.2**Index-based solutions**

To manage large volumes of small claims, index covers are generally easier to handle than indemnity-based ones. The latter are time-consuming and expensive as losses have to be assessed and settled individually. With index covers, a specific trigger (e.g. temperature, rainfall and wind speed) is agreed upon. If this threshold is reached, a payout is made, which streamlines the claims settlement process. Payments are made regardless of how big the actual loss is for the insured.

However, there can also be negative effects. Since the loss may not be covered in full, as it would be with an indemnity cover, this gives rise to a basis risk for the insured and a reputation risk for the insurer. For example, in an index cover for agriculture, basis risk can occur in two ways:

- **Index is triggered, but no losses arise:** A smallholder has few crop losses in a harvest season but receives a payout because an agreed index value (trigger point) was reached. To his or her delight, the farmer receives a payment. For inexperienced and unsure customers, however, this can be counterproductive where the acceptance of a new insurance product is concerned.
- **Index is not triggered, but losses arise:** It is difficult to get policyholders to understand that they will not receive a payout despite incurring actual losses. The insurance system can be discredited for years, particularly if a large number of people are affected.

During the first decade of the 21st century there have been dozens of pilot tests in index insurance, most of them highly subsidized by donor money, but few have survived more than two years. Basis risk is clearly not the only problem. As discussed above, affordability and take-up are major challenges, and if schemes do not reach scale, they will not be viable. The movement away from micro to the meso and macro levels for weather and disaster covers are partly a reflection of this experience.

Product design is another challenge. It is generally advisable to set a simple trigger value that is well accepted. Even in ancient times, Egypt linked the agricultural tax to the river level at Elephantine Island: the higher the water level, the better the yields and the higher the taxes. A similar, easily understandable “trigger arrangement” on a widely known threshold measurement should help increase acceptance of the cover. However, while simple triggers are more easily understood, they can increase basis risk whilst not covering the real risks confronting farmers. Complex trigger formulae are perhaps more accurate, but if only experts can understand them, they can be counterproductive. Box 20.2 proposes an alternative approach that is probably easy for farmers to understand and more responsive to their needs.

Nevertheless, the correlation between meteorological variables in triggers and actual damage can be small, even with sophisticated product designs. According to experts from Munich Re, the correlation is estimated to be a maximum of 60 per cent. Consequently, a hybrid approach, such as the one being used by MiCRO in Haiti, which combines parametric and indemnity-based methods, represents an interesting alternative. Similarly, the Indian Government is testing a Modified National Agricultural Insurance Scheme (MNAIS) that combines weather and area-yield indices (*see Box 20.4*).

Because of climate change, it is important to recognize that the data model is likely to change over time. Consequently, it will be necessary to regularly reassess the product design, including the risks covered, the time periods and the triggers, for the cover to continue to be relevant.

4.3.3 Claims management

It is virtually impossible to convey the principle of insurance if no losses occur for years on end. It therefore makes sense to design the product so that claims are settled from time to time. Allowing for a higher frequency of losses has an immediate impact on pricing, but is important for acceptance of the insurance concept, particularly during the launch phase. Consequently, it is useful to consider different sets of triggers and defined payouts for large disasters, as well as smaller payouts for more occasional events. If it can be managed cost-effectively, frequent small payouts will build trust in the insurance scheme and increase the demand for cover for extreme events.

In the case of natural disasters, claims settlement is particularly complex. On the one hand, numerous claims have to be processed and settled, while on the other, those affected are often in shock as, besides material assets, items of sentimental value can be lost or damaged. In the case of personal injury, the emotional stress is particularly high. A lack of understanding and a clumsy approach can easily lead to frustration on both sides. However, index-based products that do not need extensive loss adjustment may be a cost-effective solution to speed up the claims settlement process. Claims processing can be further expedited if the scheme uses automated weather stations that regularly transmit precipitation and other weather data directly to the insurer (*see section 24.4*).

Effective claims management requires considerable preparation before the insured event occurs. Through scenario planning, attention must be given to the loss potential – the probable amount of loss and possible number of policyholders affected – and operational systems need to be established to respond. Funds for a speedy settlement must be kept in reserve or easily accessible. The key to a cover's future success lies in simple claims documentation requirements, easy administrative processing, clear decision-making channels and timing. Poorly managed claims handling will discredit microinsurance for years and undermine insurers' credibility.

4.3.4 Education and capacity building

Education and an understanding of insurance-based mechanisms require special attention when dealing with the low-income market. Many publications deal with the much-cited problem of insurance illiteracy (*see Chapter 14*), with solutions emerging at different levels:

- **Clients:** providing effective client education, cultivating an insurance culture in the low-income market, satisfying an unmet demand for new products
- **Providers:** building staff capacity, finding the right business models and delivery channels

- **Regulators:** removing regulatory obstacles, developing systematic and comprehensive approaches (*see Chapter 25*)

In the context of climate change, the question is slightly different. Who needs to know the subject and how? How must climate change be taken into account and communicated? Climatic changes take place over years and decades. As a result, the phenomenon is abstract, even though it is becoming better understood (Edenhofer et al., 2010). It may be assumed that while people in affected regions do perceive changes in the weather, there is often no association with the complex phenomenon of climate.

In this respect, climate change must be communicated in different ways at different levels, raising awareness about strategies to adapt to new conditions and effectively manage additional risks. For example, within an insurance company, the staff can be trained and made more aware. It is also essential to publicize success stories and obstacles. If valuable insights fail to catch on, the wheel will be constantly reinvented. For intermediaries, aggregators and clients, communication should be tailored to create an understanding of weather-related concepts by referencing weather conditions that have been experienced and risk mitigation steps that they can take. Responding to local specifics and addressing the individual situation of the target group makes it easier to introduce cover concepts.

4.3.5

Sustainability

Sustainable solutions are good solutions. They are economically stable and improve the living conditions of insured persons for years. As the microinsurance sector is young, it is difficult to achieve a balance between years with few claims and years with many. The following guidelines should be considered if microinsurance is to be transacted sustainably against the background of climate change:

- **Multi-year terms:** Risk partnerships based on trust develop over a long time and are one of the foundations of successful risk sharing. Insurance schemes that are geared only to short-term profit do not work. Stable partnerships are therefore clearly preferable to competition for favourable premiums.
- **Geographical spread:** The more insurance products are geographically spread across borders, the easier it will be to shoulder the burden of climate-related risks. The solidarity-based system of insurance works best when it is diversified over a large area, and hence the important role of reinsurance.
- **Efficient operations:** For agriculture insurance, a link between loans and crop insurance is essential for scaling-up and keeping transaction costs within reasonable bounds. Other bundling opportunities can be found in the agriculture supply chain, such as linking cover to seeds and fertilizer. For non-agriculture cover,

loan linkages may also be a useful starting point, as in the CLIMBS and MiCRO examples, but it is important to explore other means of aggregating risks for meso-level interventions.

- **Dialogue and understanding:** The stakeholders – politicians, scientists, business representatives, insured persons – generally have a different understanding of the language used. To reduce misunderstandings, clear agreement on aims and time-frames and an unimpeded flow of dialogue are necessary. Only if all those involved are aware of the benefits of cooperation can a strong commitment be expected.

4.4

Role of key stakeholders

For insurance to play a role in assisting low-income households to cope with the impact of climate change, a concerted and coordinated effort from numerous stakeholders will be required. This section briefly describes the important roles for governments and donors, insurers and product designers, reinsurers, and public-private partnerships.

4.4.1

Governments and donors

As discussed in Chapter 25, the transformation of unregulated schemes into regulated insurers is crucial for catastrophic microinsurance because it enables them to access reinsurance. However, governments have an even more important role: dealing with climate change and its impact. In this context, microinsurance is just one piece of a broader puzzle.

Covers for weather-related catastrophes must be considered when designing microinsurance regulation and national strategies. When doing so, it is important to remember that insurance companies only pay claims on an ex-post basis, after an event occurs. However, preventive measures are a key component of risk management and therefore governments should also design and implement national disaster reduction strategies.

As such, the relevant demands on governments are no different from those in the conventional insurance industry (Mills, 2008):

- Take the lead in a coordinated national effort to improve disaster-resilience through the adoption, enforcement, and implementation of improved building codes.
- Require that insurers collect and analyse more comprehensive data on weather-related losses and their insurance implications.
- Raise the standards of practice for catastrophe modelling and create a non-proprietary modelling and data-collection entity.
- Support risk-based pricing based on improved understanding of climate-related risks in combination with insurer accountability for access and affordability issues.

- Promote the development of climate-friendly insurance products and premium incentives through model laws and/or regulations.
- Promote partnerships with policyholders for loss mitigation.
- Safeguard reserves and surplus, based on an understanding of climate change, and encourage prudent investments in technologies and industries that will be part of the solution.

One of the main barriers to the availability of microinsurance products covering weather-related risks is the high start-up costs. Over a period of time where no or low premiums are generated, resources are needed to finance a set of tasks including researching demand and risk, identifying and selecting credible partners to access the low-income market, data gathering and management monitoring. Financial support or subsidies will increase the affordability, outreach and sustainability of microinsurance schemes.

Competitive insurance may be too heavy a burden for those who live and work in a vulnerable situation with no possibility of reducing their risk exposure at reasonable cost. Directly subsidizing premiums, however, reduces the incentive for those insured to take adequate risk mitigation measures. Incentives to reduce risk can thus come into conflict with equity or affordability (Picard, 2008). While some may instinctively turn to donors for such subsidies, the experiences in India (*Chapter 20*) illustrate how governments can use such interventions to stimulate market development.

Where appropriate, governments should also encourage the creation of microinsurance associations or support existing ones. Financing these support structures poses a challenge, since many of them do not collect enough from their members to cover their costs. This may be an area in which subsidies could also be effective. Subsidies may also be required for research and development, such as creating new products, enhancing benefits or experimenting with technology.

Looking at the role of governments and donors from a broader perspective, they have a role to play in policymaking, participation and consensus-building to create an enabling environment and strengthen institutions (Trommershäuser et al., 2006). However, product development and pricing, sales, administration and claims management remain strengths of the insurance industry. All other tasks could be financed or even managed by governments and donors. By doing this, they indirectly subsidize an insurance scheme without affecting risk-based pricing, which may be considered “smart subsidies”.

Smart subsidies reduce the costs for the insurance provider as well as the time to break even. Other targeted financial support such as conditional grants for aggregators (e.g. communities, MFIs or cooperatives) that participate in risk mitigation programmes may complement the involvement of government and

donors (Geneva Association, 2009).³ The combination of these efforts is likely to increase the outreach and ensure a high level of participation, thereby improving the viability and impact of microinsurance schemes.

4.4.2 Insurers, product developers

The regional impact of global warming varies considerably. In some places, torrential rain and flash floods are occurring more often. In others, heat waves or droughts are becoming more intense and lasting longer. National weather services and international bodies like the World Meteorological Organization can usually provide information on climate changes in specific regions of the world. Product developers and insurers must get an accurate picture of how the changes may affect weather events and atmospheric conditions.

In this respect, as many historic events as possible should be compiled and analysed, in consultation with weather or climate experts, to assess the risk. In the wake of global warming, risk loadings are to be expected. As with climate data, the periods analysed should never be less than 10 years, with a 30-year analysis being regarded as scientifically sound. Positive effects, such as the probability of less frost, should also be taken into account in the planning, although in product development it is the negative effects that are likely to predominate.

4.4.3 Reinsurers

The role of reinsurance for microinsurance covering catastrophic risks is not much different from the regular insurance market. It is prudent for microinsurers to take catastrophe reinsurance if it is affordable and available. Reinsurance reduces volatility and can be a prerequisite for profitability, particularly in the context of climate change (Munich Re Foundation, 2011). For example:

- Reinsurance stabilizes the financial conditions of the insurer especially when rare events such as natural disasters occur.
- It meets regulatory capital requirements or even plays a role as a capital source for companies with limited means.
- It provides additional professional services to insurers such as technical assistance, training or support in the product development phase.

When it comes to microinsurance and natural disasters the last of these three points has become increasingly important, since reinsurers have good

³ In addition to providing insurance, insurers may offer other related services. For example, agricultural experts working in insurance and reinsurance companies may have a better understanding of the big picture than an individual farmer, and can suggest a change of crops to reduce risk and make insurance more affordable.

access to data and expertise, which is critical for appropriate risk assessment and pricing.

Reinsurers have been reluctant to provide reinsurance to microinsurance schemes, but that is changing, as shown by recent products from Swiss Re for example. Reinsurers are restricted to doing business only with licensed insurers, so their involvement can be enhanced by regulation that formalizes informal schemes, such as in the Philippines (*see Box 25.5*). However, the small size of many schemes makes reinsurance relatively expensive. Networks or other aggregators, such as the International Cooperative and Mutual Insurance Federation (ICMIF) in the case for mutuals or CLIMBS for Filipino cooperatives (*see Box 4.4*), may facilitate broader access to reinsurance.

4.4.4 The public-private partnership (PPP) approach

Notwithstanding the differing roles of these stakeholders, it is also critical to consider how they can work together. For example, a crop insurance system can be a unique opportunity for pooling the forces and talents of the various stakeholders, including government and international organizations, farmers and farmers' organizations, the (re)insurance industry, the banking sector including micro-finance institutions, and agricultural input providers. Coordinated action is a prerequisite for increasing market penetration and providing insurance solutions to smallholders. The increasing challenges facing farming can be tackled with the help of PPPs (*see Box 4.8*). It is vital that the roles of the participating groups – the State, the agricultural sector and the insurance industry – be clearly defined, for example:

- **State:** Stipulate a legal framework, define agricultural insurance as part of national agricultural policy, and possibly co-finance premiums. In developing countries where state institutions sometimes do not have enough resources, some tasks could be assumed by international organizations.
- **Farmers:** Finance part of the risk transfer via insurance premiums, retain part of the risk in the form of a deductible, or with index products as basis risk, and apply site-specific and sustainable production methods to minimize production risks.
- **Insurance/reinsurance:** Assume the role of risk carrier, market and manage insurance policies, develop portfolios and products, and adjust losses. The best practice is for insurance companies to work together in insurance pools, combining and developing specialist agricultural insurance expertise in a management company.

Although it exists in over 100 countries, agricultural insurance is still limited in most developing economies, and the majority of smallholder farmers currently have to bear climate risks themselves. Through public-private partnerships it is possible to exploit the strengths of various stakeholders to enhance access (*see Herbold, 2010 and 2011*).

Box 4.8

SystemAgro, PPP approach in Turkey

Hard facts 2009

Sum insured: €1 416 500 000 (US\$2 098 360 000)

Premium volume: €58 773 000 (US\$85 251 000)

Policy numbers: total 306 770; crop insurance 285 243

Area insured: total 559 509 hectares, average two hectares/policy

Insured livestock: 112 202 head

Context

SystemAgro, developed by Munich Re, is a public-private partnership (PPP) between the State, farmers and the insurance industry.

Organization

- The Government provides a 50 per cent premium subsidy and co-financing for catastrophe losses.
- Insurance Pool: Set up by 22 insurance companies.
- Pool Board: Acts as a steering committee comprised of seven members (Ministry of Agriculture, Treasury, Insurance Association, Farmers' Union).
- Management company Tarsim: responsible for transacting insurance.
- System operational since 2006.

Challenges

Increasing market penetration

Product development:

- Crop – complementing direct loss insurance products (insured perils: hail, frost, storm, flood) with yield guarantee products (insured perils: all climatic perils) for arable crops.
- Livestock – making herd insurance products more attractive compared with single animal policies.

Reducing transaction costs

Preliminary lessons learned

1. Concerted action of this kind is a prerequisite for providing insurance solutions to under-served sectors.
2. Creating a link between production credits and crop insurance is essential for up-scaling and keeping transaction costs within reasonable bounds.

Source: Herbold, 2010 and 2011; www.munichre.com/systemagro.

4.5

Conclusion

To adapt to changing climate conditions and cope with the resulting disasters, the international community has pledged substantial funds to finance adaptation measures. The “fast-track” money of US\$10 billion per year approved in 2009 is to be increased to US\$100 billion per year by 2020. The first funds from this resource were allocated by the relevant ministries in 2010 (Wiedmaier-Pfister et al., 2009). This chapter has identified a number of areas where such funds could be used or invested to enhance the effectiveness of microinsurance in the context of climate change, including improved weather infrastructure, technical assistance to improve product design, awareness raising about the role of insurance in managing climate change risks, and subsidies to enable schemes to start and scale up quickly.

All microinsurance schemes, regardless of what risks they cover, need to assess how their claims experience might change in the future because of the impact of climate change. Technical assistance from climate change experts may enable agricultural, life or health insurance schemes to understand how their risk profiles may evolve over time, and what steps they can take to manage those risks, including accessing reinsurance.

Insurance schemes that have tried to tackle weather and disaster risks at the micro level have not managed to achieve scale without government subsidies. Certainly premium subsidies and smart subsidies for research, product development and consumer education would be a welcome use of these funds to improve the effectiveness of index-based weather insurance. Additional investments could support innovative efforts to overcome key challenges, such as remote sensing and experimentation with hybrid approaches to reduce basis risk, and designing effective yet understandable triggers.

Similarly, greater experimentation with meso- and macro-level interventions is warranted to explore alternative approaches to reducing the vulnerability of the poor to risks associated with climate change. While not specifically microinsurance, interventions at the meso or macro levels may be a more effective means of protecting the poor from natural disasters. Funds should also be used to increase key stakeholders’ awareness of the roles they could play to enhance the effectiveness of insurance as a tool for climate change adaptation, including the creation of public-private partnerships.

At operational level, the insurance of weather risks is a difficult but important issue for microinsurers to tackle. Technical assistance could help these organizations to overcome challenges and implement the guidance described in this chapter, including:

- Engage with policyholders to implement relevant risk prevention activities.
- Acquire a sound database and carefully monitor experience.
- Develop products that meet the needs of the people at risk, taking into consideration their ability and willingness to pay and the payment infrastructure available to them.
- Consider the loss potential, including frequent and infrequent events, to increase the likelihood that insureds will experience the benefits of insurance.
- Establish an efficient insurance operation with a special emphasis on claims management and communication.
- Regularly adjust product design based on changing climatic conditions and the impact that it has on low-income populations.

Climate change will certainly cause the challenges to become bigger rather than smaller. Through a careful analysis of lessons and experiences, the involvement of multiple stakeholders and careful use of subsidies, it will be possible to reduce the vulnerability of the poor to weather disasters and global warming.

II Health insurance

5 Innovations and barriers in health microinsurance

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Health microinsurance (HMI) offers a promising way to mitigate the risks of disease and ill health, which are disproportionately borne by the world's poorest citizens. In developing countries, illness is mentioned more frequently than job loss as the main cause of poverty (Dodd et al., 2002; Asfaw, 2003) and many low-income individuals cannot afford medical treatment. Health risks pose dangerous threats to the lives and livelihoods of the poor, and health security remains integral to accomplishing many of the Millennium Development Goals. Little is known about the impact of HMI on health outcomes and household well-being, though some positive indicators of the value of HMI have recently emerged. Research reviewed in this chapter shows that access to HMI reduces out-of-pocket health expenses, especially for catastrophic health events, and improves access to quality health care for those who are insured.

HMI is one of many potential healthcare financing options for the poor. Other options range from out-of-pocket spending or credit to government-sponsored partial or universal access to healthcare services. Research indicates that 26 per cent of households in low- and middle-income countries resort to selling assets and borrowing to cover healthcare expenses (Kruk et al., 2009), suggesting that there is a huge gap in healthcare financing. Although health care is increasingly perceived as a human right and a public good, in reality resource constraints slow the deployment and scale-up of national health care financing. In these cases, HMI can be a possible alternative; hybrid strategies that combine private-sector-led HMI with the strengths of the public sector also promise to push the frontier in healthcare financing for the poor.

Private-sector HMI programmes aim to fill this gap, but designing valuable, sustainable health products is inherently more complex than with other types of microinsurance. Most health products cover catastrophic risks, which occur with low frequency, are often unpredictable, and result in a need for high-cost services. These catastrophic events are more easily insured than routine healthcare needs, so insurers have focused on them, often designing in-patient-only cover.

However, HMI programmes struggle to reach sustainable membership for these in-patient policies, partly because the poor perceive more value in cover for high-frequency, predictable and often low-cost services.

Despite the positive indicators and potential of HMI, there are many challenges that limit the growth and impact of the sector. This chapter, based on a longer thematic study that includes a literature review of 68 documents covering the period from 1999 to 2010 and interviews with 31 representative experts, discusses these challenges and suggests ways forward. The next section reviews literature on HMI impact, and is followed by a summary of key demand and supply barriers, and innovations that may move the field forward.

5.1 Evidence of the impact of health microinsurance

There is a body of literature focused on assessing the impact and opportunities that HMI creates. While Chapter 3 provides a more comprehensive overview of the impact of microinsurance, this section summarizes specific evidence of the impact of HMI. This impact falls into two major categories: 1) household finances and 2) access to and quality of care. Unfortunately, the literature still lacks information on short- or long-term health outcomes, and this section closes with a discussion of why this problem plagues insurance and related fields.

5.1.1 Impact on household financial vulnerability

Overall, significant portions of the published evidence suggest that clients of HMI programmes experience better financial protection from health shocks than do non-clients. While the extent of the effects varies, programmes consistently help reduce individual and household out-of-pocket health expenses (Galarraga et al., 2008; King et al., 2009; Wagstaff, 2007). In particular, HMI programmes protect the poor from catastrophic health events (Asfaw and Jütting, 2007), although this is not true in all cases (Werner, 2009). Results from Viet Nam indicate that involvement in HMI programmes reduces annual out-of-pocket health expenditure and/or improves access to health care (Waddington, 2009). Positive outcomes from insurance were replicated in Indonesia, Nepal, Senegal, Uganda, United Republic of Tanzania, and some parts of India (Asfaw and Jütting, 2007; Dror et al., 2009; Gertler et al., 2009; Msuya et al., 2004; Wagstaff and Pradhan, 2005).

5.1.2 Access to and quality of care

Despite this general positive impact on household finances, there is mixed evidence showing that not all population segments are benefiting from HMI. A key concern is that the extreme poor (including those living below the poverty line or

those living on less than US\$2/day in purchasing power parity terms) are not being reached. Essentially, the poorest cannot afford to pay the premiums, even in locations where some level of subsidy was supposedly available (Asfaw and Jütting, 2007; Derriennic et al., 2005; Msuya et al., 2004; Jütting, 2004; Wagstaff and Pradhan, 2005). These findings were consistent across programmes and countries, including programmes in India, Senegal, Uganda, United Republic of Tanzania, and Viet Nam.

On a more positive note, while the very poor do not access healthcare services through HMI programmes, research indicates that the poor (but relatively less poor) do experience greater access to care. In particular, many studies reveal that clients of HMI programmes are more likely to use hospital services than are non-clients. One study in rural areas of the United Republic of Tanzania revealed that sick individuals with HMI were 15 per cent more likely to receive treatment than individuals in non-member households (Msuya et al., 2004).

Other positive findings were that people with HMI were more likely than the uninsured to seek malaria treatment earlier in the disease cycle once they realized they were ill (Blanchard-Horan, 2007). The result for malaria was consistent across health-seeking behaviour for other, more general health conditions. For example, focus groups and interviews with programme managers in Uganda revealed that members no longer postpone health care until they are seriously ill, as they had before joining the programme (Derriennic et al., 2005).

Generally, individuals with HMI are less likely to self-diagnose and self-manage illness. For example, enrolment in programmes in Viet Nam increased use of medicines prescribed by a health professional, whereas they had previously used non-prescription drugs and/or relied on pharmacists for diagnostic advice (Wagstaff and Pradhan, 2005). Self-treatment can cause medical complications, such as progression of an untreated or misdiagnosed illness, complications from self-prescribed drugs, or public health problems in the case of infectious disease (Derriennic et al., 2005). Clearly, delays in obtaining health care can lead to increased morbidity and mortality in many cases (Derriennic et al., 2005; Msuya et al., 2004).

Note, however, that many illnesses are cured without intervention, so obtaining medicine early does not always produce the lowest-cost outcome. Moreover, although increased access to care is a generally positive indicator, the benefit design of an HMI programme can also influence use of healthcare services for reasons not related to medical necessity. For example, when an HMI programme covers in-patient care only, there is an incentive for clients seeking benefits and healthcare providers seeking revenue to choose expensive hospitalization for health care that could be appropriately provided in an outpatient setting. Similarly, programmes where patients incur reduced or no out-of-pocket costs for care can encourage unscrupulous healthcare providers to provide unnecessary drugs or even perform medically unnecessary surgery.

One question that has not received significant attention is whether enrolment in HMI programmes leads to an increase in preventive care behaviour, either because insurance promotes or covers such behaviour or because the members demand such changes from each other and their programmes. The issue is broader than examining the impact of discrete preventive care activity, such as immunizations, and includes other interventions in areas such as water and sanitation, hygiene, education and lifestyle.

5.1.3

Health and well-being

Health outcomes remain an elusive target when attempts are made to measure the impact of a health system and the value of HMI. There are a number of factors that mitigate the ability to measure health outcomes. The collection of valid outcome data is still considered embryonic even in developed health systems in affluent countries. Inevitably, it hardly exists in settings with low resources. Furthermore, measuring the impact of HMI requires a high degree of measurement of specific aspects, because health outcomes are highly correlated with the design of the benefits and the quality of the service delivery (Dercon et al., 2008). For example, a programme could have a limited effect on health because the HMI product is poorly matched to local needs or because the quality of care at the hospital or clinic is below par.

While the research is fairly limited on this subject, the ability to define and measure health outcomes must become a routine operational competency for a number of reasons: to help determine where money should be spent on services that make a difference in well-being, to support formative evaluations of HMI policies and processes, to permit identification of best practices for wider adoption, and to foster accountability and transparency in programme design and operations.

5.1.4

Potential of HMI

The emergence of HMI programmes worldwide provides hope that the poor will receive, at a minimum, a reliable, adequate level of access to affordable health care. Research shows that access to HMI reduces out-of-pocket health expenses, especially for catastrophic health events, and improves access to quality health care for those who are insured. There is also evidence that HMI stimulates important health-seeking behaviour such as the use of mosquito nets and receipt of malaria treatment earlier in the disease cycle. Nevertheless, little is known about the impact of HMI on health outcomes and household well-being, especially when it concerns the poorest individuals, who tend to be excluded from HMI programmes and who generally receive a lower quality of care. There is still scope to

expand member benefits in HMI. This can increase the ability of low-income individuals to access medically necessary care at the appropriate time, thus reducing financial catastrophe and promoting economic productivity and efficient use of resources.

5.2 Demand and supply challenges for health microinsurance

5.2.1 Complexity of health microinsurance

The very nature of HMI differentiates it from other forms of insurance. Health microinsurance is about service delivery rather than paying to compensate for a loss. This fact makes it extremely difficult to control demand and ensure that the services delivered are appropriate. The situation is complicated by the fact that healthcare services covered by insurance are delivered by a third party, the healthcare provider, whose motivation may be to maximize revenue. This creates another distortion, encouraging fraud and irrational pricing.

HMI is further complicated by the intense demand for services thought to be required for good health. Standards of care continuously evolve and are influenced by factors such as technology and infrastructure, greater awareness and improved partnerships. As a result, the frequency and number of types of service is increasing (such as diagnostic radiology once equipment and providers are accessible). At the same time, the cost of service is also increasing (e.g. CT scans replacing x-rays), compounding the challenge to deliver appropriate and affordable care. Low-income households suffer disproportionately from infectious disease and the consequences of poor living conditions, and they are also increasingly subject to chronic lifestyle-related diseases such as diabetes and heart disease that are traditionally more common in higher-income populations.

Amidst such challenges, HMI programmes differ on many fronts: they differ in programme design, including the degree of integration with healthcare providers, distribution and servicing approaches in relation to cover or benefits. This complexity exists for a reason; different programme configurations address different needs in the operating environment. Communities vary in relative wealth, health and exposure to health risks, as well as proximity to healthcare providers, pharmacies and laboratories. For example, some programmes attempt comprehensive cover (in-patient and outpatient), while some offer catastrophic (hospitalization) cover only. Further variance relates to whether a product covers pre-existing conditions, maternity, preventive or chronic care, as well as the maximum benefit amount and the degree to which members are required to share in costs.

Other differentiators are the types of organizations that offer the insurance and the types of relationship the organizations have with clients. Microfinance institutions (MFIs) can work with insurers to offer HMI, which should help to attract and/or retain clients, and may reduce defaults on loans. NGOs may offer HMI to increase services and protection for community members. Commercial insurers can move down-market to attract new clients. Governments run social protection programmes at state or national level, and hybrid models exist as well. The relationship between the programme and its clients has implications for the potential scale and viability of the programme, in addition to the kinds of benefits and pricing options that receive priority.

5.2.2 Demand-side challenges

At least 93 per cent of the global burden of disease falls on 84 per cent of the world's poor (Preker et al., 2002). This statistic suggests a potentially high demand for health care and for viable means to finance healthcare services. The fact that risk management options available to the poor are typically very costly and limited in their effectiveness strengthens the notion of pent-up demand for insurance. Many of the poor understand first-hand how healthcare needs become financial catastrophes; they are frequently forced to manage the cost of health care, both routine and catastrophic, through high-interest loans, depleting savings and/or causing the unplanned sale of productive assets at a discount. A survey carried out by the MicroInsurance Centre reveals that respondents in Africa, Asia and Latin America claimed that HMI is the most sought-after type of cover (Roth et al., 2007; Dror, 2007). Despite this demand, few of the HMI products currently available attract and retain the desired number of clients.

A lack of perceived value for products that cover only hospitalization, which less than five per cent of clients typically experience, is thought to be a key reason for low enrolment and renewal rates. Low-income households suffer other catastrophic expenses outside of hospitalization, for example a sustained drug regimen. Routine outpatient expenses have a greater impact on the majority of poor families than the possibility of hospitalization. Besides offering cover that is often perceived as insufficient, few HMI programmes have devoted the necessary resources to educating target populations, which often lack insurance literacy, about the potential and actual value of HMI and how it works (*see Chapter 14* for more on consumer education).

As described in Chapter 7, income constraints and the high and rising cost of health care are serious barriers to stimulating demand for HMI, and many existing programmes cost more than poorer households can pay. In fact, one study in Uganda indicated that only 37 per cent of insured households could pay their premiums from available cash resources (Dekker and Wilms, 2009), further

revealing that many who purchase HMI may be borrowing money or selling assets to do so. Seasonality of income makes it even more difficult for clients to pay premiums, regularly compounding the problems with low capacity to pay.

As many demand challenges are generic and thus relevant for all types of microinsurance products, only HMI-specific barriers have been considered here and will be further discussed in section 5.3. Better marketing and consumer education should solve some of the problems with the demand for HMI and therefore some of the issues discussed in Chapters 13, 14 and 15 are also relevant for health microinsurers.

5.2.3

Supply-side challenges

The literature review and expert interviews identified five key supply-side issues in HMI: 1) health delivery system constraints, 2) insufficient programme scale, 3) pricing and funding concerns, 4) operating model deficiencies and 5) the lack of an enabling environment.

Healthcare delivery system constraints

The capacity of the healthcare delivery system fundamentally affects HMI programme success. Some healthcare delivery constraints include:

- access barriers, such as when patients cannot reach a facility due to distance, transportation costs and lost wages;
- service quality, such as when clinics do not competently offer needed services (for example laboratory and x-ray);
- staffing, such as inadequate numbers of physicians, poor distribution of providers, or deficiencies in skill and training;
- lack of resources, in particular the frequent insufficient availability of medical supplies and drugs (Preker et al., 2002);
- insufficient or non-existent norms for performance monitoring, certification or accreditation, making it more difficult to measure and ensure quality across providers.

The net result of these constraints is a severely limited range of options where individuals can receive care. In many cases, when HMI programmes are not affordable or not available, the alternative for the poor is either to receive no care or to receive care from public-sector providers. There are cases where governments have programmes with significant outreach that function well, but in many locations the reputation of the public-sector services suggests that they are underfunded and understaffed. This current dilemma – where government-sponsored HMI programmes lack sufficient funding or are in the early stages of

development with long gestation periods, and private sector programmes lack essential governmental support – leaves the poor without a short-term solution to this financing and access problem.

Need for programme scale

The size and scale of an HMI scheme can also influence the quality of care, its price, the range of product options, and its sustainability. HMI programmes that limit access to a small number of facilities often fail to offer clients viable options for quality care (McCord, 2007b; S. Ahmed et al., 2005). Larger programmes can often procure more favourable pricing from healthcare providers (Marek et al., 2005), and more easily recruit doctors and nurses to participate in the provider network (Marek et al., 2003).

A study of seven HMI programmes in East Africa revealed that each programme preferred to seek scale by enrolling groups rather than individuals, thus reducing adverse selection (McCord and Osinde, 2005). Group enrolment can be achieved through partnerships with employers with low-income employees, as well as with MFIs or community groups (Kiwara, 2007).

Attempts to enrol groups of workers in the informal sector have been more successful than attempts to enrol individuals from the same area (Kiwara, 2007). In 1998, managers from UMASIDA in the United Republic of Tanzania tested payment frequency and renewal patterns over three years based on individual and group-administered payment plans. They found that renewals were highest when associations paid the premium on behalf of members and members paid daily or weekly sums into the group fund throughout the year (Kiwara, 2007).

Pricing and funding concerns

Improper pricing creates situations where HMI programmes cannot reach their target populations in expected numbers and/or cannot sustain themselves over time. McCord (2007b) indicated that in four of seven HMI programmes reviewed, cover was improperly priced. In all cases, the premiums were too low. Of these, only two programmes had obtained actuarial assistance. Programmes have notably different philosophies on pricing, as some attempt to understand what the market can pay and others price for profitability or financial sustainability (Dror, 2008; McCord, 2007b).

As described in Chapter 21, there are several reasons why HMI programmes make pricing miscalculations. Under-pricing stems from failing to use actuarially sound practices to estimate costs and from setting premiums based on what clients can pay instead of what is required to cover costs and generate minimum margins for expansion and sustainability. Over-pricing can occur when assumptions are based on insufficient or flawed data, on overly cautious margins, or on an expectation to break even or even make profits in too short a period or with

too little membership. It must also be noted that an actuarially sound premium may be unaffordable for clients – in which case either the product benefits must be reduced (enabling the premium to be lowered accordingly), or subsidies must be found.

Other reasons for pricing miscalculations relate to insufficient investment in support systems for the insurance schemes. Research indicates that private-sector, government-sponsored, and NGO-sponsored insurance schemes may not direct sufficient funds to management systems or proper costing techniques, particularly in Africa (Sabri, 2003). In addition, pricing of private-sector HMI programmes is problematic when governments provide free (or nearly free) health care.

Operating model deficiencies

The critical risk factors in HMI are similar to those that exist in commercial insurance. Namely, the behaviour of clients and healthcare providers will be different if there is insurance from what it would be if there were none (moral hazard); only the most sick and risk-prone individuals will purchase the product (adverse selection); and there will be exposure to fraud and potential for cost escalation.

Lack of project management and governance capabilities were mentioned by many experts as core obstacles in scaling up HMI schemes. As those issues are generic, they are not covered in this chapter.

More specifically, deficiencies in the use of technology and reinsurance were commonly identified challenges.

As illustrated in Chapter 24, technology can be employed to mitigate health-care-provider and client fraud. It also can help to control the quality of health-care services and make operations more efficient. However, research revealed that few HMI programmes were utilizing technology and management information systems to improve efficiency, increase quality of care and/or suppress fraud. In fact, in-depth case studies of seven East African HMI programmes revealed that only two were using computer systems to increase controls and provide management data (McCord, 2007b). Derriennic et al. (2005) indicate that only two of the 12 community-based HMI programmes evaluated in Uganda had a general management information system that would enable evidence-based managerial decisions to be made. However, much of the literature is silent on infrastructure elements such as the use of technology.¹

¹ For exceptions, see Derriennic et al., 2005; Leftley, 2009; McCord, 2007b.

Reinsurance supports three areas: financing, general stabilization and catastrophe protection (Dror, 2001). A reinsurance contract obliges the reinsurer to pay some or all of the costs above a predetermined threshold, thus reducing the HMI programme's risk of failure and insolvency. Scenarios run by Bonnevey et al. (2002) indicate that an HMI programme benefits more from paying the reinsurance premium than if it kept the same money for a safety margin in a reserve account. Their findings are robust regardless of how the HMI programmes are configured. The authors further illustrate that while profitable years for HMI programmes are unaffected by reinsurance, the inherent financial safety it provides allows programmes to use surpluses as discretionary monies rather than as reserves. Simulation work by Dror (2001) suggests that reinsurance contracts can stabilize programmes from the first year. Importantly, the author also notes that reinsurance pools may require several years of operation before they operate profitably. Note, however, that reinsurance can also be problematic, such as when it masks institutional inefficiencies.

Enabling environment and role of government

Government support and the regulatory environment for HMI is a critical differentiator between countries and HMI programmes. Accordingly, Dror and Jacquier (1999) claim that, regardless of which organization sponsors or initiates HMI, programmes need political, technical and financial support from the government. Governments can also allow decentralized decision-making to enable local-level decisions and negotiations to be enacted. Some research argues that the role of government is so salient and so varied that it destroys the ability to draw any general conclusions on the state of the HMI sector (Churchill, 2007). Along these lines, one interviewee emphasized that one must look at each country and government in isolation when assessing problems and solutions, and that recommendations should not be made on the basis of generalizations (Adelhardt, 2009).

Certainly, the regulatory environment can stimulate or constrain the development and scaling of sustainable HMI programmes. In addition to improving regulatory support, governments can contribute to HMI via public-private partnerships (PPPs), which are described in more detail in the next section. Seeking out these opportunities for collaboration is an important step towards overcoming the many supply-side challenges discussed in this section.

5.3 Innovations and interventions for health microinsurance

This section moves from investigating issues and impacts to examining options for meeting the needs of the poor through improved HMI business models. Several common themes emerged regarding the areas where HMI innovation is most needed:

- Expanding member benefits
- Organizational models and PPPs
- Overcoming low capacity to pay
- Use of information and communications technology

Enrolment, sales and distribution were other areas with a need for innovation, but as they are not specific to HMI they have not been included in this chapter.

5.3.1 Expanding member benefits

Member benefits should extend beyond hospitalization. Minor health shocks are a pressing concern for most low-income households, and meeting this demand has the potential to increase take-up and improve risk pools. More assistance with the cost of drugs, particularly the drugs necessary for long-term treatments, also has the potential to increase demand. Taking care of the outpatient side should also improve health outcomes and health-seeking behaviour. More regular health check-ups, early diagnoses and timely care for minor illnesses should result in a reduction in overall treatment costs, better cost control and lower claims for in-patient products. For example, VimoSEWA, an insurance arm of a large trade union that provides composite health, life and property cover to more than 200 000 self-employed women in India, discovered that one-third of hospitalization claims are for preventable illnesses such as malaria, gastroenteritis and other water-borne diseases. Leaving diseases like these untreated not only aggravates vulnerability in poor communities, but also undermines the viability of health microinsurance. Several Indian organizations have addressed the outpatient component creatively, as described in Box 5.1.

Box 5.1

Expanding member benefits in India

Established in 2003, as of May 2010 Uplift Health Mutual Fund serves more than 110 000 members in the urban and peri-urban slums of Pune, Mumbai and rural Marathwada. Supported by Uplift staff and systems, members themselves administer the scheme through regular, participatory claim settlement meetings. This mutual system, coupled with strong partnerships with various healthcare

providers, allows the programme to maintain a broad benefits package that includes in-patient surgical services, some outpatient services and all primary healthcare consultations for a very competitive price (INR 400 or US\$9 per year for a family of four with benefits capped at INR 15 000 or US\$333). Uplift also conducts monthly health camps and runs a 24-hour hotline staffed by qualified doctors who assist in navigating the complex healthcare system (Dimovska et al., 2009; Ruchismita and Virani, 2009). The programme is not yet fully sustainable, but the recent growth rate, scale achieved so far, established processes and systems, and professionalism of the core team distinguish the Uplift model from other community-based schemes.

Swayam Shikshan Prayog (SSP), an Indian NGO that promotes social and economic opportunities for low-income women and their families, is piloting a hybrid HMI model to overcome some of the limitations of community-based schemes. Financial risk for in-patient benefits is carried by an insurance company, bundled with a package of outpatient services, implemented by community workers, and delivered through a network of local practitioners, diagnostic centres and drug dispensing units. Besides hospitalization cover, members can receive additional health services and access outpatient primary and preventive services and drugs, saving 30 to 40 per cent on the usual charges.

Research shows that as customers become more knowledgeable and consider existing products, they will increasingly demand customized products. Because of extreme variations in client needs, the cost of health care, the availability of services and client demand, there is no single benefit package that can optimize all factors and receive universal acceptance. Context-specific solutions are most likely to address this issue of heterogeneity. For example, the programme known as CHAT, or “Choosing Healthcare All Together”, is a decision-making tool designed to involve the public in healthcare priority-setting. It includes community members in the benefits allocation process by having them work individually and then in groups to distribute a limited number of pegs on a board. One strength of the tool is that the exercises do not require significant literacy or numeracy for participation. The operating principle is that the poor themselves are well positioned to determine what should be included and excluded in their benefits package. Further, co-creation can create trust, acceptance and willingness to be insured (Dror, 2007; Micro Insurance Academy, 2009).

5.3.2

Organizational models and public-private partnerships

The organizational model used to provide HMI plays a key role in determining the impact of the programme, as the structure affects pricing, benefits and even long-term funding. Dror (2008), examining the insurance industry in India, found that HMI programmes can change models over time. For example, communities may start out by purchasing group insurance from commercial insurers, but later shift to community-based health insurance models, which offer more flexibility and relate better to the client need for customized products. In addition, members may agree to ration benefits more readily when they have a role in the decision-making process rather than when they attempt to understand the acceptance and rejection decisions of a distant and impersonal company. This suggestion hints at just a few of the possible connections between organizational model, marketing and product design.

Typically, grassroots HMI programmes understand low-income communities, but do not understand health insurance, while traditional insurers do not know how to reach communities or gain their trust. Insurers can bridge this gap by working in partnership with delivery channels that are more in touch with poor communities; grassroots HMI programmes can fill their capacity gaps by participating in training and receiving technical assistance. With any potential solution, however, understanding and meeting clients' needs should remain a priority.

When public- or private-sector intervention alone cannot accomplish enough, public and private players may need to join together in innovative and more substantive ways. Importantly, research reveals that advancing the goals of fighting poverty and providing access to health care often requires the cooperation and blended competencies of public- and private-sector actors, with complementary resources and roles (Marek et al., 2005; Cowley and Ehrbeck, 2007; Lomas, 2009).

Up to this point, this chapter has emphasized private-sector interventions and programmes that directly or indirectly provide HMI and access to health care. However, innovative PPPs have the potential to catalyse a greater quantity and quality of healthcare options for low-income individuals and groups. In particular, PPPs can exploit the creativity and efficiency of the private sector in concert with the fund-raising capability of the public sector. Public money may be necessary to pay for most preventive care, for health promotion or to subsidize HMI premiums. Government support for public-private partnerships can be provided effectively in a number of ways. In Ghana and Rwanda, the public-private partnership relationship is one where the government provides significant subsidies to pay for premiums. In Laos PDR, the government subsidizes health care directly. In Cambodia, the government finances equity funds; donors also

contribute to these funds, which are used to subsidize local programmes to distribute insurance to the poor.

The public sector, however, can provide more than just financial and contracting support. It is obvious that HMI needs to be developed in parallel with public health strategies. For example, developing HMI programmes in countries where health systems are very weak does not make sense. If well coordinated, the public sector may be able to provide access to underutilized healthcare facilities that the private sector can use to expand access and lower costs. Public- and private-sector players can also cooperate to create larger, more stable risk pools. Such partnerships can promulgate and enforce quality and accreditation standards. Quality assurance and the need for uniform standards of quality, cost of treatment, and accreditation are other areas where the government can play an important role.

On the other side of the spectrum, private-sector management expertise can drive solutions to reduce fraud and manage programme risk and costs. Broadly speaking, the private sector is inherently more able than government to innovate and respond to market opportunities, and “stay close to the customer”. The application of established business practices, including continuous quality improvement, actuarially-based pricing, robust product research and development, operations monitoring and use of technology are all essential to the success of HMI programmes.

5.3.3 **Overcoming low capacity to pay and liquidity constraints**

Given that affordability remains one of the key factors affecting demand for HMI, many countries support health financing mechanisms such as cost-sharing, government intervention (e.g. rate-setting) and subsidies, and the introduction of private for-profit healthcare services (Kiwara, 2007). Despite this range of options, one of the greatest challenges for HMI is to identify and implement pricing and payment methods that result in an affordable product, while generating sufficient revenue to sustain operations. Good business practices in HMI focus on increasing the flexibility of payments, identifying premium subsidies and providing “cashless” access to healthcare services, which are crucial to making HMI accessible and affordable for poor clients.

Increasing the flexibility of premium payments

Currently, the most common premium collection practice is to collect annual premiums at or around the time of enrolment. However, some HMI programmes are trying alternative approaches to make premium payments more flexible, such as in-kind premium payments and various savings-linked arrangements, as described in Box 5.2.

Box 5.2

Making premium payments easier

VimoSEWA offers clients a special fixed deposit account where interest earned on savings pays the annual premium. The innovation gives low-income clients the option to contribute to a special savings account until they have accumulated a balance sufficient to pay the premium (INR 500 or US\$11). The interest that VimoSEWA earns on the savings eventually covers the cost of the insurance premium. SEWA also offers a consumer loan designed to finance the 500-rupee premium, enabling the client to repay the loan regularly over the scheduled period (Radermacher et al., 2006).

Zurich Bolivia Group has had some success in delivering HMI products through BancoSol, a commercial bank focusing on the low-income market. One contributing factor is that sales and premium payments are linked to savings accounts. The product, sold at bank branches, offers medical consultation cover at 100 per cent, ancillary services and maternity at 80 per cent, and hospitalization and surgery at 70 per cent plus life insurance for US\$3.99 per month. Zurich Bolivia invested in customized management information systems to automate premium collections and integrate them with banking functions. Monthly premium collection is flexible: if the savings account has insufficient funds when a scheduled premium payment is processed, the system retries every day to debit the account until 1) there are sufficient funds to pay the premium, or 2) sixty days have gone by, in which case the policy is cancelled (Harmeling, 2010b).

Subsidizing premiums

Another major way of providing adequate capital is to subsidize HMI premiums. Some donors and governments experiment with temporary subsidies for health insurance. The Health Insurance Fund, a Dutch foundation with funding from the Netherlands government, provides two-year subsidies for their health schemes in Nigeria to allow the poor to experience the benefits of unknown products. The rationale is that clients will see the value of insurance and continue to pay for cover once the subsidies have been removed. Permanent subsidies are also targeted at poorer classes in several countries such as Georgia and Ghana. Given the

inability of the poor to pay for health care, it is hard to imagine valuable HMI programmes for all without subsidies and other support from the public sector.

Cashless or near-cashless payments

Financial constraints also need to be overcome on the claims side. As discussed in Chapter 6, another notable innovation to release liquidity constraints is cashless products, which allow the poor to access health care without having to pay up-front and then file a claim for reimbursement.

5.3.4 Use of information and communications technology

Technology has enormous potential to trim costs and increase efficiency for all types of microinsurance products and across the entire value chain, which is described in more detail in Chapter 24. There are many process-related applications of technology that should offer improvements in operating efficiency.

In the context of HMI, innovations in mobile phone technology can permit cost-efficient, appropriate access to health care. For example, Project Masiluleke in South Africa sends about one million text messages a day, encouraging recipients in their local language to contact a national AIDS hotline. The hotline then directs them to clinics outside their local region where they can avoid the stigma of being tested in the vicinity of peers. Responses have exceeded expectations, particularly from previously hard-to-reach young men (*Economist*, 2009). In other parts of the world, such as Thailand, compliance with a drug regimen to treat tuberculosis jumped to over 90 per cent when patients were sent a daily text reminder to take their medication.

A more direct way to use mobile technologies to improve the supply side is to provide better support for rural health workers serving patients, as there is a significant shortage of trained doctors in rural areas. The Council on Foreign Relations (CFR) has developed a “doc in a box” concept, in which they equip a shipping container to serve as a rural clinic. Trained community health workers offer services from the units, and have access to fully trained professionals by mobile phone (*Economist*, 2009). Medcall Home in Mexico is also using technology to improve health outcomes for people who cannot access clinics, by providing unlimited telephone consultations with doctors for a flat fee of about US\$5 per month (Medcall Home, 2010). CARE Foundation is testing a telemedicine scheme in rural India (*see Box 5.3*). Innovations like these have the potential to make HMI more viable in rural areas by improving early access to care, thus reducing costly claims later in the disease cycle.

Box 5.3

Mobile technology to connect doctors with rural patients

Based in Hyderabad, India, CARE Foundation is piloting a rural health delivery and microinsurance scheme that focuses on the provision of outpatient care in the village setting. Community members are trained to be village health champions (VHCs) who provide “health care on the village doorstep”. For routine diagnoses, VHCs use a hand-held terminal with a built-in clinical decision support system to provide appropriate medical advice and order prescriptions. In less routine cases, they liaise with a remote CARE doctor who recommends treatment through a text message. Final testing of the technology, training of health workers, and product design are currently being completed.

5.4 The way forward

This chapter suggests ways in which HMI programmes can become more valuable to clients and more sustainable over time. Specifically, some strategies are highlighted to respond to market demand, to address supply gaps by improving product design, delivery, and operations, and to integrate public- and private-sector efforts.

5.4.1 Expanding member benefits to respond to market demand

Member benefits should extend beyond hospitalization. Minor health shocks are a pressing concern for most low-income households, and meeting this demand can increase enrolment and stabilize risk pools. Furthermore, enhancing outpatient benefits encourages regular health check-ups, earlier diagnoses, and timely care for minor illnesses. These changes should reduce overall treatment costs and lower claims for in-patient care, thus improving the overall viability of HMI programmes.

HMI programmes must simultaneously educate clients in the benefits of health insurance products and respond to client needs. Currently, lack of understanding of HMI is a key reason for the low renewal rates of many HMI programmes – clients often feel that insurance is a wasted purchase if they did not fall sick during the year. Few programmes have devoted adequate resources to segment-specific market research, education and marketing, limiting understanding and acceptance of HMI products on the part of clients and even practitioners.

Compounding these issues is the fact that the poor, by definition, lack the capacity to pay. As a result, stimulating demand for HMI will require careful design of optimum benefit packages, ideally through a participatory process

involving potential clients. Furthermore, low-income individuals require flexible payment arrangements to help them finance premiums.

5.4.2 Improved supply: Products and processes

Currently, universal health care is out of reach for many countries. Market-based solutions are not reaching scale and may not meet all needs due to exclusions of populations, limitations of coverage, and constraints on the infrastructure and distribution of healthcare providers in many geographical areas. These factors leave the poor without reliable access to necessary health services or dependable financial risk management solutions. As discussed in this chapter, numerous challenges are restricting HMI programmes' ability to supply valuable products, and overcoming these challenges will require careful, multi-pronged intervention.

Private-sector activity, by commercial insurers in particular, has been limited to date partly because of the perceived complexity of designing and administering comprehensive (e.g. outpatient and in-patient) products. Context-specific solutions must be sought, using carefully constructed benefit packages. Until products are developed that meet client demand while remaining financially viable, a scale adequate for risk-pooling will not be attained. Furthermore, many HMI programmes lack sufficient financial support due to investor concerns about reaching scale, and, ironically, struggle to reach scale due to this same lack of financial support. Additional obstacles to scale include inadequate health infrastructure and insufficient data and technical expertise, highlighting the need for more market research and capacity-building assistance.

Since HMI is characterized by frequent transactions and small margins, efficient claims and policy administration processes are essential to success. Thus far, experience with third-party arrangements has not been satisfactory (*see Box 20.5*), and more innovation is needed in obtaining and implementing third-party support. Appropriate pricing, reinsurance cover and fraud controls also require significant attention and investment, particularly for community-based programmes. Though commercial insurers may have a better grasp of these insurance concepts, they lack an understanding of how to best reach the low-income market. Furthermore, HMI programmes face these challenges in environments that often lack stable political systems and supportive regulatory treatment of HMI programmes.

The best solution is a coordinated effort to tackle multiple challenges simultaneously, involving players from many different aspects of the HMI sector. This effort should be combined with active communication between actors, sharing their discoveries of what works – and what does not.

5.4.3 **Public- and private-sector collaboration**

The presence (or co-creation) of underlying health services provision is critical to advancing HMI and to improving health outcomes in general. Certainly, no HMI programme can be successful unless adequate healthcare services and personnel are in close proximity to the patient. In addition, public health programmes can create supportive environments to strengthen the impact of HMI. For example, public players can improve sanitation conditions to reduce overall systematic health risk and to support the viability of HMI programmes. They can also promote health education and preventive care. Such activities will encourage the kind of behaviour change that will enable HMI to have a greater impact and may also reduce risks for programmes.

In addition, to create an enabling environment, private-sector players need to make full use of the presence of any organizing bodies that consolidate groups of people on non-health criteria. This practice is critical to addressing the adverse selection and risk-pooling problem (Ito and Kono, 2010). Management of health care through treatment protocols, discharge planning and other forms of care coordination can improve consistency and efficiency.

Ideally, governments should provide 1) sustainable sources of financing, 2) a stable yet flexible regulatory environment, and 3) consistent political support. With some or all of these factors in place, the probability of HMI programmes being valued sufficiently by clients to stimulate enrolment and the programmes thriving long enough to achieve scale increases significantly.

5.4.4 **Improve evaluations**

Another element that deserves consideration is improved metrics for programme evaluation. Programmes where managers are testing innovations will certainly move through a trial-and-error stage and evolve over time; some will fail and most will require at least several years to break even. Thus, programme longevity may not be the best indicator of a viable and sustainable HMI programme. Other relevant metrics include standard financial indicators and ratios examining both clinical and administrative performance, robustness of management information systems, credible pricing reviews, and staff training and incentives (Biswas and Devi, 2008).

The selection of metrics and the continuous tracking of performance measurement play a role in advancing healthcare access and quality. Ideally, management attention should focus on measuring and tracking HMI programme indicators as well as client health outcomes.

5.4.5 **A coordinated effort to expand member benefits**

Overall, the evidence review indicates that programmes can approach health financing either to reduce vulnerability (focusing on a catastrophic event or inpatient care) or to improve health outcomes (focusing on outpatient care, prevention and chronic care). These two perspectives present a conundrum: the former is more aligned with principles of insurance, but clients desire the latter. Through efficient business models, customized benefit packages and varied payment plans, HMI programmes should seek a balance between the two perspectives. The solution should also make use of public-private partnerships (PPPs), combining the public sector's ability to source funding, pool large groups and ease regulatory issues with the private sector's innovation, insurance expertise, efficiency and technology.

Thus, the way forward for health microinsurance lies with the combined efforts of policymakers, the private sector, NGOs, government officials, management educators and technology firms. Ultimately, no efforts, even combined efforts, are likely to be successful unless inputs from the most important stakeholder – the potential client – are constantly solicited and utilized.

6 Third-party payment mechanisms in health microinsurance

Pascale LeRoy and Jeanna Holtz

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Some health microinsurance (HMI) schemes require patients to pay cash when they receive healthcare services and then submit the receipts so that they can be reimbursed by the insurer. For low-income households who may have to borrow the funds from family, friends or moneylenders to pay for health care – and run the risk that the insurer might reject the claim – the reimbursement method can cause severe financial hardship that significantly decreases client value.

One way to alleviate this up-front payment is to set up a third-party payment (TPP) mechanism with selected healthcare providers. A TPP can be defined as a model for claims payment in which insured patients are not required to pay for the cost of health services covered by the scheme. With the exception of any cost-sharing (e.g. co-payment, deductible), an insured patient need not make an out-of-pocket payment when using healthcare services, and a third party (the HMI scheme or another entity on behalf of the scheme) pays the healthcare provider for the covered services it has provided to the patient.¹ TPP mechanisms encompass terms of payment negotiated between the third party and preferred healthcare providers, and usually include components to manage medical care such as pre-authorizing hospital admissions.

This approach is not new in health insurance, though setting up and managing a TPP mechanism for HMI poses unique challenges. Using a practice-based approach, this chapter identifies lessons learned on the efforts of TPP mechanisms to provide “cashless” access to insured persons (*see Box 6.1*).

The evidence for this chapter comes from a literature review, an online survey of HMI schemes conducted by the ILO's Microinsurance Innovation Facility in 2009, key informant interviews and, most importantly, in-depth case studies. Seven schemes (*see Table 6.1*) were selected to detail lessons on designing and managing a TPP mechanism. The selection criteria for inclusion of an HMI scheme as a case study included its contribution to geographic diversity, and its size (minimum 10 000 insured persons) and longevity (in operation for at least three years).

¹ Adapted from the glossary of the ILO's Global Extension of Social Security (GESS).

Box 6.1

Understanding the vocabulary: “cashless” and TPP mechanism

Synonyms or related expressions used in the HMI sector to refer to a TPP mechanism include cashless HMI schemes, cashless claims arrangements, cashless systems and cashless benefits.

The term “cashless” reflects the perspective of an insured client, and not that of the HMI scheme or the healthcare provider. Cashless arrangements are made by HMI schemes to enable the insured to access healthcare services with no (or relatively little) out-of-pocket costs. The term cashless can apply regardless of whether the insured patient’s access is truly cashless or whether it involves some cost-sharing, e.g. co-payment or deductible.

Source: Authors.

Table 6.1

Summary of case study information

	<i>Africa</i>		<i>Asia</i>			<i>Latin America</i>	
<i>Name of scheme³</i>	<i>Microcare¹</i>	<i>UMSGF²</i>	<i>Yeshasvini</i>	<i>CBHI</i>	<i>GRET-SKY</i>	<i>FMiA³</i>	<i>Sol salud (Zurich Bolivia and BancoSol)</i>
Country	Uganda	Guinea	India	Lao PDR	Cambodia	Pakistan	Bolivia
Type of HMI scheme	Commercial insurer	Community-based	Community-based	Community-based	Community-based	Insurer + distribution partner	Insurer + distribution partner
No. covered (end 2008)	29 000	16 120	3 060 000	65 000	39 000	19 000	13 000
Provider payment method⁴	Fee for service with fixed fee schedule	Case-based payment and drugs	Case-based payment	Capitation	Capitation and case-based payment	Fee for service with fixed fee schedule	Capitation payment/fee for service and case-based payment
Funds transfer method	Electronic transfer or cheques	Cash	Cheques	Electronic transfer	Cash	Cheques	n.a.
Health services covered	Hospitalization and primary care	Hospitalization and primary care	Surgery	Hospitalization and primary care	Hospitalization and primary care	Hospitalization and voucher for one consultation	Hospitalization and primary care (drugs excluded)
Number of providers contracted	150	53	295	24	63	4 hospitals and 25 first line health facilities	n.a.
Member cost-sharing	Claims in excess of benefits	Small deductible	Claims in excess of benefits	None	None	Claims in excess of benefits	Co-payment and claims in excess of benefits
Claims administration outsourced?	No	No	Yes (Family Health Plan Limited)	No	No	No	Yes (PROVID)

¹ The acronyms stand for the following organizations: Union des Mutuelles de Santé de Guinée Forestière (UMSGF), community-based health insurance (CBHI), Groupe d'échange et de recherche technologique (GRET), and First Microinsurance Agency (FMiA). SKY is a Khmer acronym for “Sokhapheap Krousar Yeung”, which means “Health for Our Families”.

² Microcare ceased operations in late 2009 due to a mixture of political and regulatory reasons. Nevertheless, the lessons from this scheme are relevant for this chapter.

³ FMiA ceased operations in 2011, having failed to achieve financial sustainability or to attract new funding. This does not affect the value of the lessons they learned.

⁴ These payment methods are defined in section 6.2.2.

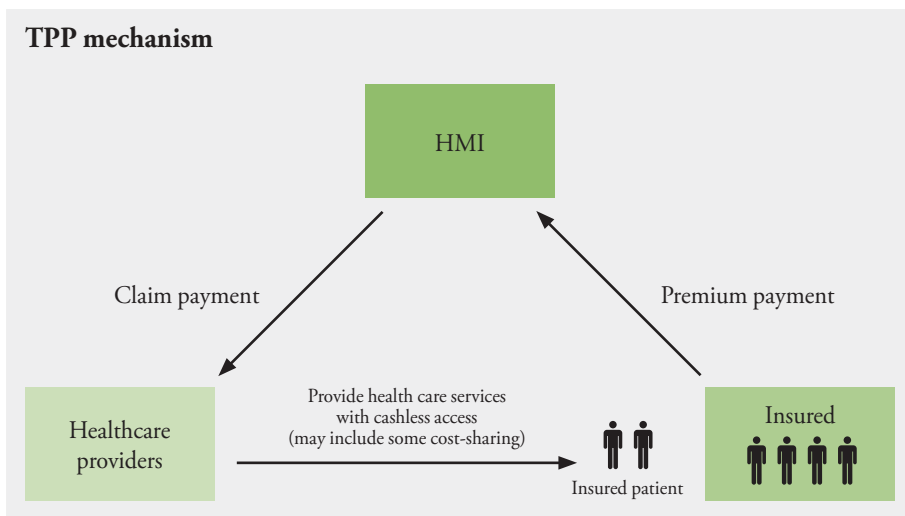
This chapter is organized into two parts. The first part presents the TPP mechanism in the context of claims models available to HMI schemes and assesses the pros and cons of third-party payments. The second part summarizes key issues to address when establishing and managing a TPP mechanism across three dimensions: 1) access to care; 2) cost of care; and 3) quality of care.

6.1 Current TPP practices

When designing an HMI scheme, practitioners must define the conditions for access to health care, and the mechanism and entity responsible for claims submissions and payment. TPP mechanisms are one of three major claims models prevalent in HMI (Radermacher et al., 2006). Two of these models provide cashless access to insured patients, while the other reimburses claims.

- 1) **TPP mechanism:** With a TPP mechanism, the HMI scheme arranges direct payment for covered services to the healthcare provider on behalf of the insured (see Figure 6.1). With the exception of any cost-sharing such as a co-payment or deductible, the patient need not make an out-of-pocket payment at the time the service is provided. As such, TPP mechanisms are frequently cited as a tool to increase the value of insurance to low-income persons, who may otherwise face a significant debt burden to fund the cost of health care, even for a short period.

Figure 6.1

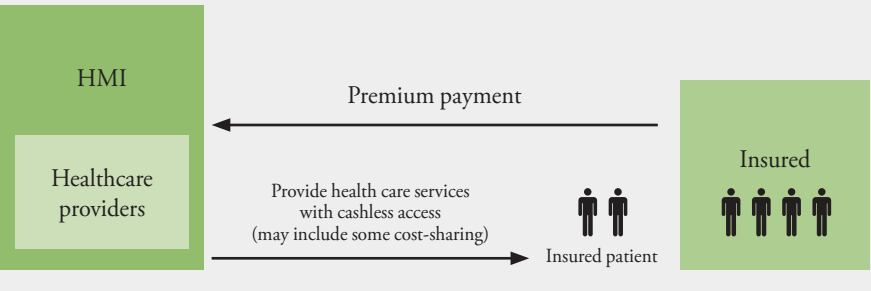


- 2) **Integrated care and financing model:** HMI practitioners may own and manage healthcare facilities (usually to provide primary health care), or healthcare providers may start HMI schemes, thereby integrating insurance with healthcare delivery. In an integrated model, healthcare providers collect the premium from the insured and provide healthcare services according to the terms of the insur-

ance policy (see Figure 6.2). The premiums collected in advance by healthcare providers are expected to cover the cost of the services. In this situation, patients do not have to submit claims. As with a TPP mechanism, in the integrated claim model insured patients have access to care without paying out of pocket or only paying a moderate portion when cost-sharing is in place.

Figure 6.2

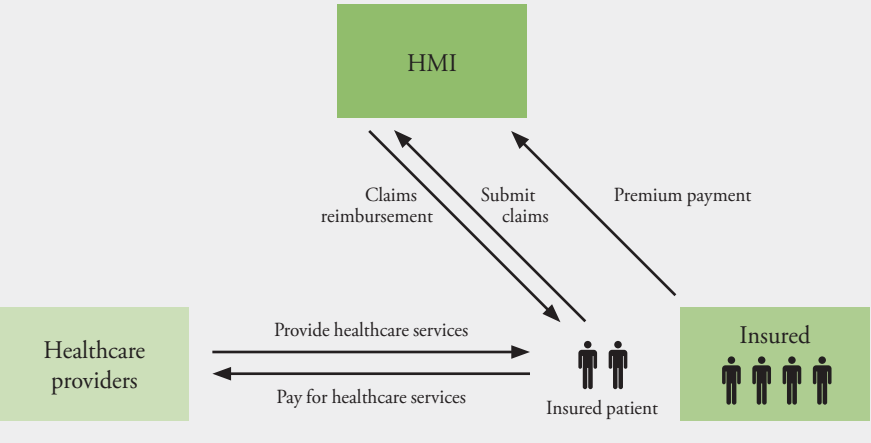
Integrated care and financing model



- 3) **Reimbursement model:** With the reimbursement claims model, the insured member pays for healthcare services at the time of use and then submits claim documents and receipts from healthcare providers to the HMI scheme to request reimbursement (see Figure 6.3).

Figure 6.3

Reimbursement model



Practitioners often mix the different models depending on contracts with providers and services covered (see Box 6.2).

Box 6.2

Claims models in HMI schemes

An online survey conducted by the ILO's Microinsurance Innovation Facility in 2009 confirmed that the majority of HMI schemes use TPP mechanisms. Among the 65 respondents:

- 52 per cent use a TPP mechanism
- 22 per cent use reimbursement models (mostly in Asia)
- 18 per cent use a mix of TPP mechanism and claims reimbursement, depending on services covered or type of healthcare provider
- 8 per cent use an integrated care and claim-financing model

Among the HMI schemes with pure TPP mechanisms, one out of four had not implemented any cost-sharing (e.g. co-payment, deductibles) or benefit limits.

Some regional patterns emerge. In Central and West Africa, TPP mechanisms appear to be a standard feature of health mutuals, for which the UMSGF is a representative example.

In India, Devadesan et al. (2004) reported that only two out of 12 schemes studied were using TPP mechanisms, including Yeshasvini. Five other schemes were integrated into healthcare providers, and offered cashless access to services. In Pakistan, the National Rural Support Programme started with a reimbursement model and is evolving towards a TPP mechanism based on client feedback. All schemes developed by First Microinsurance Agency (FMiA) use TPP mechanisms.

In Cambodia, Lao PDR and Viet Nam, TPP mechanisms were a common feature amongst HMI schemes since they tend to rely less on the integrated care and financing model and since national health-financing systems are oriented toward social health insurance with TPP. In Lao PDR, only one community-based health insurance (CBHI) network has developed so far, under the supervision of the Ministry of Health, with a TPP mechanism. In Cambodia, all five existing CBHI schemes use TPP mechanisms. The Ministry of Health has issued guidelines regarding key design features allowing TPP mechanisms with capitation to be negotiated with public health facilities for both primary and hospital care at district level. At provincial level, HMI schemes typically pay hospitals on a fee-for-service basis according to a fee schedule.

Responses to the survey from Latin America were too limited to paint a fair picture of claims models in that region. Five schemes from Bolivia, Colombia and Mexico responded to the survey. Three of these have adopted TPP mechanisms, including Sol Salud healthcare insurance services from Zurich Bolivia and BancoSol.

Compared with reimbursement or integrated models, a TPP mechanism has potential advantages and disadvantages (*Table 6.2*) that differ according to the parties involved.

Table 6.2

Possible advantages and disadvantages of TPP mechanisms		
Party	Possible advantages	Possible disadvantages
Insured clients	<ul style="list-style-type: none"> – Eliminate or reduce cash payment at the time of service – Enhance access to healthcare services – Reduce incidences of people delaying or avoiding the use of health care – Reduce or eliminate administrative burden (e.g. no claims to submit) 	<ul style="list-style-type: none"> – Restrict choice of providers – Require authorization prior to admission – Healthcare providers may render unnecessary services that can increase health risk and out-of-pocket costs
Insurers	<ul style="list-style-type: none"> – Simplify claims management (e.g. batch settlement as opposed to claim by claim) – Depending on the provider payment method, can align incentives for providers to provide efficient, appropriate care – Permit transfer of financial risk (all or part) to healthcare providers – Support market expansion (turnkey operations) – Improve quality of care – Increase efficiency of premium collection from clients 	<ul style="list-style-type: none"> – Increase moral hazard for healthcare providers and members, who might provide/seek unnecessary services if member has no financial responsibility when seeking care – Contracting healthcare providers may be difficult and time-consuming – Some providers may be unwilling to contract if they do not have excess capacity and do not face competition – Increase administrative costs and processes, especially in IT – Increase claims costs
Healthcare providers	<ul style="list-style-type: none"> – Increase utilization and therefore generate additional revenue – Reduce uncollectible amounts from patients – Stimulate quality of care (and therefore enhance reputation) – Depending on the payment method, can generate: <ul style="list-style-type: none"> a) a financial gain b) a stable flow of revenue 	<ul style="list-style-type: none"> – Create additional administration needed to verify eligibility and submit claims – Increased patient volume may not offset any discounts or additional costs – Increased compliance requirements for quality of care – Pressure to eliminate informal charges including bribes – Depending on the payment method and utilization, can generate a financial loss – Depending on the payment method, may increase the time taken for payments to be made

6.2 Establishing and managing a TPP mechanism

The way in which a microinsurance scheme selects, contracts and manages healthcare providers under a TPP mechanism will determine its success or failure. It is critical that HMI schemes establish and maintain minimum standards for each participating provider and for the network of providers overall. These standards should address the adequacy of three key dimensions: 1) access to care; 2) cost of care; and 3) quality of care.

6.2.1 Access to healthcare services

The first dimension relates to access to services for members of the HMI scheme through the selection of healthcare providers. As with regular health insurance schemes, the regulatory environment and geographic and service offerings must be assessed to evaluate which healthcare providers could be relevant partners for

the HMI scheme. In some locations, public healthcare providers are the only available partners that offer affordable healthcare services for the target population (e.g. Cambodia, Lao PDR). Often, the reputation of public providers is perceived as poor, but it may be possible to form productive partnerships under which quality can improve. In other contexts, public providers may not be allowed to engage in contracting with health insurers (e.g. in Pakistan, where public providers officially provide their services free of charge), pushing HMI providers to turn to private providers and negotiate costs of healthcare services in order to make premiums affordable.

One of the most difficult challenges to overcome is when there are simply not enough qualified healthcare providers in a service area. In this case, short-term solutions may be scarce, and it is possible that the TPP mechanism will not be relevant. Long-term approaches include working with governments, donors and other stakeholders to improve healthcare delivery capacity. Alternatives, including mobile clinics, telemedicine and training of community health workers, continue to emerge in an effort to address this dilemma.

Access to healthcare services may be defined by number, type and location of providers, and the mix of services they offer. The adequacy of a provider network to serve the number of enrollees can be monitored through indicators such as waiting time for appointments and the amount and type of care delivered outside the provider network. A network of providers under a TPP mechanism should include providers needed to cover the insured services. For example, if eye surgery is a covered benefit, then ophthalmology providers should be included in the provider network.

Geographic access can be measured using time and distance required to access care. The results of these measurements can be compared to benchmarks, such as 85 per cent of members having access to two or more providers within 20 kilometres or 90 minutes travel time. Such standards need to be tailored to urban and rural settings, and should reflect the existing standards in the community.

6.2.2 Managing healthcare costs

Once healthcare providers have been selected, the success of a TPP mechanism depends on establishing a collaborative contract with them to manage cost and align financial incentives to encourage appropriate care. To manage costs, the HMI scheme also needs to manage moral hazard and fraud risks for both health providers and clients.

Collaborative contracting process

Contracting healthcare providers to participate in a TPP mechanism is most successful when the negotiations are transparent and collaborative, and there is recognition of the objectives of both parties. Endorsements from existing participating healthcare providers can help an HMI scheme recruit new partners. HMI schemes often seek healthcare providers that agree to:

- meet minimum standards for the quality of health care, ideally under the supervision of a medical adviser from the HMI scheme;
- conduct regular monitoring of quality of care, both internally and/or by external healthcare professionals;
- payment for services provided under the terms of agreement and the use of rational fee schedules;
- utilize transparent billing and accounting systems;
- establish an acceptable procedure to verify insured patients' eligibility;
- share information with the HMI scheme regarding insured members' utilization of healthcare services;
- support the presence of a help desk on site to assist insured members.

Commitments from the HMI scheme to contracted healthcare providers can include:

- financial guarantees, such as a minimum annual payment until an enrolment threshold is reached, or placing a maximum on potential revenue lost under a capitation arrangement (GRET-SKY);
- minimum or sufficient member enrolment (Microcare, FMiA);
- cash advances (UMSGF);
- tools or support to identify insured clients and determine eligibility for covered services (Microcare, FMiA);
- agreeing to a regular review of results under the HMI scheme (e.g. volume of patients, revenues and costs) with the possibility of renegotiating terms.

Contracting healthcare providers can be time-consuming, as the contract needs to be comprehensive and clear to avoid future complications. For example, at UMSGF it takes approximately three months to contract an outpatient clinic and six months for a hospital. Both parties need to understand what is expected of them and how the relationship will work in practice. Both administrative and clinical teams within healthcare providers should be involved in the contracting process as they have different expectations of the partnership with an HMI scheme. Above all, HMI schemes should take care to make commitments that

can be met, and be prepared to reassess commitments to serve the long-term interests of all parties.

For HMI schemes that contract public healthcare providers, it is necessary to involve the health authorities (that supervise providers) at an early stage to support the contracting process as well as to enforce the contract in some cases (GRET-SKY, CBHI).

Negotiating the payment method

With a TPP mechanism, HMI schemes usually pay contracted healthcare providers according to a pre-determined method of payment. The payment method is critical to the scheme's success. Four common payment methods are outlined below. Each method provides different incentives and disincentives for providers to control the cost and quality of services:

- **Retrospective payment on a fee-for-service basis:** Providers are paid (*à la carte*) for each service performed that is covered by the HMI scheme. Fee-for-service payments can be based on a fixed fee schedule for each service, group of services or on the provider's billed charges. In the case of the latter, payments may be based on a percentage of billed charges (i.e. when a discount is negotiated or when cost-sharing is in place). This is the most prevalent model amongst the schemes surveyed. In developed countries, this payment method is usually associated with an increase in both the volume of services provided and overall healthcare expenditure (Langenbrunner et al., 2009).
- **Retrospective case-based payment:** Providers are paid an all-inclusive (sometimes called “global”) amount, typically for all services provided in connection with a hospitalization or an episode of care that may include pre- and post-hospitalization care. Per-case payments can be constant, or vary according to factors such as diagnosis or age of patient that can greatly influence the cost of treatment.
- **Retrospective payment per day:** Providers are paid an all-inclusive amount per day of hospitalization. Per diems can vary by type of service or bed, such as intensive care, surgical or medical ward days.
- **Prospective payment by capitation:** Providers are paid a fixed payment per enrollee for a defined period, usually one year. Capitation payments are not affected by utilization of services (volume and type) by the insured; they are made prospectively (in advance) to the healthcare provider that the enrollee selects. Capitation may apply to a specific healthcare service or set of services, such as primary (outpatient) care, or capitation can apply at a “global” level, i.e. for all health care including primary, secondary and tertiary care.

It can be difficult to develop fair payments, regardless of the method used, given the wide variation in baseline charges, and the tendency for charges not to

be based on cost plus a reasonable margin, or to be supported by accurate data. Another challenge with all payment methods is that healthcare providers may attempt to “balance the bill”, or collect additional fees not reimbursed through the payment made by the TPP mechanism.

From the perspective of the scheme, each payment method has advantages and disadvantages, as highlighted in Table 6.3. Measures to offset disadvantages vary depending on the method of payment chosen (ILO STEP, 2006; Langenbrunner et al., 2009).

Table 6.3

Advantages and disadvantages of the different payment methods

<i>Method of payment</i>	<i>Advantages</i>	<i>Disadvantages</i>
Fee-for-service	<ul style="list-style-type: none"> – Easy to understand and implement; typically the method used by healthcare providers – Encourages provision of services, which can aid access to care for low-income households – Generally well accepted by healthcare providers 	<ul style="list-style-type: none"> – Fuels medical inflation by providing a financial incentive to: <ul style="list-style-type: none"> – over-utilize services (increase volume); – raise billed charges if these are the basis for calculating payments (increase unit costs) – HMI scheme bears entire financial risk and may try to restrict claims by limiting covered services or by being prone to reject claims – Can require unpopular interventions to reduce inappropriate claims
Per case	<ul style="list-style-type: none"> – Simplifies claims administration – Transfers financial risk for length of stay to providers – Encourages efficient care management (shorter length of stay) 	<ul style="list-style-type: none"> – Incentive to diagnose and bill for more complex (higher revenue) cases – Incentive to reduce length of stay and services that may be necessary – Incentive to make unnecessary admissions – Difficult to establish a fair cost per case for all patients (i.e. including outliers)
Per day	<ul style="list-style-type: none"> – Simplifies claims administration – Transfers financial risk for cost per day to providers – Encourages efficient care management (lower intensity of service per day) 	<ul style="list-style-type: none"> – Incentive to increase length of stay – Incentive to reduce services that may be necessary – Incentive to make unnecessary admissions
Capitation	<ul style="list-style-type: none"> – Simplifies claims administration (no claims necessary) – Steady revenue stream (prepayment) for providers (cash-flow advantage) – Allows the transfer of financial risk to healthcare provider – Encourages providers to provide preventive care and encourage earlier and less costly treatment 	<ul style="list-style-type: none"> – Providers generally unreceptive due to inability to manage financial risk of care – Difficult to price accurately without large enrolment due to high variation in cost to care for small numbers of patients and overall lack of data – Incentive to reduce care – Incentive to exclude high-risk groups (elderly, persons living with HIV/AIDS, those with pre-existing and chronic diseases in some cases) – Encourages inappropriate referral to other providers for expensive cases when some but not all healthcare services are covered by the capitation payment – Can be difficult for insurer to obtain utilization (encounter) data to reconcile payments with actual experience

Most of the surveyed schemes with TPP mechanism use a single method for payment, though 36 per cent use a mix of two or more payment methods. The majority (69 per cent) have negotiated fee-for-service payment terms, while 40 per cent use a case-based payment method and 17 per cent have negotiated a prospective payment based on capitation.

The following lessons emerge from the case studies:

- Payment methods that transfer some financial risk to healthcare providers (case-based, per day or capitation) have greater potential to contain costs than fee-for-service payment, but require additional measures to control the quality of care (*see section 6.2.3*). These methods are usually more difficult to negotiate with healthcare providers (*see Box 6.3*).
- Capitation may be an appropriate way to compensate providers for high frequency/low cost (i.e. more predictable) health events, including outpatient care. This is because it is easier to estimate in advance how often people will seek primary health care in a given period and the approximate cost involved. This type of prepayment is more difficult for complicated and infrequent care such as hospitalization. Capitation can also reduce administration costs, because claims do not need to be submitted and processed for each healthcare encounter (*see Box 6.3*).
- Capitation is better adapted to contexts where a critical mass of enrolment can be achieved with a given provider. This is more often attainable when the choice of healthcare providers is limited and/or the population enrolled is significant. Capitation payments are easier to set and manage in settings where the provider can deliver the full range of care.
- Mixed payment methods may be suitable in many respects (i.e. capitation for primary healthcare providers/services and per case for hospital cases), but often complicate administration and increase management costs.

Limiting moral hazard and fraud

Moral hazard and fraud are standard challenges with health insurance. Since insured patients in HMI schemes with a TPP mechanism do not bear the cost of health care at the time of service, the incidence of moral hazard can increase as clients may view the care as free and use unnecessary services. Similarly, healthcare providers often view the insurer as having a greater capacity to pay than a patient who must pay directly and thus may see an increased opportunity to deliver services that are covered but may not be medically necessary.

HMI schemes with TPP mechanisms face similar challenges regarding fraud to schemes that use reimbursement models. Fraudulent behaviour can occur when non-insured patients pose as covered persons, or insured clients seek non-covered services; providers can engage in fraudulent acts by billing for services not delivered or providing unnecessary services to generate additional revenue.

Each of the seven HMI schemes studied has implemented measures to control moral hazard and fraud through strategies to influence both the providers' and clients' behaviour.

Box 6.3

GRET-SKY's experience with capitation

GRET-SKY wanted to provide clients with free access to primary health care to limit expensive hospital cases (thereby contributing to the sustainability of the scheme) and offer them an attractive benefit. Capitation was felt to offer the best payment method for primary health care, in part because it could limit the administrative costs associated with the high claims frequency of primary health care and because it limited the financial risk for the HMI scheme.

Establishing a capitation payment arrangement required lengthy negotiations to address concerns of public healthcare providers to generate sufficient revenue. Several factors made this negotiation successful:

- The scheme had support from the Ministry of Health as well as the local health authority.
- The first contracted public health facilities were supported by an international NGO that was open to alternative payment methods.
- The contracted public health facilities had excess capacity and were seeking more patients.
- All calculations to determine the capitation amount were transparent to all parties. GRET-SKY compensated any financial loss suffered by the provider during the first year if the charges for services rendered exceeded the capitation amount.
- When the number of insured clients was limited and providers were reluctant to participate, the capitation payment per client was “boosted” in order to guarantee a minimum amount of revenue to participating providers. This per member “capitation boost” gradually decreased as the membership increased.

Once a year, GRET-SKY evaluates the appropriateness of the capitation amount to achieve financial viability for both parties, and makes any adjustments needed. So far, the capitation amount has progressively decreased for many contracted providers, as rates were initially “boosted” to encourage participation. GRET-SKY's experience showed that approximately two years was necessary to eliminate subsidy of per-person capitation rates (rather than one year as initially envisaged).

Source: Authors.

Moral hazard and fraud by healthcare providers

It is necessary to monitor utilization, cost and patient satisfaction delivered under various payment systems, each of which can generate specific types of moral hazard (see Box 6.4). For example, in fee-for-service environments, providers have a well-known tendency to increase the number and cost of services. To manage moral hazard, schemes can adopt a number of approaches, as described below.

Product design: limit maximum total benefit per person for hospital care (FMiA and Microcare). This can be an effective way to limit risk exposure, but it limits benefits for necessary care for those who suffer a catastrophe. This in turn can reduce both the real and the perceived value of the HMI scheme from the client perspective, making the right balance difficult to achieve.

Claims administration: analyse claims and utilization data. A variety of indicators related to high or low costs or utilization can help identify instances of moral hazard. These include:

- number and cost of claims (total, segmented by client category, location, provider, type of service and category of illness);
- frequency and cost per unit (e.g. number and cost of hospital admissions per 1000 members per year);
- average length of stay, expressed in days per admission (for hospitalizations);
- incurred claim ratio (incurred claims/earned premium);
- billed charges as a percentage of total capitation (for schemes with capitation).

Monthly monitoring of key indicators is essential to scrutinize a scheme's incidence rates and identify moral hazard. Interpreting these indicators requires a management information system (MIS) and knowledge to enable data to be analysed. For schemes that use a case-based payment, the focus should be on ensuring that the length of stay and provision of services during that stay are appropriate, and that providers do not claim more complex diagnoses or treat unnecessary cases to increase revenue. In schemes such as FMiA, the claims were sometimes reviewed twice before being sent to the insurer for payment: a first review was made at the time of discharge by a sales officer, who could then refer questionable claims for a second review to FMiA's medical adviser. Schemes using a prospective payment approach, such as capitation, need to monitor for under-service. Moral hazard can occur in the form of providers restricting care, because minimizing the provision of care can maximize profits.

Medical management: implement utilization controls. Interventions such as pre-authorization or concurrent review can manage both cost and quality prospectively and concurrently and reduce moral hazard. However, such activities (e.g. implementing treatment guidelines) can be complex and costly to administer, and are often perceived as a hassle by providers as well as clients.

Box 6.4

A co-payment to limit over-utilization by clients induces moral hazard by providers

The HMI schemes in the case studies that use capitation do not require any out-of-pocket costs to be borne by clients, even for primary health care (e.g. outpatient consultations). In GRET-SKY, a contracted provider requested that a co-payment be implemented to discourage frivolous use of healthcare services. What happened, however, was that the healthcare provider actually encouraged additional (and potentially unnecessary) visits to supplement the capitation payments with the co-payments. The co-payment has since been discontinued and the provider receives compensation for care solely through capitation, while the GRET-SKY monitors utilization and patient satisfaction to assess whether access to and use of care is appropriate.

Source: Authors.

Moral hazard and fraud by clients

When access to health care is free or nearly free for patients, the risk of over-utilization, especially of outpatient services, increases. A common strategy is to include some form of patient cost-sharing (Microcare, UMSGF). Additionally, many schemes implement a gatekeeper mechanism, which requires a referral by a primary care provider to access specialist consultations or hospital services. Enrolment in an HMI scheme often triggers an initial period of high utilization due to pent-up demand and deferred care, especially for elective surgery (e.g. hernia repair).

Lessons from case studies show that HMI practitioners understand that a target of zero fraud is not realistic. Strategies for preventing fraud include:

- **issuing a family or individual insurance card** with a photograph. Findings from the online survey show that 67 per cent of the schemes with TPP mechanisms use an identification card with a photograph and 14 per cent use a more sophisticated smart card that allows electronic verification of eligibility. Photo ID cards, however, pose challenges and there are ways of verifying identification without such cards (*see Box 6.5*). Issuing cards adds administrative costs, and therefore savings through fraud reduction must compensate for the additional cost. Cards may not be effective in preventing fraud when healthcare providers do not use them correctly, or if the provider is complicit in the fraud, e.g. it receives payment from the insurer for an uninsured client who may lack funds to pay for care. The preparation of photo ID cards can also be a problem, as often the client and insured family members must obtain, pay for and submit photographs to the insurer. Finally, in some locations photographs may be unacceptable for religious or other reasons, particularly for females.
- **checking identification through liaison officer and technology.** A liaison officer can foster a “client culture” by helping clients to better understand the

benefits of their HMI scheme, and ease the burden on providers to verify eligibility. Nevertheless, the healthcare provider still has an important role in managing fraud, and must be trained accordingly. Having an insurance liaison inside contracted health facilities entails a risk of internal fraud that needs to be heeded. For example, Microcare rotated nurses managing the liaison function at a healthcare provider to limit the potential for collusion. Microcare also experienced a reduction in claims of 30 per cent when a computerized check-in desk was introduced in a clinic. The reduction was attributed to a reduction in fraud, which could occur when uninsured persons accessed care using the name of an insured person.

- **requiring pre-authorization of high-cost services.** A gate-keeping function to limit fraudulent healthcare utilization is especially important when providers receive fee-for-service payments (FMiA, UMSGF and Yeshasvini). Typically, the insured person must request an authorization from the scheme to access healthcare services. Rapid authorization is important for client satisfaction. Authorizations for emergency cases are usually given within 24 hours. When possible, a toll-free telephone/fax process can be implemented to speed up the process (FMiA and Yeshasvini). With advances in and more widespread availability of technology, internet-based options using mobile phones, computers or point of service devices are being introduced. Pre-authorization is not applicable to primary health care due to the high frequency of services and less clear criteria available for their use (e.g. when is it necessary to seek medical care for a headache?).
- **providing accurate lists of eligible clients** to healthcare providers, which is critical for schemes with capitation payment. This strategy is simpler for HMI schemes that limit enrolment, e.g. to once a year, but more demanding for HMI schemes, such as GRET-SKY and CBHI, that maintain open enrolment. Both of these schemes have clear procedures and deadlines to ensure that eligibility data are provided to health facilities early each month.

Box 6.5

Preventing fraud without photograph identification

After testing a smart card with photographs that could be used at a hospital's intake desk, FMiA began a simpler identification process that used national identity cards (NIC) with photographs. FMiA issued an insurance card without a photograph, and requested the insured to show his or her NIC at the time of admission. The risk of fraud remained for children, who have no NIC. In cases where a NIC had not been issued or was not available, birth certificates were requested. A thumbprint identification system was considered, but ultimately not implemented due to the time and cost expected to obtain thumbprints for all members at the time of registration. FMiA additionally managed fraud using a pre-authorization process and a "gate keeping" system with FMiA staff located at contracted hospitals.

Source: Authors.

6.2.3 Managing quality of care

In addition to access and cost, the third dimension of standards relevant to setting up and managing a TPP mechanism is quality of care. Quality may be defined using both objective and subjective criteria, and can be measured with clinical indicators as well as non-clinical or service indicators. Clinical outcomes, such as infection rates, are examples of objective quality of care indicators. Since clinical outcome data and/or benchmarks are often not available, other criteria may be used as a next best alternative. For example, the credentials of healthcare providers are often evaluated as a proxy for clinical quality. Sometimes claims data can be mined to develop retrospective assessments of quality, using healthcare professionals to analyse treatment patterns. Service quality, defined by indicators such as hours of operation or scope of services offered, may also be measured.

Subjective quality of care, sometimes referred to as the patient experience, typically reflects a patient's view on the health care he or she has received. Subjective views may be measured through surveys or focus groups on a range of topics such as comfort of facilities, perceived attitudes of healthcare providers and value for money.

HMI schemes require members to use a defined network of healthcare providers when they implement a TPP mechanism. Thus, poor quality of care provided at network facilities – whether real or perceived – can impair client retention and the reputation of the HMI scheme. As indicated in Table 6.3 above, HMI schemes that use capitation payment can be even more vulnerable to quality-of-care issues, as providers have a financial incentive to restrict care.

Measuring quality of care

To promote quality of care, HMI schemes must find objective ways to measure it (see Box 6.6). One way to do this is to compare the actual number and type of services (e.g. admissions per thousand clients, number of contracts to the primary healthcare provider per person per year, number of prescriptions per consultation, percentage of children immunized) to expected morbidity (sickness) and mortality (death) norms. Developing norms can be a challenge. Ultimately, with sufficient quality and quantity of data, the comparison should be possible. However, great care must be taken when interpreting the data because there can be many natural variations in clinical outcomes among patients. These variations may be explained, for example, by nutrition, education, sanitation, and occurrence of natural or man-made disasters.

*Box 6.6***Monitoring the service quality of health care**

Zurich Bolivia and BancoSol have a TPP mechanism in place with a third-party administrator (TPA), PROVID. PROVID receives a capitation payment (and then pays contracted healthcare providers according to various methods of payment including fee-for-service). PROVID monitors utilization of health services and maintains claims data. It also performs regular spot checks of service quality in contracted health facilities by sending its staff to pose as potential patients to test how they are received and treated.

Because BancoSol distributes the HMI product to its microfinance clients, comment boxes have been placed in BancoSol branches to allow insured clients to comment on the HMI services. It is critical for the microfinance institution to make sure that clients are satisfied with the HMI scheme as it may affect BancoSol's reputation.

Source: Authors.

HMI schemes can evaluate the frequency and type of healthcare services being delivered to individual patients, or by specific healthcare providers. The evaluator (ideally a clinical professional from the HMI scheme) can meet healthcare providers to discuss unusual cases and trends, and develop appropriate interventions.

Setting standards for quality

In all seven case studies, the contracts for healthcare providers establish standards for various aspects of quality. For example, contracts often require that insured patients be treated in the same way as non-insured patients in terms of access to services and clinical standards of treatment. The behaviour of healthcare providers towards HMI scheme members should be monitored for any evidence that members receive inferior service. This can occur because of a perception that a patient not paying cash out-of-pocket at the time the service is provided, or who is receiving discounts or special rates, is socio-economically inferior. Some contracts under TPP mechanisms stipulate adherence to treatment protocols or care guidelines, and ensure availability of essential drugs.

In other contracts, such as that of UMSGF (*see Box 6.7*), healthcare providers are prohibited from requesting additional fees beyond those laid down in the plan of benefits, such as co-payments. Such provisions exist to discourage fraudulent practices, which can be rampant in facilities where salaries are low or a culture of corruption prevails.

For some HMI schemes, a performance-based contract may be a useful way of promoting quality of care. GRET-SKY is testing a performance-based contract

with a capitation payment adjusted by utilization rates. Targets for utilization of services are set with each provider and a capitation payment is associated with this target. If the actual utilization is below target, providers receive a decreased capitation payment. When utilization exceeds the target, healthcare providers also receive a decreased capitation payment, but to a lesser extent. The objective is to encourage health providers to achieve an optimum (desirable) utilization, and to discourage potential over-utilization. The use of utilization as an indirect indicator of clinical quality can be useful in a context where more specific measures of clinical quality may be unavailable.

Box 6.7

Improving quality of care

Despite collaborative relationships with healthcare providers, quality of care is a core challenge for UMSGF. The HMI scheme has taken a number of measures to improve the situation.

Contracted health facilities are under-financed and face significant drug shortages. To improve the quality of care (and client satisfaction), UMSGF began to cover the cost of drugs purchased in private pharmacies when prescribed by a contracted hospital. Unfortunately, this initiative resulted in a rapid rise in claims costs and thus had to be stopped. Now, a revolving fund for drugs has been set up with donor support to purchase a stock of drugs that can be provided to clients when a prescription is not available directly from a contracted provider.

Additionally, financial incentives have been set up to encourage medical staff to provide appropriate care to insured patients and limit unauthorized payments by patients (e.g. bribes for drugs). More recently, a liaison officer was assigned to each contracted facility to ensure that insured patients are appropriately welcomed and served.

Source: Authors.

Promoting clinical quality through medical advisers

Related to clinical quality, cases studies show that medical advisers can play a key role in measuring quality of care against defined standards, especially when a healthcare provider is not directly involved in claims and care management (FMiA, UMSGF, GRET-SKY, CBHI). A medical adviser monitors quality of care with healthcare providers through the following main functions:

- **Assessing whether insured patients receive appropriate healthcare services** according to diagnosis and health status. This assessment can be either 1) prospective, when authorizing treatment or assessing a provider against network participa-

- tion criteria; 2) concurrent, such as through case management of a hospitalization; or 3) retrospective, through analysis of claims, encounters or surveys of patients.
- **Screening and periodically auditing the general quality of care** in contracted health facilities. Quality indicators can include simple and measurable criteria such as hours of operation, availability of medical staff, availability of essential drugs and diagnostic equipment, and hygiene.
 - **Implementing and monitoring compliance with standard treatment protocols.** Such protocols may be in the public domain and published by organizations such as the World Health Organization or a Ministry of Health, as seen in Cambodia and Lao PDR, or they may be proprietary and developed by the HMI scheme and/or its network providers.

Promoting service quality through liaison officers

All seven case studies confirm that clients perceive greater quality of care when a liaison officer assists them in accessing health services. Liaison officers often perform tasks such as:

- welcoming patients and orienting them towards the facility;
- verifying benefits and eligibility;
- registering new enrollees and collecting premiums;
- visiting hospitalized patients and serving as an advocate to ensure that appropriate care and services are being provided, and helping prepare the patient and family for discharge; and
- collecting feedback on patient satisfaction and outcomes through surveys or interviews.

Liaison services can increase the perception of value and quality and in turn increase trust in the scheme and encourage renewals, contributing to the scheme's sustainability. However, since they have a cost, HMI schemes must evaluate when and how to provide such services efficiently. For example, the scheme must decide whether to provide a liaison service just for hospitalizations or also be present in outpatient settings. An optimal cost-benefit arrangement may be achieved by providing a liaison at facilities that have a minimum number of clients or claims (Microcare). Another cost-efficient strategy can be for a liaison officer to cover several facilities on a rotating basis, or only during peak hours (GRET-SKY). Technology developments such as the spread of mobile phones have also stimulated development of call centres, which can provide many of the liaison services desired remotely and at considerably lower cost (five case studies, including FMiA).

Ensuring timely payment to healthcare providers

In a context where healthcare providers often struggle to maintain sufficient cash-flow to fund operations, it is critical for an HMI scheme with a TPP mechanism to make timely payments to providers. Contracts with healthcare providers typically stipulate the terms for payment, including the maximum time allowed for payment of capitation or reimbursements. Failure to abide by contractual terms can lead to refusal to treat patients or to demand prepayment, which can damage the HMI's reputation amongst both insured and providers, and may even result in contract termination. Managing quality under a TPP mechanism therefore includes paying health providers on time. Payment by cheque or electronic transfer can lower the risk of fraud or loss, though some schemes (e.g. UMSGF and GRET-SKY) use cash.

Lessons learned from retrospective TPP mechanisms that pay healthcare providers on time are:

- The claims administration team needs to have a clear structure and spot checks must be carried out on problematic claims.
- A medical adviser should conduct clinical reviews focusing on problematic cases only.
- Computerized systems should be in place to provide data for prices and services covered.
- Decentralized systems are needed to capture data directly at the facility level (admission and discharge).
- Electronic transfers and/or cheques should be used to pay providers to save costs and time and avoid the risks associated with cash transactions.

Microcare reduced its claims payment period from 30 days to 14 days with a reorganization of the claims department into five units, each specialized in one task in the claims process (*see Box 6.8*). At Yeshasvini, claims are sent by healthcare providers to the TPA, which assesses the claims with support from a medical adviser. These claims are reviewed by the Yeshasvini Trust during a monthly meeting and those that are approved are paid by cheque to the TPA, which in turn pays healthcare providers by cheque. Payment terms for healthcare providers vary from 15 days (target) to three months. Delays in payment are often problematic, especially for smaller clinics that tend to have cash-flow problems.

Box 6.8

The claims administration function

In 2009, Microcare restructured its 12-person claims administration team into five units. Each administrative unit fulfilled a distinct function to improve efficiency:

- 1) **Invoicing:** claims were matched to healthcare provider invoices (sent often in batches). Discrepancies were sent to the investigation unit.
- 2) **Data entry:** data from paper claims were entered into the computerized database. The system automatically alerted Microcare staff when charges for key services and drugs exceeded acceptable limits. A query was made to validate the appropriateness of the charge.
- 3) **Data analysis:** a medical doctor reviewed the appropriateness of the diagnosis and corresponding treatment, and a drug specialist checked prices and benefits allowed for drugs to identify possible occurrences of fraud or inappropriate billing. Questionable claims were queried further; approved claims were sent to reporting so that questionable claims did not delay an entire batch associated with an invoice.
- 4) **Investigation:** administrators followed up with healthcare providers to resolve questions on claims (e.g. missing or inconsistent information, unexplained charges).
- 5) **Reporting:** approved claims were sent to a supervisor for a final review and approval, which triggered a request to the accounts department to issue payment.

Source: Authors.

With capitation, the HMI scheme pays a fixed amount per insured person assigned to a healthcare provider. A per capita payment approach can be quite simple when enrolment information is accurate, timely and fixed for a longer period. Capitation payments become complex to administer when a scheme permits open enrolment, or when retroactive adjustments due to delayed or incorrect enrolment data are required. Capitation can be more difficult to administer if the per capita payments are made more frequently (e.g. monthly), and when payments by members vary depending on factors such as age, gender or location (GRET-SKY, CBHI – see Box 6.3). Additional challenges can arise relating to premium collection and policy administration. For example, a waiting period may be mandatory to reduce adverse selection, requiring the scheme to defer capitation payments until the waiting period has elapsed; or a grace period may apply for unpaid premium before a policy is cancelled, making it difficult for the HMI scheme to make payments (see Box 6.9). As these complexities occur and schemes scale up, they will need better MIS.

Box 6.9

Balancing premium and capitation payments

Delays or gaps in premium collection can leave an HMI scheme with insufficient funds to make prospective capitation payments to healthcare providers. Two schemes, CBHI and GRET-SKY, allow a three-month grace period for members to pay monthly premiums due. In CBHI, members can avoid cancellation if they pay three months premium in arrears at the time of paying the fourth month's premium, but for many this is unaffordable, and local scheme premium collectors are reluctant to enforce cancellations. Instead, members may pay for one month, then skip two, and then pay for another month to avoid cancellation, at least until planned healthcare services can be utilized. This creates additional administration and affects the schemes' ability to make timely capitation payments to healthcare providers.

To minimize such difficulties, GRET-SKY requests three months premium at enrolment to establish cash reserves for capitation payments and to reduce the incidence of unpaid premiums. This approach has not been implemented in CBHI Lao PDR, as the district schemes are not computerized and lack capacity to manage advance premium payments.

Source: Authors.

6.3 Conclusions

A TPP mechanism was found in a majority of HMI schemes surveyed. This finding is probably due to the potential advantages of a TPP, especially enhancing client value by eliminating all or most out-of-pocket costs for care. A TPP mechanism also offers the following potential advantages to HMI schemes:

- more rational and fair pricing of healthcare services;
- increased quality of care, potentially leading to better health outcomes;
- better utilization of services, leading to improved care and lower costs;
- improved administrative efficiency; and
- better client service.

Despite these benefits, TPP mechanisms also have potential drawbacks that HMI schemes must monitor and manage, such as:

- lack of quality providers to build an adequate provider network that offers clients all covered services as well as choice and convenience;

- unwillingness of healthcare providers to contract as part of a TPP mechanism, in particular to agree to financial and administrative requirements imposed by the scheme;
- lack of information system technology;
- difficulty in monitoring and managing claims expenses and administrative costs without creating onerous procedures (and costs);
- risks of fraud and abuse by both clients and healthcare providers.

HMI schemes cite numerous lessons learned about TPP mechanisms:

- Successful contracting with health providers requires a long-term approach to a partnership. Healthcare providers may agree to alternative payment mechanisms such as capitation provided they perceive the terms to be sufficient for them to cover costs and make a fair profit.
- The ability of the HMI scheme to manage the costs associated with moral hazard, fraud, claims and administration, while providing timely service to clients and healthcare providers, will heavily depend on the quality and efficiency of its MIS.
- Approaches that encourage better-quality health care include: a) assessing the extent to which insured patients receive appropriate services according to diagnosis and health status; and b) auditing the quality of care in compliance with standard treatment protocols.
- Approaches to improve perceived quality of health care include:
 - locating a liaison officer at contracted healthcare providers to support admissions and discharge planning;
 - monitoring simple and measurable indicators of perceived quality of care, such as hours of service and patient satisfaction;
 - setting up a 24/7 help line (ideally, toll-free).
- Payment methods that transfer some financial risk to healthcare providers (case-based, per day or capitation) are better able to contain costs than fee-for-service payment, but require additional measures to control the quality of care. These methods are usually more difficult to negotiate with healthcare providers.
- Capitation may be appropriate for high-frequency/low-cost (i.e. more predictable) health events, such as outpatient care, without jeopardizing the financial health of the healthcare provider, and seems appropriate for contexts where a critical mass of enrolment can be achieved with providers.
- HMI schemes that pay claims based on a fee for service may be tempted to restrict care covered to limit the number and cost of claims in response to the financial incentive of healthcare providers to over-provide services.

Additionally, HMI schemes may be willing to engage a TPA to manage their TPP mechanism and maintain an adequate healthcare provider network, especially when scaling up and expanding geographically. In most developing countries, affordable TPA services tailored for the poor that work well may be difficult to find, though this is changing with the development of internet-based systems, such as the use of mobile phones for data transfer. A more in-depth review of the availability and pros and cons of TPAs merits further consideration.

As a scheme matures and reaches some degree of volume and complexity, investment in information technology and improved collection and analysis of data becomes increasingly necessary, not only to manage moral hazard but also to assess quality of care and to identify ways to improve the product. Deployment of information technology with increased analysis of the scheme's performance should be part of the scheme's business plan to achieve scale and viability.

7 The elusive quest for estimates of willingness to pay for health microinsurance

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Focusing on poor people in low-income countries (LICs) entails a price constraint for those planning to supply health insurance. The challenge is to price health insurance at a level that ensures a balance between expenditure and income, at least in the long term, and remains affordable and attractive to poor people. This balance can be achieved either by limiting expenditure to available premium income where membership is usually voluntary – even though the affiliation unit can include more than one individual, e.g. entire households or entire communities, as is typical for mutual and community-based health insurance – or by defining first the benefit package, and then the premiums needed to cover the cost, which is typical for mandatory and commercial schemes.

This chapter focuses on the issue of voluntary membership in health insurance. We should first explain why persons with low income would wish to buy insurance in the first place, as this can shed light on how much people would be willing to pay. One well-known explanation linked to the expected utility theory is that insurance is a trade-off between an uncertain but potentially huge loss (occurring if the uninsured has to pay for the risk) and a certain but small loss (incurred by paying a premium that eliminates the unaffordable risk). The implied assumption is that all people are risk-averse. However, in low-income settings, this assumption does not hold true in all cases; for one, the premium might be considered a high-risk cost rather than a risk-reducing cost, particularly when people who have paid the premium receive no benefit in return (even when they have incurred some healthcare costs). Furthermore, this theory does not explain how much people would be willing to pay for certainty as to their risk exposure. For example, is it worthwhile paying INR 100 or 150 (US\$2.25 or US\$3.40) for hospitalization cover up to INR 5 000 (US\$115)? The theory also fails to address what relationship there might be between willingness to pay (WTP) and income levels (e.g. are richer people prepared to pay a different share of their income from poorer people for the same insurance?), risk exposure levels (e.g. does previous exposure to the insured risk affect the amount people are willing to pay as premium?) or other relevant parameters (e.g. does education influence WTP?). A better understanding of the parameters that are likely to affect

WTP can be very helpful to practitioners and policymakers in designing an insurance product that suits the target population.

One way to estimate WTP is by following the revealed preferences (RP) method introduced first by Samuelson (1938). RP is a predictive modelling approach to WTP that is based on studying actual purchasing behaviour, not of the product we are interested in, but of other, related products from which we wish to identify the value people place on – or would be willing to pay for – a product for which no purchasing information exists. The first applications of the RP approach were made in the 1940s to predict the amount that could be charged for entry to National Parks in the United States; at that time, there was no pricing information because National Parks were new, and this is the case for microinsurance today. People's travel costs were used to infer the WTP. In the context of our investigation, we could not find any published study reporting estimation of WTP for health microinsurance (HMI) using the revealed preferences method, which leaves open the key question of what a suitable inference or anchor to estimate WTP for health insurance would be.

The alternative option, called stated preferences (SP), is to ask people what they would be willing to pay for insurance cover that they do not yet have and that is perhaps not even on the market. There are several ways to value non-market goods. One of the most frequently used, called contingent valuation (CV), consists of using survey methods to present respondents with hypothetical scenarios about an intervention under evaluation (or insurance product in this case). Respondents are required to think about the contingency of an actual market for the benefits, and indicate the maximum amount they would be willing to pay for them.

WTP is presumably mediated by ability to pay and by individual and cultural aspects that determine the perceived benefit. We wanted to examine the evidence for this, and embarked on a systematic review of the literature. When this had been completed (in 2010), we found several studies that were reported from a number of countries in Asia and in Africa on WTP for health insurance among the poor in LICs (the target population for microinsurance). This chapter contains a comparison of the findings of these studies, notably the features that emerged as explanatory variables for WTP, some of which are dependent on time and context, while others seem to describe major determinants of WTP for health insurance among the poor in LICs. The paper ends with a synthesis of the findings that point to the way estimates of WTP could be obtained, whilst at the same time highlighting the limitations inherent to methods used to elicit WTP.

7.1 Methods of eliciting WTP

A crucial methodological question in CV is how WTP information can be elicited. For one, replies could be influenced by the product in question and by characteristics of the target population. However, the process of elicitation can affect the results of CV surveys, in areas such as 1) how the information is obtained and presented; is it clear and complete? Can people imagine the situation? 2) How would people pay for the health event (e.g. out-of-pocket, by taxation or private health insurance?) 3) Over what time period is the product valued? This provides the respondent's budget and cash-flow constraints. 4) How is the survey administered? (e.g. individual or group responses?).

There is considerable debate on the precise format in which the questions should be asked, because each possible format appears prone to some bias (*see Table 7.1*).

7.1.1 Open-ended format

CV applications started with the use of open-ended formats, in which respondents were asked to state the amount that best matched their valuation of the hypothetical insurance package presented. Respondents found it difficult to answer these questions, leading to low response rates and a high degree of variation. Because of the disappointing results, alternative closed-end elicitation formats were developed.

7.1.2 Closed-end formats

The "bidding game" (BG) is an example of a closed-end elicitation format, in which the respondent is asked whether he or she is willing to pay a specific amount. Depending on the answer, the bid is lowered or raised and the individual is asked about this new bid ("bi-directional BG"). This process continues until the maximum WTP amount is found. Alternatively, "unidirectional" BG could be either ascending, in which case the initial bid is very low and is increased until respondents reject the offer; or descending, in which the initial bid is very high and is lowered until respondents accept the bid. The descending BG is assumed to yield a higher WTP. A problem with the BG is that the maximum in the auction process can be influenced by the amount of the first bid; a higher first bid was reported to result in a higher WTP. This is called "starting-point bias".

Another method, called the "dichotomous choice technique" (DC) involves asking subjects to answer the question as to whether they would pay a specified amount for a given commodity with "yes" or "no". The demand curve is estimated by varying the bid amount across respondents and the area under this demand curve represents mean WTP.

A variation of the DC technique is “dichotomous choice with follow-up question”. In the first step, respondents state whether they are willing to pay a specified amount; in the second step, those who said “yes” get a higher bid and those who said “no” a lower bid. According to Asfaw and Braun (2005), the problems with the starting point bias can be partially toned down by the presence of the second bid.

Another variant of the DC is the “take it or leave it” approach (TIOLI), in which each respondent is asked one question during surveys of large numbers of persons. The data are then analysed using econometric techniques to identify the shape of the distribution. The difficulties with this approach are in identifying the relevant range of sample bids needed for precise estimation.

Another similar method is called the “payment card” (PC). Each subject is invited to select his or her maximum WTP from the same specified list of possible values, which provides the respondent with a clear context for making the valuation. The PC method achieved a higher completion rate and generated higher valuations than the open-ended format. It is not exposed to starting-point bias (like the bidding game) or to “yes-saying” (as with dichotomous choice) but the potential bias when using the PC method is “mid-point bias”: respondents tend to state their maximum WTP in the middle of the card. According to Bayoumi (2004), using the PC method with a follow-up bidding process can define the value more precisely.

Table 7.1

Advantages and disadvantages of different elicitation methods		
<i>Elicitation format</i>	<i>Pros</i>	<i>Cons</i>
Open-ended formats (OE)	simple and easy method	<ul style="list-style-type: none"> – difficult to answer – low response rate – results are sensitive to outliers – compliance bias
<i>Closed-end formats</i>		
Bidding game (BG)	<ul style="list-style-type: none"> – easy and simple to answer – easy for people who are used to bidding for their daily utility goods 	<ul style="list-style-type: none"> – starting-point bias
Dichotomous choice (DC)	– simple and easy method; the respondent only has to make one or two choices	<ul style="list-style-type: none"> – results in higher WTP estimates compared to OE and PC – starting point bias – yes-saying bias
TIOLI	– simple method; the respondent only has to make one choice	<ul style="list-style-type: none"> – yes-saying bias
Payment card (PC)	<ul style="list-style-type: none"> – comprehensible context for making the valuation – can be self-administered – amenable to data collection (unsupervised or postal questionnaire) 	<ul style="list-style-type: none"> – range bias – anchor-point bias – mid-point bias – hypothetical bias – warm glow effect/social desirability bias

7.2

Search of relevant WTP experiments

To achieve a successful launch of HMI, it is important to understand WTP relative to the stakeholders' context. The three issues that are of particular concern are: 1) what are the difficulties associated with predicting WTP when the investigation has to be performed before the respondents can actually buy HMI? 2) Which variables explain the differences in WTP across households in the same location, and across different locations and points in time? And 3) how can reliable and comparable WTP estimates be obtained with minimal investment of time and money?

With the purpose of reviewing what has been done in this regard, we conducted several searches of literature in 2010, including a search of MEDLINE database; search terms included: "WTP" or "willingness to pay" and "health insurance": 179 hits came up; a refined search was based on crossing the keyword "willingness to pay" with "health insurance" or "prepayment-health" and one of the following keywords: "developing countries"; "Asia"; "Africa"; "Latin America"; "low income"; "poor"; "microinsurance"; or "CBHI (community-based health insurance)". 18 articles that were relevant for the topic "WTP for health insurance in low-income countries" were retained. We also scanned the references of the above-mentioned articles to identify additional papers that did not come up in the online searches; two articles were identified (one on a study conducted in Pakistan and the other in Cameroon) bringing the total to 20 articles.

A detailed screening of the articles revealed that three experiments were reported by more than one article, and thus this chapter is based on 14 experimental field studies eliciting WTP for health insurance among low-income persons in developing countries, but on 20 papers. The countries included Burkina Faso (five articles), Cameroon, China (two articles), Ethiopia (two articles), Ghana, India (two articles), Islamic Republic of Iran, Namibia, Nigeria (two articles), Pakistan, United Republic of Tanzania and Viet Nam.

Table 7.2 summarizes the elicitation methods used in the field studies. All researchers used the CV approach, but with notable differences in the method to elicit the WTP and the definitions of various parameters.

Table 7.2

Overview of the data, locations and method of elicitation of WTP used¹

<i>Authors</i>	<i>Date</i>	<i>Sample</i>	<i>Country</i>	<i>Objective²</i>	<i>Unit of inquiry</i>	<i>Method</i>
Walraven	1996	821 I + 1 500 HH	United Republic of Tanzania	WTP for local health insurance scheme	I + HH	OQ
Asenso-Okyere et al.	1997	164 urban + 142 rural	Ghana	WTP for health insurance	HH	BG
Mathiyazhagan	1998	1 000	India	WTP for a rural CBHI	HH	OQ
Masud et al.	2003	600	Pakistan	WTP for health insurance primary care	HH	OQ
Dong et al.	2003	2 414 I + 705 HH	Burkina Faso	WTP for CBHI	I + HH	TIOLI + BG
Binam et al.	2004	471 rural	Cameroon	WTP for CBHI	HH	BG
Asgary et al.	2004	2 139	Iran	WTP for a rural health insurance	HH	BG
Asfaw and Braun	2005	550	Ethiopia	Assess prospects for rural CBHI	HH	DC + F
Bärnighausen et al.	2007	621	China	WTP for basic health insurance	I	PC
Ying et al.	2007	2 671	China	WTP for private health insurance (urban informal sector)	I	BG + OQ
Dror et al.	2007	3 024	India	WTP for CBHI	HH	BG
Lofgren et al.	2008	2 070	Viet Nam	WTP for health insurance	HH	TIOLI + OQ
Gustafsson-Wright et al.	2009	1 700	Namibia	WTP for low-cost health insurance	HH	DC + F
Onwujekwe et al.	2010	3 070	Nigeria	WTP for CBHI	I + HH	BG + OQ

¹ About 90 per cent of the target population of 1 million chose to remain uninsured during the first year of operation of CBHI.

I = individual; HH = household; OQ = open question; BG = bidding game; DC + F = dichotomous choice with follow-up question; PC = payment card.

A few researchers used open-ended direct questions such as *"How much would you pay for health insurance?"* (with a detailed explanation of the health insurance product in question). Walraven elicited WTP by asking *"How much are you willing to pay per year for each member of your household (to be covered by services in the hospital)?"* Masud et al. also use a direct question, which was: *"Would you be willing to pay [prepay] for health care at the government health facility? ... And what is the maximum amount you would be willing to pay?"* Mathiyazhagan (1998) and Lofgren et al. (2008) first introduced an anchor price by asking respondents whether they would agree to pay a certain amount. The query was of the TIOLI type, and regardless of the reply, all respondents were then asked what would be their maximum WTP; that last amount was retained as the respondents' WTP. Onwujekwe et al. (2010) used the DC-with-follow-up method, followed by a direct question: *"What really is the maximum amount you are willing to pay for CBHI?"*. This last number was retained as the WTP.

Binam et al. (2004) followed a bi-directional bidding game to elicit WTP and they used four initial bids as anchors. Ying et al. (2007) used a composite method which consisted of a bi-directional bidding game followed by an open question, which was, however, presented only to respondents that either refused the lowest bid or accepted the highest bid. The open question was “*What is the highest amount that you [the respondent] would be willing to pay?*” It is recalled that respondents knew the last bid, which was their anchor. Ying et al. (2007) explained that they used the open question (in addition to the bi-directional bidding game) in order to avoid truncation of the data. Ying et al. (2007) used a uniform initial bid for all respondents. Other researchers who conducted a bi-directional bidding game chose different initial bids for different groups of respondents. Dong et al. (2003) used 13 different initial bids, randomly assigned to respondents. This multiplicity of initial bids could introduce the starting-point bias, because respondents may think that the initial bid represents the value, or very close to the value, of the good or service in question. Dror et al. (2007) used a unidirectional and descending bidding game, the purpose of which was to obtain a more accurate maximum WTP, which is the most relevant for policy decisions. They used an initial bid which they assumed was too high, with a view to examining the quantitative expression of “maximum WTP for health insurance”; in fact, 18.4 per cent of their respondents accepted the initial bid, which could suggest that if the intention was simply that it should serve as anchor, it might not have been high enough. Asenso-Okyere et al. (1997) also followed a unidirectional and descending bidding game. As 40.1 per cent of their respondents accepted the initial bid, one might think that it was not the best anchor to elicit maximal WTP. It is noted that Dong et al. (2003) and Binam et al. (2004) could not find significant evidence for a starting point bias in their datasets. However, they used bi-directional bidding games with multiple initial bids. It is assumed that a unidirectional BG with the same anchor for all respondents could neutralize the starting-point bias and improve comparability of results across sampled households.

In the articles reviewed, there was also an experiment that applied an ascending unidirectional bidding game. Asgary et al. (2004) applied it in rural Iran to estimate demand and WTP for health insurance. These researchers used three initial bids as anchors, each presented to one-third of their sample. A negative response to the initial bid was recorded as zero WTP; otherwise, the highest accepted bid was recorded. Bärnighausen et al. (2007) used a modified ascending trajectory in their study among informal-sector workers in Wuhan China. They elicited responses by using a “payment card” eliciting method.

Asfaw and Braun (2005) and Gustafsson-Wright et al. (2009) used the DC with follow-up (which they call “double-bounded contingent valuation – DBCV”), whereby respondents are given two bids, an initial bid and a second bid. Respondents who rejected the initial bid were presented with a lower second bid, and those who accepted the initial bid got a higher second bid. After these two bids, the game is over; respondents are then classified into four groups: those that said “yes” + “yes”, “yes” + “no”, “no” + “yes”, and “no” + “no”. Mean WTP values must then be estimated by maximizing a log likelihood function.¹

The most striking insight gained from this review of empirical WTP studies is the large variety in the methods used. This diversity makes it difficult to compare quantitative estimates of WTP across the studies as they use different metrics. It is possible to present qualitative explanations for variations in WTP within each group of respondents, but there are no clear “translation rules” for comparing uni-directional and bi-directional bidding games, ascending and descending trajectories, or those using an open question, those who offer a single bid (TIOLI) and those who estimate WTP after multiple bids. In addition to the methodological diversity, there are socio-economic differences (inherent to different locations, which is covered in the next few sections), and differences related to researchers’ choice to measure WTP of a household rather than WTP of individuals, whilst in other studies the decision was taken to include both units. The diversity of elicitation methods used highlights the difficulty in comparing quantitative results across several studies.

7.3

Key findings

This section summarizes the findings from the identified studies on the willingness to pay for HMI. The results suggest that numerous factors can affect that decision, including socio-economic, demographic and geographic characteristics, and the respondents’ experiences with health care services and expenses.

7.3.1

Income/socio-economic status/demography and WTP

Most studies presume an intuitive expectation that WTP for health insurance will be positively associated with income, because households would be able to afford a higher prepayment as their income increases. We seek to verify this important assumption, by juxtaposing WTP and income (or its proxies) in the studies described above (summarized in *Table 7.3*).

¹ Under this method, WTP values (or the distribution of these values) are not observed directly from respondents’ replies.

Table 7.3

Association between income and WTP

<i>Authors</i>	<i>Income proxy used</i>	<i>WTP (% of income proxy)</i>	<i>Trend¹</i>
Walraven	Weekly expenditure per adult equivalent	3.20	NS
Asenso-Okyere et al.	Self-reported income (HH survey)	1.9 rural and 2.5 urban	Up
Mathiyazhagan	3 categories: low, middle and high (unspecified criteria)	n.a.	Up
Masud et al.	Socio-economic score & income	3.0 (only those where WTP>0)	Up
Dong et al.	Consumption/expenditure	2.15 (calculated)	Up
Binam et al.	Income of respondent	2.54 (assumed average income)	Up
Asgary et al.	“Wealth and income variable” based on assets	1.4 (assumed average income)	n.s.
Asfaw and Braun	Annual farm and non-farm income	1.4 (calculated)	Up
Bärnighausen et al.	Self-reported income (HH survey)	4.6, 7.8, 6.8, 6.9 (4 packages)	Up
Ying et al.	Self-reported income (HH survey)	1.4, 2.0, 2.2 (3 packages)	Up
Dror et al.	Self-reported income (HH survey)	1.35 income, 1.8 expenditure (median)	Up
Lofgren et al.	2 categories: poor/rich households (determined by local leaders).	n.a.	Up
Gustafsson-Wright et al.	Consumption/expenditure	2.25	Up
Onwujekwe et al.	SES index, based on assets	n.a.	Up

¹ Up = WTP increases with income, n.s. = not significant.

It must be emphasized at the outset that estimation of income in our context is rendered very complex and unreliable by the cumulative effect of 1) there being only partial records (or none at all) of income for households working in the informal economy, which represent the majority of the poor in low-income countries; 2) an endemic and persistent irregularity in income flows due to seasonal fluctuations and the erratic employment patterns of day-labourers and self-employed people in agriculture or family businesses; and 3) widespread inaccuracy in self-reported income, due to confusion regarding the monetary value of non-monetary income.

As could be expected, different researchers used different methods to obtain income proxy. A commonly used method is self-reported income, obtained through a survey. Since there could be many sources of income at household level, it is unlikely to obtain a reliable estimate in answer to a direct question such as “*What is the income of the household?*”. Therefore, most surveyors use a series of questions, but there is no uniform standard for them.

Asenso-Okyere et al. (1997), Asfaw and Braun (2005), Bärnighausen et al. (2007), Ying et al. (2007), Masud et al. (2003) and Dror et al. (2007) reported that they had obtained household or personal income information through surveys.

Expenditure/consumption information is often used because it is considered more reliable than income information in developing countries. WHO uses this data, and many low- and middle-income governments, in official surveys, collect information on consumption/expenditure rather than on income (e.g. the Indian National Sample Survey Organization). Masud et al. (2003), in addition to income, created a

“socio-economic score” based on assets. Asgary et al. (2004) and Onwujekwe et al. (2010) constructed slightly different “wealth and income variables” based on assets. Dror et al. (2007) also posed questions on the expenditure of respondent households in addition to income, and found a highly significant correlation between both variables. Other researchers of WTP for CBHI used only consumption/expenditure data, e.g. Dong et al. (2003) (in yet another paper based on the same dataset), Walraven (1996), and Gustafsson-Wright et al. (2009) and Mathiyazhagan (1998) and Lofgren et al. (2008) started by dividing the sample into categories; the first scholar divided it into low, middle and high income (but did not specify the classification method), and the second scholar divided it into “poor” and “rich” as determined by local leaders.

Despite the huge differences in methods of measuring a proxy for income, 12 of the 14 studies reported a significant and positive association between nominal WTP for health microinsurance and the economic situation of households (*Table 7.3*). The remaining three studies reported no significant trend, or did not investigate this issue. This finding validates the initial assumption that a higher income leads to a higher WTP.

In the light of this finding, one might query whether people would be willing to pay a relatively constant share of their income for health insurance. This information is also shown in *Table 7.3* either as reported by the authors themselves, or calculated by us, using the original published data. The results are quite similar, not only when comparing WTP relative to income, but also relative to consumption/expenditure. Furthermore, with the exception of one outlier estimate (4.6 per cent to 6.9 per cent for four different packages, reported by Bärnighausen et al. (2007)), all WTP values were in the range of 1.35 per cent to 3.2 per cent, with a mean value of 2.2 per cent of the relevant income proxy. This rather narrow range for the estimates strengthens the credibility of the results, even though they have been obtained using very different modes of calculation and with very different populations.

However, could the expression of mean WTP as a share of income obscure a different reality in which different income sub-groups actually differ in the portion of their income that they are willing to pay for health insurance? Some of the articles reviewed offer clues to the answer. Bärnighausen et al. reported that for an increase of 1 per cent in income, WTP increased by about half a per cent. Dong et al. (2003) measured this aspect by calculating the measure of inequity (Gini coefficient)² in income and in WTP. Dong et al. (2003) show that the inequity in income is much higher than in WTP (Gini value of 0.68 in individual expenditure and 0.63 in household expenditure compared to a Gini value of 0.15 for individuals’ and 0.08 for households’ WTP). These findings indicate that WTP increases at a lower rate than income, i.e. richer households would be willing to pay a smaller share of their income than poorer households.

² The Gini coefficient (developed by Corrado Gini, 1912) is a measure of the inequality of a distribution; a value of 0 expresses total equality and a value of 1 maximal inequality.

This assumption was tested further with the data from three studies reviewed. Gustafson-Wright et al. (2009) showed that WTP expressed as a percentage of consumption/expenditure was 11.4 per cent among the poorest quintile, but only 1.2 per cent among the richest quintile. Dror et al. (2007) reported that the median value of WTP as a percentage of income decreased from 1.79 per cent among the poorest quintile to 0.84 per cent among the richest quintile, and this negative correlation was significant. Dong et al. (2005) provided the value of WTP for five income quintiles and the average income proxy (consumption) for these quintiles, which enables us to calculate WTP relative to income/expenditure; his results show that WTP was 18.9 per cent among the poorest quintile, and only 0.9 per cent among the richest quintile. We therefore conclude that, while nominal WTP levels increase when household incomes grow, they decrease dramatically as income increases when WTP is measured as a share of income.

Most studies also examined the association between WTP and other socio-demographic variables. Table 7.4 contains the summary results.

Table 7.4

Association of WTP with socio-economic parameters

<i>Authors</i>	<i>I/HH</i>	<i>Gender</i>	<i>Education</i>	<i>HH size</i>	<i>Age</i>	<i>Insurance experience</i>
Walraven	HH+I	n.d.	n.d.	n.d.	n.d.	n.d.
Asenso-Okyere et al.	HH	m>f	+	n.d.	n.s.	n.s.
Mathiyazhagan	HH	n.d.	+	+	n.s.	n.d.
Masud et al.	HH	n.d.	n.d.	n.d.	n.d.	n.d.
Dong et al.	HH	n.s.	+	n.s.	n.s.	n.d.
	I	m>f	+	n.d.	—	n.d.
Binam et al.	HH	m>f	n.s.	n.d.	n.s.	n.d.
Asgary et al.	HH	n.d.	+	n.s.	+	n.s.
Asfaw and Braun	HH	n.s.	+	n.d.	n.d.	n.d.
Bärnighausen et al.	I	f>m	+	n.d.	—	n.d.
Ying et al.	I	m>f	+	n.d.	—	n.d.
Dror et al.	HH	m>f	+ (>11y)	+,- (PP)	—	+
Lofgren et al.	HH	n.s.	+	n.d.	—	n.s.
Gustafsson-Wright et al.	HH	m>f	+	n.s.	—	n.d.
Onwujekwe et al.	HH	m>f	+	— (PP)	n.s.	n.d.
	I	m>f	+	n.s.	+	+

I = individual; HH = household; n.d. = not determined; n.s. = not significant; PP = persons in household.

As is often assumed, education is a positive explanatory variable of WTP in most cases.

The results (shown in Table 7.4) also suggest that in most cases, males were willing to pay more than females. As for age, five studies showed no significant effect of age on WTP, and six reported a negative correlation. There is no intuiti-

tive explanation for younger people's willingness to pay more, and it cannot be explained by income or education, as the effect of age is independent of these parameters in the analysis.

7.3.2 Healthcare availability and WTP

It is self-explanatory that paying the premium is relevant only when the insured can access health care in case of need. Therefore, the association between WTP and supply-side parameters (including availability, distance, and satisfaction with care) should be examined. Interestingly, only a minority of WTP/CBHI researchers reported the results of associations between WTP for health microinsurance and supply of health care. Table 7.5 contains a summary of the findings.

Table 7.5

Effect of healthcare availability on WTP

<i>Authors</i>	<i>Parameter used</i>	<i>Effect</i>
Walraven G		n.a.
Asenso-Okyere et al.	Distance travelled to attend clinic	n.s.
Masud et al.		n.a.
Dong et al.	Distance to health facility (individual WTP)	
	Individual WTP	—
	HH WTP	n.s.
Binam et al.	Categorical variable (yes/no) rapidity in the reception at healthcare centre	n.s.
	Categorical variable (yes/no) representing the cleanliness of the healthcare centre	n.s.
	Categorical variable representing the attendance of physician at healthcare centre	+
	Categorical variable representing the availability of basic drugs at healthcare centre	—
	Categorical variable representing confidence in healthcare services	+
Asgary et al.	Drugs available at health service centre	+
	Existence of full-time physician in the village	+
	Existence of pharmacy in the village	n.s.
	Satisfaction with healthcare facilities in the nearest city	+
Asfaw and Braun		n.a.
Bärnighausen et al.		n.a.
Ying et al.		n.a.
Dror et al.	Distance to preferred primary health facility	n.s.
	Distance to preferred hospital	—
Lofgren et al.		n.a.
Gustafsson-Wright et al.		n.a.
Onwujekwe et al.		n.a.

The distance from home to the healthcare point of service is an often-examined parameter considered to represent the accessibility of health care. One might expect that the shorter the distance, the higher the WTP would be. This

assumption has been confirmed in two studies. Dong et al. (2003) obtained significant negative association for individual WTP but no significant association for household WTP levels, and Dror et al. (2007) reported a significantly negative correlation for the distance to the preferred hospital, but not to the preferred primary health facility. Asenso-Okyere et al. (1997) did not discover a significant correlation between distance from clinic and WTP for health microinsurance. The other studies did not examine the association between WTP and this proxy.

Association between perceived quality of health care and WTP for health microinsurance was examined through several proxies. The correlation with the rapidity with which clients were treated, examined by Binam et al. (2004), was not significant. Binam et al. (2004) and Asgary et al. (2004) reported significant and positive association between WTP and the presence of physicians at the healthcare centre. The availability of drugs in the health centre was also found to be positively correlated with WTP in one case (Asgary et al., 2004), but negatively correlated in another case (Binam et al., 2004). This apparent contradiction could reflect differences in the terms of the policy regarding reimbursement of medicine costs, but the full information was not reported in those papers. Asgary et al. (2004) also investigated satisfaction with healthcare facilities in the nearest city and found the positive association with WTP that one would expect, and Binam et al. (2004) also demonstrated a positive association between WTP and a categorical variable representing confidence in healthcare services.

In summary, the results uphold the assumption that better availability and quality of health services would encourage higher WTP for health insurance. However, this assumption should be examined more frequently and in greater detail in the future to provide an up-to-date indication of the specific features of the supply of health care that influence WTP most positively.

7.3.3

Exposure to ill health, financial consequences of illness and WTP

As we have seen, WTP for health microinsurance reflects an understanding that the intrinsic value of health insurance is that it should protect the household from financial shocks by paying costs related to illness and improving access to adequate health care. It therefore follows that households with recent experience of costly health care would be more willing to spend money to insure against the consequences of such events. As seen in Table 7.6, quite a few of the studies attempted to address this point by searching for an association between WTP values and recent experience with costly illness. It is interesting to note the large variability of the proxies used in the different studies to assess this association, including annual healthcare expenditure, episodes of hospitalization, frequency

of illness, experience with chronic illness, payment for health care, borrowing money to pay for health care and loss of income due to illness. Nine of the reviewed studies found a positive association between WTP and at least one of the proxies for exposure to costly ill health. It seems that recent personal experience with the financial consequences of ill health is an important explanatory factor for the variation in WTP.

Table 7.6

Effect of health expenditure on WTP

<i>Authors</i>	<i>What was measured</i>	<i>Association with WTP</i>
Walraven		n.d.
Asenso-Okyere et al.	Expenditure on health care last month	+
Mathiyazhagan	Illness of respondent	+
	Number of hospital episodes	+
	Working days lost due to illness	+
	Number of consultations with doctor	n.s.
Masud et al.		n.d.
Dong et al.	HH expenditure on western medicine last month	+
Binam et al	Percentage of individuals in the HH ill 6–12 months prior to survey	+
Asgary et al.		n.d.
Asfaw and Braun		
1st bid	HH head reported illness	+
2nd bid		n.s.
1st bid	Number of HH members reported illness	+
2nd bid		n.s.
1st bid	Borrowed money for health care	+
2nd bid		n.s.
Bärnighausen et al.	Average monthly health expenditure in the past year	+
Ying et al.	Respondent suffered from chronic disease	
	MCDI	n.s.
	IEI	n.s.
	OEI	+
Dror et al.	Hospitalization in HH in last 2 years	+
Lofgren et al.	One or more persons in HH has a chronic disease	+
Gustafsson-Wright et al.	Number of HH members sick	
	WTP, the first bid	—
	WTP, the second bid	n.s.
Onwujekwe et al.	Paid OOP for health care	—
	Paid with own money	+
	Borrowed money to pay for care	n.s.

7.3.4 Package composition and WTP

In our context, the price of different insurance packages might vary due to levels of co-pay, caps and exclusions, but also due to the benefit types included. While one could argue that co-pay and caps reflect economic considerations, the inclusion/exclusion of benefit types could well reflect normative choices. For example, should maternity be included in the package or not? Therefore, it is necessary to examine whether WTP for health microinsurance is influenced by the design of the insurance product, and if so to what extent. Unfortunately, only very few studies examined this issue in detail. Bäringshausen et al. (2007) asked respondents about their maximum WTP for a basic health insurance (BHI) and, separately, for three variations: 1) without the ceiling of the basic option (which was four times the average annual formal sector worker's salary); 2) without deductible (which under the BHI was 9 per cent of the average annual salary), and 3) without coinsurance (that ranged from 10 per cent for in-patient care to 20 per cent for special services and 30 per cent for outpatient care). In this experiment, the options examined represented different levels of financial protection within the same set of benefits covered. In comparison to the BHI, respondents were willing to pay 70 per cent more for BHI without a ceiling, 43 per cent more for the BHI without a deductible and 56 per cent more for the BHI without coinsurance. This increase in WTP was not only nominal but also relative to the respondents' income (respectively 4.6 per cent for the BHI, 7.8 per cent for BHI without ceiling, 6.8 per cent for BHI without deductible and 6.9 per cent for BHI without coinsurance).

Ying et al. tested WTP for three different health insurance programmes: 1) MCDI would reimburse 80 per cent of health expenditure when the insured suffered from a catastrophic disease; 2) IEI would cover 100 per cent of the enrollees' health expenditures on in-patient health services; and 3) OEI would cover 60 per cent of health expenditure on outpatient health services. 43 per cent of respondents chose MCDI (WTP: 110.1 RMB (US\$17) = 2.2 per cent of annual income); 49 per cent chose IEI (WTP: 100.2 RMB (US\$15.50) = 2.0 per cent of annual income); and 25 per cent chose OEI (WTP: 72.4 RMB (US\$11) = 1.4 per cent of annual income). The price elasticity of the demand for MCDI was -0.27 (this indicates that demand for MCDI would decrease by 2.7 per cent if the premium increased by 10 per cent). The elasticity of demand for IEI and OEI was -0.34 and -0.42 , respectively. In this experiment, the demand for MCDI was least elastic, and WTP highest, both nominally and relative to income. These results suggest that WTP for health insurance can reflect not only financial protection but also preferences for different kinds of services.

By contrast, Lofgren et al. elicited the WTP of their respondents in respect of different insurance products: 1) a health insurance that is based on compulsory

affiliation with income-rated premium;³ and 2) health insurance that is based on voluntary affiliation with risk-rated premium.⁴ Although when subjects were asked about their willingness to affiliate with either of these insurance products there was a slight preference for the compulsory affiliation, the mean WTP for both products was practically the same despite the fact that each household was presented with both options.

Dror et al. (2007) also examined the sensitivity of WTP to being packaged in a different way: each third of the sample was offered a different benefit package.⁵ In that experiment, there was no difference in WTP for the three packages. This could be due to the different elicitation method, in which respondents were offered only one option and were not given a choice between options that they could compare or prefer. This suggests that WTP can, at least sometimes, be used as a tool for package design only when the same respondent can choose between options. This would work when the number of options is relatively small, but would be impracticable with the very many options that health insurance packages usually contain. Other methods were developed for benefit package design that enable respondents to choose from 10 or more options, but this is done within a finite budget, i.e. without soliciting the respondents' WTP. The methods that were applied in the context of CBHI in low-income countries include simulation exercises (Dror et al., 2007), focus group discussions and structured interviews (De Allegri et al., 2006). We conclude that the available information on the impact of package composition on WTP is inconclusive.

³ All households in the district are obliged to pay an annual premium to a local healthcare fund when crops are sold. The fee is based on the households' income. The higher the income, the higher the fee. All members in the household are entitled to free health care at the Communal Health Station or District Health Centre and free medicine if it is prescribed by a doctor. If care at higher levels is needed, the insured patient will be supported by an amount based on the cost per bed-day at the District Health Centre level. The fund will be managed by the Commune People Committee (or elected representative).

⁴ Each household can choose to voluntarily pay an annual premium to a local healthcare fund when crops are sold. The fee is based on the number of people in the household and the fee is higher for children under five and elderly over 65 because they are expected to use more health care.

⁵ Version 1 included hospitalization expenses up to INR 5 000 (US\$115) per year and person and reimbursement of costs for prescribed drugs up to INR 1 000 (US\$22.50) per year and person; version 2 included hospitalisation expenses up to INR 5 000 (US\$115) per year and person and reimbursement of costs for general practitioners up to INR 1 000 (US\$22.50) per year and person; version 3 included reimbursement of costs for prescribed drugs up to INR 1 000 (US\$22.50) per year and person and reimbursement of costs for general practitioners up to INR 1 000 (US\$22.50) per year and per person.

7.3.5 Location of residence and WTP

The discussion presented above, based on the data reported in the cited studies, leads to the assertion that WTP for health microinsurance is highly influenced by various variables, notably the economic and socio-demographic status of respondents, their financial exposure to healthcare costs and availability of healthcare facilities. All these features vary markedly by location, within and between countries. A simple comparison of results of the different studies reviewed here is impossible due to the dissimilarity in methods used to elicit WTP and to interpret the data. Specifically, the question arises as to whether the significant explanatory variables identified at the level of single households can account for the difference across locations.

We submit that the way to address this question with confidence would be to include a “location variable” in multiple regressions performed to identify the explanatory variables at the level of single households when the dataset includes more than one location. Following this process could ensure that household features and WTP levels would be elicited using the same methodology. Only two of the studies reviewed have actually followed this procedure, Dror et al. (2007) (comparing seven locations in India) and Onwujekwe et al. (2010) (comparing six locations in Nigeria). Both studies reported that the location still remained a highly significant explanatory variable for the variation in WTP, even in a multivariate model including all the features of the individual households (economic and socio-demographic status and recent experience with healthcare costs). This finding suggests that the studies published so far on WTP for health microinsurance have not yet identified all of the reasons that explain differences in WTP for health insurance across communities; we cannot exclude that some features, e.g. those reflecting cultural or lifestyle choices, could explain some underlying reasons that have not been recognized. The impact of location as an explanatory variable will need to be explored more thoroughly in future research.

7.4 Lessons learned and implications for practitioners

“We had to work backwards taking into consideration what the community could pay, while creating a long-term, self-sustaining scheme.” This testimony of an HMI practitioner in India presents the essential role of WTP estimates, namely that members’ WTP determines the income side, and by extension also what the insurer can offer by way of cover.

This review of field experiments has illustrated that all researchers agree that WTP must be explored locally, because there is no “one-size-fits-all” option to determine the income side of different HMI schemes operating in different settings. The review has also shed light on the difficulties associated with obtaining WTP estimates that would be relevant locally. Such estimates require data that is

usually obtained through household surveys and other costly and time-consuming investigations. These constraints make it impracticable to obtain local data in each place where HMI is launched.

However, if the income of the target population is known, it could serve as an anchor for initial estimation of WTP, based on the analysis of the studies reviewed here and shown in Table 7.2. It has been shown in Table 7.3 that WTP estimates (when expressed as a percentage of income) converge mostly to a relatively narrow range around two per cent of income.

It has also been shown in Tables 7.4, 7.5 and 7.6 that various other parameters influence WTP levels. Therefore, we might be able to extrapolate WTP levels known in one location to other comparable locations using knowledge of these parameters. For instance, if in one location we know the level of education of household heads as well as the WTP values, and in another location we only know that household heads have a higher level of education, we would expect WTP levels in that second location to be higher. Similarly, ample supply of quality health care, or higher cost of care, or higher morbidity would all be expected to lead to higher WTP.

We have also seen that WTP levels are sensitive to benefit package design. Therefore we would expect that involving the target population in the design phase would increase WTP levels.

However, for the time being, it is impossible to devise a simple standard model to predict WTP everywhere, because of the large diversity of methods used to elicit and estimate WTP in the different studies reviewed in this chapter. Such a model could hopefully be devised in line with the methods used to determine WTP and standardized for the purpose of analysing explanatory variables.

III Life insurance

8 Savings in microinsurance: Lessons from India

Rob Rusconi

Considerable support has been received for this study from the Centre for Insurance and Risk Management (CIRM), which was involved at the conceptual stage and contributed significant assistance in corresponding with insurers and gathering data. The study would also not have been possible without the information so generously provided by the insurers, information not only on the products but also on the thinking behind distribution alternatives and possibilities for the future. Finally, the author wishes to thank the following reviewers for their feedback: Denis Garand (DGA), Michael J. McCord (MicroInsurance Centre), Pranav Prashad (ILO), Rupalee Ruchismita (CIRM), Donna Swiderek (DGA), John Wipf (actuarial consultant) and Mary Yang (ILO).

This chapter assesses four products that combine the benefits of insurance and saving offered by Indian insurers and targeting low-income customers. The assessment is timely, as many insurers have launched or are giving serious consideration to initiatives aimed at bringing insurance combined with saving to this market segment.

The first section of this chapter introduces the issues and presents a framework that is used for the product analysis. The products are then described in section 8.2, highlighting the key characteristics that set each apart. This leads to section 8.3, the heart of the discussion, which draws and explains a number of important lessons from this analysis. There are few easy decisions and prospective participants in this market need to think carefully about the most important needs and preferences of their customers, converting these into product design, and then balancing difficult trade-offs.

8.1 Saving and insurance considerations

Collins et al. (2009) highlight three needs that drive much of the financial activity of poor households: basic cash-flow management, coping with risk and raising lump sums. As tempting as it may be to equate these to borrowing, insurance and saving, the financial behaviour of these households – indeed the complexity and uncertainty of their challenging lives – makes such simplification unrealistic. Households often use a combination of financial tools to meet their financial needs, highlighting a need for composite products that combine savings and insurance.

Saving helps low-income households protect themselves against shocks and stabilize their cashflow, yet it has limited potential to shelter people from catastrophe. Adding an insurance component usually means that saving must occur on a regular pre-determined basis over an extended period. Like loan repayment instalments, this requirement can be onerous, yet it also provides a mechanism to

instil discipline and encourage clients to save consistently.¹ As the success of commitments to save shows (see Ashraf et al., 2003 and 2006), low-income households often welcome some structure in their savings mechanisms. Policyholders also benefit from the provision of long-term savings products by insurers because it offers alternatives to suit customer needs and convenient access to other forms of insurance cover.

These types of products are also relevant because they address a reservation that the low-income market has about insurance. For insurance products that do not build value over time, such as term life or property covers, if an insured event does not occur, low-income policyholders often feel that they have wasted their money because they do not have anything to show for the premiums they have paid. Whereas products that combine savings and insurance, like endowment products, cover the risk of death and accumulate value over time.

However, standard endowment products are notorious for providing poor value to customers compared to other saving options, partly due to the high commissions paid to agents. Because of their irregular cash-flows, low-income customers also may have difficulty paying regular premiums, and therefore the surrender value of the product can be quite low (see Roth et al., 2006). Thus, the main thrust behind this chapter is to assess whether the next wave of products that combine savings and insurance has found solutions to overcome the limitations of traditional products, and whether the new products provide better value to low-income customers than the previous generation.

8.1.1 A framework for savings-linked insurance

These products compete for attention with a wide variety of alternatives (formal and informal) and need to be competitive, in the sense that they meet customer needs clearly and effectively. To design such a product, the insurer needs to consider a set of fundamental principles:

- **Primary objective:** What key need does the product seek to meet? To do this, needs must be identified and prioritized. Furthermore, the extent to which customers actually recognize these needs must be estimated or measured.
- **Secondary goals:** What are the other goals for the product and what are the priorities across these goals?
- **Flexibility:** How much can the customer vary the standard terms of the contract to meet a variety of needs, such as unanticipated changes to personal circumstances?

¹ It is important to avoid casting an inflexible payment schedule – whether for saving or loan repayment – in doggedly negative terms. Just as compulsory saving has benefits, households frequently take on credit with fixed repayment instalments precisely because they appreciate the discipline imposed.

- **Understanding and trust:** What features need to be in place to ensure that the customer understands all of the terms and conditions of the arrangement? The importance of customers understanding this promise must not be underestimated. These are long-term products, so keeping customers is just as important as convincing them to purchase the policies in the first place. In addition, helping these customers to understand why the product is good for them – through simplicity of design and frequent communication, for example – is the first step towards gaining their confidence and retaining them.

8.1.2

Product design

Insurers need to consider the four principles outlined above when defining the following components of savings-linked insurance products:

- **Allocation to savings and insurance:** it is difficult to value the respective contributions of saving and insurance equitably, but the allocation of premiums between the two helps to show the relative significance of each. The provider should always be able to make this allocation. For the customer, this is less often possible, so that the insurer should make every effort to explain this allocation – and the corresponding benefits from insurance and savings.
- **Product features:** Characteristics like premium or sum assured minima and maxima are captured here, along with age and term restrictions.
- **Insurance benefit:** This describes the contingencies that are covered, life, health or assets, for example, and how benefits are paid (e.g. lump sum or income, fixed amount or indemnity).²
- **Saving benefit:** This covers the flexibility of the product, limitations on the timing of withdrawal or the opportunity for partial withdrawal during the term of the contract. Other features like the potential or guaranteed investment return may also be important to customers, but the relevance of the return may depend on their financial sophistication. As lower-income customers are generally more exposed to financial stress, they may value flexibility of design – giving them a break from contributions or access to their savings in an emergency – more than the potential for investment return.
- **Charges:** A record of fees, where these are explicit, should form part of a detailed typology.³

² All products covered in this study provide life cover only, although other types of protection are possible.

³ Some products provide a pre-defined set of benefits that include all charges; others levy charges separately. Comparing these offerings is not straightforward, a problem that affects the analysis described in this chapter.

- **Exclusions:** This includes pre-existing conditions or suicide, for example, on life insurance, or limits on claims under asset insurance.
- **Special features:** Additional characteristics not covered by other headings.

There are a number of difficult issues hidden in the detail of these components that insurers must resolve when putting together their products. These trade-offs, some of which are considered in this chapter, strongly define the essence of the product and the nature of the promise to customers. For example, it is clear that not all saving is for fixed periods and known future events.⁴ Insurers need to think carefully about the balance between the promised maturity benefit (received after five or ten years of enrolment) and the terms under which customers might withdraw their accumulated savings during the term of the policy.

8.1.3 Focus on India

The chapter focuses on products in India for two main reasons:

- It proved challenging to find a range of products from other parts of the world that 1) provide meaningful elements of saving and insurance cover, 2) have achieved scale, and 3) are sold by insurers willing to provide insights into the dynamics of their portfolios.
- It is difficult to carry out a fair comparison of products from different parts of the world because these products can be specific to a context, particularly in regards to constraints imposed by regulation.

As described in Chapter 20, India has seen considerable microinsurance development in recent years, including life insurance. Consequently, it has a critical mass of interesting examples with sufficient experience to warrant a specific investigation. Nevertheless, a study like this that focuses on a single country runs some risks. A number of the products included have been withdrawn from the market in response to regulatory changes that forced reconsideration of their design. Furthermore, it can be difficult to transfer the experiences gained in one country to other jurisdictions.

⁴ In the three studies reported by Collins et al. (2009) in Bangladesh, India and South Africa, over half of all savers reported their primary use of the large sums borrowed or accumulated as falling into the category of opportunity rather than emergency or life cycle.

Finally, the study depended on insurers for the information provided. Data on customer choices is limited by competition considerations. The chapter may appear to give preference to the view of the institution over that of the customer, but this has not been the intention and every effort has been made to overcome the limitations of the information available.

8.2 Products considered

The market for savings-linked insurance products in India has been subject to a number of recent regulatory changes,⁵ which have affected those considered in this section. Some of them have been withdrawn from the market for redesign. Changes in referral guidelines have also affected distribution options.

The descriptions of the four products that follow, which predate these changes, are broad, highlighting the most important features of each product. This leads to the discussion in section 8.3 that draws a number of lessons from these similarities and differences. Table 8.1 summarizes the key features of these products.

⁵ The most important of these regulatory requirements for unit-linked investment products are that:

- customers must be locked in for a period of at least five years, reinforcing the fundamental principle that these are long-term financial instruments providing risk protection;
- premiums must be regular and at a constant level;
- charges must be evenly distributed over the initial five years;
- death benefits must meet minimum requirements; and
- a guaranteed minimum investment return must be granted.

For universal life products, renamed variable insurance plans, the combined investment and commission limit is prescribed, and for both sets of products, referral activities have been curtailed in the interest of customer protection.

Table 8.1

Key features of products assessed

	<i>Max New York Life Max Vijay</i>	<i>Bajaj Allianz Sarve Shakti Suraksha</i>	<i>SBI Life Grameen Shakti</i>	<i>ICICI Prudential Anmol Nivesh</i>
Lives covered (approximate)	90 000	3.4 million	1 million	2 300
Allocation to savings and insurance	All premiums to savings; insurance cost deducted	Insurance cost deducted from premium	Implicit; guaranteed maturity and death benefit	Insurance cost deducted, but guarantees provided
Premium payment options	Premiums entirely at option of customer after initial purchase	Monthly, quarterly, half-yearly or annual	Annual only	Annual only
Minimum premium	INR 1 000 (US\$22) initial contribution, INR 10 (US\$0.22) minimum thereafter	INR 45 (US\$1) monthly premium, INR 500 (US\$11) for its annual equivalent	No explicit minimum, but likely to be low	INR 1 200 (US\$26), annual premium only
Term limitations	Ten-year term only	No longer than seventieth birthday of policyholder	Five- or ten-year term only; different maturity benefits	Between 7 and 15 years
Maturity guarantee	No guarantee, but returns declared cannot be removed	Total premiums less cost of cover and administration fees	Explicitly and clearly guaranteed	Total premiums paid
Sum assured (death benefit)	Five times the premiums paid	Guaranteed from outset on group requirements	Guaranteed from outset	Greatest of sum assured, fund value and sum of premiums
Investment returns	Guaranteed once declared	Based on returns on low-risk assets	Implicit in the guarantees	Based on returns on low-risk assets
Earliest available withdrawal	Three years	Immediate	Three years	Three years
Partial withdrawal permitted	Yes	Yes	Not permitted	Yes
Surrender terms	Fair: available after three years with a penalty of 15 per cent until year 6 and 7.5 per cent thereafter	Very good: available from inception and based on account value with penalty, 7 per cent in years one and two, lower thereafter	Fair: available after three years' premiums; 35 per cent and 65 per cent of premiums payable on the 5 and 10-year policies	Good: available from three years with 10 per cent charge, waived if three years of premium have been paid
Policy revival option	Available	Available	Available	Available

Note: Quality assessments mentioned in this table provide a comparison of product features from the perspective of the customer and are therefore subjective rather than technically precise.

8.2.1 MNYL's Max Vijay

The venture of Max New York Life (MNYL) into a microinsurance product, Max Vijay, combining savings and insurance and available to individuals rather than only members of groups has shown, above all, that it can be done. From a product sale perspective alone, the results are good. From the product launch in 2008 to the end of the first quarter of 2010, Max Vijay sold 90 000 policies, a good number, but significantly less than the more than one million policies sold by each of the next two products considered. The project has allowed the insurer to gain first-hand experience in determining customer needs, incentivizing behaviour, and identifying the success factors for such a venture.

Max Vijay offered a savings product with remarkable contribution flexibility, a death benefit that grows with contributions and fair withdrawal terms. The most important features of the product are the following:

- **Contribution flexibility:** Following the payment of a one-off initial contribution, defined by the product sub-type but no less than INR 1 000 (US\$22),⁶ the policyholder is completely free to contribute to the account when able, with no rules on frequency or amount, except for a minimum contribution of INR 10 (US\$0.22), an extraordinarily low threshold.
- **Sum assured linked to premiums:** The benefit payable on death is equal to the value of the accumulated customer account plus five times the contributions paid, ten times in the case of accidental death, encouraging contributions but also keeping under control the cost of insurance, which is deducted monthly to meet this cost.
- **Withdrawals are available from the third anniversary:** Policyholders may surrender or partially surrender the policy from three years onwards, with charges that are fair, though the facility to partially withdraw free of charge on a limited number of occasions is a useful addition to policyholder flexibility.

The most ambitious feature of the project is its distribution model. This is the only product in this set that is available to individuals and marketed to the general public. This limits the potential to achieve economies of scale, as the per-unit distribution costs are significantly higher than if the product were distributed solely through groups, all else being equal.⁷

Key observations on this product are:

- Sales have been good, particularly given the ambition of reaching individuals rather than limiting access to members of groups.
- Without the support of the (voluntary) on-going contributions, the product does not provide particularly good value to the customer and is less likely to generate profit for the insurer. A key imperative, apart from the need to develop a diverse range of efficient distribution channels, is to find ways to motivate this continuous commitment to the saving process, essentially a form of partnership with the insurer (this is explored in more detail in Box 8.1 in the next section).

⁶ The mid-market exchange rate at the end of February 2011 is used throughout the paper, approximately INR 45 to US\$1.00.

⁷ Max New York Life launched this product specifically to learn about its potential and the nature of the market need. It invested a considerable amount of money, recruited a dozen or so senior managers and outsourced the information technology requirements to a major provider.

Through lessons on understanding saving behaviour, reaching customers, designing and pricing products, and running an efficient operation, Max Vijay has provided invaluable experience to MNYL.

8.2.2 Bajaj Allianz's Sarve Shakti Suraksha

Sarve Shakti Suraksha is a savings product that provides a guaranteed maturity benefit, low surrender penalties and an insurance cover that pays a fixed amount on death due to natural or accidental causes.

The product is available to members of targeted groups only. The minimum size of the group is 50 and pricing of the insurance is based on the risk profile of the group. The product is targeted at groups of women who are reached through NGOs and microfinance institutions (MFIs).

The most important features of the product are as follows:

- **Guaranteed insurance benefit:** The sum assured is negotiated with the group and is unchanged throughout the term of the policy.
- **Investment returns on the accumulated savings:** The accounts attributed to individual policyholders are credited with the investment returns earned on the underlying assets, appropriately invested.⁸
- **Withdrawal flexibility:** Policyholders may surrender the policy right from inception at very reasonable charges. This is a unique feature among the products considered in this assessment.

Though the product is available only to those who form part of an applying group, policy records after inception, such as accumulating policy values, are held on an individual basis.

More than three million lives across India have been covered in the two years since launch and assets under management are approaching US\$66 million. It is too early to comment on profitability, though the insurer expects to break even soon. It is also too early to assess the extent to which the product meets customer needs, but other variations are already being considered, and customer satisfaction appears to be high, as supported by persistency through to the beginning of the second year (13 months from inception) of 82 per cent.

Modified versions of this product are now being adopted by Allianz in other regions, such as Indonesia (called Tamadera, launched in October 2010) and parts of South America and West Africa, to suit the distinct requirements of customers in different parts of the world.

⁸ No minimum return is specified, but the benefit on maturity is guaranteed at total premiums less cost of cover and administration fees, suggesting a minimum return for those who reach maturity of no less than zero, after costs.

8.2.3 SBI Life's Grameen Shakti

Grameen Shakti is a simple product provided by SBI Life Insurance designed to reach low-income clients that, while combining insurance and savings, keeps costs low by packing together:

- a term life product priced without any differentiation for age or gender, and
- a simple cash benefit on survival of the pre-defined policy term.

The product is offered only to groups with a minimum of 200 members and has reached close to one million customers in the approximately three years since launch. While banks are the primary means of reaching customers as this helps to overcome practical difficulties such as premium collection, the distribution channels – those that have the relationships with the ultimate customers – are MFIs and self-help groups (SHGs). All premiums are collected by debiting the customer's bank account.⁹

The important features of this product may be summarized under the principle of simplicity:

- **Limited choice of term:** only five- or ten-year terms are available.
- **Limited choice of death benefit:** the sum assured must be a multiple of INR 5 000 (US\$110), up to a maximum of INR 50 000 (US\$1 100).
- **Explicit guarantee on maturity and death benefit:** The death benefit attracts no investment return but is clearly set out, and the maturity benefit is equal to the sum of all premiums under the 10-year policy and half of this sum for its five-year counterpart.

The policyholder receives no investment returns, but also suffers no charges for the cost of providing death cover. Both of these are built into the product design and the assessment of the risks of the guaranteed benefits. One charge is explicit. It is the cost of the service tax on premiums, charged at a rate of 1.03 per cent of the premium. This is added explicitly to the premium so that it does not need to be taken into account later in the policy term.

The policy includes an element of risk-sharing that reduces the margins that the insurer would otherwise need to take into account in its pricing: the death benefit to an entire group is limited to INR 50 000 (US\$1 100). If this threshold is exceeded, subsequent claims are declined and premiums net of service tax and stamp duty are returned to the nominees of covered members.

⁹ While this implies that all of the customers have to have a bank account, the product frequently originates as a service to the members of the self-help group, with the bank operating as a distribution channel.

While the product may be criticized as providing a limited range of options and no more than fair value for money on early termination, its simplicity makes it easily understood and it appears to fulfil a significant need for pure protection with limited savings.

This is probably the most important lesson that may be learned from the SBI Life experience. The insurer has taken the view that customers appreciate the straightforwardness of the product, a simply defined sum assured with limited exclusions and a clearly defined cash-back payment at maturity. The volume of product sales appears to support this view. SBI Life has commenced a programme to roll out the product across India.

8.2.4 ICICI Prudential's Anmol Nivesh

ICICI Pru has developed a policy that combines saving and insurance in a design not far removed from a classic endowment contract: it is a regular-premium investment-linked policy that guarantees, on maturity and death, a benefit no lower than the value of premiums paid, less the value of any partial withdrawals to that point. It has been launched on a pilot basis to workers in the tea plantations of Assam, in India's north-east, and is untested elsewhere.

Elements used from the design of the classic endowment include:

- the combination of a **death benefit and a maturity benefit**, both attracting investment returns, but with guarantees,
- a **unit-linked approach** to investment returns, with assets held in low-risk instruments,
- a **range of policy terms** (7 to 15 years) and sum assured options ranging from INR 6 000 to INR 30 000 (US\$130 to US\$650), and
- a **conventional set of charges**, a premium allocation charge, policy administration charge and mortality charge that do not unduly detract from the effectiveness of the guarantees.

However, the designers of this product have been innovative in a number of respects, all of which assist the policyholder. Examples of these include the following:

- **Cover continuance option.** The life insurance cover continues, for those who have selected this option, even if premiums are stopped, any time after the third anniversary of the product, avoiding an automatic surrender procedure.
- **Bonus allocation of units.** Policyholders are motivated to persist by an allocation of five per cent of one full years' premium every fifth anniversary. The policy administration charge also ceases at the end of five years.

- **Reward for premium persistency.** Surrender may take place at any time after three years. A charge of 10 per cent of the fund is applicable, but this is waived if, at the time of the surrender, three full years of premiums have been paid.

These terms go a long way towards aligning the incentives of the policyholder with those of the insurer, though they do so at some cost to simplicity, increasing the risk of poorer understanding by the policyholder.

This product was designed specifically to reach low-income customers operating in a semi-organized sector. It has been piloted in north-east India to reach tribal tea plantation labourers, using the tea companies as financial intermediaries. Partnership with a tea company does not guarantee access to all of its workers, as this needs to be negotiated at the level of the tea garden falling under the jurisdiction of the company. Nevertheless, 2 300 customers, around a quarter of those targeted, were enrolled and further roll-out was negotiated.

Sales of the product were suspended in July 2010 following the introduction of the regulatory changes discussed earlier in this chapter. A number of changes to product features are to be introduced to ensure compliance with regulatory requirements and to take advantage of the opportunity to respond to the emerging needs of customers. At the time of writing, details had not been finalized.

The initiative has survived thus far on financing by the ILO's Micro-insurance Innovation Facility, but the insurer is optimistic that with economies of scale available through wider distribution, this could become a profitable venture.

8.3 Key lessons learned

Drawing on the analysis of these four products, this section focuses on the most important lessons to consider when designing savings-linked insurance products.

8.3.1 Products may come in many shapes and forms

The four products show different characteristics in a number of key areas as depicted in Table 8.1. Some of these may be described as design differences and are relatively easy to identify. These include:

- premium flexibility,
- minimum premium requirements, and
- surrender terms.

Others are more subtle, but perhaps more sophisticated. Two of these are considered in more detail in the discussion that follows:

- the balance between savings and insurance, and
- the balance between flexibility and simplicity.

Premium flexibility

SBI Life and ICICI Pru require policyholders to pay premiums annually without variation. Bajaj Allianz permits premium payment on one of four different programmes, but on a regular basis. Only MNYL allows a completely flexible approach to premium payment, an almost unheard-of premium-paying flexibility, at least in the context of long-term insurance.

It is not obvious as to what is best for the customer. Consider the issue from a number of different perspectives.

- Annual premiums are larger than those paid more frequently, so there is a material risk of surrender if the customer cannot afford them as they fall due.
- Annual premiums lead to lower collection costs per unit paid, permitting lower charges and better value for customers.
- Where products are sold through facilitating partners, the partners may assist in the aggregation of smaller amounts into annual premiums, deepening the relationships between insurer and partner, and between the partner and customer. SHGs and tea plantations play such a role for SBI Life and ICICI Pru, respectively.
- Permitting customers to choose their premium frequency or allowing contributions to be paid entirely at the convenience of the policyholder may attract more customers and allow them more control over their financial management.
- Keeping the customer to a regular premium, with appropriate grace periods to facilitate recovery from times of hardship, may improve the policyholder's commitment to saving.¹⁰ For Max Vijay, only around 15 000 of its 90 000 customers made contributions after their initial payment, despite the extraordinarily low minimum requirement. This suggests that the insurer may have overestimated the benefit of the flexible approach over the discipline imposed by a regular premium arrangement.

These arguments demonstrate the challenge of establishing the right approach for a particular product and the need to consider the issue from the customers' perspective, in addition to any intermediary entities involved. These decisions are seldom straightforward. Researching customer preferences, evaluating paying

¹⁰ Bajaj Allianz and SBI Life allow 30 days premium payment arrears and all of the insurers in this study permit customers to revive arrangements under which premiums have been unpaid for some time.

capacity, and conducting cost-benefit analyses of different models are among the methods that would assist insurers to evaluate the trade-offs. Low-income households live sophisticated and complex financial lives; insurers should never assume that they know what their customers need.

Minimum premium

The lower the premium threshold, the easier it is for low-income individuals to participate as customers, but the more difficult it is for the insurer to achieve scale efficiencies at the level of the individual contract. On the other hand, a lower premium threshold may translate into a greater number of policies, which across the entire portfolio could be sufficient to create economies of scale.¹¹

ICICI Pru and, to a lesser extent, Bajaj Allianz, have chosen relatively high minimum premiums, with policyholders at the former paying at least INR 1200 (US\$27) annually and at the latter, if they choose the annual premium option, no less than INR 500 (US\$11). Bajaj Allianz offers smaller premiums for those prepared to contribute more frequently. The implied minimum premium at SBI Life is significantly lower than this, and MNYL offers complete flexibility of contributions starting at INR 10 (US\$0.22) but the initial premium is high at INR 1000 (US\$22).

It is difficult to say which approach has worked best because the effects of the minimum premium are obscured by other factors. Bajaj Allianz has sold a very large number of policies with Max Vijay selling significantly less, but this is not necessarily attributable to the premium threshold.

Surrender terms

One of the most important design questions in products that combine saving and insurance is the flexibility to withdraw from the policy, partially or completely. Surrender terms under three of the products are similar. Bajaj Allianz stands out as it provides generous terms for policy surrender, particularly by permitting early surrenders. The other insurers permit surrender after three years; Bajaj Allianz permits it immediately after inception, although surrender in the early months is likely to produce a low payout.¹²

¹¹ Viability depends on a number of cost and revenue factors. The lower premium threshold facilitates easier access, resulting in higher take-up and the spreading of fixed portfolio costs across a greater number of contracts, but it may result in higher expenses overall if the costs associated with each new sale are high. Rules are not easily determined and there is no evidence that the four insurers in this study have followed any specific approach. There is no substitute for financial modelling of the alternatives, supported by research on the likely customer take-up at various levels of minimum premium.

¹² It would be useful to understand how many customers take advantage of these surrender terms. The chapter closes with some thoughts on possibilities for further research.

As persistency with savings products is an important determinant of financial success, this approach is risky because it may experience financial losses as significant numbers of policyholders surrender early. However, as a feature differentiating the insurer from competitors, it may pay off because it sends the message to customers that the product is flexible in their hands. Facilitating exit may stimulate higher levels of loyalty, a risk not easily evaluated prior to launch.

All aspects of product design require sensitivity not only to financial effects but also to the impact of incentives on human behaviour. The issue of permitting customers to leave more easily in the hope that, in return, they will not do so, is one that requires a particularly good understanding of the tendency of people to respond to incentives. It touches, also, on the issue of trust, discussed later in this section.

The balance between saving and insurance

One of the main challenges is meeting the cost of providing insurance, the death benefit, while demonstrating adequate commitment to the maturity benefit, the result of the savings effort for those who survive until the end of the policy term. Some might suggest that a minimum insurance benefit is required to meet basic customer needs. Others believe that saving plays an important role in meeting these needs and that the insurance is supplementary. Each insurer needs to take a view on this, based on its understanding of customer preferences.

Four different approaches have been adopted to achieve this balance. These are illustrated with reference to a hypothetical product with a ten-year term, annual premiums of INR 1 000 (US\$22), and the corresponding annual cost of cover and administration fees of INR 30 (US\$0.66) and INR 50 (US\$1.10) respectively.

- **MNYL: Cost of insurance deducted from premiums; no guarantee.** From the premium of INR 1 000 (US\$22), a deduction of INR 30 (US\$0.66) is made to cover the cost of insurance. No guarantee on the maturity benefit is offered. MNYL deducts the cost of cover from the premium and does not provide a guaranteed maturity benefit to balance this. However, it mitigates the risk to the customer by describing and guaranteeing the insurance cost, and it limits the potential erosion of savings by setting the death benefit at a multiple of total premiums paid. The death benefit would be INR 5 000 (US\$110) after year one, five times the annual premium, and an additional INR 5 000 with every subsequent INR 1 000 (US\$22) premium. Furthermore, once returns have been declared, they cannot be removed.
- **Bajaj Allianz: Cost of insurance deducted from premiums; guarantee based on premiums less cost of cover and administration fees.** The guarantee is based on the sum of all premiums, INR 1 000 (US\$22) in each year, less the cost of cover

and administration charges, a total of INR 80 (US\$1.75) in each year, giving a maturity benefit after ten years of not less than INR 9 200 (US\$201). Bajaj Allianz deducts the cost of cover from the premiums. It provides a guaranteed maturity benefit, but does not guarantee the impact of the cost of insurance. This is the easiest guarantee to provide because it exposes the insurer to the least risk. Though it is not good for the customer, it allows the insurer to consider offering good value elsewhere in the product, which Bajaj has chosen to do through the surrender terms.

- **ICICI Prudential: Cost of insurance deducted from premiums; guarantee based on total premiums.** Though the insurer still meets the cost of cover by deducting it from the premium, the guarantee is based on total premiums, in other words INR 10 000 (US\$219) after ten years of INR 1 000 (US\$22) contributions. ICICI Pru provides a maturity benefit that, notwithstanding the cost of insurance cover, is guaranteed to be no less than the value of total premiums paid. It must meet this guarantee from the after-expenses return on the assets and risks failing to do so. It manages this risk by imposing a reasonably high minimum premium and ensuring that the term of the policy is not too short. Note again that, from the point of view of the policyholder, the benefit is good, but it is not without cost in design limitations.
- **SBI Life: Explicit, simple guarantee on benefits; cost of providing the guarantee implicit.** SBI Life has taken a different approach to this guarantee, providing a clearly defined outcome, but not disclosing the costs of providing this outcome. Though the level of risks that it incurs to meet these guarantees is not known – perhaps the combination is profitable – its advantage is that it is simple and more likely to be understood by customers. SBI Life offers, on its ten-year policy, a maturity benefit guaranteed at the total level of premiums less sales tax of 1.03 per cent annually, a little under INR 10 000 following premiums of INR 1 000 annually. The guaranteed benefit under the five-year policy is half of all premiums paid, just under INR 2 500 for the same premium.

Each of these approaches is justifiable. Each may be described as fair to customers, striking a reasonable balance between savings and insurance in a context in which resources are limited. Each has advantages and disadvantages from the point of view of the insurer and policyholder. In addition, each allows the insurer to provide other benefits within the policy design to the customer. The insurer needs to consider the trade-offs and prioritize the most important needs of its customers. As is evident from the differences in product design and customer benefits, the four insurers have adopted different approaches to these priorities.

Choice: The flexibility-simplicity balance

Insurers need to balance the trade-off between simplicity (less choice) and flexibility (more choice). Simplicity is helpful to gain customer trust and improve

understanding of the most important features of the product, while flexibility allows customers to respond to unexpectedly changing circumstances.

Insurers need to decide how much choice to give to their customers. It increases the potential for customer needs to be met, but it also increases the cost of administration. Choice may also decrease the level of customer understanding of the product, and is not always helpful (*see Chapter 13*). Furthermore, flexibility can lead to behaviour that undermines the protection, as seen in the low contributions for the Max Vijay product.

Each insurer has taken a view on the level of choice that it offers:

- **Bajaj Allianz** offers a range of terms, sums assured and premium frequency options, but the decision must be made at the level of the group and all of its members must abide by this selection.
- **SBI Life** allows the group to choose the level of the sum assured and then assesses the risks in order to provide the maturity guarantee. However, it permits only annual premiums and only two options for policy terms.
- **ICICI Pru** limits the term of the policy to a period of 7 to 15 years. It allows the policyholder to choose the level of cover required and the term from within this range. It accepts premiums only on an annual basis, but puts this restriction in place with the customers' cash-flow in mind.
- **BNYL** offers only a ten-year term, but allows its customers complete freedom of premium amount and frequency.

These decisions have consequences for the financial viability of the product and the potential to offer positive features in other parts of the design. The Max Vijay product provides remarkable flexibility, but the insurer found it difficult to motivate customers to make these contributions on a regular basis. After paying their initial premium, approximately five out of six customers did not pay any additional premiums despite the very small instalment amounts. This, in turn, has undermined the financial viability of the portfolio, which reduces either the insurer's profitability or the investment return available to customers, or both.

Need for persistency

There is one characteristic of policies with savings elements that must be noted: the need for persistency. Lapse rates in all long-term insurance products can be high: 10, 20 or even 30 per cent per year. Persistency levels are a key marker of insurer success. A failure to keep customers for a sizeable part of the duration of the policy hurts the insurer in three ways:

- I. A surrender takes away the marginal benefit of the fees that the policy provides to the insurer.

2. A surrender takes with it assets that are under the care of the insurer, reducing both the fees and the margins that the insurer may have been able to generate for policies on books.

And, most importantly for savings policies,

3. A policy that is surrendered may result in financial loss because the insurer may not have covered all of its costs of issuing and maintaining the policy, or setting aside assets to meet guarantees.

All long-term insurance policies are dependent for their financial success on persistency, but this is much more important for savings policies than for pure insurance policies because the incidence of profitability is heavily skewed towards the later years of the policy. Moreover, what is good for the insurer is frequently also good for the customer, who needs the product range to be financially sound and for this success to be shared with the customer.¹³

Price for scale

Insurers should make an effort to: 1) price as keenly as possible, making every effort to provide value for money to their customers, 2) test the willingness of the market to accept this price through a combination, if possible, of pre-design research and testing of market responses to the actual prices of products, and 3) compare to the corresponding prices charged by competitors where possible. A significant number of policies sold is usually more indicative of profitability than the margin available on each product. In this environment of small units, costs simply cannot be covered without the numbers. This does not mean that there is no margin in pricing for products. First, customers may not be particularly price-sensitive if the primary needs are being met. Second, profit gained through unexpectedly successful selling can be shared with policyholders if the mechanisms to do so are in the product design. Third, these are long-term arrangements and margins are needed to protect against unexpected terminations.

8.3.2

Distribution is key

Effective distribution is especially important in microinsurance products that include savings components because achieving scale is so crucial to the success of the product. In addition, participation in a long-term arrangement depends on

¹³ How this success is shared varies from product to product. While financial sustainability is important to the policyholder as the insurer is more likely to honour its promises, the policyholder also has an interest in the profit margins of the insurer, which should be low enough to share success with the policyholder, but not so low as to undermine the soundness of the portfolio.

customer understanding of the benefits of the policy, and the distribution channel plays a significant role in establishing and maintaining this understanding.

One important decision regarding distribution is whether to sell to the microinsurance public at large or whether to limit access to members of organized groups. The insurers reviewed have followed three different approaches:

1. **Group membership only.** Bajaj Allianz and SBI Life only make their products available to members of groups, with the intention of selling to all of the members of that group. Bajaj Allianz sets the terms of the contract based on an underwriting exercise covering the group, suggesting that all or a substantial proportion of the members of the group must take up the insurance.
2. **Targeted at members of groups.** The ICICI Pru product is targeted at workers on tea plantations, but participation is not compulsory for every member of the group. The group coordinators facilitate the transaction, but the decision to enrol is taken by each member individually.
3. **Available to individuals.** Max Vijay is marketed to and available to individuals through a range of distribution channels.

Selling only to groups has a number of advantages:

- It assists with scale efficiency by adding a larger number of policies with every successful sale.
- These groups contribute to enhancing the loyalty of customers, through education, practical assistance, and perhaps even peer pressure.
- It brings into play an intermediary who has the interests of policyholders at heart and frequently also a willingness to encourage persistency and to help with saving for widely-spaced contributions.
- It contributes to solidarity between members, improving understanding of the product, celebrating payment of benefits and improving persistency.

Distributing to group members appears to be the key point of differentiation between the products and the scale achieved. The two providers that sell only to groups have reached significant scale, each covering more than one million lives. The other two insurers have had encouraging starts, but cannot be described as successful in terms of number of policies sold or profitability.

A key lesson from the Max Vijay initiative is the importance of the distribution channel (*see Box 8.1*). The distribution channel needs to have an interest in encouraging active savings from customers, but finding such a channel is not always easy. Retail stores, for example, have an incentive to encourage people to spend, not save. When selling through retail stores, the savings product competes with other products in the store, both for the retailer (in terms of commission to

be earned from other high-margin products) and the client. Conflicts of interest also arise when savings-linked insurance is sold through banks, as banks have an incentive to make clients enrol in their own savings products. SHGs may have similar conflicts, but are fundamentally interested in the welfare of their members and hence may be better suited to encouraging a long-term savings product.

Box 8.1

Channel experimentation in Max Vijay

Max Vijay has tested a variety of channels, using “push” and “pull” methods. Push channels are those in which intermediaries actively persuade customers to purchase the product. These were used primarily to encourage the relatively high-premium initial uptake of the product. The push channels utilized were a financial product distributor, MFIs, NGOs and government centres.

Pull channels are those in which product sales points are established and customers are encouraged to purchase products from these points. These were primarily local retailers, including “mom and pop” shops, which policyholders regularly frequented and were therefore convenient locations for customers to make additional contributions to their Max Vijay policy.

Experience across distribution channels has varied. The financial product intermediary generated the majority of sales, but at the expense of other MNYL products targeted at higher-income customers. This channel, however, produced poor results in the area of on-going contributions.

Overall, additional contributions were made in only one-sixth of the policies. Success rates were highest in the retail channels, particularly in the city of Agra, where more than half of the policies sold were credited with top-up contributions by policyholders. It is clear from the experience to date that the product will provide clients with value – and probably the insurer with profit – only if regular saving behaviour is developed and sustained, which suggests that even marginal efforts to promote a culture of continuous saving could pay off well in terms of new sales, improved persistency and growth in savings.

Sources: Adapted from Harmeling, 2010.

8.3.3

Design priorities

A careful analysis of four insurers that have adopted different approaches to extending savings and insurance products to low-income households provides some preliminary insights for others interested in designing similar products.

Establish the key objective and focus everything on this. Microinsurance customers live complex financial lives, but it is not possible for products to meet all needs. Customers need products that meet one specific goal. They must understand what they are purchasing, particularly if the product seeks to com-

bine elements of insurance and saving. The distribution channel, the product design and the internal infrastructure of the insurer must support this. Failure to focus on one goal compromises the clarity of the message to customers, reducing the sales potential and undermining customer loyalty to the detriment of the sustainability of the business.

Prioritize distribution. Portfolio scale is crucial for insurance products that provide savings, so giving the business the best opportunity to sell large numbers of contracts is a priority. This probably means making some tough decisions early on, for example to exclude access for the general public, but these can be reviewed once a sustainable structure has been achieved. Successful insurers in this study have been single-minded in their approach to distribution.

Stimulate trust and loyalty. From a number of different perspectives it seems that trust plays a significant part in the success of the insurer, whether the primary channel of product distribution is intermediated or not. Insurers, it follows, should monitor the satisfaction of customers with the product and services being received from the insurer and intermediaries. This should extend through the whole chain of contact with customers. Good client service, timely payment of claims, minimal exclusions and smooth administration service all serve to enhance the reputation of the insurer in the community that it serves. Happy customers are more likely to stay; and keeping existing customers is cheaper than replacing them with new ones. Insurers must recognize that it is not primarily about sales, but about persistency, as customers who leave early are worse than those not gained at all.

Simplicity has merit. In savings products, as in microinsurance more generally, some compromise on flexibility in favour of simplicity seems to have helped in at least two of the examples considered in this chapter. It appears that, while consumers generally desire choice, they acknowledge and appreciate the benefits of longer-term contractual arrangements that impose constraints, in premium payment for example, in return for rewards. This has a considerable positive impact on the sustainability of the product and must be considered by the insurer in the context of the product's key objectives. Simplicity enhances customer understanding which, in turn, is likely to improve loyalty and hence the financial sustainability of the portfolio. It may alienate customers with more sophisticated needs, but these can be met at a later stage through product enhancement. The reverse is not true, as it is almost impossible to simplify an existing product.

8.4

Concluding thoughts and way forward

Microinsurance practitioners are paying more attention to the manner in which customers might be encouraged to combine savings with insurance. A number of insurers in India have launched products that do just this (this chapter considers

four of them), providing some preliminary lessons for other insurers in a similar position, namely:

- determine business and design priorities and stick to them;
- prioritize distribution;
- stimulate trust and loyalty; and
- design for simplicity, focusing on customer understanding.

Trade-offs are an unavoidable part of the product design process. Ultimately, insurers need to make their own decisions on these issues, acknowledging the importance of their context. Customer satisfaction does not come easily.

A number of questions have emerged in the course of this research that could not be answered with the information available from insurers. Further research is needed in a number of areas, including:

- the effectiveness of different distribution channels and commission models in delivering sales, and the quality of these sales, in terms of persistency rates, for each of these models;
- the take-up and persistency of customers across product variations, for example, the term of policies purchased and the level of cover – and premium – where options are available;
- incidence and causes of policy lapses, characteristics of lapsing customers, and influence of product features (such as surrender terms) on lapse rates;
- the proportion of group members taking up cover made available to them through the group and the persistency experience of the members; and
- customer satisfaction levels and the link to product design.

All of this research requires considerable commitment from insurers and some of it might be difficult to cover in the public domain, but these insights would be of tremendous benefit to others considering a venture into this segment.

9 Improving credit life microinsurance

John Wipf, Eamon Kelly and Michael J. McCord

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Credit life cover – insurance that covers the outstanding principal and interest of a loan if a borrower dies – is the logical starting point for organizations new to microinsurance. It is generally easy to introduce, simple for clients to understand, and seen by financial intermediaries as a complement to their core business. Credit life can help create an understanding of microinsurance and expand demand by building an insurance culture. When borrowers see benefits from such products, it makes them more receptive to other insurance products.

Unfortunately, credit life insurance is often designed poorly and provides little value to the insured client. When products provide little value to clients, the common negative attitude towards insurance is reinforced. Thus, improving the value of credit life products may help improve overall demand for microinsurance.

To understand the status of credit life microinsurance, and to formulate ways to improve the overall quality of credit life products, this chapter responds to the following questions:

- What is credit life insurance and how is it structured?
- Who benefits from this cover: borrowers, lenders and insurers?
- How is good value for clients measured, and is it achieved?
- What are examples of credit life products that provide value to clients?
- How might credit life products be expanded or adjusted to offer greater value to clients?
- What operational considerations are necessary to improve credit life products?

This chapter addresses these questions primarily based on the authors' years of experience working with credit life products. Additionally, to build a pool of similar data, a survey of credit life products was conducted with 30 organizations, intentionally selected because of the diverse characteristics of their products and contexts, including regional representation and varied institutional arrangements. Although the results from this sample are not representative of credit-linked microinsurance products, they are certainly illustrative, reflecting the range of good and bad practices.

9.1 What is credit life insurance?

Credit life insurance is among the most common types of microinsurance (Roth et al., 2007; Matul et al., 2010). The primary purpose of this product is to ensure that the outstanding debt is extinguished if a borrower dies. The product is typically mandatory as a precondition for obtaining a loan from microfinance institutions (MFIs).¹ The product can, however, be designed in different ways and provided through a variety of institutional arrangements.

9.1.1 Types of credit life cover

Basic credit life, which covers only the principal and interest of an outstanding loan on the death of the borrower, is the simplest form, though it can be structured in a variety of ways. Premiums, for example, may be paid up-front, either deducted from or added to the loan, or they may be factored into the loan interest rate and collected throughout the loan period. When they are integrated into the interest rate, borrowers are often unaware that they have cover.

The lenders' approach to credit life depends on their objectives. Some organizations use credit life as a benefit to clients, others as an additional source of income, and others as a building block of more comprehensive cover. For lenders interested in the latter objective, they are likely to provide **enhanced credit life**, which comes in three variations:

- **Enhanced life cover** provides the basic cover plus additional benefits such as a funeral payout.
- **Enhanced risks cover** includes basic cover plus additional risks such as disability cover for the borrower, a personal accident rider, or fire cover for business premises.
- **Enhanced family cover** expands the basic and sometimes the enhanced cover to include death or disability of family members.

9.1.2 Institutional arrangements for credit life

There are a number of institutional configurations for delivering credit life. While the lender is always present as the distributor, the underwriting institution is typically either a commercial insurer, a member-owned mutual benefit associa-

¹ The term “microfinance institution” (MFI) refers to any institution providing credit and sometimes savings services to low-income markets.

tion (MBA)² affiliated with the lender, or a cooperative insurer.³ Sometimes there is no external insurer at all as the lender retains the default risk due to client death, as in the case of Banco Compartamos in Mexico for its basic credit life cover.

Where allowed by regulation, self-insurance by MFIs is certainly an option. The cost of maintaining an internal reserve is minimal compared to the administrative cost of managing collections, bookkeeping, and transfers on the MFI side, and managing client records and claims on the insurer's side. Many lenders retain the risk because it results in better value and faster service, and enables them to adapt the product to suit their borrowers' needs. This is possible only up to a prudential amount. For example, the MFIs of the Confédération des Institutions Financières (CIF) in West Africa self-insure the death risk up to a maximum of 10 million CFA francs (US\$20 792). The CIF plans to establish a life insurance company in West Africa to cover the excess credit life of several major financial institutions.

Some MFIs charge a fee to clients when the risk is held internally and some even set up a reserve for this specific purpose such as a "Reserve for Possible Loan Losses Due to Client Death". These MFIs may charge clients, but the fee is often allocated directly to income in their books. This is both an unhealthy practice and a sign of how insignificant some MFIs really consider their losses due to client death.

From the moment the institution wants to offer more cover to clients, it becomes necessary to cede the risk. As survey respondents noted, besides the legal issue of retaining risk, they were concerned with putting their core capital at risk and not having the technical capacity to manage the insurance cover.

If an insurer is the underwriter, there may also be an intermediary involved. Some intermediaries fulfil only the sales and facilitation functions of an agent, while others design products, pre-process and pre-pay claims, and encode or reformat the operations data to the insurer's specifications. PlaNet Guarantee performs such a role, working as a broker for MFIs, and linking the insurer with a reinsurer. The rationale for intermediaries' existence is to add value for the lender, insured clients and the underwriter. Intermediaries, however, may find themselves squeezed out of this business as margins decrease, and both lenders and insurers decide that they can manage such simple products on their own. For intermediaries it becomes difficult to argue that they really do add value when insurers and/or delivery channels are willing to manage it themselves (*see Chapter 23*).

² Typically this is a risk-bearing organization, either formal or informal, which is separate from the lender and owned by the borrowers themselves.

³ In some countries, the cooperative institutions own an insurance company that focuses on providing products for their primary member-households. For these, there are sometimes special concessions by the regulator such as reduced capital requirements.

9.2 Who benefits from credit life?

Credit life insurance is often criticized because it is perceived as more valuable for insurers and lenders than for insured borrowers. In the early nineteenth century, credit life was promoted in the United States using the slogan “the debt shall die with the debtor”. It was considered disgraceful to leave a burden of debt for surviving dependents or relatives. Moreover, banks were more likely to approve a loan if part of their risk was covered by the borrower being insured. Credit life thus evolved with a clear purpose to protect both lender and borrower. In the context of microinsurance, it is useful to assess the value of credit life from the perspectives of the various stakeholders – borrowers, lenders and insurers.

9.2.1 Borrowers

For the insured household, credit life must settle the debt of a borrower on death without causing financial strain to the deceased’s family. When a microentrepreneur dies, the surviving household members are financially affected in several ways. First, there are the hospital, funeral and burial costs to settle. Apart from being one, if not the main, breadwinner, the deceased is often the skilled manager behind the household business. Thus in addition to losing her productivity, the household suffers from loss of her business skills, experience and expertise.⁴ As the business struggles to survive, the household may resort to selling inventory and liquidating productive assets at discounted prices in order to service the unpaid loan. For a household in this situation, having the outstanding loan settled by insurance is useful as long as the lender halts pressure for loan payment and the insurer pays any additional benefits rapidly.

Insurance protection is also valuable for borrowers of an MFI using the group-lending methodology. When a borrower dies, the MFI can require the remaining group members to pay the debts of the deceased from their savings. This has negative implications for group morale and the risk of losing savings discourages savings growth. Under such circumstances, borrowers often appreciate insurance as an important protection against the death of fellow group members.

Despite these potential benefits, borrowers often express little or no satisfaction with basic credit life products. One reason, as one survey respondent noted, is that “credit life is only moderately valuable because the majority of covered borrowers are not even aware that they have cover”. Since there is often no direct charge to clients for basic credit life, or because the premium is perceived as a fee for obtaining the loan, clients may be unaware of their cover status. In a client satisfaction study in Zambia, MFI clients indicated that they had only learned that they had insurance from the research team (Manje, 2007).

⁴ This chapter uses the feminine pronoun to refer to microentrepreneurs and borrowers as many MFIs primarily serve women.

Borrowers often perceive credit life as a product that benefits the lender, and not them. To understand why, it is important to look at how MFIs deal with credit default due to death without credit life insurance. Because of the stigma and extremely bad public relations that result from collecting debts from a deceased's estate, many MFIs simply write off the loan when a borrower dies. In this case, a transition to insurance would not provide additional value if it only covered the loan.

An improved value proposition would include cover beyond basic credit life so that surviving families receive a financial benefit on the client's death, or the client receives some benefit on the death of a family member and/or cover in the event of another risk. In MFIs that primarily serve women, for example, borrowers tend to be much more concerned about cover for their spouse's life than their own (*see Chapter 16*). Such enhanced and family products are more expensive, but even with the additional cost, they provide greater value to clients if the products respond to their needs and are efficiently delivered.

Value is eventually context-specific, as seen in the case of Allianz Indonesia (*Box 9.1*).

Box 9.1

Impact on clients

In one of the few assessments of credit life products, research assessed the impact of a credit life product offered by Allianz Indonesia. The study found that such a product was not needed because the assumed post-mortem financial crisis did not exist. Community and family support among low-asset Muslim Indonesians was strong enough to largely cover funeral expenses and provide for the bereaved family. This support was driven by the perception of death as a collective risk in the light of the moral economy and hinged on principles of balanced reciprocity. Thus in this case, credit life products did not fill a demand gap for clients. The study concluded that it is important to understand demand before offering credit life or any microinsurance product.

Source: Adapted from Hintz, 2010b.

Even with enhanced risk and/or family cover, the level of awareness and experiences of insured borrowers directly affect the perception of product value. For borrowers surviving a previous loan cycle, or for those applying for the first time, credit life may not seem valuable even if the purpose of the cover is clear to them. Paying a premium for an intangible benefit can be viewed as a waste of hard-earned money because borrowers “know” beforehand that they will survive the term of the loan. Indeed, mortality rates of MFI clientele tend to be significantly lower than those for the average population because the MFI primarily lends to healthy and productive clients. In general, greater appreciation of credit life occurs with increased age, when people have witnessed a benefit payout, have dependents or have benefited from consumer education.

9.2.2 Lenders

For a lender, it is much easier to be positive about credit life insurance. Unlike the borrower who is limited to her individual experience, the lender can evaluate the financial impact of credit life on its entire portfolio of loans. Eliminating the risk of borrower mortality with the cost passed on to the borrower is prudent risk management and established business practice. Lending institutions in the survey appreciated credit life as being valuable for their organization, because:

- it protects the company, shareholders or member-owners, and their loan portfolio;
- it increases fee income;
- there is no need to seek repayment from a deceased borrower's estate;
- offering quality insurance enhances corporate image, increases reputation in their markets, attracts new clients and improves customer loyalty;
- it helps fulfil their social mission in that they help clients and their families to manage risks;
- it enables a broader range of financial services to be provided.

For lenders, credit life – and especially enhanced credit life – can be a competitive advantage, as it was for VisionFund (*Box 9.2*).

Box 9.2

Credit life as a competitive advantage in Cambodia

Cambodia has a relatively high microfinance penetration and significant competition among MFIs. One MFI, VisionFund, uses its credit life product as a comparative advantage. It promotes its loan products as superior to competitors' because the outstanding debt is waived if the borrower dies. In addition, there are funeral benefits for the borrower, spouse and children. "Insurance" is never mentioned in its promotional materials or in interactions with borrowers. The premium is "invisible" since it is embedded in the interest rate. Credit life is regarded as highly valuable by this successful MFI because it has given it an important competitive edge.

Source: Authors.

At corporate level, lenders may promote credit life as a competitive advantage. However, field staff interacting with clients typically do not use this as a marketing advantage and tend to be weak at informing clients of this cover. Sometimes, even the staff are ill-informed. The mandatory nature of basic credit life facilitates this apathy to educating clients about what they are purchasing. Additionally, since basic credit life has proliferated throughout microfinance, its status as a market advantage is questionable. In Uganda, after a few large MFIs began offering enhanced and family credit life products, this level of cover became a market

expectation on the part of clients, who moved from MFIs without cover to those with the product.

In many instances MFIs focus on creating value for themselves and not for their clients (*see Box 9.3*). When MFIs retain the risk of portfolio loss due to borrower death, they often charge significant fees for the service (up to 3 per cent of the initial loan), while facing much lower claims experience. The presence of insurance should mean that lenders could theoretically lower interest rates. The authors, however, found no examples of the presence of credit life products leading to any clear reduction in interest rates on loans.

Box 9.3

Benefit flows in credit life

Richard Leftley, CEO of the multinational microinsurance broker MicroEnsure, relates his experience with credit life and MFIs. “In 2002, most MFIs that we worked with charged borrowers a flat one per cent of the loan value and used the resulting funds to pay off the outstanding loans when borrowers died; no insurer was involved. As we started to implement credit life at these MFIs, we noticed that they continued to charge borrowers one per cent even though the insurance company was charging 0.3 to 0.5 per cent of the loan value. In essence, the MFI outsourced the risk for a lower price, but did not pass the saving on to their borrowers, rather the delta was being booked as revenue. This practice is widespread today, which is a great shame, as we should all be focused on delivering good value for our clients.”

Source: Adapted from Leftley, 2010.

9.2.3 Insurers and intermediaries

The insurers and intermediaries that were surveyed generally stated an interest in credit life products because they:

- are straightforward and thus easy to sell and administer;
- tend to be very profitable, and can enable an insurer to experiment with additional products that might not be as profitable in the short term;
- represent a good entry level into microfinance markets with a chance to establish trust at both institutional and household levels;
- are a good way to create demand and awareness for insurance;
- provide relatively easy access to a large customer base with a potential growing demand for other insurance services in the future.

Insurers and intermediaries usually approach credit life as an anchor of their microinsurance business since it allows them to enter that market with a relatively

easy product. Without much risk, they can learn about the market, understand mortality rates and test controls, while generating significant profits. However, too often, credit life is as far as insurers venture into microinsurance. In these cases the motivations of both insurer and lender are satisfied – profits and portfolio cover – and neither is particularly concerned about the remaining risk-protection needs of their low-income market.

9.3 Quantifying the value of credit life

An important aspect of value is the amount and type of credit life cover one can buy for a given price. An actuary determines this by calculating the average expected claim for each borrower, which is then loaded to derive the premium rate. A similar measure, the incurred claims ratio, can be calculated retrospectively on the basis of claims experience. Intuitively, this indicator, sometimes called the loss ratio, is the proportion of premium paid back to the collective insured borrowers in the form of insurance benefits. In the absence of adverse selection and fraud, a “high” ratio signifies good value for money. Related measures are the incurred expense ratio, which indicates how much premium is used to manage and administer the product, and the net income ratio, which shows how profitable the product is for the insurer. With these ratios, one can begin to quantify value for clients, as illustrated in Table 9.1 (Wipf and Garand, 2010).

Table 9.1

Key performance indicators for credit life			
Indicator	Calculation	Range for good financial value ¹	Interpretation from consumer perspective
Incurred expense ratio	Incurred expenses/earned premium ²	Below 25%	This ratio measures the efficiency of the credit life product. The more efficient it is, the more valuable it can be if the savings on expenses are used to reduce the premium rate rather than increase profit.
Incurred claims ratio	Incurred claims/earned premium	Above 60%	Shows how valuable the credit life product is. A “high” ratio, in the absence of fraud and adverse selection, means the price of cover is relatively “low” (the value is “high”).
Net income ratio	Net income/earned premium	Not more than 10%	Shows how profitable the product is. Profit can be reduced by lowering the premium rate and thus increasing value for money.

¹ These proposed limits on the ratios are the collective opinion of the authors. Note that the sum of the ratios may exceed 100 per cent because interest on reserves increases the net income ratio.

² In accrual accounting, premium is earned throughout the term of a loan in a pattern that reflects the risk of the insurance cover and the cost of administering it. The premium earning pattern is thus independent of how the premium was paid

This chapter assumes the following five characteristics of a “valuable” credit life microinsurance product:

- a) **Relevant:** The product protects a borrower’s household from relevant risks including having to deal with an outstanding loan following the borrower’s death.
- b) **Timely:** The insurer settles the claim in a timely manner before the outstanding loan has an adverse effect on the household’s finances.
- c) **Understandable:** The majority of borrowers understand the product even when it is mandatory.
- d) **Facilitates access:** The lender’s portfolio is protected, which makes it easier for poor households to access credit.
- e) **Value for money:** There is good value for money as defined by the three value indicators in Table 9.1.

To assess financial value, the authors analysed the financial information provided by 17 institutions participating in the survey. These institutions were selected on the basis of the authors’ identification of credit life programmes that in aggregate offer a variety of covers, under a variety of different models, and where management was willing to provide data (a significant challenge). Table 9.2 provides key financial data for these institutions’ credit life operations and relevant characteristics of the institutions, but their specific identities are obscured as a condition of providing the data. Even then, not all requested data was available; for many it was difficult to provide the information because of the accounting methods they used for these products.

The findings are particularly remarkable because of the enormous range of the results. While credit life is commonly assumed to be profitable for insurers and lenders, these results illustrate that this is not universally true. Of the 12 institutions that reported their profitability in Table 9.2, eight were indeed significantly above the 10 per cent target, but two were loss making and thus have significant issues.

Table 9.2

Value for money of credit life programmes (ranked by claims ratio)

Type of organization	Name	Model ¹	Cover	Commis- sion %	Admin exp %	Claims ratio %	Profit % ²	Con- tin- gency % ³	Comment
Unsustainable									
MFI	Alpha	PA	Family	n.a.	n.a.	119	n.a.	n.a.	Not sustainable
MFI	Beta	PA	Basic	n.a.	n.a.	95	<0	n.a.	High rate of HIV+
Value for clients									
Broker/ intermediary	Gamma	PIA	Life and disability for borrower	15	12.5	70	2.5	n.a.	Priced for low profit
MFI	Epsilon	PA	Family	n.a.	n.a.	65	n.a.	n.a.	
MFI	Zeta	PA	Family	n.a.	n.a.	64	n.a.	n.a.	
Takaful intermediary	Theta	PIA	Basic	25	10	60	5	n.a.	Pricing, not actual
Commercial insurer (including Takaful)	Iota	PA, PIA	Mixed portfolio	5–16 varies by account	22	60	approx. 16 average	n.a.	Profit is returned to MFIs (80% for conventional and 70% for Takaful)
Self-insured MFI	Kappa	SI-MFI	Family	0	21	57	8	14	Building up reserves
Poor value for clients									
Cooperative insurer	Lambda	PA, PIA	Mixed portfolio	0–40 (varies)	15	30	25 average	n.a.	
Commercial insurer	Nu	PA, PIA	Mixed portfolio	10	20	28	42	n.a.	
MBA	Omicron	MBA	Basic	25	20	25	20	10	
Self-insured MFI	Pi	SI-MFI	Basic	12	10	24	54	n.a.	
Self-insured credit union network	Rho	SI-CUN	Basic	10	10	22	58	n.a.	
MBA	Sigma	MBA	Basic	n.a.	n.a.	18.5	n.a.	n.a.	
MBA	Tau	MBA	Basic	0	19	13	68	n.a.	
Self-insured MFI	Upsilon	SI-MFI	Extended life for borrower and spouse	18	89	12	<0	n.a.	Voluntary participation
Cooperative insurer	Psi	PA	Mixed portfolio	8	8	11	63	n.a.	Very uncompetitive

¹ PA = Partner agent; PIA = partner-intermediary-agent; SI-MFI = self-insured MFI; MBA = mutual benefit association; SI-CUN = self-insured credit union network.

² For some, profit excludes interest earnings on reserves.

³ Contingency reserve does not include unearned premium or claims reserves.

From the client's perspective, if good value for money includes a claims ratio of at least 60 per cent, only six of the 17 in this sample meet that criterion. It is particularly striking that member-based delivery models (MBAs, cooperatives, credit unions) ranked among the least valuable in the sample. The results suggest that these cooperatives and MBAs do not face competition, and products are often priced to generate additional surplus to build equity and reserves. Some

organizations have limited technical capacity and prefer to price conservatively, while some mimic other products in the market since they do not have the ability to price correctly. Nevertheless, as these organizations are directly or indirectly owned by the insured households, an “excess” surplus should ideally trickle back to members in an indirect manner by way of expanded services and other benefits. For example, CIC in Kenya uses its surplus on credit life to finance other services for its members and clients (*see Chapter 18*).

Members of MBAs are typically required to buy a primary life and accident product as a condition of membership, in addition to the basic credit life required of borrowers. However, for many, this insurance cover is all that they can afford to buy. This reduction in purchasing power illustrates a crucial point about MBAs in the sample providing products with very low claims ratios. The surpluses that client-members are supplying to the MBAs are crowding out the client’s ability to acquire other, potentially more valuable cover.

A review of the products based on the type of cover shows that basic cover in five of the cases falls into the “poor value” group. Though there are enhanced products in each value group, five (50 per cent) of the enhanced products fall within the “value for clients” group, compared to only one (17 per cent) of the basic products. Clearly, in this sample, those offering enhanced products have a stronger focus on providing value to their clients.

Providing balanced financial benefits across clients, lenders and insurers helps to promote value in credit life. Schemes that carefully track their financial results and are aware of the importance of providing good value to the market will realize positive long-term effects on their brand name. A key means of providing better value to clients is by including benefits that have a greater impact on them.

9.4

Existing expanded products

The strategy of using credit life as a profit driver has been historically successful, but recently, in several countries, the credit life market has become more competitive, driving down premium rates and forcing insurers and lenders to rethink their microinsurance strategy. This evolution is good for borrowers, who are seeing a greater variety of benefits and covers offered in response to the suppliers’ desire to retain the business. Because of a desire to provide better value to clients or improve competitive positioning, many organizations have expanded beyond basic credit life in terms of enhancing the cover related to the client, covering additional risks, and/or covering other family members in the borrower’s household.

9.4.1 **Enhanced life cover**

Another common way of enhancing the value of credit life is by making the sum assured the original loan amount instead of the outstanding balance at the time of death. This is done for two reasons: a) to ensure that delinquent loans with accrued interest and penalties are better covered, since death is often preceded by a period of illness; and b) to provide some financial benefit to dependents. This cover almost doubles the premium cost, since the fixed sum assured is about twice that of the declining sum assured. The problem is that, while there is almost always some benefit payable to beneficiaries, the amount is uncertain, and therefore the borrower's preference for a certain fixed benefit for beneficiaries is not met. Some institutions have addressed this problem by combining a declining sum assured with a fixed sum assured term life policy. This provides the benefit of credit life cover with the confidence of a fixed benefit to the family on death.

9.4.2 **Enhanced risks cover**

Another common enhancement is the addition of total and permanent disability (TPD) of the borrower resulting from an accident as a condition for repayment of the loan. This cover tends to be very inexpensive since it occurs so rarely, and hence it adds little value overall, other than possibly providing a perception of greater value. Accidents are somewhat rare, and it is even rarer for someone to survive an accident and remain permanently unable to pursue a livelihood, which is how accidental TPD is often defined. Usually, disability is assessed by a medical professional 90 to 180 days after the accident. If cover is for TPD resulting from any cause including sickness, the value and cost of the additional cover increases considerably.

Although found in some commercial credit life products, temporary or partial disability cover which triggers temporary loan repayments by the insurer on behalf of the borrower is not a common feature with microinsurance. While this type of cover may help people overcome a short-term financial difficulty, controls to combat moral hazard and fraud are too difficult and expensive to manage in view of the small amounts of the loan payments.

A unique variation on this approach comes from a South Asian microinsurer, whose product covers only the borrower, but has the following additional features:

- The sum assured is the disbursed loan amount, which is paid in the event of natural death, accidental death, or total permanent disability due to accident.
- An additional benefit equal to the sum assured is paid in the event of accidental death.

- In the event of permanent partial disability due to accident, the benefit is 50 per cent of the sum assured.
- An educational cash grant amounting to a maximum of 10 per cent of the sum assured is paid in the event of death by any covered event.
- In the event of hospitalization for at least three days, hospital cash amounts to 0.5 per cent of the sum assured per day (with a cap) up to a maximum of ten days during the term (the first three days of hospitalization are not covered).

For the medical portion, pre-existing conditions, maternity and circumcision are excluded on top of the standard exclusions such as attempted suicide and participation in a criminal activity. In the event of death or total permanent disability, the outstanding loan amount is deducted by the MFI from the benefits due.

Another example is provided by Opportunity Uganda Ltd. Opportunity provides short-term loans to a large number of market vendors for purchasing stock. The small shops are located in wet and dry market areas that are prone to many risks, especially fire. Opportunity's credit life insurance protects not only against the death of the borrower but also against fire – if a fire destroys a vendor's shop the insurer will pay off the outstanding loan. Having experienced the devastating economic impact of a market fire on a number of its clients, Opportunity is exploring the possibility of extending fire cover to protect the entire stock of the borrower, not just the outstanding loan. Such cover could be easily added to the existing credit life product with the purpose of protecting the vendor's stock-based equity that has been built up over months or years.

Other examples of cover enhancements include Microfund for Women in Jordan, which provides daily cash assistance in case of hospitalization; Allianz Indonesia, which allows borrowers to insure up to three times the value of the loan; and PlaNet Guarantee, which provides indemnity in the event of death due to road accident in Cambodia.

9.4.3 Enhanced family cover

Since the financial crisis for a borrower occurs when family members experience insurable events, some lenders have pushed for credit life to cover other persons besides the borrower. Most often the spouse is covered, and occasionally children and parents. Sometimes, as with the AIG Uganda's group personal accident policy, benefits are graduated with the spouse and children being covered at a reduced level, 50 and 25 per cent respectively, of the borrower's sum assured in addition to loan repayment.

An enhancement for family cover usually involves full or partial repayment of the loan if the spouse of the principal insured dies. This is valuable cover since the spouse is often an important breadwinner. Sometimes the spouse is the actual user of the loan proceeds, as in the case of a farmer who sends his wife to attend group meetings as he must tend his fields. Additionally, many households rely on two incomes and when one of the breadwinners dies this has a dramatic impact on household well-being. Covering the other breadwinner can help stabilize the household finances, or at least mitigate the economic damage. Other benefits offered include funeral cover for spouse and children (VisionFund in Cambodia), and disability for the spouse (MicroEnsure in Philippines).

Once the family cover is added, however, a dramatic shift in information asymmetry occurs because, although the client is known to the lender, the risk of insuring the family and especially the spouse is less clear. Microfinance clients are often women. Husbands of low-income women tend to have riskier work as well as riskier lifestyles. Thus, the cost of covering spouses can be significantly higher than covering the client. In two examples, the AIG product in Uganda experienced a mortality ratio of one female client death to four spouse deaths (McCord et al., 2005a), and CARD MBA experienced one client death to 3.2 spouse deaths (McCord and Buczkowski, 2004). Often, to manage the added risk, the insurer begins with a moderate cover for the spouse and increases it as experience builds up and the true risk is better understood over time. Such cover, though potentially challenging, is of great benefit to the client.

It should be understood that not all product innovation is successful. One South-East Asian MFI initially designed its credit life product on the basis of market research, from which it concluded that a savings component was important. The product was offered on a voluntary basis and consisted of a death and total permanent disability cover for the borrower amounting to the original loan amount. From this, the outstanding loan at time of death was deducted and the balance paid to dependents. The spouse and children were also covered, their cover amounting to 50 per cent and 25 per cent of the borrower's cover respectively. The savings component was 50 per cent of the premium, which was returned with interest when the client left the MFI. The main design problem was that the entire premium was deducted up-front from the loan, which made it unattractive to the market. Hence take-up was low. Eventually, to reduce the premium deduction, both the savings component and the cover for children were dropped. Sales of the product still remain too low for sustainability, mainly because market awareness is low, participation is voluntary and the premium remains payable up-front.

9.4.4 Provider considerations

Insurers and intermediaries often offer several versions of credit life cover and some have the capacity to develop a specific combination of features that their distribution partners request. Lenders should be aware of this opportunity for flexibility and innovation, and utilize it to ensure the evolution of products to enhance value for their clients. Offering such a variety of products requires flexible administration systems and actuarial capacity. Other insurers, such as “Iota” in Table 9.2, offer their partners a basket of pre-priced components and allow them to choose a suitable combination.

Takaful credit life may be regarded as an added benefit since it permits cover within the boundaries of religious beliefs and because it may result in additional secondary services. Takaful principles require that much of the surplus from risk-pooling be returned to the insured and, while partners have the ability to do this directly, they may opt for indirect methods such as adding an additional service or reducing the cost of existing services. One insurer, Allianz Indonesia, offers both conventional and Takaful (i.e. Shariah-compliant insurance) versions of credit life. In line with Shariah principles, it returns as much as 70 per cent of the profits on completed business to its distribution partners.

Some MFIs prefer not to expand credit life beyond its basic form for a number of reasons; some, like “Lambda”, have very well developed banc-assurance distribution systems. Through a large number of MFIs, cooperatives and bank branches, it retails a range of life and non-life products to those institutions’ customers. In these cases, clients would still have the opportunity to purchase the additional products, but would have more flexibility (at least as a group) to select the most appropriate combination of products. The preference of these providers is for simple credit life that insures only loans, and customers are expected to voluntarily buy extra insurance products to suit their varied needs.

Equity Insurance Agency in Kenya employs such a strategy of offering a variety of products to its clients and limiting its mandatory cover to basic credit life. For Equity, this requires spending a great deal of its resources on educating its target market to improve understanding and stimulate demand for micro-insurance.

9.5 Operational aspects

Basic credit life cover can be simple to administer, especially once the operational details are clearly structured. As innovations are introduced to offer value to clients however, the level of complexity increases and additional operational issues should be considered. This section looks at a number of operational issues that should be addressed before a product is introduced.

9.5.1 Period of cover

Microinsurers need to be careful with the maturity of basic credit life products. Does the policy terminate at the scheduled loan due date? Not all clients are punctual in delivering full payment. Some institutions offer two weeks or more as a grace period to retain the cover when the client is late in making the final payment. Some institutions charge a periodic (weekly or monthly) premium, rather than a single premium up-front, which allows for cover regardless of the actual repayment period. Others automatically require up to two extra months of cover beyond the loan maturity date, possibly to bridge periods between loans.

Tying expanded benefits to credit life can exacerbate this timing problem because there is a lack of parity between risk durations. Risk of credit default due to death has a fixed term, as the loan has an expiry date by which it is expected to be fully repaid. Yet the risk of financial crises due to breadwinner death or loss of the business is continual. Thus, linking the period of cover to the loan can be a problem, especially if people do not continually borrow.

What happens if a loan is repaid early and insurance covers more than the outstanding loan? For some products, cover automatically ceases. For others with enhanced benefits, cover continues to the end of the scheduled loan term. Some organizations provide a partial refund of the premium. Given the small premiums of even expanded credit life, the administrative cost of refunding a small piece of a tiny premium might be excessive. CLIMBS in the Philippines lets its distribution partner decide whether the premium should be partly refunded; if no refund is due, then cover continues until the original expiry date. As CLIMBS has good administration software, it is relatively simple to provide the refunds but it must then claw back some reinsurance premium and commissions as well, requiring some administrative effort.

9.5.2 Premium collection and financing

Premium collection can be effectively managed using several methods. For the majority of schemes, the premium is paid **explicitly** by the client, typically with a single premium at the start of the loan term. Collection from the client is usually in the form of a deduction from the loan or is added to the loan amount and amortized. These methods add interest expense to the cost of the credit life cover for the client. Other methods include:

- periodic withdrawals from a savings account (practised by some credit cooperatives)
- premium payable with each loan payment
- premium embedded in the loan interest rate

- monthly premium payable based on total value of the loan portfolio (bulk credit life where the institution is the beneficiary and policyholder)
- term insurance bought for clients by an MFI
- self-insured through an internal fund sourced from MFI profits

Different methods have an impact on operational efficiency. Depending on the level of automation, multiple premium payments may cause additional operating costs. Payment methods also have an impact on marketing. When the client requests a loan of a certain amount and receives less due to the premium deduction, confusion can ensue. Furthermore, if the cost of insurance is fully charged up-front, it can drive clients to competitor MFIs, especially if insurance cover is not highly valued.

The majority of programmes base their premium rates on the loan amount or sum insured (with enhanced and family products). This effectively links the premium to the financial risk and capacity to pay. A few schemes have a single fixed premium for all clients irrespective of the loan amount or term. This arrangement is easier to implement and explain, but it raises equity issues. If there is a range of loan sizes, clients with smaller loans and shorter terms subsidize the larger and longer loans. In one example, a self-insured MFI initially started out with a single fixed premium but after a few years its members became more aware of the inequity and many complained. Today it calculates premiums based on the initial loan amount.

An interesting case from an actuarial viewpoint arises when the premium is embedded in the interest rate. For example, VisionFund (Cambodia) offers fixed funeral benefits for the family, but a monthly premium is charged on the outstanding balance of the loan (loan repayments are made monthly). With inflation and the improvement in the economic situation of borrowers, the average loan sizes increase over time, and hence the base on which the premium is calculated continues to grow while funeral benefits remain fixed. This requires frequent re-pricing and adjustment of the rate (at least every 12 to 24 months). The organization collects very good data to permit accurate actuarial analysis.

9.5.3 Education and promotion

A very important distribution function is to educate clients about the credit life product that they receive to ensure that the borrowers and beneficiaries understand the cover, terms of cover, and what to do in the event of a claim. Most information is provided verbally during the loan application process and many institutions, especially those with enhanced and family cover, offer explanatory materials such as brochures. Some, like MicroEnsure in the Philippines, use a formal financial literacy training tool as well as educational comic books.

The focus of insurance managers interviewed for this chapter appears to be on promoting their products to their distribution partners. Other than Micro-Ensure, it is not clear to what extent they assist their partners with developing education methods. One intermediary complained that with a small commission it is left to do everything on its own without any help from insurers.

One insurer in Ghana said that he did “not want to tell his clients that they were covered because they will make claims”. If credit life is expected to be of benefit to clients and serve as the foundation for an insurance culture, institutions must make sure clients understand the benefit they have in working with an institution that offers quality credit life cover. Demand for microinsurance can only come if the market understands what it is buying and sees that the obligations under that insurance contract are met.

9.5.4 **Organizational capacity**

Many organizations know what innovations their borrowers would like, but the MFIs often do not have the capacity to change processes or systems to accommodate expanded versions of credit life. Capacity self-assessment is tricky in itself, as institutions often think they have more capacity than they do.

MFIs typically have limited technical capacity in microinsurance and have little interest in developing such capacity given that their core competency is in credit and savings. Some have access to expertise through their partners (insurers or intermediaries), while others source expertise from microinsurance technical resource centres and actuarial consultants.

Capacity can be greatly enhanced with systems and software to track activity. Those without capacity should develop these systems because even credit life becomes complicated when it is enhanced with additional covers.

Institutions that have sufficient capacity sometimes face other challenges that prevent them from making changes. One insurer with a successful Takaful product notes that it has sufficient capacity, but finds it difficult to persuade shareholders and management to prioritize the development of new microinsurance products. Other reasons for limited expansion include:

- Desire to focus on achieving much greater outreach before adding additional products.
- SICL in Sri Lanka remains conservative because there are only two actuaries in the country, and neither has microinsurance experience. Thus product expansion carries significant additional risk that it is unwilling to take on.
- Some mutuals are still focused on building up a surplus and reserves before venturing into new products.

- Some institutions claim their customers are satisfied with the basic offerings and are not aware that there is demand for anything else.

9.6 Conclusions and recommendations

Borrowers enrolled in group liability models, those with relatively high-value loans (which lenders are not willing to write off), and those in cultures that consider leaving debt after death as taboo, may benefit from credit life insurance. In most cases, however, credit life remains a product seen as benefiting the lending institutions. The financial value to clients is often poor with credit life, especially for cooperative-based programmes. For cooperatives, the reasons for poor value include limited competition, a policy of building up surplus and contingency reserves without infusing external funds, lack of focus on providing financial value due to complacency, and cautious overpricing due to a lack of actuarial expertise.

The involvement of many parties – lender, broker, insurer and reinsurer – can add inefficiencies to credit life products. Cases where lenders manage the credit life on their own have potential to keep costs much lower, but are frequently focused on fee generation rather than value creation.

There is a demand from clients for innovation beyond basic credit life. The value of credit life is significantly improved when there is enhanced cover available and the loss of family members is added. Product expansion typically occurs by adding cover of additional risk events (as with total permanent disability), an increased cover amount (such as cover of three times the loan amount), other insured persons (preferably the spouse), or insurance for other assets (such as the home). Voluntary credit life insurance may also lead to improved products, as they require a positive purchase decision from clients, but such products have proved difficult to sell.

There are often constraints on expanding credit life products, such as technical capacity, financial capacity, management requirements, an unclear business case and price sensitivity in the market. Front-line organizations may cede or retain the insurance risk depending on their situation and their plans for micro-insurance product evolution. Some strive to reduce cost and improve value, some lack access to alternative options, and others seek to optimize their profit.

The structure of the product – credit life as a stand-alone product in contrast to an enhanced product with family cover and/or cover for other risks – has a considerable impact on operational issues. These issues include continuity of cover, premium calculation and collection methods. They need to be considered before the introduction of the product to ensure clarity and to minimize conflicts. Product adjustments to include families, or at least spouses, need to be carried out carefully and must factor in claims controls and pricing issues.

Insurers and lenders may benefit from credit life premiums at first, but the benefits should be utilized to create an array of products that could be subsidized from the funds generated by the credit life product. However, the evolution commonly stops at basic credit life and does not continue to include products that clients may value. Where this evolution progresses, insurers, lenders and borrowers often benefit, though such benefits should not be assumed.

In conclusion, this chapter makes several recommendations about the development and implementation of credit life products:

- Credit life should be seen as a start and not an end. Clients across the globe can benefit if insurers and lenders learn from the basic credit life products and use that learning to expand options available to clients.
- Basic credit life (including with spouses) should be treated as a stand-alone product and priced relative to loan volume. Other products should be priced on the basis of their specific risk. These are often priced together and because of the different risk characteristics this makes little sense.
- Administration of credit life products should be simple, with active effort made to reduce costs. Savings should be passed on to clients either through lower premiums or through an evolution of microinsurance products to provide greater benefits.
- In most cases, basic credit life can be provided efficiently by lenders as an adjunct to their “Reserve for Possible Loan Losses”. There should be no legal issues barring lenders from providing this, as credit life simply covers default in the event of death. Where there are very large loans, significant potential for catastrophic loss or a real expectation and active plan to enhance the credit life to respond better to clients, there is value in passing on the credit life product to an insurer. Otherwise, it is more efficient if the mortality risk of the portfolio is borne by the lender.
- Examples in this chapter demonstrate that credit life products can be flexible and responsive to the needs of insurers, lenders and clients. The lender needs to assess its role in providing valuable products to clients and should assume the responsibility of representing its clients’ needs. Basic credit life is not sufficient for the needs of low-income clients. Credit life offers insurers and lenders an entry point to assist clients in managing their risks in an efficient and effective manner. This opportunity should not be overlooked.

10 Funeral insurance

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This chapter considers the current and potential role and value of funeral insurance for low-income consumers based on evidence from selected countries. Despite the different experiences across countries, the following important themes emerge:

1. **Funerals and related expenses are often prominent** in the minds of low-income households and, accordingly, many households place high priority on finding ways to deal with funeral expenses and are willing to dedicate part of the household income to funeral cover.
2. **There is a strong link between funeral insurance and the underlying service, namely the funeral.** This link to a tangible service is an important driver of demand as well as, in some cases, of the choice of distribution channel used.
3. **Funeral insurance is provided in both formal and informal markets.** In some instances, funeral parlours self-insure – that is, informally act as insurers. Informal funeral insurance also occurs where groups of people pool funds to help cope with funeral expenses. Funeral insurance is an important product in some formal markets and is at the forefront of many commercial insurers' drive to reach down the income spectrum. As such, it has been one of the focus areas for alternative distribution innovation.
4. **Funeral insurers are challenged to deliver better value to customers.** As section 10.3.1 indicates, the combination of strong demand for funeral cover and the close association with funeral services may lead to consumer vulnerability. A number of trends are, however, starting to emerge to counter abuse and provide enhanced value.

The sections below consider these themes in more detail.

10.1 Funeral cover matters

Funeral insurance is a term life insurance policy where the benefit is used to cover funeral expenses. The benefit can be in the form of a funeral service, a cash benefit that can be used to help pay for a funeral, or a combination of the two. Outside credit life insurance (*see Chapter 9*), funeral insurance is the most prevalent form of microinsurance in a number of countries (*see Box 10.1*).

Box 10.1

Mapping funeral insurance



A survey of microinsurance practitioners in **Africa** found that 14.7 million people in 32 African countries were covered by microinsurance products. South Africa, where funeral insurance is by far the biggest microinsurance product, accounts for more than half of this (8.2 million). Survey respondents were providing life cover to 9.1 million low-income persons, of which 6.2 million had funeral cover (Matul et al., 2010).

Dercon et al. (2004; 2006) highlight the history, prevalence and social role of informal group-based funeral insurance in **Ethiopia** and the **United Republic of Tanzania**. Dercon et al. (2008) find that nearly 90 per cent of rural households in a relatively representative sample of the rural Ethiopian population belong to at least one *iddir*.

In **Kenya**, survey data show that up to four million adult Kenyans are part of a society or group that fulfils a welfare function such as the provision of a funeral payout on death in the family or payment of hospitalization costs (FSD Kenya, 2009).

The latest survey data for **South Africa** (FinMark Trust, 2009) show that 43.5 per cent of all adults have some form of life cover. Of them,

- 45 per cent indicated that they have funeral cover through a burial society; and
- 27 per cent indicated that they have funeral cover that was bought from a retail store.

Eighty per cent of the South African Financial Diaries sample (Collins et al., 2009) had at least one form of funeral cover and most of them had more than one:

- 26 per cent of households had a formal funeral plan;
- 57 per cent of households belonged to a burial society; and
- 24 per cent had some kind of policy with a funeral parlour.



A study on microinsurance in **Colombia** (Cáceres and Zuluaga, 2008) quoted 2006 data by the Colombian industry association which estimates that 24 per cent of the 2.7 million microinsurance policies are for funeral insurance. In addition, industry sources estimate that the informal funeral cover market, provided through funeral service providers, could serve up to three million clients.

Though no hard data is available on the reach of informal funeral cover provided outside of the insurance industry by funeral homes in **Brazil**, industry players estimate that as much as 20 to 25 million people have funeral cover – the bulk of which covers low-income persons (Bester et al., 2010).



A similar study in the Philippines (Llanto et al., 2008) estimated that about half of the members of the 22 000 active financial cooperatives (or about 1.2 million adults) were covered by informal, in-house funeral insurance, which equated to roughly 41 per cent of the total microinsurance market. In addition, informal funeral groups known as *damayan* funds are widespread.¹

Why is funeral insurance so popular in the countries reviewed? A number of social, cultural and economic factors contribute to the demand for such insurance.

Paying last respects. Some cultures attach great importance to a dignified funeral. The risk of death and the need to find ways of providing for the related expenses are constantly on people's minds. In some cultures, funerals are seen as essential to honour the dead. For example, in South Africa a dignified funeral is given high financial priority as part of the cultural belief in the importance of honouring ancestors. Expensive funerals that include food and transport for those attending the funeral are the norm. Market research conducted by Alternative Insurance Company (AIC) in Haiti (Nabeth and Barrau, 2010) likewise showed that Haitians believe that a dignified funeral is essential to ensure that the soul of the deceased will look after them. As one focus group respondent remarked, "I also want a brass band for my funeral. I won't entertain the idea of not having a brass band; when I'm in my coffin, I will take my leave to the rhythm of a brass band!"

Funerals are also an opportunity for relatives to keep in contact and maintain social ties. There may be social pressure to have an elaborate funeral ceremony, just as in other cultures an expensive wedding ceremony – relative to the income of the family – may be important. Even in cases where municipalities offer free burials for those who cannot afford a private burial, some focus group respondents indicated that the family's pride would not allow a "pauper's funeral". The cultural significance of funerals is an important driver of insurance demand but, as discussed later in this chapter, it is also a driver of vulnerability.

¹ "*Damayan*" is a Filipino word that means "to console", "to empathize with the other" or "to be a part of" a certain unfortunate or unforeseen event. This comes from the local practice of helping one's neighbour who might be in great need. In practice, each individual in a *damayan* fund voluntarily pledges and contributes a certain amount to a fund that will be given to the aggrieved party, who is likewise a contributor to the fund. Membership of the fund is voluntary and the benefits are not pre-determined but contingent on the funds collected.

Living in the shadow of death. Funerals are not only important culturally, they are also a practical reality. Focus group discussions in Brazil, Colombia, Haiti, Kenya and the Philippines indicated that the risk of death is a primary concern for low-income households because of the serious financial implications. Ethiopians often regard drought as the primary risk facing individuals. Focus group participants, however, regarded drought as “in God’s hands” and instead focused on the financial risks of death and illness in considering coping strategies. In the *Financial Diaries* from South Africa, death affected more than four-fifths of the households during the study year and funerals were by far the most common financial emergency (Collins et al., 2009). In Zambia, when asked why they are most concerned about death risks, one focus group participant remarked: “It just comes suddenly. Even today a funeral can happen.”

This prioritization, however, is not universal. In India, the risk of death was not emphasized in focus groups. Rather, health risks were the top priority. In Uganda, likewise, the risk of death was not ranked highly. In some countries such as Côte d’Ivoire there is a difference according to tribe and religion, and in majority Muslim countries such as Senegal funerals are not considered important at all.² In such environments, where elaborate funerals are not the norm, there are nevertheless other costs associated with the death of a family member that imply that similar risk cover (even if not called funeral insurance) may still be of value.

Matter over mind. In some countries, people are reluctant to talk about death. Buying funeral insurance may even be regarded as bad luck. As one focus group participant in Brazil remarked, “I don’t like to speak about death. It’s like someone is cursing me. I immediately change the subject. Insurance! Don’t even think about it!”

Surprisingly, funeral insurance is sometimes even popular in countries where people are reluctant to talk about death. This can be regarded as a feat of pragmatism over cultural taboos. Focus group research in Brazil revealed that people tend to take out funeral cover on relatives to avoid the financial impact of a funeral. They therefore have an insurable interest in the life of relatives for whom they would be expected to make a funeral contribution. Funeral cover then becomes an income-smoothing strategy. This holds true even for wealthier individuals. In Indonesia, McCord et al. (2005b) noted that wealthy people were joining *arisans*, local multipurpose social assistance groups, so that funds from the *arisan* could smooth the demands on them from others, and create a mechanism whereby relatives and others are not demoralized by the frequent need to approach the wealthy for help.

² Source: Discussion with CGSI Consulting.

A substantial financial impact. Though there is variation across countries, it is commonly accepted that a funeral is a substantial expense:

- In Ethiopia, a funeral can cost up to a quarter of annual income (Dercon et al., 2008).
- In Brazil, funeral insurer SINAF estimates that the average household spends approximately one month of household income on just a regular funeral, increasing to more than a month's wages for more expensive options.
- In Haiti, market research³ found that a mid-range funeral costs between US\$1 000 and US\$1 300, which is roughly equivalent to the GDP per capita (IMF, 2010).
- Roth (1999) found that funerals in one South African township cost approximately 15 times the average monthly household income. The South African *Financial Diaries* suggest that households spend about seven months' income on a single funeral (Collins et al., 2009).
- In Zambia and Kenya focus groups confirmed that funerals are a very big expense. The cost of the funeral feast and transport for the guests often exceeds that of the funeral service itself, a phenomenon that is also borne out by the South African *Financial Diaries*.

Not just the expense of a funeral. While the importance and cost of the funeral is emphasized above, it is not the only cost stemming from a death in the family. Debts have to be settled, day to day expenses have to be paid and visiting relatives need to be fed, often resulting in a multilayered approach to managing the costs (*see Box 10.2*). Where sickness preceded death, medical bills may already have drained family savings or entailed taking out a loan. Where the deceased was a breadwinner, the loss of income will furthermore present a major challenge. Even if the deceased was not a breadwinner, there can be significant lost earnings during the mourning period, as organizing a funeral and hosting relatives may result in inability to work for weeks.

Box 10.2

Why have multiple funeral insurance policies?

“As a person you have needs, there is a hierarchy of needs. Socially you need to have money should something happen – so you need the burial society, and then you need the undertakers who will take care of the funeral. The money from the insurance company takes time to pay out so whenever that money comes, you can settle all your outstanding bills, so it is worth it. It's for peace of mind in a way.”

Source: South African focus group participant.

³ By CGSI consulting, for Alternative Insurance Company Haiti.

Coping with the cost. The financial shock of the funeral has to be managed in some way. Market research indicates that people use a variety of coping mechanisms, including drawing on savings, taking out loans, calling on family and friends for contributions or selling assets or business inventory – often, due to the time pressure, at less than the asset or stock is worth. An extreme coping mechanism mentioned in focus groups in Zambia was taking children out of school to help in the business or collect money.

An example from the *Financial Diaries* research conducted in South Africa illustrates the variety of coping strategies employed (see Table 10.1). When the brother of one of the respondents died, she used numerous ways to cover the expenses of the burial. While contributions from family and the community are a reliable coping mechanism mentioned time and again in the market research, there is also consensus that it is simply not enough. Generally, the market research confirms that many of the coping strategies are either unreliable or will not be sufficient by themselves and may plunge people (further) into debt. Furthermore, where families and the community contribute, the net effect may be a reduction in income for the whole community over time. Some form of funeral cover is therefore often regarded as non-negotiable to respondents in market research.

Table 10.1

Thembi's coping strategies

<i>Sources of funds</i>	<i>US\$</i>	<i>Uses of funds</i>	<i>US\$</i>
Payout from burial society	154	Undertaker	538
Contribution from relative	231	Tent	91
Contribution from relative	154	Pots	35
Contribution from relative	154	Food	649
Rental of cooking pots by relative	35	Sheep	100
Purchase of sheep by relatives	100		
Borrow from aunt's burial society (no interest)	154		
Borrow from cousin's savings club (30 per cent per month)	92		
Borrow from cousin (no interest)	108		
Use income (social grant money)	92		
Use deceased brother's grant money	49		
Total	1 414		1 413

Source: Collins et al., 2009.

10.2 Key characteristics of funeral cover

Now that it has been established why people want funeral insurance, this section considers the nature of funeral insurance in more detail. What makes funeral insurance different from other types of microinsurance? What are the market’s salient features?

10.2.1 One product, many providers

As illustrated in Table 10.2, funeral insurance is provided by a variety of risk carriers, both cooperative and corporate, informal and formal.

Table 10.2

Types of funeral insurance providers

	Formal	Informal
Mutual	Cooperative insurers Examples: Solidaria and La Equidad in Colombia	Community risk-pooling groups Examples: <i>Iddir</i> , <i>damayan</i> funds, burial societies, funeral associations
Corporate	Commercial insurers Examples: SINAF (Brazil), Sanlam Sky, Hollard (South Africa), AIC (Haiti)	Funeral undertakers Examples: funeral homes in Brazil or Colombia, undertakers in South Africa, certain pre-need companies in the Philippines

As part of the **formal** insurance market funeral insurance is provided by both commercial insurers and mutual or cooperative insurers. Either mutual or corporate entities can also provide **informal** funeral policies:

- Informal insurance provided by **mutual** entities includes the in-house funeral cover provided by cooperatives in the Philippines that are not registered insurers, or the informal risk-pooling groups found in various guises in different countries: *iddir* in Ethiopia, funeral associations or funds in Zambia, *damayan* funds in the Philippines, welfare societies in Kenya or burial societies in South Africa.
- Informal funeral insurance is **corporate** where funeral service providers, who are commercial rather than member-based organizations, carry risk in-house. Even if such undertakers are registered as a company or partnership (that is, are formal entities), the funeral cover provided will be informal, and possibly illegal, if it is not underwritten by a licensed insurer.

10.2.2 Is it insurance or not?

Where funeral insurance provides in-kind benefits, namely a funeral service, such benefits sometimes fall outside the regulatory definition of insurance. For example, in Brazil, Colombia and Kenya, funeral assistance provided in kind is explicitly excluded from the regulatory definition of insurance.⁴ The market is therefore not subject to insurance regulation or supervision. In other instances, informal risk-pooling where there is no contractual guarantee for the benefits provided, or where groups are smaller than a certain threshold size, is implicitly not regarded as insurance. This is for example the case for burial societies in South Africa or, until recently, *damayan* funds in the Philippines.⁵ It is therefore legal for them to continue to operate informally.

Such intentional exclusion of certain activities from the formal insurance market is known as regulatory forbearance. Regulatory forbearance can be in recognition of the low insurance risk posed by certain practices, or can come about due to pragmatic concerns, for example a lack of supervisory capacity to enforce insurance regulation across thousands of groups. It can even be the result of lobbying by strong industry groups. In Brazil, for example, recent attempts to incorporate funeral assistance into a microinsurance bill were thwarted by funeral home lobbying of Congress.

10.2.3 Salient underwriting features

Funeral insurance is essentially an entry-level, simple and affordable life insurance product. There are a number of common product design elements:

- **Group pricing.** Funeral insurance is most often priced and adjusted on the experience of groups, even if sold individually. That means that there is limited or no individual underwriting, which helps to make the premiums affordable.
- **Renewable.** As with other microinsurance products, insurers' lack of experience with the target market means that they may have limited actuarial data on it, in turn implying that it may be difficult to get pricing exactly right. Due to this uncertainty, insurers are generally (though not always) reluctant to commit to a whole-life/long-term price guarantee or contract, preferring to opt for renewable

⁴ In Colombia, a 2006 opinion issued by the Financial Superintendence (based on a 2003 constitutional court judgment) held that the policies provided by funeral service providers fell outside the definition of insurance in the Fundamental Law of the Financial System. These providers therefore operate on an unregulated and unsupervised basis. In Brazil, CNSP Resolution 102/2004 differentiates between "insurance cover" and "assistance services" and allows funeral assistance services to operate outside the definition of insurance as it entails in-kind benefits (assistance services) rather than monetary reimbursement in the event of a claim. In Kenya, the definition of insurance excludes all benefits in kind. Funeral benefits are explicitly mentioned under this exemption.

⁵ Note that legislation passed in 2010 requires *damayan* funds to be registered. They may therefore no longer operate informally with the sanction of the regulator.

term cover. This gives the insurer the option of not renewing the contract when it expires or adjusting the price on each renewal in line with the risk experience of the group. Many funeral policies are therefore renewable monthly or annually.

- **Waiting periods to counter anti-selection.** Where there is no individual underwriting, anti-selection may be a challenge. People may be prone to buying funeral insurance on the life of a relative who is ill or dying. Such anti-selection is typically countered by waiting periods. Waiting periods of up to six months are common practice in the funeral insurance industry. For example, a policy may be structured to cover only accidental death for the first six months, with no claims for natural death allowed. From month seven onwards the policy will cover all life risks. Another method to counter anti-selection may be to increase the schedule of benefits over a period of, say, three to five years, for example by paying only 10 per cent of the benefit in the first year, 25 per cent in the second year and so forth.
- **Limited exclusions.** Though some exclusions may apply, funeral insurers tend to limit exclusions, for example for pre-existing conditions, as they are complex to communicate to prospective clients and costly to enforce. Instead, to keep the policy as simple as possible, insurers tend to price for the risk of anti-selection associated with no exclusions, or to manage it through the imposition of a waiting period.

10.2.4 The nail in the coffin

Perhaps the quintessential element of funeral insurance is its close association with the underlying funeral service. In some cases, the benefit provided will be a funeral service rather than a cash payout. Even where there is a cash benefit, it is the need to pay for the underlying funeral service that drives the demand for funeral insurance. The link with funerals matters on three fronts: tangibility, distribution and self-insurance.

Tangibility. The fact that benefits are often described in terms of a funeral service of a certain standard makes funeral insurance very tangible in the eyes of consumers. Low-income consumers place high value on tangible benefits. For budget-constrained individuals the opportunity cost of paying insurance premiums is high. Consequently, the promise of a sum of money that may or may not be enough to cover the expenses at the time of need may be less enticing than the assurance that their expenses will be covered or that certain necessities will be provided in the event of a certain peril. Tangibility is also becoming popular as a means of communicating value for other types of microinsurance. Apart from funerals, tangible benefits include grocery baskets or coupons, discounts at certain stores, the replacement of an insured item, or payment of school fees or other bills for a predetermined period. Increasingly, funeral insurers are adding

such other tangible benefits to the funeral insurance offering to enhance the clients' perception of value. For example:

- Hollard (South Africa) now offers a funeral insurance product that provides a rental car for making funeral arrangements, a certain amount of mobile phone airtime (once again for making funeral arrangements) and payments towards groceries for six or twelve months after the funeral – all in addition to the lump-sum cash payout for the funeral.
- In Viet Nam, where talking about death is still a cultural taboo, a composite product that combines funeral cover with hospitalization cover, the provision of an ambulance for emergencies and the payment of school or pre-school fees could be popular, according to focus groups led by Groupama Vietnam.

Distribution. Given the link to the funeral service, stand-alone funeral insurance is often distributed through the funeral service provider in the markets reviewed.⁶ Distribution through the undertaker reduces distribution costs and may facilitate take-up: people are clients of the funeral home and regard insurance as a way of pre-funding the funeral. The flipside, however, is that an under-developed funeral services market may undermine demand for funeral insurance. Likewise, customers may not be happy with the level of service received in kind.

Self-insurance. As mentioned above, in some cases undertakers act as insurers of their own book without being licensed insurers. Examples include some pre-need companies in the Philippines that have their own chapels and crematoria and provide life plans, “death care” plans or cremation plans without buying a guarantee for the risk from an insurer. Another example is the funeral homes or cemeteries in Brazil that sell funeral plans. Where this is the case, specific consumer vulnerabilities may arise (*see section 10.3.2*).

10.2.5 Alternative distribution

The fate of funeral insurance is not solely linked to funeral service providers. Funeral insurance is the source of much activity and innovation in the commercial insurance sector's efforts to develop viable products targeted at the low-income market. Specifically, the funeral insurance market is seeing substantial developments in alternative distribution channels.

⁶ Note that this phenomenon is found in some countries, notably Brazil, Colombia and South Africa, but does not account for the bulk of the funeral insurance market globally. In most countries, funeral insurance is simply sold by insurers through traditional or alternative distribution channels and benefits are provided in cash rather than in kind. In such cases, funeral insurance may also be a rider on or component of a broader insurance policy

Mobile phone channel. Term life or funeral policies, being affordable and simple, are one of the first insurance products introduced through mobile network operators. For example, mobile operator Tigo in Ghana provides free funeral insurance cover as an incentive for buying airtime (the more airtime you buy, the more cover you receive). Not only does this instantaneously extend funeral insurance to millions of customers, but it is hoped that it will provide an introduction to the concept of insurance that will enable the company to sell more complex, voluntary insurance products to its customers in the future. The model uses SMS and media campaigns to inform clients of the amount paid out in claims and the fact that payments were made within 48 hours of receiving the necessary documents. These campaigns aim to overcome negative perceptions of insurance.

Another model involves offering mobile network customers the option to buy insurance voluntarily, using their phones as a premium payment platform. Besides using mobile phones to pay premiums, a number of insurers are also harnessing the mobile phone to communicate with clients, for example to inform them that premiums are due (*see Chapter 24*).

A funeral off the shelf. Off-the-shelf funeral policies are another example of alternative distribution. In South Africa, for example, funeral insurance is the only product that the market is familiar enough with for it to have become commoditized. That means funeral insurance can be sold off the shelf through passive sales techniques (*see Chapter 22*), relying on consumers to purchase it without face-to-face, active sales by an agent (*see Box 10.3*).

Box 10.3

Alternative distribution: Pep-Hollard, South Africa

Pep is the largest low-income clothing retailer in South Africa. It has teamed up with innovative insurer Hollard to provide funeral insurance sold off the shelf at premiums that start from around US\$5 per month for a funeral policy covering the whole family, with a benefit of around US\$1000 per person. The “insurance starter pack”, as it is called, contains a policy card, the policy document and other information. The cashier captures the buyer’s basic details and a call centre then phones the client to activate the policy.

The customer is given the choice of a number of options with regard to the benefit level and the number of people to include as lives assured. There is also an option to cover just elderly parents. Each policy option pays out a cash amount that can be used towards a funeral or for any other purpose at the discretion of the beneficiary.

Source: Adapted from Smith and Smit, 2010b.

“Sold, not bought”. Zuluaga (2010) highlights the use and potential of alternative distribution channels such as utility companies or retailers for funeral insurance in Colombia. In contrast to the South African experience, one of the main lessons from Colombia is the need for active sales. Even if clients find it convenient to pay premiums through a channel with which they have an existing relationship (e.g. at the cashier in-store, or through an add-on to a utility account), they will initially need to be persuaded to purchase it through active and often face-to-face sales techniques (*see Box 10.4*).

Box 10.4

Alternative distribution: CODENSA Mapfre, Colombia

Bogota electricity utility CODENSA and insurer Mapfre have teamed up to offer CODENSA's two million clients a number of insurance options, among them three family funeral plans that provide in-kind funeral service payouts at a monthly premium starting from US\$2. CODENSA sees the insurance products as a way of providing additional services to its electricity client base, thereby increasing client retention. It plays an active role in sales and marketing, as well as in product administration.

Different marketing techniques are employed. Initially, a pamphlet with insurance product information was included in the electricity bills sent out to clients, but this passive form of marketing was not effective. Currently, marketing is conducted through a combination of call centre and face-to-face sales. The customer database is used to identify prospective clients based on their income strata and to locate them geographically. Prospective clients are then contacted by telephone. If the call centre does not close the sale but generates interest, a sales agent will be sent to the person's home. The CODENSA sales force also operates on a door-to-door basis (targeting specific neighbourhoods at a time) in parallel to the call centre marketing drive.

Source: Zuluaga, 2010.

10.3 Delivering value

This section considers the value proposition of funeral insurance to its clients and looks at ways in which insurers are starting to improve value.

10.3.1 Consumer vulnerabilities

The cultural importance of a dignified funeral found in a number of countries may create vulnerability to abuse in the funeral insurance market. Such vulnerability is exacerbated by the strong link between funeral insurance

and the underlying service provider. Where benefits are provided by a particular funeral parlour, it will create a captive market for that service provider. This arrangement can lead to a number of consumer protection concerns:

- **Geographical limitations.** Where there is no cash-payout option, clients can only receive the funeral service benefit in the geographical area served by the funeral parlour in question. There is a problem if a client moves to a different town or city. In some instances, clients may pay premiums for a long time, only to find that they are unable to claim because they have moved outside the service area of the funeral parlour.
- **Multiple cover.** A person can only have one funeral. Thus, should different family members insure the same life under different policies, they will forfeit all but one policy's benefits if the policy benefit is a funeral service with no option for a cash payout. Over-insurance can be an issue even where the benefit is not linked to the underlying service. To minimize sales costs, insurers often only check the identity numbers of lives assured and beneficiaries at the claims stage. It may therefore happen that more than one family member has insured the same life under different policies. Where this is not permitted under the conditions of the policy, it results in only one policy being paid out.
- **Inflated costs.** The fact that the undertaker knows that the insurance will ensure that people use its funeral service, thereby creating a captive client base, may drive up the cost of the funerals provided.⁷ There will be no effective competition in the market, as the client cannot compare different service providers' services and prices at the time of the funeral.
- **Cost-benefit mismatch.** Where consumers are promised a funeral service rather than a cash benefit, they have no guarantee that the cost of the service will actually be the stated monetary value. The "value" of the funeral offered may therefore be inflated vis-à-vis the actual cost of the service rendered. Consumers may be misled into paying inflated premiums in the belief that it will provide them with a superior funeral,⁸ resulting in a situation where clients are not happy with the level of the service (e.g. finding the coffin to be inferior to the one promised beforehand). In this way, unscrupulous behaviour by funeral service providers could undermine trust in the funeral insurance industry.

⁷ See, for example, the findings regarding Indonesia noted by Hintz (2010a).

⁸ This was a striking finding of the South African focus group research. One respondent mentioned that he was paying R350 (US\$49) per month – or around 10 per cent of his total monthly income – for a funeral parlour policy. He justified such a high monthly premium by the fact that he had been assured that he would receive a very fancy coffin and the best service as part of the package. Respondents were also asked about the details of their current policies. In most cases, the premiums of the policies used by various respondents would differ substantially, but this information was never met with concern and did not lead them to question the value of their own policies.

While funeral parlours may, therefore, be a valuable partner for insurers in distributing insurance, caution has to be exercised to avoid anti-competitive and abusive practices and to ensure that the insurance provides value for the client and not only for the funeral industry. In some cases this will require specific regulatory intervention.

Just a fancier coffin? Extending insurance cover under such conditions may simply fuel further cost increases and serve to line the pockets of the funeral industry. As the demand for funeral insurance is driven by the demand for the underlying service, the danger is that the cultural or social pressure for a dignified funeral may be exploited (intentionally or unintentionally) to push the price of funerals to unnecessarily high levels. Even where the funeral service provider is not the insurer or is not directly linked to the insurer, the fact that a funeral expense benefit of a certain amount will be paid out implicitly caters for a funeral costing the same amount or more. Should the insurance benefit increase, some argue, it could lead to a more expensive funeral. In this way, insurance may fuel higher funeral costs.

Yet it is not necessarily the case that funeral insurance just leads to fancier funerals. As indicated in section 10.1, expenditure on funerals tends to be high regardless of whether the person has funeral insurance. As the focus group research indicated, people will “beg, steal or borrow” to pay for the funeral. They buy funeral insurance in response to the reality of a funeral as an unavoidable expense. Importantly, there is also evidence that, where families have the choice and receive a cash payout, insurance benefits are not only used to pay for the cost of a funeral, but deal with other financial effects of a death in the family (e.g. settling debts, dealing with loss of income or paying for essential services and food).

The perils of informal risk management. Though insurers’ practices do give rise to complaints, consumers are particularly vulnerable where funeral insurance is provided outside the regulated insurance market. Funeral service providers that provide in-house coverage without an insurance licence do not comply with any insurance regulation. They do not price products actuarially and generally do not separate their insurance business from the funeral service business. Contributions collected are often not kept aside as reserves against future claims; instead, funeral services are paid out on a cash-flow basis. When cash-flow problems arise or mortality experience is higher than expected, providers that operate on a cash-flow basis will no longer be able to honour their commitments. While the absence of compliance costs and actuarial practices reduce short-term operating expenses, the fact that risks are not adequately managed is to the ultimate detriment of consumers.

Having said this, it is important to note that the informal market does offer a number of advantages vis-à-vis the formal market. For example, it tends to pay benefits more quickly and with fewer documentation requirements. It may also

be less strict regarding aspects such as insurable interest.⁹ Most importantly, the informal market often serves communities where no formal products are available, thereby extending access to insurance. These are some of the issues for insurers to consider when designing products and business models.

10.3.2 Making funeral insurance better

How can funeral insurance provide better value to consumers and avoid consumer protection concerns? To answer this question, it is important to know the target market's preferences and behaviours, and to tailor products and services to clients' needs. A number of insurers are already addressing these issues, as is apparent from the examples below.

Portability. In some countries insurers are moving to de-couple the insurance benefit from a particular service provider or, alternatively, the insurer seeks to exercise increasing control over the services delivered by its network of parlours. Ultimately, it is the insurer who will bear reputational risk if the funeral parlour does not deliver value. Such de-coupling increases insurers' ability to limit the possible abuse of customers in the funeral services industry as clients will not be tied to any one funeral service provider. For example:

- AIC makes use of a network of accredited funeral service providers and clients can claim the service at any one. Another option, for example provided by some insurers in South Africa, would be to provide discount vouchers redeemable at a range of accredited funeral parlours or specific funeral parlour chains.
- A number of South African funeral insurers are paying cash benefits that beneficiaries can use at their own discretion to buy a funeral service from any service provider or help cover any other expenses.

Pay when it's needed. The payment of claims is when intangible insurance finally becomes real, and it is a powerful marketing opportunity for insurers (*see Box 10.5*). Yet rejected and delayed claims are the subject of recurring complaints against the insurance industry. Swift claims processing is very important in the

⁹ Formal products tend to have strict rules on insurable interest to counter abuse. However, the "traditional" concept of insurable interest is not necessarily in line with the liabilities faced by the poor. For example, the fine print of a policy may stipulate that only family members where there is some legal relationship, proven by documentation, may be covered on a policy. A policyholder, faced with the need to pay for funeral expenses for a number of relatives, may however decide to include a step-mother, an unofficial foster child or a distant relative on the policy. At the claims stage, it may emerge that these persons did not meet the insurable interest criteria. This then forms the basis for the repudiation of the claim, even if the person in fact had a real insurable interest given the allocation of financial responsibilities within the community. Insurable interest is a valid concern and it may be difficult for the formal market to be more accommodating in this regard. By contrast, insurable-interest conditions are often less strict in the informal market.

case of funeral insurance, as funeral expenses cannot be put off until the claim is paid. Insurers are starting to focus on better claims service as a way of improving the value of funeral insurance. Increasingly, promises are made for a maximum number of days for claims settlement and in some cases, such as the Philippines, this is even entrenched in regulation. MicroEnsure Philippines introduced a product feature whereby the first 10 per cent of the benefit is paid within 24 hours without any need for proof of death. The remaining 90 per cent is then paid later, after all documentation has been submitted. In South Africa, insurers as a rule promise to pay claims within 48 hours of receiving all the necessary documentation. In other countries the promise is five or ten days. This is an area where continuous improvement will be needed.

Box 10.5

The importance of claims: Alternative Insurance Company (AIC), Haiti

During the devastating earthquake that struck Haiti in January 2010, claiming the lives of more than 220 000 people, AIC's approach was to encourage claims – to the point that it explicitly decided to pay claims even where there were valid contractual grounds for repudiation. It embarked on an advertisement campaign to inform potential claimants that they should claim and where they could do so, sent text messages to all policyholders to the same effect, approved claims even where policyholders used non-accredited undertakers, and provided full service benefits to clients with lower cover in recognition of the important word-of-mouth effect in the community of a successful claims experience. AIC therefore regards successful claims not as a loss, but as an essential component of its business model.

Source: Nabeth and Barrau, 2010; discussion with O. Barrau, President of AIC, 2010.

There are a number of other ways in which formal insurers are seeking to enhance the funeral insurance product and address some of the challenges noted above: some are finding innovative ways of reducing the documentation burden, for example by using a call centre to collect policy details from the client; some make use of grace periods and other product design elements to provide flexibility for clients who may not have a regular income.¹⁰

Business rationale for better value. The above measures are not implemented for altruistic reasons; they make business sense for insurers to improve value and overcome negative perceptions in the funeral insurance market. Through the

¹⁰ In South Africa, these factors have contributed to the dramatic increase in the share of the formal sector in the funeral insurance market: survey data show that between 2003 and 2007 the number of people with funeral cover in South Africa increased by roughly 10 per cent per annum; formal cover growth has exceeded 20 per cent annually. This means that the share of the formal market has risen significantly vis-à-vis the informal market.

power of word-of-mouth marketing, better value will lead to higher volumes, or conversely poor value will soon undermine volumes. Furthermore, countering abuse and focusing on speedy claims payment may lead to lower lapse rates. Higher persistency is attractive because client acquisition represents a significant cost that may take several months of premium contributions to recover.¹¹

The business case for better value may also lie in the distribution partnership. The distribution partner, be it a retailer, mobile network operator or utility company, may carry reputational risk should the insurance product sold under its brand name provide poor value. It is therefore in insurers' interest to continuously improve customer value, as this will strengthen the distribution partnership.

Beyond the funeral. Since the cost of the funeral is not the only financial need should a family member die, insurers are starting to move beyond pure funeral insurance to design policies that provide a cash payout, part of which may be used to cover the cost of a funeral. As discussed in section 10.2.4, they are also starting to include innovative tangible benefits as part of the product suite. In this way, as Box 10.6 illustrates, funeral insurance is starting to evolve into life insurance, which in turn can form the basis for a bundled offering of life and other types of cover.

Box 10.6

The role of market research in designing funeral-plus products

- **Pep-Hollard, South Africa.** One of the options of the Pep-Hollard Family Funeral Plan (*see Box 10.3*) provides a monthly payout for a fixed number of months rather than a lump sum benefit (Smit and Smith, 2010b). Even though the product is still marketed as funeral insurance – as the market is familiar with this product category – this way of structuring the benefits explicitly recognizes customers' need for an income stream rather than just covering the funeral expense. It also addresses the phenomenon found in the South African focus groups that participants tended to have more than one funeral policy, each for a different purpose. This policy would look after the on-going cash needs of the family.
- **AIC, Haiti.** As its name suggests, AIC takes a fresh approach to funeral insurance. Before launching its funeral insurance product, Protecta, it undertook extensive market research. Based on the resulting insights it gleaned about the target market, AIC designed Protecta to offer four benefit levels (ranging from around US\$1125 to US\$2500) and four plan options for each benefit level (discussion with O. Barrau, President of AIC, 2010):

¹¹ In an early study on the scope for microinsurance in South Africa (Bester et al., 2003), actuarial calculations showed that a decrease of 25 per cent in policy lapses in the lower-income life insurance market would reduce the price of policies by 18 per cent.

1. **Protecta Classic:** the full benefit amount is paid out in the form of a funeral service from an accredited funeral parlour.
 2. **Protecta Plus:** a funeral service plus a fixed cash component that the beneficiary can use towards additional expenses. This benefit was included to cater for the ancillary expenses related to the funeral, such as food and transport, but also to allow for a small cash benefit to tide the family over after a family member dies.
 3. **Protecta Cash-back:** a proportion of the premium is reimbursed every three years, provided that all premium payments are up to date. This option was included to increase the value proposition to clients so that they do not think that they pay premiums without getting anything back if there is no claim. It is also a way for AIC to keep the renewal rate as high as possible.
 4. **Protecta Five Star:** includes all of the above benefits. Experience has shown that this plan is the most popular. This popularity has a lot to do with the name of the plan, which recognizes the cultural significance of a dignified funeral in Haiti.
- **UNACOOPEC, Ivory Coast.** UNACOOPEC, a microfinance institution with more than 800 000 clients, believes strongly in the role of market research. In partnership with Allianz, the MFI developed an insurance product on the basis of market research that indicated that people often take out loans to cover the funeral expenses of a family member. This finding indicated a definite need for funeral insurance, which was confirmed by the rapid take-up of the product during the pilot phase. Policyholders are given the choice of spending the full benefit on a funeral, receiving a cash payout, or a combination of the two. In the case of the latter option, the beneficiary receives a voucher to purchase the service at a funeral parlour. If the service costs less than the voucher amount, the remainder is paid out in cash.
 - **SINAF Brazil.** SINAF is a formal funeral insurer in Brazil, a country where funeral assistance is largely provided outside the definition of insurance by unregulated funeral service providers. Based on its market research, it offers clients a number of options for funeral and funeral-plus cover. Clients can choose the premium and benefit level for the plan that best suits their needs. The most basic plan covers just funeral expenses. Clients are then offered the option to also include personal accident cover, i.e. to add a cash benefit in the case of accidental death. The third option is to add an income protection component that provides a monthly cash payout equating to a proportion of the deceased's monthly income for a specified number of months. Therefore the policy provides protection against loss of income due to the death of a breadwinner over and above the funeral cover.

Pure funeral insurance already represents an intergenerational transfer by avoiding expenses that may set the next generation back in their asset-accumulation process. “Funeral-plus” insurance and extending benefits beyond funeral costs will play an even larger role as a form of long-term saving for the next generation. In this way, funeral insurance can form the basis for the development of a broad-based life insurance market.

10.4

Conclusion

This chapter has shown that funeral insurance is one of the most popular micro-insurance products in a number of countries. While being part of the broader microinsurance market, it also has a number of particular features. Funeral insurance is not just insurance business as usual; it requires a dedicated understanding of the dynamics driving funeral insurance markets. This applies both to insurers seeking to target and distribute it effectively and to regulators seeking to find the right regulatory approach to it. Often, these dynamics relate to the underlying funeral service. The funeral service channel may drive demand, distribution and underwriting of funeral insurance. The link to the funeral service creates a tangible benefit for funeral insurance that engenders trust and provides real value, but that can also cause vulnerability to consumer abuse. Increasingly, insurers are starting to focus on ways to provide better value by adding on elements beyond pure funeral insurance. In this way, funeral insurance is evolving into life insurance that can form the basis for asset accumulation and intergenerational transfers.

In conclusion, the experiences reflected in this chapter raise six key principles for the delivery of value in the funeral insurance market:

1. Do not forget the importance of tangibility and providing for the immediate needs of the client following a loved one's death. Funeral insurance need not entail an in-kind benefit (funeral service) to be tangible. Innovative ideas based on consultation with the market can lead to improved take-up and retention, and better client value.
2. Retain the focus on simplicity, even while adding additional components to increase value (*see Chapter 15*).
3. The funeral cannot wait for the payout – swift claims handling is key. Tardy claims payment will undermine consumer trust. Product simplification and minimization of exclusions that have to be assessed at the claims stage may improve claims-handling efficiency.
4. While informal insurance may pose many risks, commercial insurers have much to learn from the level of service delivered by informal players.

5. It makes business sense to ensure good value. In the interest of creating a vibrant insurance market characterized by high persistency, insurers have to ensure that their clients derive value. In addition to considering their own product and performance, insurers may have to delink insurance benefits from specific funeral providers or exercise control over provider networks to ensure client value.
6. Think beyond the funeral. Funeral insurance may be the starting point to build a life insurance market amongst low-income households.

IV General insurance

II **Designed for development impact: Next-generation index insurance for smallholder farmers**

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Risk is economically costly in low-income agricultural economies, prompting protective self-insurance strategies that keep small farmers poor as they eschew remunerative, but risky, opportunities. To make matters worse, self-insurance only partially protects small farm households against drops in consumption that can irreversibly damage the long-term physical and cognitive development of young children. These problems are further compounded because risk stunts the development of rural financial markets, making it harder for small farmers to capitalize on and move forward with new technologies and market opportunities.

Recent technological advances in remote sensing and automated weather measurement open the door to innovative index insurance contracts that can transfer the correlated or covariant risk out of small farm economic systems. However, realizing the risk transfer potential of these advances and that of older ideas like area yield insurance¹ is subject to both demand- and supply-side constraints. A number of recent projects have shown that the supply-side challenges can be overcome. Index contracts based on area yields, weather and remotely sensed vegetative growth data have all been designed and approved by regulatory bodies, offered for sale by commercial providers and reinsured by international reinsurance companies.

Despite this supply-side progress, contract demand and take-up have been tepid, and there is little evidence to date that index contracts have helped small farmers better manage risk, achieving higher incomes for themselves and securing better human development for their children. In a review of experience with weather index insurance, Hazell et al. (2010) observe that in order to be sustainable, insurance contracts must resolve these demand-side constraints. This chapter fleshes out this observation and proposes that the next generation of index insurance contracts be designed for demand and development impact through:

¹ Area yield insurance measures average yields in a defined geographic area (e.g. a valley or administrative district) and makes payments when these average yields fall below a specified “strikepoint” level.

1. **Intelligent design of contracts to reduce basis risk:** Success in this area will require moving beyond weather-based contracts and using either area yield indices, vegetation indices based on satellite images or combinations of these information sources. Choosing between these information sources and designing optimum contracts that reduce basis risk will also require a demand-based approach, rooted in data on actual farmer outcomes and livelihood strategies.
2. **Systematic interlinking of insurance with credit:** Risk is a development problem precisely because it forces small-scale farmers into self-insurance strategies that leave remunerative but risky economic opportunities unexploited. By explicitly linking index insurance with the finance needed to take up these new opportunities, index contracts can overcome the constraints to insurance take-up created by basis risk and contract loadings that make insurance expensive. Exactly how this interlinking can be achieved depends on the nature of the existing property rights regime and financial market environment.

Section 11.1 introduces basic concepts of agricultural risk and of index insurance, illustrating both the strengths and the weaknesses of index insurance from the perspective of the small farm household. Section 11.2 shows how micro household data can be used to intelligently design contracts through choice of signal and statistically optimal loss and indemnity functions. Section 11.3 then shows how interlinking credit and insurance can be used to overcome problems of uninsured basis risk and contract loadings in order to create a demand-worthy index insurance contract designed for development impact. Section 11.4 concludes the chapter.

11.1 Agricultural index insurance basics

This section introduces the index insurance problem from the perspective of the small farm household, considering the potential effectiveness and costs of index insurance relative to traditional mechanisms of self-insurance. These observations open the door to consideration of the options for improving the relative desirability of index insurance and its development impacts.

11.1.1 Index insurance and the risks faced by agricultural households

The challenges of index insurance design are best understood by rooting the discussion in the outcomes at household level. Random or uncontrollable forces that cause real, consumable household income to dip below its typical or average value are of particular concern to households. The goal of insurance is to protect households against such deviations.

For reasons that are well described in the literature, agricultural index insurance works not by insuring the household directly against shortfalls in its own income or yields,² but instead by insuring a direct or predicted measure of the average or typical yield losses experienced by neighbouring households in a region. An index insurance contract can be represented as an indemnity schedule that links payments to an index that predicts typical losses in the zone covered by the index. To avoid problems of moral hazard and adverse selection, it should not be possible for the index to be influenced by the insured, nor should benefits depend on which particular individuals choose to purchase the insurance.

Figure 11.1 illustrates the indemnity schedule that might accompany a zone-level yield loss predictor function built around a rainfall signal. The horizontal axis shows a rainfall index (perhaps cumulative rainfall measured in millimetres) and the vertical axis shows indemnity payments. The contract is defined by a lower and an upper strike level. When the rainfall index dips below (signalling drought), indemnity payouts begin as shown by the dashed line in the figure. Similarly, when rainfall exceeds the upper strike point (signalling flood conditions), payouts to the insured farmers are triggered again.

A key question faced in index insurance is the extent to which household yield shortfalls track the index of predicted shortfalls. If the index signalled exactly a 100-kilo loss every time the yields were 100 kilos below the household's long-term average, then index insurance would perfectly cover all risks faced by the household. The problem of course is that no index will perfectly correlate with any individual's losses in this way.

The index that predicts average losses will not perfectly track individual households' yield shortfalls for three reasons:

1. **Pure idiosyncratic risk:** A single farm's crop may suffer damage from an idiosyncratic factor such as animal or bird damage, or highly localized weather events. Different levels of pure idiosyncratic risk characterize different agro-ecological zones. In the Sahel, for example, rainfall is highly localized, creating significant variation in yield losses between neighbouring villages, or even between households in the same village.
2. **Noise created by the geographic scale of the index:** As the geographic zone covered by a single index increases in size, household losses will correlate less well with the insurance index. For example, a weather-based index that only has to cover households within 1 kilometre of the weather station will track household outcomes better than an index that has to cover all households within 30 kilometres of the weather station.

² A myriad of experience has shown that trying to insure all sources of variation in agricultural outcomes for small farmers is beset by a host of problems rooted in the costs of obtaining information on small farm outcomes that render such insurance infeasible (see Hazell, 1992).

3. **Noise created by index prediction errors:** The average loss within a defined geographic zone can be measured directly with high precision (as with area yield contracts in the United States where yields are measured to a tolerance of ± 2 per cent), or it can be predicted using weather or satellite information that is likely to be cheaper to implement, but also likely to have a larger margin of error when used to predict even the average loss.

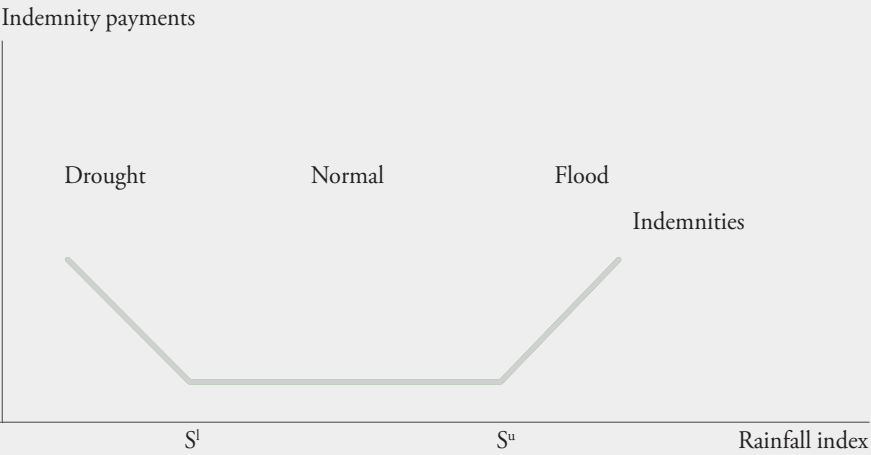
Together, these three elements create what is called basis risk, yield losses experienced by the household that are not correlated with the insurance index and are therefore uninsured by the index insurance contract. As the second two sources of basis risk are influenced by the design of the contract (geographic scope and exact index used), we refer to them as “design effects” on basis risk.

The linear contract structure in Figure 11.1 is simple, and close variations of it have been used in several index insurance pilots, including ones in Ethiopia, India, Kenya and Malawi. However, implicit in this structure is the assumption that losses are linear in the rainfall index. Empirical analysis of the sensitivity of yields to rainfall like Carter’s (1997) West Africa work suggests that yield losses respond in a non-linear way to rainfall shortages or excesses. If this is correct, then these common linear loss contracts will have large design effects that unnecessarily increase basis risk.

Section 11.2 discusses ways to estimate statistically optimal predictor functions that can be used to design more effective indices and contracts. The stylized linear indemnity schedule represented in Figure 11.1 is highly unlikely to be the contract structure that minimizes design effects.

Figure 11.1

A stylized rainfall index insurance contract



Once an indemnity schedule is designed, historical information on the index, such as rainfall data, can be used to calculate the probability distribution of the index and the actuarially fair premium, which is simply the expected or long-term average payment under the indemnity schedule. The market premium is then defined as the actuarially fair premium plus mark-ups or loadings associated with the costs of providing the contract (for example sales costs, capital costs and reinsurance costs). Loading premia can vary based on the quality and quantity of the data used to construct the probability distribution of the signal. For agricultural index insurance contracts offered by the US Department of Agriculture, the typical loading level is 20 per cent (Smith and Watts, 2009).

A number of pilot projects have shown that index insurance contracts in this form can be defined and supplied by the commercial market (see Hazell, 2010). In addition, recently introduced products that have also satisfied national and international insurance supply standards include a satellite-based livestock insurance contract in Kenya (*see Chapter 12*), and area yield contracts in Mali and Peru.³ While these supply-side achievements are absolutely critical, index insurance will only have its desired development impact if the insured understand how it works and choose to modify their behaviour, thus generating informed demand and take-up.

11.1.2 Self-insurance compared to index insurance contracts without interlinking

As a prelude to thinking about how to create index contracts that are demand-worthy, this section examines the demand for index insurance from the perspective of a typical small farm family that has a diversified livelihood strategy and has options for self-insuring against agricultural risk. In contrast to the analysis in section 11.3 below, this section assumes that insurance is not interlinked with credit or other opportunities to improve average family income. Specifically, it assumes that the household grows the same crops, with the same technology, with or without index insurance. Section 11.2 argues that unless index insurance is in fact interlinked with expanded economic opportunities, demand for the insurance is likely to be low. Correspondingly, demand or take-up of credit and new agricultural technologies is also likely to be low for small farm sectors unless it is interlinked with low-cost risk management tools, such as index insurance.

As detailed in the appendix to this chapter, we analyse demand for index insurance from the perspective of a small farm household that obtains 50 per cent of its income from non-agricultural sources, and 50 per cent of its income on average from farm production using a risky, but relatively safe, low input technology. For this analysis, we assume stylized levels of overall risk and a reasonable

³ Details on these and other projects are available at <http://i4.ucdavis.edu>.

division of this risk between correlated risks (such as weather and insect invasions) and idiosyncratic risks.

Under our assumptions, for half of the time this family would have lower-than-average agricultural income and therefore lower-than-average household consumption. For the other half of the time, the family would have higher-than-average consumption. Despite its self-insurance strategy, 10 per cent of the time the family would face significantly reduced consumption (less than 75 per cent of its average consumption level) due to a poor agricultural crop (*see appendix Figure 11.4*). In other words, the family faces “basis” risk that is not insured under its self-insurance strategy. In addition, if the family eschews more productive strategies (such as greater levels of fertilization of its crop) in order to reduce risk, then it is also paying an implicit loading, meaning that self-insurance reduces its average income. The challenge is whether index insurance – with its level of basis risk and loading – can do better than the family’s stylized self-insurance strategy.

Index insurance gives the family the option of adding a new risk management tool to its traditional risk management strategies. The analysis detailed in the appendix assumes that half of all agricultural risk faced by the household is a correlated risk that can be covered by the index insurance contract. The other half is basis risk, resulting from either true idiosyncratic risk or from design effects, that is not insured by the index insurance contract. The simulation analysis assumes that the family faces loading costs of 20 per cent, meaning that after insurance is purchased, average family consumption will fall slightly below its pre-index-insurance average.

As shown in the appendix, under these somewhat conservative assumptions, index insurance lowers the probability of extremely low consumption from about 10 per cent to 3 per cent. While lower, this probability is not zero, reflecting the reality of basis risk and the possibility that the family could have a low outcome and still not receive any compensating insurance payment under the index contract. In addition, because of loading costs, the contract presents the household with a zero-sum game: the (imperfect) reduction in the probability of low consumption is purchased at the cost of reduced average income. As analysed in greater detail by Carter et al. (2010), only the most risk-averse fraction of the population (those who are most deeply worried about low consumption outcomes) would find this kind of index insurance attractive. When combined with the other factors that might inhibit the adoption of a new, relatively complex contract (such as inability to understand it or lack of confidence that the insurance will really pay out as advertised), this trade-off may explain the sometimes weak demand for index insurance when it is not combined with measures to simultaneously improve access to credit, improved technologies and new markets.

11.1.3 Options for improving the demand-worthiness of index insurance

As summarized by Hazell et al. (2010), many pilot projects have met with weak demand. While there are a plethora of reasons that might explain the sluggish take-up of novel index contracts (including inability to understand and lack of confidence in the contract), the fact that self-insurance, basis risk and loadings compromise the desirability of the contract is surely also part of the explanation, as evidenced by the discussion above. Recognizing this problem, Hazell et al. (2010) suggest two things. First, it advocates better-designed contracts that have lower basis risk. Second, it advocates combining index insurance with other agricultural services, creating what it calls a value-added proposition. The remaining two sections of this chapter build on these suggestions, expanding and combining them into a next-generation approach to index insurance for small-scale farmers.

11.2 Designing contracts to minimize basis risk

Figure 11.1 uses a standard rainfall contract to illustrate the more general functioning of index insurance. While index insurance is sometimes generically called weather or rainfall insurance, the importance of the basis risk problem demands that well-designed contracts consider options beyond weather-based indexes and choose an optimum contract design that minimizes basis risk.

While rainfall contracts are typically based on expert advice on rainfall levels at which crop damage occurs, the ad hoc linear loss and indemnity functions used in some contracts are unlikely to be statistically optimal and minimize prediction error – that is, the design effects on basis risk are likely to be large. Fortunately, widely available micro data on farm households allows estimation of a statistically optimal loss function for rainfall or any other candidate signal. The resulting contracts, or hybrid combinations of them, can then be compared to see which one offers the best value to the beneficiary population, taking into account the predictive power of the signal⁴ as well as the cost of obtaining it.

To illustrate these ideas and their implementation, this section summarizes an analysis of West African grain crops that used micro data to compare the desirability of rainfall, area yield and satellite-based index insurance contracts.

11.2.1 Minimizing design-induced basis risk for West African grain farmers

This section considers grain yields in six villages in Burkina Faso where the International Crop Research Institute for the Semi-Arid Tropics (ICRISAT)

⁴ The remote sensing literature has already made substantial progress in identifying transformations of satellite signals of vegetative cover that best predict farmer yield outcomes on the ground. The same methodology can also be applied to other potential insurance indices.

intensively interviewed farm households over the 1980 to 1985 period. Detailed production data were obtained from 25 households in each village for the three crop years 1980/81 to 1982/83 (see Carter (1997) for details on the data). For the analysis here, each household's production is aggregated across all of its sorghum and millet fields to create an annual grain yield figure for each household. The goal of a contract minimizing basis risk is thus to create an index that can statistically explain as much of the yield fluctuation faced by households as possible.

One possible index would be simply average village yields. A contract based on this village yield index would provide a payout to farmers based on the degree to which village yields deviate from the long-term average. Using the ICRISAT data, we can replicate an area yield index simply by taking the average yield across all households in each village for each crop year. Within a village, all farmers' fields are at most a few kilometres apart. While the Sahelian region from which these data come is famous for large idiosyncratic risk generated by highly variable local weather patterns, we would still anticipate that each household's yields would closely follow its village average yields. In this case, a contract based on village average yields would be relatively effective, as insurance indemnity payments would tend to correctly compensate households for losses experienced.

The analysis detailed in Laajaj and Carter (2009) shows that about half of the yield fluctuations experienced by households can be explained by average village grain yields. The other half represents the basis risk that would be uninsured even under a village-level area yield contract. While it is surprising that as little as half of the risk may be common across villagers, note that it is precisely this correlated risk that households would have trouble managing through traditional mechanisms of social sharing and reciprocity.

While this village-level area yield index represents the basis-risk-minimizing index insurance contract for this semi-arid environment of West Africa, it would in all likelihood be impractically expensive to implement as it would require an annual yield survey in each village where households were covered.⁵ We therefore need to consider whether there are alternative, cheaper mechanisms that can achieve similar predictive power to the area yield index.

The ICRISAT data includes rainfall information collected in each village. Note that this rainfall information is extremely high-density as it is the equivalent of having a weather station every few kilometres. In practice, such a high density of weather stations is not economically feasible. Nonetheless, it provides another useful benchmark against which to compare the performance of a third

⁵ It might also raise problems of moral hazard, as villagers might be able to collectively agree to under-produce so that village yields would drop and everyone would receive an insurance payout.

possible index, one based on satellite data on vegetative cover (NDVI). Because this latter kind of data is less familiar, we present a brief overview of it before comparing the performance of NDVI-based contracts with that of alternative contracts based on more familiar measures.

11.2.2 The Normalized Difference Vegetation Index

The Normalized Difference Vegetation Index (NDVI) is a satellite-based measure of vegetation density. NDVI is scaled to lie between zero and one, with low values indicating very little vegetative growth and high values indicating dense vegetation. Every 10 days NDVI is measured at a resolution of eight kilometres by eight kilometres (that is, a unique NDVI measure is provided for each eight kilometres by eight kilometres pixel). NDVI measures at this resolution are freely available on the FEWS NET (Famine Early Warning System Network) website.⁶ The availability of NDVI at this resolution is equivalent to having a separate weather station (or an area yield survey) for each eight kilometres square. If NDVI can be shown to have similar capacity to predict individual farmer yields as meteorological or area yield data, then clearly it would emerge as the preferred basis for an insurance index on simple cost and simplicity grounds. In addition, NDVI is available going back to 1981, meaning that the long-term data needed to accurately price an insurance index are available.

Figure 11.2 illustrates how NDVI works. The diagrams on the left side of the figure display actual NDVI data for West Africa. A brown to green colour spectrum has been used to graphically display the zero-to-one NDVI scale, with browner colours signalling low NDVI values and greener colours high NDVI values. The insert in each diagram shows the individual eight kilometres square pixels for the region surrounding the village of Silgey, one of the six villages included in the ICRISAT study in Burkina Faso. The dot on the insert is the pixel where the village centre is located.

The first of the three charts on the right side of Figure 11.2 show 1981–1983 grain yields from Silgey as measured by the ICRISAT Village Level Studies discussed further below. The middle chart displays average NDVI for that time period, while the bottom chart shows rainfall as measured by a village rainfall gauge maintained by the ICRISAT study. Impressionistically, these figures show that NDVI tracks village level yields. While this is encouraging, we need to evaluate more carefully the precision with which NDVI can predict village yields and form the basis for a valuable insurance index contract.

⁶ Higher-resolution data that measure NDVI for each square of 30 by 30 metres can be purchased.

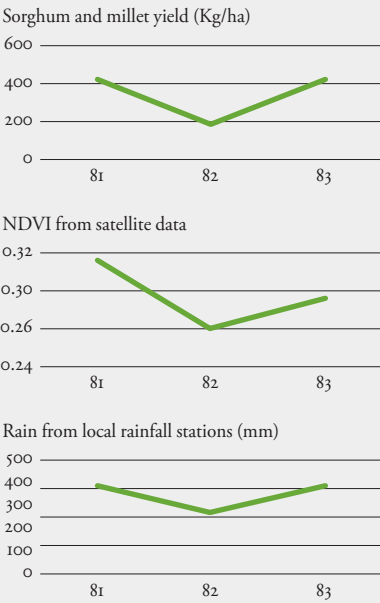
Figure 11.2

Yield prediction using satellite data

Normalized difference vegetation index (NDVI) good year: 1981 (1st decade of September)



Normalized difference vegetation index (NDVI) bad year: 1982 (1st decade of September)



11.2.3 Area yield, weather and NDVI contracts compared

While the raw NDVI signal could be used as the basis for an index insurance contract, there is a well-developed literature on remote sensing that has explored the transformations of NDVI that best predict crop yields. For the analysis here, we employ the transformation of NDVI information called the vegetation condition index (VCI). VCI is defined as:

$$VCI = 100 * (NDVI - NDVI_{min}) / (NDVI_{max} - NDVI_{min})$$

For a given village, the VCI uses long term series of NDVI to relate present NDVI to the extreme values observed since 1982 at this same time of the year.

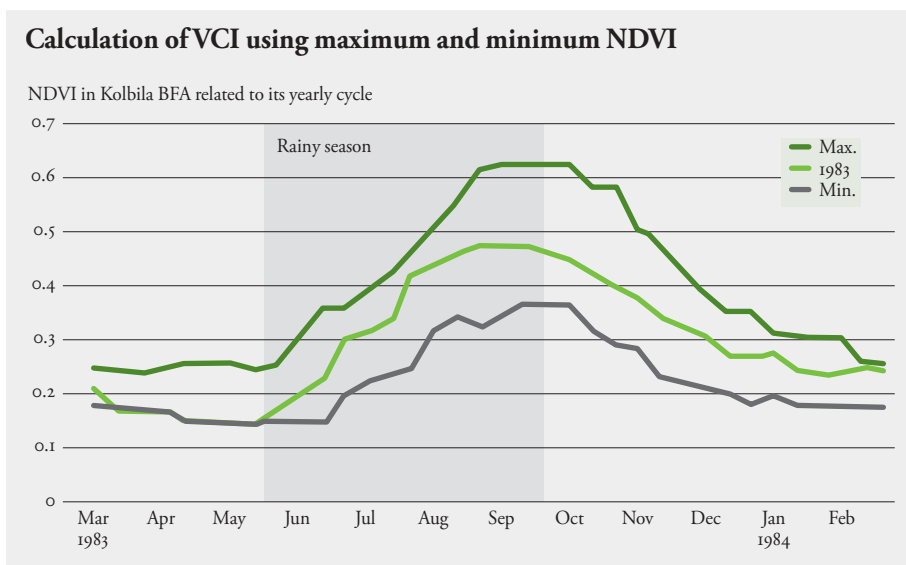
Figure 11.3 plots the VCI measure for the year 1983 for the village of Kolbila, another of the ICRISAT study sites. Also shown on the graph are the historical minimum and maximum values of NDVI for Kolbila. As can be seen in Figure 11.3, the VCI for Kolibila was close to zero in April 1983, but around a half in September 1983. An advantage of the VCI transformation is that it relates absolute NDVI values to a local context and therefore facilitates the use of NDVI data coming from heterogeneous places.

So how much basis risk would exist under an index insurance contract written on the village-specific VCI? Laajaj and Carter (2009) estimate the statistically optimal (basis-risk-minimizing) predictor function that can be obtained for the VCI.

Conducting a similar exercise using rainfall data at village level, they find that the VCI index achieves 89 per cent of the variance reduction of the village yield index. The rainfall measure achieves 75 per cent of the risk reduction of the village-level area yield contract. Interestingly, when the VCI and rainfall measures are combined into a hybrid index, no additional variance reduction is achieved beyond that obtainable with the VCI-based index alone.

While it may be possible to improve the predictive power of rainfall data through further analysis, it is important to note that an insurance scheme is unlikely to be able to afford to have the village-level weather measurements that are available in the ICRISAT data. Even the most ambitious proposals for weather station construction suggest that each station would have to cover a circle with a radius of 25 kilometres. By way of comparison, some 30 separate NDVI measurements would be available within a circle of that radius, meaning that a high-density NDVI-based contract should have a further design advantage over weather-based contracts.

Figure 11.3



While analysis of the ICRISAT data for West Africa suggests that NDVI can not only offer lower basis risk, at lower cost than rainfall-based indices, this finding should not be generalized for other agro-ecological environments. In some situations remote sensing may provide a cost-effective index, as is the case with livestock mortality predictions in Kenya (*see Chapter 12*), while in other situations it may prove to be an unreliable predictor of agricultural yields (as was discovered when satellite information was found to be a poor predictor of cotton yields in Mali). These findings show that designing a cost-effective index insurance contract that minimizes basis risk should consider a variety of index options by using micro

data to ground truth and select the optimal index. At the same time, the analysis also shows that there are limits to the elimination of basis risk, even through optimal contract design. In the extreme case of the Sahel, it would appear to be difficult to use index insurance to eliminate more than half of the agricultural risk faced by farmers. Given these technical limits to the quality of index insurance, the next section explores the possibilities for further improving the development impact value and sustainability of insurance by interlinking it with credit.

11.3 Interlinking insurance and credit

The analysis in section 11.1 assumed that the small-scale farm household had access to only one traditional agricultural activity. While the risks associated with such activities are important, development economics has long been preoccupied with the notion that one of the biggest costs of risk is that it induces farm households to shy away from riskier, new technologies and economic opportunities that offer improved average incomes over a period. In addition, risk stunts the development of rural financial markets, compounding the adoption problems for liquidity-constrained farm households. This section argues that explicitly connecting index insurance with these kinds of activity will not only solve the development problem that makes risk so costly, but will also resolve the problem of tepid insurance demand.

11.3.1 High-return economic activities and small-scale farm households

High-return economic activities typically require significant up-front investment in purchased inputs of improved seeds and fertilizers. This factor alone increases the risk exposure of the family as a drought year means negative, not just zero, net income. In addition, the yield variance of high-return activities also tends to be higher, in part because these activities are less well-adapted to climatic stress than are traditional activities that have evolved in the farm's specific agro-ecological system. Finally, the increased cash costs of production may simply exceed the liquidity available to the household, making access to capital through financial intermediaries or value-chain operators indispensable.

To explore the performance of index insurance in combination with new, higher-return technologies, we return to the stylized household model detailed in the appendix. We now assume that with significant investment in seeds and fertilizer equal to the household's non-farming earnings, the household can use an improved technology that increases average net agricultural income by 25 per cent over the traditional crop activity.

This high-return technology offers the household the prospect of having higher income and therefore higher consumption. However, given the input

costs and the riskiness of the new technology, this higher average consumption comes at the cost of increased risk.

Under these additional assumptions, our simulation analysis shows that the probability of household consumption falling below 75 per cent of its long-term, traditional-technology average rises from 10 per cent to nearly 20 per cent if the new technology is adopted without insurance (*see Figure 11.5 in the appendix*). In addition, it raises a non-trivial probability that consumption could fall to as little as 50 per cent of its old long-term average. Even assuming that the household had the savings to finance the high-return activity, this stark trade-off between risk and return would discourage many farmers from adopting the new technology,⁷ keeping them safe, but also perpetuating a low standard of living.

The decision to utilize the traditional technology when the high-return activity is available and financially feasible can be examined as an insurance-like decision. From this perspective, practising self-insurance by continuing to utilize the traditional technology carries a very high loading as it reduces expected household income from agriculture by 25 per cent, while reducing overall average household consumption. As discussed above, this self-insurance strategy also carries uninsured or basis risk, as the self-insured household still faces positive probabilities of low consumption outcomes. When seen from a development perspective, to improve household economic well-being, the challenge of index insurance is not to eliminate all basis risk and loadings, but simply to do better than the costly self-insurance that is available by relying on traditional technologies. As the next sections describe, the mechanisms for doing this depend critically on the nature of the financial market.

11.3.2 **Index insurance and adoption of the high-return activity when loans are fully secured**

The discussion here and in the following section assumes that small farm households lack the savings to purchase the new technology even if they wanted to. To explore how insurance and credit might interact in this environment, we assume that agricultural loans are offered by a competitive lending sector on terms that yield lenders expected profits exactly equal to the economy-wide opportunity cost of capital. We also assume that borrowers repay loans to the extent possible using all realized agricultural income and any security required for the loan. When loans are fully secured – meaning that the security is sufficient to repay the loan in full even if there is a crop failure – the lender bears no risk. Under these terms, a loan functions much like self-finance, as the farm household is fully

⁷ When analysed from the conventional economic perspective of expected utility theory, only households with very low degrees of risk-aversion or higher-than-average stores of wealth would adopt the technology (*see Carter et al., 2010*).

liable and bears the full risk associated with adopting the high-return activity. It may be possible for loans to be fully secured in economies where there are individual titles to land.

As fully secured loans function like self-finance, only the least risk-averse households would be willing to accept the probability of very low outcomes in return for the prospect of higher incomes. This case, in which small-scale farm households have access to a loan to finance a high-return activity, but turn it down and decline to adopt the activity, corresponds to what Boucher et al. (2008) describe as risk-rationing. These authors show theoretically that risk-rationing is most likely to affect lower wealth households and, empirically, may constrain the choices and income of up to 20 per cent of small-scale farmers in Central and South America.

With a fully secured loan, the benefits of index insurance will accrue directly to the household, which carries all of the risk. The simulation results shown in the appendix indicate that when combined with a loan and an index insurance contract, the new technology can be undertaken with almost no risk of consumption falling below 50 per cent of its long-term average. However, even with interlinked credit and insurance, the household would still face some increase in the risk of consumption falling to less than 75 per cent of its long-term average relative to the self-insurance strategy. Beyond that level, the interlinked contract strongly dominates the self-insurance strategy as for most of the time it offers higher household consumption than would the self-insurance strategy. While this interlinked contract still presents the household with a trade-off (higher returns at some increased risk of low outcomes), the trade-off is much less severe than that offered by the high technology without insurance. Analysis by Carter et al. (2010) shows that while this interlinked contract is still characterized by a trade-off, all but the most risk-averse agents would prefer the interlinked contract to the low-technology, self-insurance strategy.

The trade-off that remains even with the interlinked contract can be reduced or even eliminated completely if basis risk can be reduced under the index insurance contract. The discussion so far has assumed that index insurance can cover half the risk faced by the farm household and that the other half remains as basis risk. This is roughly the quality of the insurance that can be obtained using satellite signals for Sahel grain producers or other contracts that have minimized design effects. However, in environments where more of the risk is insurable (say two-thirds rather than a half), or where intelligent contract design can further reduce design effects on basis risk, it is possible for interlinked contracts to completely dominate self-insurance strategies (*see Figure 11.5 in the appendix*). That is, compared to the self-insurance strategy, when adopted with an interlinked credit and insurance contract the high-yielding technology offers less risk of low consumption outcomes and a much greater chance of high consumption outcome. Even

the most risk-averse agent would be expected to prefer the interlinked arrangement to the self-insurance of low technology (conditional on understanding and having confidence in the contract).

It is important to note that there are still basis risk and loadings under this interlinked contract. While it is thus inferior to a perfect insurance contract offering full cover, such an infeasible option is not an especially interesting point of comparison. The more interesting comparison is with the extant self-insurance strategy with its degree of basis risk and high loadings. Interlinking credit and insurance is important precisely because it opens the door to dominating self-insurance and crowding-in technological change.

11.3.3 **Index insurance and credit supply in environments where high levels of security are available (“high-collateral environments”)**

The discussion so far on interlinking has assumed that loans are fully secured, so that the household bears all the direct risk of a production shortfall that leads to default. While lenders do not directly bear any immediate risk if their lending is fully secured, they do potentially face what might be termed political economy risk. In the event of a major covariant shock that leads to crop failure and results in the security provided by small farm households being realized, lenders might well anticipate political pressure and forgive outstanding debt rather than cause farmland to be reposed. As described by Tarazona and Trivelli (2005), this scenario took place following the 1998 El Niño event in Peru. Note that this political economy risk is directly tied to covariant shocks, as the political possibility for this kind of debt forgiveness exists where large numbers of farmers can point to an easily observable event.

The magnitude of this political economy risk depends on the lender's loan portfolio. As modelled by Carter et al. (2010), lenders will react at the market level by increasing the rate of return required on uninsured agricultural loans as the proportion of the loan portfolio in agriculture increases. An increase in the number of small farms taking up loans (induced by the availability of index insurance contracts) would thus be expected to provoke an increase in the cost of capital to the agricultural sector, a force that would tend to choke off the increased take-up.

Explicitly interlinking loans and index insurance contracts would be expected to resolve this problem. While index insurance contracts do not cover all risks, they do cover the covariant risks that power the political economy problem faced by lenders. The next section discusses interlinking more thoroughly in environments in which little security is available, where it is potentially of even greater importance.

II.3.4 **Index insurance and adoption of the high-return activity in environments where little security is available (“low-collateral environments”)**

It is unlikely that loans will be fully secured, especially in many smallholder areas in sub-Saharan Africa. If a loan is not fully secured, the lender carries some of the risk of low yield. Even if lenders are willing to grant loans with a low level of security, they will need to charge higher interest rates in order to achieve a given expected rate of return. In addition, because defaults on agricultural loans are likely to be correlated, lenders are likely either to severely limit the amount of agricultural loans in their portfolio (Tarazano and Trivelli, 2005) or, if they increase them, to require an ever higher rate of return to compensate for the additional risk on their balance sheets (Carter et al. 2010).

In this context, supply of credit to finance new technologies is likely to be restricted and expensive. Moreover, simply offering index insurance to farmers is unlikely to have much impact, as the benefit of the insurance will accrue primarily to the lender, who bears a substantial portion of the risk where little security is available. Neither credit nor insurance markets are likely to emerge independently in low-collateral environments, and agricultural technologies and income are likely to stagnate.

Interlinked insurance-credit contracts are one possible way out of this conundrum. An index insurance contract that covers the covariant risk faced by lenders should be sufficient to relax the constraints that restrict the supply of credit to the small farm sector. At the same time, if lenders face competitive pressure, the loan rates will drop and reduce the cost of credit to the small farm household, creating yet more demand for capital and increased take-up of the high technology.

While these mechanisms are somewhat different from those considered above where a high level of security is available, according to the analysis of Carter et al. (2010), the net result is almost identical in terms of the overall impact on farm incomes and levels of well-being. Index insurance contracts interlinked with credit and take-up of improved technology can dominate the high basis risk and implicit loadings that small farm households pay when they self-insure by adopting traditional technologies.

II.3.5 **Marketing interlinked index insurance**

While compelling on its own terms, the interlinking of intelligently designed index insurance contracts and credit also potentially offers important marketing advantages. In low-collateral environments, in which most of the direct benefits of index insurance will accrue to lenders, it may make sense to market it directly to lenders as portfolio or meso-level insurance (*see Chapter 4*). While in a perfectly competitive loan market the benefits of this portfolio insurance would trickle down to borrowers, in the real world in which rural loan markets are far

from competitive, an approach to insurance oriented towards development impact will need to consider a contractual mechanism that ensures that the benefits of the insurance are indeed passed on to borrowers. In high-collateral environments, interlinking may still offer marketing advantages, as a single contract can offer both credit and insurance.

11.4 **Conclusion: Designed for development impact**

Small farm agricultural insurance is not an end in itself. Its importance comes from its ability to relieve a fundamental problem of economic development, namely the economically costly self-insurance and coping strategies that can make and keep smallholders poor. Approaching the insurance problem from this development impact perspective suggests a demand-centric approach to contract design, rooted in data on small farm households and their production technologies and constraints.

As explored in this chapter, this approach allows evaluation of alternative insurance indices – area yield, satellite-based, weather-based and hybrid combinations – and selection of a statistically optimal contract design that reduces uninsured basis risk in a cost-effective fashion. In addition, this approach opens the door to context-sensitive interlinked credit-insurance contracts designed to simultaneously deepen financial markets and facilitate small farm technology take-up by operating on both the demand and supply sides of the agricultural credit market. As argued here, it is the combination of intelligently designed contracts and interlinking that will allow index insurance to dominate small farm self-insurance strategies, sustain demand and, ultimately, achieve the desired development impact, both on small farm incomes and on human development outcomes.

Appendix – Simulation analysis index insurance versus self-insurance

This appendix provides additional detail on the simulations discussed in sections 11.1 and 11.3. A complete discussion of these simulations, as well as further analysis of the degree to which there would be a demand for index contracts is given in Carter et al. (2010).

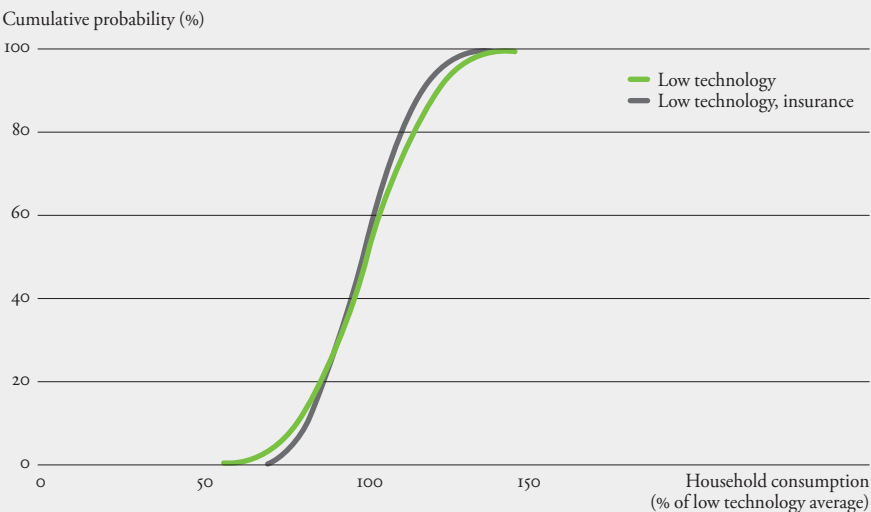
Index insurance with traditional technology only

Figure 11.4 illustrates the risk faced by a stylized farming household both with and without index insurance, assuming the opportunity set is unchanged. The horizontal axis shows the income available for family consumption as a percentage of the family's average consumption without insurance (100 per cent would thus be the family's average consumption level). The vertical axis shows the cumulative probability of different consumption outcomes for the family. The

green line shows these probabilities when the family does not have an index insurance contract. For 50 per cent of the time the family will have consumption levels at or below its average, and under the assumptions made for the simulation, for 10 per cent of the time the family will need to make do with consumption at or below 75 per cent of its normal level.

Figure 11.4

Insuring the traditional technology



The grey line shows the consumption probabilities if the family's agricultural production is insured by an index contract. For illustration purposes, we have assumed that half of the yield variation faced by the family is covered by the index contract and that the other half is uncovered basis risk. We also assume that the premium charged for the contract has a loading of 20 per cent, meaning that the household pays 20 per cent more in premiums than it expects to recover from indemnity payments. Finally, we assume that the strike points are set in such a way that pay-offs are triggered whenever measured or predicted zone yields fall below their average level.

Careful examination of Figure 11.4 shows both the strengths and weaknesses of index insurance. First, the probabilities of extremely low outcomes drops substantially. With insurance, there is only a 2 per cent chance of household consumption falling below 75 per cent of its normal level, down from a 10 per cent chance without insurance. While lower, this probability is not zero, reflecting the fact that the contract does not cover all risks. Complete insurance cover without basis risk would stabilize household consumption at its mean level (less mark-up or loading costs). As can be seen from Figure 11.4, substantial basis risk remains relative to this idealized (but infeasible) complete insurance.

This factor, along with the fact that premiums are marked up by 20 per cent means that even with insurance, the family's consumption can still fall below its pre-insurance average of 100 per cent. Household average income is also reduced by 1 or 2 per cent because of the loadings charged to the insurance. The partial reduction in the probability of low outcomes is purchased at the cost of reduced average income.

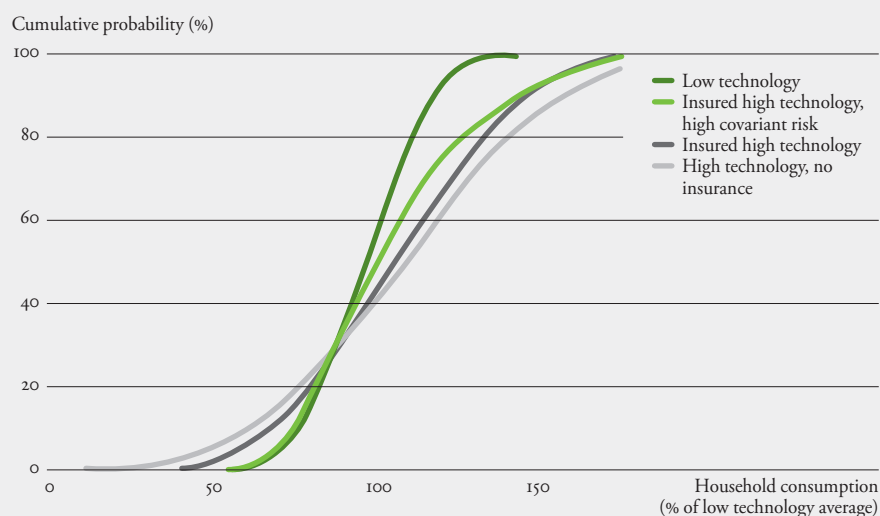
Index insurance and high-return economic activities

Figure 11.5 illustrates the cumulative distribution function for the stylized high-return activity described in section 11.3 above. Compared to the traditional activity (shown here as the dark green line), the high-return activity has mean returns that are 25 per cent higher than the traditional agricultural activity and requires the purchase of significant cash inputs. The light grey line in Figure 11.5 shows the probability of different household consumption outcomes under the high-return activity when the cash costs are either completely self-financed by the household, or equivalently, financed by a fully secured loan.

As can be seen, under the high technology the household faces almost a 10 per cent chance that its total consumption will be less than 50 per cent of the average income it can obtain under the low technology. However, some 40 per cent of the time household consumption will be at least 25 per cent higher than average income under the low technology.

Figure 11.5

Interlinking insurance and credit for technology take-up



The dark grey line in Figure 11.5 shows the impact of index insurance when interlinked with credit and technology take-up in a relatively unfavourable agro-

ecological environment in which only 50 per cent of the risk faced by households can be covered by a well-designed index insurance contract. Despite this disadvantage, this interlinked insurance arrangement pushes the risk of low consumption outcomes back towards the levels under the traditional, low-returning technology. At the same time, the interlinked adoption of the new technology outperforms self-insurance strategy 70 per cent of the time. While this interlinked contract still presents the household with a trade-off (higher returns at some increased risk of low outcomes), the trade-off is less severe than that offered by the high technology without insurance.

Finally, as shown by the light green line in Figure 11.5, interlinked adoption of the new technology can completely dominate self-insurance if more (two-thirds) of the overall risk faced by households is insurable, covariant risk.

Livestock insurance: Helping vulnerable livestock keepers manage their risk

Anupama Sharma and Andrew Mude

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Livestock accounts for 40 per cent of global agricultural output and supports the livelihood and food security of over one billion people (FAO, 2009). A livestock-related livelihood represents a way out of poverty for a significant number of the world's poor. However, the poor still face a number of risks when they strive to access the benefits of the growing and vibrant livestock sector.

Reducing the inherent vulnerability of people dependent on livestock in smallholder production systems has been the central motivation of livestock insurance targeting poor or vulnerable populations. While some countries, such as India, have significant experience with livestock insurance for the poor, improvements in the provision of insurance products, as well as innovations in their design, are fuelling interest in the potential of insurance to reduce the vulnerability of the poor to the risks associated with a livestock livelihood. A growing recognition of the importance of risk management as a key pillar of any poverty-reducing strategy (Pica et al., 2008), coupled with a complex, evolving livestock economy that offers opportunities for the poor, provides a foundation upon which livestock insurance may flourish.

This chapter highlights experiences that have offered valuable lessons on the potential benefits of livestock insurance, analyses the reasons for the failure of some insurance products and examines the conditions required for the successful implementation of a livestock insurance product. Section 12.1 illustrates the significance of the livestock economy globally and discusses the importance of managing the livestock risks to improve well-being in rural environments. Section 12.2 draws attention to a sample of livestock insurance experiments across the globe and summarizes the experience gained with them. Section 12.3 underlines the common challenges that many livestock insurance pilots face. By highlighting new innovations in insurance design and provision, section 12.4 discusses various opportunities that can help counter the obstacles to livestock insurance.

Why livestock insurance?

Livestock plays an important role in the livelihood of the poor. It serves as both a source of income and a source of productive wealth that the poor can

expect to rely on for future income flows. It is also one of the few assets readily available to the poor, and especially to women, who have greater difficulty accessing other productive livelihood opportunities (FAO, 2009). It is estimated that close to one billion people, or about 70 per cent of the world's 1.4 billion people living in extreme poverty, depend on livestock for their livelihoods (Delgado et al., 1999).

Although the livestock revolution represents a powerful vehicle for channeling pro-poor growth (IFAD, 2004; Thornton et al., 2008; FAO, 2009) a major hindrance to the poor's engagement in livestock production is their high degree of vulnerability to the many sources of mortality, morbidity and other risks that pervade the livestock production and marketing chain. Any disease, accident or theft of livestock leads to a substantial loss for the household. In addition, huge production risks associated with dairy activities render animal husbandry a risky proposition for low-income households. The production risks can relate to a scarcity of input such as fodder or water for the animals, the high morbidity of individual animals or an epidemic (*see Table 12.1*). The tropical climate and poor hygienic conditions pertaining in many developing countries are some of the factors that trigger or aggravate diseases such as mastitis, foot and mouth disease (FMD) and haemorrhagic septicaemia.

Table 12.1

Types of risk in livestock livelihoods	
<i>Production risk</i>	<i>Price risk</i>
Death, accidental and natural	Weak rural infrastructure, e.g. roads, temperature-controlled supply chain
Disease: – High morbidity due to epidemics and variable risks – Stoppage of milk production due to diseases such as mastitis and FMD	Fluctuations in cost of livestock and products
Problems in input supply: – Lack of dry and green fodder for animals – Lack of water during droughts causing stress	

Animal death is the biggest risk for poor cattle owners. Since animals often represent a major asset for a low-income household, perhaps even its most valuable asset, their death can cause a significant decline in the household's net worth, not to mention a fall in income and productive output. If the animal has been purchased through a loan, the household may have a debt on an asset it no longer owns.

Depending on the context, other risks are also important. Heffernan et al. (2003) conducted a survey of 3 000 households across Bolivia, India and Kenya and found that livestock diseases are the most significant problem for approximately 20 per cent of all producers. Others (Perry et al., 2003; Pica-Ciamarra, 2005) have argued that in low-income countries across Africa, Asia and Latin America animal diseases are a major factor in limiting meat and milk production and depressing livestock incomes. Moreover, for a majority of livestock livelihoods, especially in semi-arid areas, climate-related shocks that result in water and fodder scarcity constitute the most significant risk. Most of the production systems the poor engage in – agro-pastoral, pastoral and smallholder crop-livestock systems – are rain-fed, with severe shortfalls often resulting in productivity-reducing morbidity and, in many cases, widespread mortality.

The initial consequence of the growing water and fodder scarcity is a reduction in lactation rates, which lowers daily income. The calving frequency of weakened animals is also likely to be adversely affected, with consequences for the expected income stream from a future herd. In addition, emaciated livestock have impaired immune systems and are more likely to succumb to diseases, further perpetuating the cycle of morbidity. In extreme cases, severe shortages of water and forage lead to mortality.

Uninsured risks, particularly for valued productive assets, leave poor households exposed to serious losses from negative shocks. The welfare costs due to forgone investment opportunities and ineffective coping methods are considerable (Dercon, 2005; Dercon et al., 2005; Barrett et al., 2006; Carter and Barrett, 2006).

Mortality due to the key sources of vulnerability – starvation and disease – has generally been the most amenable to insurance, and comprises the set of risks that a majority of livestock insurance programmes cover. However, not all risks are insurable, and therefore it is important to build an overall risk management strategy that also includes reducing risk through preventive measures such as better feeding, vaccination, breeding and de-worming.

12.2 Livestock insurance provision to the poor

In the few examples of livestock insurance schemes in developing countries, governments and the public sector have often been the pioneers. As an extension of the agricultural support that governments may provide, including the guarantee of minimum prices for agricultural commodities, re-financing, extension services and subsidies for inputs, insurance covering the inherent risks of agricultural production is a complementary method to boost agricultural production and the economic welfare of rural households.

India, which holds the largest stock of livestock in the world and boasts one of the largest government-supported insurance programmes for agriculture in the developing world, has offered various livestock insurance schemes since 1971, when nationalized banks, through the Small Farmer's Development Agency, began to finance the purchase of cattle and offered mandatory insurance to protect their loans (Sharma, 2010). Table 12.2 describes the various programmes started by the Government of India since then.

Table 12.2

Chronological events in the insurance history of India

<i>Year</i>	<i>Implementing agency/programme</i>	<i>Note</i>
1971	"Cattle Insurance Scheme" by Small Farmer's Development Agency	Nationalized banks began to finance the purchase of cattle and agreed to collect premiums from beneficiaries. Cover was for one year and the premium was collected annually.
1983	"Cattle Insurance Policy" under Integrated Rural Development Program (IRDP)	Livestock and asset insurance was extended to the poor along with the IRDP subsidized loans (50 per cent subsidy). Compulsory product with loan. The premium amount was 2.25 per cent (death) + 0.85 per cent for permanent total disability and the product had no age limit for the cattle.
1983	Livestock insurance under market agreements	Voluntary product and no subsidy. For animals not covered under IRDP. Premium: 2.85 to 4.00 per cent. Age specified: two to eight years for milk cow, three to eight years for buffalo.
2006	"Livestock Insurance Scheme" implemented by State Livestock Development Boards and State Animal Husbandry Departments	The insurance premium is subsidized 50 per cent. Competition increased between public and private players; premium not to exceed 4.5 per cent for annual policies and 12 per cent for three-year policies.

One salient similarity between these programmes is that even where private players have underwritten the risk and provided the agency and distribution services, the Government of India has subsidized these efforts, mostly by paying 50 per cent or more of the market premium. Despite this, product take-up has been relatively low, with less than 8 per cent of total insurable cattle covered (indiastat.com, 2010). Among the reasons cited for such a performance are poor implementation and limited distribution, inability or unwillingness to pay, and limited awareness of the product.

This pattern of government support is mirrored in other developing countries with livestock insurance programmes. In Eritrea, the National Insurance Corporation of Eritrea (NICE), established in 1993, offered a range of subsidized insurance products ranging from medical and asset accident insurance to various agri-

cultural policies, including livestock losses (Mohammed and Ortmann, 2005). NICE's livestock insurance policy, limited to dairy cattle, indemnifies the insured for death due to accidents, illness, diseases and epidemics. With a subsidized premium of 4 per cent of a cow's value, indemnification is limited to 75 per cent of the sum insured.

Despite the high asset value of cattle in Eritrea and the considerable mortality risks faced, almost 10 years after the product was offered only 4.4 per cent of dairy farmers have used its services (Mobae, 2002). Studies indicate that such a low demand is due to poor NICE cover, lack of farmer understanding of the product, and an ineffectively tailored product (Mohammed and Ortmann, 2005).

In the Islamic Republic of Iran, where agriculture accounts for a quarter of the nation's GNP and 85 per cent of the agricultural workforce is employed in livestock production (Naemi Nezam Abadi, 1999), livestock insurance is offered through the state-owned Agriculture Bank. While the product is subsidized and target clients claim strong demand for livestock insurance, take-up has been quite weak (Chizari et al., 2003). The cost and unfavourable terms of the policy, as well as slow and uncertain claims payments, have been highlighted as the cause of the poor acceptance level (Chizari et al., 2003).

Viet Nam has had a more varied and comprehensive experience with livestock insurance than Eritrea and Iran because the role of the state has been more pronounced and livestock insurance has been offered as a stand-alone product. In Viet Nam, much like in India, the logic behind livestock insurance is driven by the demand for credit for livestock purchases. Sixty per cent of households currently take out loans for livestock production and 54 per cent of all formal loans in the rural areas of northern, central and southern Viet Nam are for livestock (Dufhues et al., 2004; Duong and Izumida, 2002). As such, there is a demonstrated need for livestock insurance to protect lenders from default risk.

Dufhues et al. (2004) investigated the constraints and potential of livestock insurance schemes in Viet Nam by looking at four different types of insurance providers: a credit-linked insurance product within a state-owned company; a credit-linked insurance product offered through a development project; a pure livestock insurance contract offered by a state company; and finally, a private insurance company. These efforts faced several challenges, including the collapse of the state-owned company offering pure livestock mortality contracts, and large losses met by the state-owned company and the development project offering credit-linked products. Dufhues et al. (2004) conclude that the lack of mortality data available to determine premiums accurately, as well as political pressure to set low-level premiums, have been the biggest problems facing the development of a sustainable livestock insurance market for smallholders in Viet Nam.

The progress made in Viet Nam, however, is promising. The private, strictly commercial initiative was driven by Groupama, one of Europe's leading multi-

line insurance companies with a strong emphasis on agricultural insurance across the world. In September 2002, Groupama began to offer livestock insurance in Viet Nam. After the first several years in which Groupama made losses on this product, the company has expanded its extension infrastructure, opened complementary veterinary shops to assist with monitoring and verification, carried out data collection exercises to improve its understanding of the risks, and revised its product terms.

Similar experiments have been conducted by BASIX and IFFCO-Tokio in India. BASIX's successful implementation of the product has constantly led to lower mortality and morbidity in the area and more widespread livestock insurance (*Box 12.1*). Preliminary results from the Indian insurer IFFCO-Tokio's technology-driven product give hope that livestock insurance can be commercially viable (*see Box 12.2*).

Box 12.1

Livestock risk management strategy by BASIX, India

BASIX, a livelihood promotion institution, offers a full range of financial and non-financial services to assist poor households. Bundled with preventive veterinary care, its livestock insurance product underwritten by Royal Sundaram covered 26 129 cattle as at 31 March 2008. One of the main process innovations was that the certification of animal value and health was delegated to BASIX field staff. It reduced transaction costs as no veterinarians were involved, so the product could be offered at a lower price. The lack of technical knowledge was overcome by staff training. It was also assumed that even if the BASIX staff made some errors, the benefits of this solution would outweigh costs, which were previously generated by low-quality and fraud-prone veterinary services.

To reduce mortality risk, field staff provide preventive veterinary services to policyholders. Other product features included a 10-day waiting period from the date of tagging, 100 per cent sum insured, underwriting by the insurance company based on submission of electronic data by BASIX, and a discount on premiums for multiple animals (5 per cent for two animals, 10 per cent for three or more). These features have enhanced the value proposition to farmers, and reduced fraud and moral hazard.

Source: Adapted from BASIX, 2011.

Before introducing some of the innovations in processes and policies that can unleash the promise of livestock insurance, the next section describes in greater detail some of the difficulties that must be overcome.

12.3 Difficulties in providing livestock insurance

Livestock insurance is a relatively small segment of the market, accounting for 4 per cent of the total agricultural insurance premiums written worldwide (Iturrioz, 2009). Observations indicate the huge potential but very low penetration of this market, which implies that livestock insurance is either too costly or is not designed to meet the specific needs of the target clientele. These problems – high cost of premiums or poorly designed products – are the result of a series of hindrances across the supply chain.

Like many other insurance products, livestock insurance is plagued by the twin problems of moral hazard and adverse selection, which are based on asymmetric information between the insurer and the insured. Ineffective identification techniques, costly claims verification methods, and a lack of standard valuation considerably facilitate the rampant fraud in the industry. In parts of India, insurers fear that a substantial portion of livestock insurance claims are fraudulent, as indicated by the high mortality rate in insured areas (Sharma, 2010). To curb losses due to moral hazard and adverse selection, insurers resort to tighter controls which not only increase the costs of premiums but also make it difficult to comply, thereby discouraging take-up. There is a serious need to improve verification and monitoring processes to break the perpetuating cycle of fraud and low take-up.

Livestock insurance, particularly those products targeted at smallholder populations in rural areas, is considered a transaction-heavy product for the following reasons:

- **Monitoring and verification:** To combat fraudulent claims, insurers must appoint their own veterinarian, or other relevant agent, for tagging, valuation and risk calculation. Verification of a loss in remote rural areas for one to two insured animals is a considerable transaction cost relative to the revenue stream drawn from the particular client.
- **Valuation of animals:** The value of livestock is closely correlated with their age, health and production capacity. Due to the range of breeds in different geographical areas with different feeding patterns, insurers find it difficult to assess the correct value and are therefore hesitant to enter this market.
- **Identification of animals:** Insurers obviously need to know which animals they are insuring; however, poor identification techniques substantially increase the moral hazard problem and consequently affect product pricing.
- **High operational cost:** Operational processes associated with issuing policies and settling claims can be labour-intensive, and hence expensive.
- **High incidence of fraudulent claims:** Fraudulent practices are rampant in livestock insurance due to fragile identification methods.

- **Absence of actuarial pricing:** It is difficult to produce an effective design in an environment lacking in data to make credible probability assumptions and to price insurance products appropriately. Consequently, underwriting becomes difficult when the policyholder is unable to or does not disclose the correct health status and history of animals.
- **Complementary systems for risk reduction:** Most livestock support services such as artificial insemination or natural service, vaccination and de-worming are time-sensitive. Government institutions are not always able to deliver on time due to both financial and bureaucratic constraints. Though the government understands that there is a compelling need to improve the dairy and animal husbandry sectors, efforts can be so thinly spread that the desired positive effects are not achieved. Therefore, many obstacles remain unchallenged, probably due to the public nature of animal health interventions.

While supply-side obstacles present the biggest hindrances to a sustainable livestock insurance market, demand considerations must also be taken into account. Demand-side challenges for livestock insurance are not much different from those for other insurance products. Inability or unwillingness to pay, coupled with a limited knowledge of the product, hinder the growth of livestock insurance.

12.4

Catalysing the market: Innovations to make livestock insurance viable

Despite these significant challenges to achieving viability and scale, some innovations are emerging that enable the obstacles identified to be circumvented. As explained below, some recent developments in product design, identification methods, operational processes, institutional models, technology and subsidies may pave the way for the expansion of viable livestock insurance.

Expansion of product risk cover

There is a need for more comprehensive cattle-care covers. Most livestock products cover mortality and its various causes, but insurance may be more attractive if it addresses more than death risk and tries to graduate towards “productivity cover”. Productivity (e.g. lactation rates or calving frequency) can be affected by disease, climactic extremes and other factors that lead to considerable income shocks for the poor. While greater risk cover means higher premiums and thus lower demand from households with limited liquidity, premiums for such products could be made more attractive by bundling them with risk-reduction strategies to contain overall risk and help households benefit from the arrangement.

Improved identification methods

Various identification methods have been tested in the market with interesting trade-offs between costs and effectiveness (*see Table 12.3*). As shown by the IFFCO-Tokio example (*see Box 12.2*), the rapid improvement in technology for the identification and tracking of livestock may help overcome one of the biggest difficulties for livestock insurance. Radio frequency identification (RFID) not only facilitates identification, but also has other important applications, such as the ability to gather and store appropriate data easily. Once RFID technology has enabled sufficient data to be generated and recorded it will become easier to implement risk-reduction measures and to track diseases than it has been in the past. Technologies that can help identify and track the physiological characteristics of animals need to be further analysed so that their costs and benefits can be assessed. In time, cost reduction, greater efficiency and the information-provision capacity of technology-based livestock identification and tracking systems will reduce the expense of monitoring and bring down the incidence of fraud. This should permit a considerable reduction in premiums.

Table 12.3

Comparison of different techniques for identification of livestock

<i>Issue/strategy</i>	<i>Read distance</i>	<i>Ease of reading</i>	<i>Retention</i>	<i>Ease of application</i>	<i>Cost</i>
Metal tag	Inches	Varies	Low	Easy	< US\$0.01
Branding	Feet	Good (while still visible)	Fades over time	Difficult	Cheap
Tattoo	Few metres	Low	Fades over time	Difficult	Cheap
Ear notch	Feet	Difficult	Long	Difficult	Cheap
Colour pattern	Metres	Difficult	Long	n.a.	Cheap
Bar-code	Inches	Varies	Good to moderate	Easy	Cheap
RFID (implant)	Inches to feet	Easy	Good to moderate	Slightly difficult	US\$1 to US\$4 (depends on volume)
RFID (external)	Inches to feet	Easy	Good to moderate	Easy	US\$1 to US\$4 (depends upon volume)
DNA testing	n.a.	Lab testing	Lifetime	Test takes time	Very expensive
Retinal imaging	Inches to feet	Easy	Lifetime	Equipment set-up	Not used extensively
Muzzle identification	Inches	Requires expertise	Good	Precautions to take muzzle imprint	Still in experimental stage

Source: Adapted from Comparison of animal identification devices and numbering systems, 2010.

Improved processes

Both the BASIX and IFFCO-Tokio examples described in this chapter emphasize the importance of redefining the involvement of veterinarians in the livestock insurance processes. There is a high risk of collusion between veterinarians and farmers and even other intermediaries involved in the value chain, such as lenders. Therefore, both schemes employ their own veterinarians and use their front-line staff to take over some of the veterinary tasks.

Box 12.2

Improving the viability of livestock insurance at IFFCO-Tokio

IFFCO-Tokio is testing a livestock insurance model to reduce fraud by using an identification device based on RFID technology. In the period from August 2008 to March 2010, almost 15 000 cattle were insured. While the project is still in its pilot stage, the lower claims ratio (42 per cent), which is less than a fifth of the claims ratio with traditional ear tags, suggests that the new technology is working.

Perhaps even more important than the technology is the change in process that IFFCO-Tokio initiated because of the technology. IFFCO-Tokio now oversees the tagging of each new animal, reducing the possibility of claims being filed for uninsured animals. There is still visible resistance to the new technology from bank staff and veterinarians as it is no longer possible for them to make fraudulent claims. Contrary to previous concerns, the RFID-driven cattle product is well accepted by clients. By and large, the cattle owners accept the new technology as the enrolment and claims processes are clear, and the technology does not increase stress for cattle. Some have even indicated that they prefer RFID to the external tag because it protects their privacy, as neighbours do not know that they received a loan to purchase the animal.

Source: Adapted from the ILO's Microinsurance Innovation Facility, 2011a.

Index-based insurance

Index-based insurance is a promising innovation that has gained attention over the past decade and given rise to many pilot products across the world (*see Chapter 11*). Index-based insurance products might be particularly relevant given low-income households' growing exposure to climate-related risks (*see Chapter 4*). The creation of insurance markets for events that can be precisely calculated and linked to a well-defined index is increasingly being championed as a way to make the benefits of insurance available to the poor (World Bank, 2005; Skees, 2008; Hazell et al., 2010).

Although typically associated with crop insurance, index-based insurance can also be relevant for livestock cover (*see Table 12.4*). This technology sharply reduces transaction costs and hence may help to make a product profitable. Index-based insurance also helps to reduce the moral hazard and adverse selection problem. However, all this comes at the cost of basis risk, whereby there may be a discrepancy between the insurance payout and the farmer's actual losses.

Table 12.4

Index-based insurance experiments for livestock insurance

<i>Country</i>	<i>Scheme or type of insurance</i>	<i>Salient features</i>	<i>Service provider</i>
Mongolia	Death cover	Index-based product for migrating population during harsh winters based on historical mortality rates	Risk-layering by cattle rearers, insurers and government
Kenya	Cover for catastrophic events like drought, which impacts fodder	Index-based product against drought and other weather phenomenon using NDVI	Pilot by private insurers with the support of the International Livestock Research Institute

Mongolia was the first to pilot an index-based insurance product for livestock that covered substantial losses due to extreme winters (*see Box 12.3*). In January 2010, the second index-based livestock insurance product was launched in the Marsabit district of northern Kenya and was aimed at providing insurance cover for livestock mortality due to a prolonged lack of forage (Mude et al., 2010). The Marsabit index is derived from a satellite-based normalized differenced vegetation index (NDVI) series that summarizes the state of rangeland forage availability. More than 1 000 livestock were insured during the period to May 2011.

Both of the projects are still in their experimental phase and need datasets to substantiate the success stories. Moreover, index-based livestock insurance might be effective in semi-arid zones but its application to areas with more complex, multi-activity agricultural production might not be possible. The jury is still out on the effectiveness of this solution if no subsidies are received from the Government.

Community-based model

While there are few experiments around the globe to test and verify community-based models for livestock, their potential benefits cannot be neglected. The Livestock Protection Scheme (LPS) running in Andhra Pradesh, India is one example. The programme was successful in reducing fraud through community supervision and vigilance (Sharma and Shukla, 2010). The programme managed to keep the total delivery costs down and achieved significant outreach (*see Table 12.5*). Close monitoring with strong community ownership resulted in reduced fraud, helped to build trust among community members and was instrumental in increasing enrolment. However, the scheme is self-insured, which might become a problem if mortality increases and, as with many community-based schemes, it might run into governance problems when a larger scale is achieved.

Box 12.3

Index-based livestock cover in Mongolia

In 2005, the World Bank was invited to assist the Government of Mongolia with a livestock insurance programme. Since it was clear that it would be impossible to implement a traditional scheme that performed a loss assessment on animals in the vast space of Mongolia in harsh winter conditions, alternative methods for measuring livestock losses were sought. Mongolia had been conducting a census of animals every December since the early 1920s, which provided estimates of mortality rates of animals by species and by *soum* (rural districts). It was proposed that these data be used as the basis of premiums for a new insurance programme. Policymakers and others understood that premiums based on *soum*-level mortality rates would retain the incentives for herders to work hard to save their animals in severe winter conditions.

The goal of index-based livestock insurance (IBLI) is to provide cover for catastrophic livestock mortality events within a region, recognizing that smaller, individual livestock mortality risks are better addressed through appropriate household-level risk management strategies. The IBLI pilot involves a public–private partnership with a commercial insurance product, the Base Insurance Product (BIP), and a Disaster Response Product (DRP) to compensate herders when major livestock losses occur. The BIP pays when *soum* livestock mortality rates exceed 6 per cent. Losses beyond 30 per cent are managed by the DRP and currently paid with a contingent loan from the World Bank, with the intention that they will be financed by the Government of Mongolia after the pilot ends. Thus, the commercial exposure (BIP) is for the layer between 6 and 30 per cent mortality and the social component (DRP) is for losses exceeding 30 per cent mortality. Herders can select their sum insured based on an aggregate value of all their animals for the specific species. Typically, herders have been insuring about 30 per cent of the estimated value of their animals.

In general, IBLI has exceeded the performance goals that were developed when the project started. Four insurance companies are currently participating. In 2006, 2 400 policies were sold; over 3 700 policies were sold in 2007; and 4 100 policies were sold in 2008, representing 14 per cent of herders in the pilot provinces. In 2008, following high livestock losses, US\$340 000 was paid out to 1 783 herders. All financing systems worked as planned; a small amount was drawn from the contingent debt facility. Lenders have offered lower interest rates and better terms for loans to insured herders, and the National Statistics Office has successfully implemented a mid-year census to facilitate timely payments as most losses occur in the first five months of the year.

Source: Adapted from GlobalAgRisk, 2009.

Table 12.5

Parameters of performance for LPS, Andhra Pradesh, India

	2006 to 2007	2007 to 2008	2008 to 2009	2009 to 2010
Enrolment	3 519	4 756	48 675	90 035
Claims received	96	120	327	—
Percentage of claims	2.73	2.52	0.67	—

Source: LPS, DRDA, State Government of Andhra Pradesh, India, 2011.

Smart subsidies

As transaction costs are high and capacity to pay is low, governments may need to intervene to catalyse livestock insurance. This has often been accomplished with the provision of blanket subsidies to state-owned insurance companies or even as discounted premiums paid to private insurers. While a strong case can be made for the need for subsidies to support nascent ideas that may result in social welfare gains, their application has often been ad hoc, dampening incentives for innovation, and has been blamed for many failed attempts to provide livestock insurance. In addition, as mentioned above, various government programmes have shown that direct subsidies have not helped to increase coverage, instead leading to stagnation in product development.

There is a strong case for well-targeted “smart” subsidies that could help to accelerate the development of livestock insurance based on the principles of a competitive market:

- **At producer/farmer level:** Subsidies can be used as premium discounts for livestock keepers who practise risk-reducing husbandry. It will help to achieve the objectives of inculcating good risk-reducing practices by rewarding those who engage in them with discounts, and reducing overall premiums by minimizing the actual exposure to risk.
- **At intermediary level:** Where aggregators help to pool risks and reduce transaction costs, subsidies could be in the form of the fixed costs to set up the necessary business processes. Intermediaries can also be encouraged to provide data or other services that can help insurers operate more efficiently at lower cost.
- **At insurers’ level:** Premium subsidies could be given to insurance companies, but they should regularly bid for these subsidies in an open and transparent system that allows new competitors to enter. The provision of premium subsidies could also come with conditions that insurance companies must adhere to, such as performance contracts, to retain the business.

The provision of subsidies can reduce premiums, stimulate demand and improve innovation in contract design by increasing information, reducing the leakage due to fraud and allowing the provision of premium discounts to clients

who take other risk-reduction measures. However, as the PICC case study shows (*Box 12.4*), even if subsidies can make the product more affordable, it might not be enough to stimulate demand for it.

Box 12.4

Paying the premium after the term?

PICC, a state insurer in China, in collaboration with the Government's agriculture extension services, has been piloting a voluntary swine insurance product since 2005 in Sichuan province. The local government pays a 40 per cent subsidy for the premium, which is set at an affordable rate of RMB 10 (US\$1.50) per animal. Demand for insurance remains low even when premiums are heavily subsidized. Sales stagnated at the level of 200 000 pigs covered annually, or 20 to 25 per cent of the total market.

Liquidity constraints and a lack of trust in insurers play important roles in the low take-up of microinsurance. To overcome these problems, researchers from the Beijing-based International Centre for Agricultural and Rural Development (ICARD) and the US-based International Food Policy Research Institute are testing an alternative premium collection arrangement in which farmers will be allowed to defer paying until the end of their insured period. Farmers who enrolled in the pilot programme in 2011 were provided with an insurance voucher that identified them as having the swine insurance cover. This arrangement enables farmers to benefit from insurance despite the trust issue and liquidity constraints they face. Default on premium payment is expected to be limited by eligibility to access insurance in the next period, as well as by the involvement of government extension services in the scheme.

Source: Adapted from the ILO's Microinsurance Innovation Facility, 2011c.

12.5

Conclusion

Livestock production offers a credible way out of poverty for many smallholder livestock keepers. However, for them to effectively participate in the livestock revolution and share in its expected benefits, they must have access to methods of managing the various risks involved in livestock rearing and marketing.

Livestock insurance has the potential to help many livestock keepers manage the production risks they face. Despite its promise, however, the implementation of livestock insurance poses many challenges. The supply of livestock insurance is hampered by difficulties in identifying and tracking insured livestock and the substantial cost of making sales to smallholders in remote areas. This naturally creates disincentives for the design of intelligent policies. Catalysing supply would

require tapping into innovations in new information technologies that reduce fraud and the costs of delivery. It is important to point out that in the current distorted market, demand also remains a big problem due to lack of awareness and unwillingness to pay the premium.

Solutions can be developed to improve the livestock insurance markets throughout the world. The application of index-based and community-based models to livestock insurance is definitely worth further exploration. Better marketing strategies and motivating insurance sales agents to sell livestock insurance products will certainly help to boost demand. New technologies such as RFID and NDVI are being tested. Finally, the livestock insurance sector can aim to build strong livestock management systems. Risk reduction and risk transfer systems should be integrated so that the overall performance of the livestock sector can be improved.

Despite early failures in livestock insurance provision, a more favourable institutional and infrastructural environment, technological improvements in design and delivery, and growing demand, not to mention insights gained from previous experiments, offer hope for commercially viable and welfare enhancing livestock insurance. Even where subsidies may be necessary, the case for subsidized livestock insurance as a productive safety net to facilitate the entry of the poor into livestock production and marketing could be compelling.

v Insurance and the low-income market

The psychology of microinsurance: Small changes can make a surprising difference

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Anyone who has struggled to meet a deadline, stay on a diet or save for a large purchase knows how difficult it can be to translate intentions into actions. Many of us struggle when temptation is near, tomorrow's problems seem distant and choices are complex. These realities drive the field of behavioural economics, the branch of research that incorporates lessons from psychology and economics to enrich understanding of how people make decisions.¹

Ideas from behavioural economics are transforming understanding of financial decision-making. One important lesson is that small changes in the design of products and marketing can sometimes make a surprising difference to how and whether financial products are used.

This chapter draws on behavioural economics ideas and results from laboratory and field research to describe new insights into how households think about losses and gains, weigh present and future trade-offs, struggle with self-control and are influenced by the way choices are framed. These insights may help insurers to improve product design, marketing, insurance education, pricing and take-up. This chapter articulates possibilities and describes examples, from microinsurance and broader contexts, to show practical ways in which behavioural ideas might be deployed to expand access to insurance.

Small changes can make a surprising difference

The microinsurance sector has grown in the last few years, but significant demand- and supply-side challenges remain. Suppliers are seeking ways to lower transaction costs, develop suitable distribution channels, adopt new technologies and improve organizational structures. These suppliers also realize that increasing demand and creating a culture of insurance in vulnerable communities will require changes in attitudes and beliefs, which can be a slow process (*see Chapter 14*).

¹ For a broad introduction to behavioural economics, see Thaler and Sunstein (2008); for critical perspectives see Rubinstein (2006) and Güth (2007).

This chapter is a discussion of simpler changes, small adjustments that insurers and delivery channels can make that can have a meaningful impact on how people understand insurance, whether they buy it, and how they use insurance products.

To influence decisions, organizations must: 1) understand how decisions are made; 2) understand the context and “construals” under which poor households operate; and 3) evaluate the factors that prevent action (Mullainathan and Shafir, 2009).

The choices we make are a function of both our personal characteristics and the contexts in which we operate. Traditionally, economists have not paid much attention to the power of context, focusing instead on the internal, personal characteristics of decision-makers. However, experimental research shows that situational factors can influence a person’s action in important ways – people sometimes behave very differently when external circumstances are modified.

Another overarching lesson from behavioural economics is the role of “construal”. People do not always process information and choices in an “objective” manner. Rather, information is construed, interpreted and processed, based not on the actual state of the world but on our mental representation of the options (Mullainathan and Shafir, 2009). As a consequence, the way choices are framed can matter greatly. Simply providing information is not enough – it is important to understand how that information will be processed.

13.2 Strategies

This section reviews eight situational adjustments that can influence behaviour and explores how framing can influence people’s decisions to buy and use insurance.

13.2.1 Keep it simple

When people make decisions, they evaluate the available options and choose the one they like best. Economists have long believed that “rational” people therefore welcome having options – the more alternatives they have to choose between, the better off they are. In traditional economic theory, that is the whole story, but behavioural economics offers a different view.

First, behavioural economics research has shown that adding choices can do more than just increase options; it can change the nature of choice-making itself. This puts a focus on “choice architecture”. Choice architecture is the context in which a decision is made and, especially, how options are presented, or framed. The focus is on which options are available and, critically, on how the available options are perceived.

Differences in framing can be subtle, but they matter. Options can be presented alone or in comparison to something else, and the nature and the number of available alternatives for comparison matter.

Consider an example from magazine sales that has parallels to insurers selling a range of bundled products. Ariely (2009) reports on an experiment in which people were offered magazine subscriptions. Individuals were presented with two lists of subscription options. The first list included three items: online only for US\$59, print only for US\$125, and the combination of “print + online” for US\$125. The second list included two items: online only for US\$59, and print + online for US\$125. In the first list, the choice of “print only” is irrelevant from the point of view of traditional economic theory: it costs the same as “print + online” but the latter provides more value. It so happens, however, that including the “irrelevant” option strongly influences the choice made by individuals: 84 per cent of those asked to choose a subscription option in the first list chose the expensive “print + online” option, but only 32 per cent of those choosing in the second list did. In other words, including an irrelevant item in the list of subscription options increased take-up of the expensive product by more than 160 per cent.

It is not the point of the example to show how to manipulate customers into buying expensive products. Instead, it shows how different combinations of options can shift the focus of customers, often inadvertently. Insurers can test menus of options to keep customers focused on the most meaningful options.

Second, new evidence shows that when people face an excess of options, they can experience feelings of conflict and indecision that can lead to procrastination or inaction. This phenomenon, called “choice overload”, can be a real problem when it stands between people and the important decisions they want or need to make. The solution is not to eliminate all choices, but to recognize that providing too many choices can lead to inaction, counter to the desired outcome. In micro-insurance, it should be borne in mind, typical choices are not simply between no insurance cover and formal microinsurance products, but may also include a range of informal mechanisms that poor households use to protect themselves against risk (Collins et al., 2009).

The existence of a choice overload effect is supported by experimental evidence. The best-known example is an experiment in a California grocery store. Shoppers were presented with a selection of jams to taste. Among those who stopped to taste the jam, shoppers were much more likely to purchase a jar when they were presented with six choices than when they had 24 jams to choose between (Iyengar and Lepper, 2000). The idea of choice overload has been challenged (e.g. Scheibehenne, 2008; Greifeneder, 2008), but the relevance to financial choices remains worthy of concern. The choice overload idea shows up, for example, in decisions to save. In the United States, many individuals can save for

retirement through partially tax-exempt savings accounts available through their employer. Enrolling in such accounts, however, can be complex: it involves choosing what percentage of one's salary to save and how to allocate the money saved among many financial products with different risk profiles and returns. Researchers implemented a Quick Enrolment™ mechanism that allows employees to sign up for a savings account with pre-set contribution rates and asset allocations. The choice is greatly simplified: it becomes only about whether to save or not, omitting choices about how much to save and how. As a result of the simplified Quick Enrolment™ mechanism, participation rates among new employees of an actual firm tripled (Choi et al., 2009).

Another example comes from a randomized field experiment in South Africa. Bertrand et al. (2010) sent former clients of a consumer lender direct-mail marketing letters for a loan. They randomly varied different elements of the letter, including the interest rate advertised, reference to the interest rate as special or low, suggestions for how to use the loan proceeds, a large or small table of example loans, and a comparison with a competitor's interest rate. Overall, the authors found that advertising content had a significant effect on loan take-up. In particular, the number of examples presented in the letter influenced people's decision to apply for a loan. Potential borrowers who received a loan marketing letter with one example of principal, interest rate and maturity were more likely to apply for loans – not necessarily with the amounts and rates advertised – than those who received letters with several examples. For the lender, this was a small, no-cost detail of its advertising content, but it made a real difference: the estimated effect on take-up was the same as that of a 25 per cent reduction in the interest rate.

Simplicity is important in microinsurance marketing as well. Products that provide various cover options or opt-out/opt-in features can be so complicated that potential customers turn away – even if on paper the design makes sense.

13.2.2 Frame the loss

Another aspect of framing is the kind of message attached to a decision. Options can be presented with a positive message: "Take advantage of this once-in-a-life-time opportunity"; or a negative message: "Don't miss out on this once-in-a-life-time opportunity".

An example of positive and negative messages is gain and loss frames. Insurance marketing can convey the same basic information by drawing attention to the positive benefit of cover in the face of an adverse event or by highlighting the loss incurred by an uninsured person facing the same event. Theory suggests that negative framing is more powerful than positive framing, and there is some evidence that loss-framed messages induce demand more powerfully than gain-framed messages (e.g. Ganzach and Karsahi, 1995). For example, messages like

“Don’t lose your property or the money you put aside, buy insurance to be covered in case of emergencies” could lead more people to sign up for insurance than a positively framed message, such as “Increase your peace of mind, buy insurance to be covered in case of emergencies”.

The explanation for the power of loss frames is that invoking potential losses triggers “loss aversion”. Loss aversion is well-documented in the behavioural economics literature. A battery of experimental evidence has shown that the perceived loss associated with giving something up is greater than the perceived gain associated with obtaining it (Kahneman and Tversky, 1979; Tversky and Kahneman, 1991). The imbalance leads to an “endowment effect”, or a preference for what one already has. In other words, when we own something we think it is more valuable than other people do.

List (2003) looked for evidence of the endowment effect. He randomly selected research participants to receive a mug, a candy bar, both, or neither, and then surveyed them about their preferences over the two goods. Participants who did not receive anything were asked which of the mug and candy bar they would like to receive. Overall, they did not have a strong preference for either of these two low-value, common items – they were as keen on the mug as the candy bar. Participants who received either the mug or the candy bar, however, were much less likely to subsequently trade what they had for the other item – they were about four times more likely to leave the experiment with the item they initially received. The “endowment” mattered. Accordingly, in the case of insurance, suppliers often achieve success when stressing the potential loss of existing assets.

13.2.3 Facilitate self-control

Insurance, like savings, can be seen as an investment that yields future cash-flows. In a perfectly rational world, households would consider their present and future needs and optimally balance current consumption against saving and investing for the future. However, this is not the case. The temptation to spend our money now often gets between us and our most strategic investment goals.

Behavioural economics offers an explanation for problems with self-control and temptation. The notion of “time inconsistency” yields one of the field’s most important insights for financial decision-making. Time inconsistency captures situations in which people have preferences at different points in time that conflict with each another. For example, experimental data shows that some people are particularly impatient with regard to meeting their present needs. So, even if these people genuinely value saving regularly in the future, that plan will be hard to sustain since, as time goes by, the future becomes the present and the preference to consume will prevail. If given the chance, some people will change their

minds about saving. The tension is sometimes called “present bias” and it can similarly reduce the demand for insurance.

Self-control problems, for example, make it hard to accumulate the lump sums needed to make large, up-front premium payments. In fact, the size of premiums is frequently mentioned as an obstacle to buying insurance. One way to accommodate self-control problems is therefore to make it easier to pay insurance premiums by allowing customers to pay in small instalments rather than insisting on one large payment. This approach is modelled on other financial tools already used by the poor. Both microcredit contracts and informal saving schemes use small and frequent payments to help the poor create larger sums. There are, of course, sometimes economic reasons for up-front premium payments in the microinsurance context, but it is no surprise that practitioners are increasingly introducing small and frequent payments.

Another way to address self-control problems is with commitment devices. Traditional economic theory argues that people always value liquidity, or the option to spend money at any time, in the present or in the future. Behavioural economics research, however, shows that people who exhibit a present bias may prefer products that offer structure and impose discipline, such as a contractual savings account or an endowment life insurance policy (*see Chapter 8*), which restricts access to funds until a certain date or the achievement of a savings goal.

Experimental evidence on contractual savings accounts shows that they can be powerful. Ashraf, Karlan and Yin (2006) conducted a field experiment to test the efficacy of a contractual savings product offered by Green Bank of Caraga in the Philippines. They randomly divided clients into three groups and offered the contractual savings products, called SEED, to one group. Another received nothing extra. A third group received promotional material on the value of saving (but no contractual savings product). All groups also had access to a standard savings product without any commitment feature, and the SEED account offered the same interest rate as Green Bank’s standard savings accounts; the only difference was the impossibility for its holder to withdraw the funds until reaching his/her goal. What appears to many people as a limitation of the account was valued by others: women identified as having potential self-discipline problems were 15 percentage points more likely to sign up for the SEED account than other women. No difference existed for men. In addition, the commitment feature had a clear impact on savings balances. After a year, the average bank account savings increased by 81 per cent for customers offered SEED accounts, which was substantially higher than the savings in the other group.

This type of commitment mechanism can help people with self-control problems buy insurance. For example, insurance providers could offer an option to pre-commit during a lean season to buying insurance during the next harvest season. The lean season is when the need for insurance is felt the most, because

farmers cannot afford expensive emergencies, but it is also the time when farmers might not have the funds to buy insurance. Pre-committing to buying insurance, like the example tested by ICARD in China (*see Box 12.4*) could help some households who want to buy insurance but cannot avoid spending the money they would like to reserve for paying premiums.

In many ways, insurance itself is a commitment device, which requires individuals to make sacrifices in a structured manner in the present to qualify for a future benefit. Insurers can take advantage of this feature when marketing by highlighting the commitment nature of insurance products.

13.2.4 Make it salient

Poor households are faced with low and irregular income flows which they use to meet present needs. One of the main reasons poor households struggle to invest in the future – through either savings or insurance – is that future needs are not “salient”. Salient ideas are those that are most prominent among the many thoughts that compete for our attention. In other words, salience means being present at the front of our minds.

For future needs to be salient, they must be recognized and seen as priorities relative to present needs (Armendáriz and Morduch, 2010). People might not fully attend to future needs because they give them limited attention (Karlan et al., 2010). As a result, some future needs might end up being completely ignored and not factored into decisions. Making future needs salient at the point in time when people are making investment decisions can help with planning ahead.

Like comparisons and framing, timing is an element of choice architecture that can influence decisions. This may be particularly relevant for people with irregular or seasonal incomes. Duflo et al. (2009) illustrate this point. The researchers found that farmers in West Africa were more likely to purchase fertilizer at the time of harvest. One explanation is that farmers have funds available at harvest time and choose to invest the money to counter self-control problems, as discussed above. Marketing insurance to people when they have money to spend – during the harvest season, for example – seems intuitive. Another explanation is that farmers are most likely to see the benefits of the fertilizer at the time of the harvest, which makes fertilizer salient.

The problem of salience is particularly important for insurance. Insurance is often bought for unexpected, unpleasant events that people prefer not to think about. If people make their expense allocations based on needs that are most salient, these unexpected events are the lowest on their list of priorities, even though they might have the largest impact on their well-being.

Organizations that promote saving encounter similar challenges. Fortunately, new evidence from experimental research is encouraging. It shows that the poor

can and do save, and the results point to strategies insurers could use to make their products more salient.

Through a series of randomized field experiments in Bolivia, Peru and the Philippines, Karlan et al. (2010) tested whether text message reminders (transmitted by mobile telephone) helped people to save by overcoming the limited attention problem. In each experiment, a bank offered a savings product and sent text messages to clients that reminded them to save. The researchers found that reminders increased savings: they led to a 6 per cent increase in the total amount of money saved, and a 3 per cent increase in the proportion of individuals that met their saving goals.

In the same way that text messages encourage regular savings, insurers that collect premium payments over time could encourage payments with reminders that make risk management actions more salient. When asking people to pay their premiums, messages could remind people of the benefits of insurance during the adverse events that can affect their household.

By making adverse effects more salient, reminders can help overcome the limited attention that people typically pay to unpleasant, future events. For example, CARE's microinsurance programme in India organizes community-wide celebrations when it pays out insurance claims. Public payments of claims provide an opportunity to positively make adverse events more salient, and remind people – insured and uninsured – that insurance is helpful when these events occur.

People also exhibit “availability bias”: whether an event is easy to recall affects how people plan for it. The ease with which an event can be brought to mind influences its “subjective probability”, or how likely its occurrence is perceived to be. Recent events are more readily available, so people tend to overestimate the probability that they will happen again. Similarly, witnessing something makes it more salient than simply learning about it. Availability bias can explain the spike in property insurance sales after a natural disaster, such as the increase in demand for earthquake insurance in California after the 1989 Loma Prieta earthquake (Palm, 1995). Regulators and insurers should be aware of this bias when educating people in disaster-prone areas.

13.2.5 Undermine overconfidence

Another bias that influences subjective probabilities is overconfidence. People tend to give overly optimistic estimates of the likelihood of experiencing both positive and negative events (Weinstein, 1980). The issue is not merely misperception, however. Overconfidence holds even when people are aware of probability statistics for the population as a whole. The bias is manifested in a widespread tendency to consider oneself above average – for instance, 90 per cent of drivers

in New Zealand ranked themselves as safer-than-average behind the wheel (Walton and Bathurst, 1998). As a result, people may systematically underestimate the risks they face.

This kind of miscalculation could cause people to under-invest in proactive risk management relative to what they would invest if they were taking actual risk probabilities into account. People may overestimate their healthiness, for example, and underestimate the actual risks they face. In other words, when people do not have a good understanding of how likely they are to experience a hardship, they may undervalue protective measures like insurance.

13.2.6 Access mental accounts

Traditional economic theory assumes that money is fungible – it has no labels and households' wealth can be collapsed into a single lump sum (Mullainathan and Shafir, 2009). Insights from behavioural economics, however, have shown that people do not always think about their money that way. Instead, they compartmentalize their wealth into separate “mental accounts” tied to specific spending goals (Thaler, 1990). Individuals might have different mental accounts for expenses related to rent, education, food and emergencies. Mental accounting might also be literally enforced by saving through different mechanisms and vehicles: a ROSCA (rotating savings and credit association), asking a friend to hold money, or a savings account in a microfinance institution. Individuals maintain these accounts separately, stick to the spending goals of each account, and are reluctant to dip into these accounts for outside expenses. This practice partly explains the difficulty in “dis-saving”, where households are willing to borrow money even though they have savings.

However, mental accounting can also be used to create an association between the label and a future need. If individuals can create a mental association between an income stream and the future need, then this association could make that need salient (Karlan et al., 2010). And because mental accounts are not fungible, creating this association could prevent present needs from superseding future need.

In the text message reminder experiments discussed above, Karlan et al. (2010) tested the effect of mental accounts by associating reminders with personal savings goals set up by clients. Some clients randomly received messages which focused on their individual savings goals. While the associations with saving goals alone did not have a significant impact on savings, reminders that mentioned both particular saving needs and an incentive to save – a higher interest rate as a reward for making every scheduled deposit, for example – increased saving by nearly 16 per cent.

Most people tend to have a mental account for emergencies such as a rainy-day fund. Insurers could connect their product to this mental account to encourage people to see the insurance policy as an emergency fund. Referring to this pre-existing mental account could have a powerful effect on how people view the insurance product.

13.2.7 Realize the value of zero

There is something about a price of zero that people find compelling. Experiments show that items given away for free are strongly (and perhaps irrationally) preferred to alternatives with a positive cost and a higher net benefit, and that people's preferences suddenly change when zero enters the equation. Shampanier et al. (2007), for example, gave research participants the option to buy either a US\$10 or a US\$20 gift certificate for Amazon.com at a discount. In the first experiment, the researchers offered the US\$10 gift certificate for a discounted price of US\$5, and the US\$20 gift certificate for just US\$12. Most people chose to buy the US\$20 gift certificate for US\$12. In the second experiment, the certificates cost US\$1 and US\$8, respectively. Again, most people chose the US\$20 certificate. But the decision changed sharply in a third experiment. This time, the US\$20 gift certificate cost US\$7 and the US\$10 certificate cost US\$0. Given that choice, 100 per cent of participants chose the US\$10 certificate. The gift certificates' relative value did not change – the US\$20 gift certificate always cost US\$7 more than the US\$10 gift certificate. The only thing that changed was the introduction of zero, and the effect speaks for itself.

As regards insurance, people generally prefer zero-deductible/co-pay policies to policies with cost-sharing mechanisms. The trick, though, is to take advantage of this preference without undermining the role of cost-sharing in mitigating moral hazard and adverse selection. One option may be to offer a health insurance policy with a limited number of free outpatient visits per year, and a normal deductible or co-payment for all covered expenditure after that.

13.2.8 Eliminate obstacles to action

While the focus has been on marketing insurance, behavioural economics can also identify steps to improve the use of microinsurance. When analysing decision-making, economists often emphasize the influence of internal, personal characteristics of the individual and focus less on the power of external, contextual factors. In practice, people's actions are influenced, sometimes disproportionately, by seemingly inconsequential "channel factors" (Mullainathan and Shafir, 2009). The idea is that certain behaviours can be facilitated by small

nudges. When designed properly, channel factors can be effective in translating intentions into actions, but if ignored, they can lead to inaction.

An experiment by Leventhal et al. (1965) illustrates the role of channel factors. Participants were educated in the risks of tetanus and the value of vaccination, and provided with information on where to obtain the injection. Follow-up surveys showed that the education changed participants' beliefs and attitudes to tetanus. The education failed, however, to change their behaviour: only 3 per cent of the participants had themselves vaccinated. The situation changed when channel factors were added to the education. The vaccination rate rose to 28 per cent when participants were also provided with a map to the nearest infirmary and were encouraged to think about an actual appointment time. These additional channel factors were needed to translate intentions into action.

Channel factors can have an effect on whether people buy insurance. Insurance education that includes topics such as risk management and insurance contracts might be useful to change households' perception of the value of insurance, but the knowledge might not translate into behaviour change if obstacles to action are not removed. Making the purchase of insurance convenient through on-site insurance representatives after training sessions is one example of a channel factor.

Channel factors can also affect how people utilize the insurance. Consider the case of a health insurance scheme with an established network of hospitals. The insurer has screened each network hospital based on quality, and established a pre-determined price schedule. Now all the insurer needs to do is make sure that people use the hospitals. The first requirement is for people to know the hospitals on the list, which can be accomplished by providing them with a map of the hospitals. However, in emergency situations, people often do not have access or the presence of mind to search for the map. Some insurers, such as Uplift in India, have instituted a hotline for people to call during emergencies that can direct patients to network hospitals. All the cost and effort of building a network of providers could be wasted if patients are not guided there properly, and hence a minor intervention can have a huge impact on how policies are utilized.

13.3

Conclusion

New evidence from research at the intersection of psychology and economics highlights how small details can have big effects. One important conclusion is that the context in which individuals make choices, including whether to purchase insurance, strongly influences their decisions. Table 13.1 summarizes several small-scale strategies that microinsurers can use as they aim to increase the take-up and use of microinsurance.

Table 13.1

Summary recommendations

<i>Issue/strategy</i>	<i>Short description</i>	<i>Implications for microinsurance</i>
Keep it simple	Offering more choices to consumers is not always best. “Choice overload” can lead to inaction.	Microinsurance may be difficult to understand for its target clients. Take-up could be increased by reducing the number of options available in microinsurance policies or simplifying target clients’ choices in other ways, such as by offering composite insurance products.
Frame the loss	Individuals react differently to the ideas of gain and loss. The risk of losing something that one already has is a stronger motivation for action than the possibility of gaining something.	Take-up of microinsurance products could be increased by appealing to individuals’ fear of losing (e.g. their property, their health) rather than advertising the benefits of insurance.
Facilitate self-control	Many people are impatient – yet also value the future and worry about losses. Some recognize their inconsistency and seek products and services that impose discipline and self-control.	Buying an insurance policy means spending small amounts of money in the present to receive larger benefits in the future. Insurance can impose discipline and help people with self-control issues accumulate lump sums. Advertising this feature to impatient potential clients can therefore help increase take-up.
Make it salient	Future needs, as well as uncommon and uncertain events, are usually not at the front of people’s minds. Present desires and needs are usually much more salient, and much more likely to influence behaviour.	Making future and uncommon adverse events more salient can trigger action in the present to protect oneself against those events, notably by buying insurance. Paying insurance claims publicly, for example, is a good way to make adverse events more salient.
Undermine overconfidence	Insurance offers protection against uncertain events. Behavioural evidence shows that people are typically overconfident and think that these events are less likely to happen to them than to the rest of the population.	Microinsurers can increase take-up of policies by undermining potential clients’ overconfidence, for example by providing data about the actual frequency of occurrence of insured risks.
Access mental accounts	Even though money is fungible, people often reserve certain amounts for specific uses. They might be able to afford a microinsurance policy but not buy it because, in their mind, their money has already been assigned to be spent on another item.	Microinsurance can take advantage of mental accounts: associating microinsurance with a specific income stream can increase the likelihood that individuals will actually purchase a policy.
Realize the value of zero	A price of zero has a unique ability to attract people’s interest, even when a positive price provides more net value.	In insurance, zero-deductible/co-pay policies are generally preferred by low-income consumers, but cost-sharing is very helpful in counteracting moral hazard and adverse selection. Finding ways to exploit people’s likeness for zero could help increase take-up of microinsurance.
Eliminate obstacles to action	Translating intention into action is not easy. Behavioural evidence suggests that “channel factors”, or small nudges, have a surprising power to create action.	Channel factors can have an effect on whether people buy insurance, and how they utilize it. They can be used to bridge the gap between recognizing the need for insurance and actually purchasing a policy, or to direct insured patients to network hospitals where costs are lower.

Emerging practices in consumer education on risk management and insurance

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Consumer education in microinsurance involves a systematic effort to teach risk management strategies and the role of insurance in order to promote better risk management practices amongst low-income households. The goal of consumer education is to provide households with knowledge and skills that enable them to make informed financial decisions. Consumer education can be delivered by microinsurers, outsourced to partner organizations such as distribution channels or specialized training institutions, or be part of a collaborative national effort by government or industry bodies.

Consumer education is often considered to be an integral part of microinsurance schemes; it is intended to benefit both microinsurance practitioners and their clients. It is supposed to help low-income households make sound choices and practitioners stimulate demand. The current lack of academic and business research, however, makes it difficult to prove whether consumer education can keep its promise. New evidence from a host of on-going evaluations in Brazil, Colombia, Ghana, India, Kenya and South Africa will be available in the coming years to shed light on this question. Until then, lessons based on the experiences of practitioners serve as the best guide for those designing new consumer education programmes.

Given the growing number of consumer education programmes and the huge demand for capacity building, the Insurance Education Working Group of the Microinsurance Network decided to compile a list of emerging practices that microinsurance practitioners should consider when designing education programmes. This note summarizes feedback from more than fifty practitioners who were early implementers of consumer education schemes. Their feedback is documented in three studies (Dror et al., 2010; Burns and Dalal, 2010; Smith et al., 2010b) supported by the ILO's Microinsurance Innovation Facility and the Microinsurance Network.

The experiences of practitioners reviewed in these studies demonstrate that a long-term, integrated approach is needed to improve risk management capacity and increase the use of relevant financial tools. A programme that delivers ad hoc, stand-alone education, which is not linked to access to appropriate micro-insurance products, is often not sufficient to realize these objectives.

This chapter highlights key design features for content and delivery of the education, and in the next two sections provides examples of organizations that have implemented these features. In the final section, the chapter reviews the challenges of sustainability and monitoring and evaluation that are especially relevant for practitioners who want to integrate education into their business models.

14.1 **Content of consumer education**

14.1.1 **Focus on risk management and insurance; layer other financial concepts where possible**

The foremost question for practitioners trying to design an education programme relates to the breadth of the content. Should the programme cover generic financial education concepts such as money management and budgeting? Should it cover broad risk management topics, such as the nature of risks and differences between insurance and saving? Should it focus primarily on product-specific details such as premium payment, benefits, exclusions and claims procedures? The breadth of the content depends on a number of factors, including resources available, the amount of time the educator has with the community, prior knowledge and experience of the community, and the mandate of the practitioner. Some practitioners surveyed argue that it is useful to begin with basic financial education before getting to risk management and insurance content. Starting with concepts like budgeting is important because it allows households to understand how current resources are being used and appreciate the impact of losses.

With limited resources, microinsurance practitioners may not be able to offer a comprehensive financial education programme. In such instances, the focus should be on risk management and insurance. The content could be designed to give low-income households the ability to identify household risks, tackle reservations about the concept of insurance, compare different risk management strategies including insurance and plot a strategy to prioritize and optimally manage their risks. If focused only on product benefits, the programme is more about marketing the specific product and can hardly be classified as consumer education.

Below are two examples of programmes that have cleverly layered insurance and risk management education.

CARE India, in partnership with insurer Bajaj Allianz, designed a comprehensive education programme (*see Table 14.1*) that included four components: 1) risk education; 2) insurance education; 3) product education; and 4) product logistics and practicalities. CARE India considered all of these topics indispensable in creating a culture of insurance and was deliberate about including all of them in the design of its Insure Lives and Livelihood (ILAL) programme targeting poor and vulnerable rural communities in Tamil Nadu, India.

Table 14.1

Content areas for CARE India

<i>Risk education</i>	<i>Insurance education</i>	<i>Product education</i>	<i>Product logistics</i>
<ul style="list-style-type: none"> – What are risks? – Risk management mechanisms – Risk mechanisms in practice – Difference between savings and insurance 	<ul style="list-style-type: none"> – What is micro-insurance? – Principles of insurance – Why micro-insurance? – What are life and general insurance? – What are premiums, claims? 	<ul style="list-style-type: none"> – Introduce CARE, Bajaj Allianz – What is ILAL? – Explain life and general products – What is premium, claim, exclusion, inclusion? 	<ul style="list-style-type: none"> – How to pay premiums – When should premiums be collected? – How to file claims – Documentation requirements

In Kenya, the Swedish Cooperative Centre and Microfinance Opportunities developed a ten-session financial education module, shown in Box 14.1, which focuses on risk management and insurance and also includes relevant financial education concepts. The content is delivered using a study circle approach whereby one member of the group serves as the facilitator, leading a discussion about the key topic for the day.

Box 14.1

Content areas for Swedish Cooperative Centre and Microfinance Opportunities

1. Introduction to study circle methodology: How adults learn, choosing a leader, role of participants, planning learning sessions.
2. Risks: What is a risk? How can risk affect you? Which risks pose the greatest challenges?
3. Risk management tools: What is protection? Identify protection (before) and reaction (after) measures.
4. Savings: How to save more money. Where can you save? Use savings or credit?
5. Introduction to insurance: Myths about insurance, welfare associations and pooled risks; compare welfare association and insurance.
6. How insurance works: Insurance terms, cost-benefit analysis, frequently asked questions (FAQs).
7. Different types of insurance products: Basics of health, life and property insurance.
8. How to submit a claim: Terms for submitting a claim; practice and advice to complete a claims form.
9. How to find the best insurance products for you and your family: Choosing the best insurance product, questions to ask the insurance provider, good and bad techniques for communicating with family members and making decisions together, developing an action plan to purchase insurance
10. How, when and why to renew: What is a renewal? Consequences of not renewing your insurance policy, what to consider before renewal, to renew or not to renew your policy.

Source: Smith et al., 2010b.

14.1.2 Base education on what people know, and relate to their previous risk exposure

The content of a programme should always be framed in the context of what the households already know about insurance and how they think about their risks. When information is wholly new – as is often the case with insurance – households do not have an existing frame of reference. Thus, the programme should make explicit connections between insurance and the risk management strategies like savings and credit that are already being used by the households.

The content should be salient to capture households' attention and encourage retention. A simple way to make content salient is to talk about risks. Talking about risks might seem too obvious and basic, but it can be crucial for success. Lessons from the field of behavioural economics show that people often underestimate the probability of adverse events occurring (*see Chapter 13*). Hence, to

make the education relevant, it is useful to remind them of the most prevalent risks in their communities and lives.

The educational material on risks can be followed immediately by a discussion about how households currently manage those risks, how informal risk mitigation strategies can be improved, and how informal strategies can be complemented by formal insurance. The goal is to place the value of insurance along other formal and informal arrangements to deal with risk.

For instance, Weather Risk Management Services (WRMS), which offers insurance against adverse weather conditions across India, reminds farmers of past crop failures, and explains the weather conditions that lead to such failures in order to provide farmers with concrete reminders of potential risks. With existing data on past crop failures, WRMS is able to show the amounts of produce a farmer had lost during the crop failures and how much a policy would have saved him.

Another example of providing relevant risk education comes from Hollard Insurance Group of South Africa, which organizes three-hour workshops in which participants are introduced to a “conversational map” that represents a community with houses, shops, factories and hospitals. The map, shown in Figure 14.1, features a number of insurable events. The trainer explains the benefits an insurance policy would provide in each event, as well as the rights and responsibilities of both the insurer and the insured.

Figure 14.1

Hollard's conversational map



14.2**Delivery of consumer education**

When designing the delivery of their education programmes, practitioners need to decide on the tools they want to use, and the channel and frequency of delivery. Practitioners should remember that education should be about more than just transferring information. Good education programmes aim to promote proactive risk mitigation. For this to happen, the education needs to be delivered in a learner-centric manner – the more engaging and participatory the better. Practitioners should think of consumer education as a long-term process. Education can be most effective when it is delivered through a variety of channels and when it is on-going and integrated with access to valuable microinsurance products. Stand-alone, one-off training is not sufficient.

14.2.1**Mix of channels and tools**

Practitioners should consider using a combination of channels (e.g. workshops, radio and TV) and tools (e.g. brochures, flip charts and games) in their programme delivery because each channel and tool can serve a specific purpose. Mass media and performing-arts channels are useful in raising awareness amongst a wide audience, while targeted channels like workshops and classroom training allow for greater participation and interaction, and potentially increased understanding. Diversifying tools helps to respond to varying learning styles and make the education interesting for different target segments. Using multiple channels also reinforces the messages.

CARE India and its community-based partners use cultural programmes like songs, drama and puppet shows to generate interest amongst households. The field officers create songs on insurance themes and set them to recognizable tunes borrowed from films. Dramas are performed for larger audiences by small teams of local self-help group members. Field officers reported that these cultural programmes were more effective in generating interest than simply talking to clients. However, they felt that while cultural programmes create broad awareness, the audience did not generally retain the details of the presentation and needed more opportunities to discuss insurance principles and product features in small groups.

CNSeg, the Brazilian Insurance Confederation, has actively engaged community members in its education programme by using mass media (videos and radio soap opera) to disseminate educational material. The videos and radio soaps are based on a simple script that highlights important messages around the value of insurance for low-income households. They are produced in the community and include local vendors and community members as actors. By soliciting community feedback to develop new scripts, CNSeg is using a participatory approach intended to develop trust within the community and encourage members to take note of and retain messages.

The Micro Insurance Academy (MIA) uses interactive games to help communities recognize their risks, learn about proactive risk management, and understand the value proposition of health insurance. One game, CHAT (Choosing Health-plans All Together) is designed to help poor communities manage trade-offs when considering healthcare benefits. The game, shown in Figure 14.2, allows members to jointly define the benefit package that covers their most relevant needs.

Figure 14.2

CHAT game



Individual participants are provided with a CHAT board, which displays different forms of insurable risks, along with a number of stickers representing the available funds. The participants then place the stickers on the board according to which risks they want to be insured against. Then, participants draw events cards which simulate real life risks, and discuss the judiciousness of their choices. In the second round, the exercise is conducted in a group of approximately 15 participants. Through discussions, the participants reach a consensus on the particular risks against which the community wants to be insured. Another game, called the Treasure Pot, helps community members understand the notion of insurance and risk-pooling. The game involves a simulation of real-life risks using cards that represent health events, and sweets that symbolize money. The game demonstrates the shortcomings of using credit or savings as risk management tools and how risk-pooling can benefit a community. The MIA uses such tools as part of a comprehensive insurance education programme that also includes workshops, brochures, mass media (radio and films) and street plays.

14.2.2 Delivering on-going education

Consumer education should not be a one-time activity but an on-going facilitation effort that uses consistent messages delivered by multiple channels in an integrated way. Ad hoc efforts are rarely effective.

The experience of the South African Insurance Association (SAIA) provides a useful reminder of why one-time activities might not effectively deliver insurance education. As part of its financial education initiative, SAIA supported a project that provided financial literacy workshops in rural and communal areas through community and labour organizations. Its objective was to empower low-income rural communities by providing basic financial literacy. While conducting a programme assessment, SAIA found that only 57 per cent of the participants interviewed ever remembered participating in the workshop. The poor retention rate could be because education was delivered in a stand-alone workshop, rather than in a continuous learning process facilitated by refresher messages in various forms.

Nevertheless, workshops can be an effective channel if shorter sessions are spread over a period of time, and if messages are strengthened by other channels. Freedom from Hunger in partnership with Sinapi Aba Trust of Ghana provides a series of workshops around “learning conversations” to help families understand how to obtain and use health microinsurance. The workshops consist of short, technical learning conversations that use stories, role plays and visual aids to explore how insurance works, how to save for premium payments, what the insurance covers and how to utilize available healthcare options paid for by the insurance. To reinforce the main messages, Freedom from Hunger plans to offer shorter “refresher” sessions prior to product enrolment campaigns.

CARE India and its community-based delivery partners found that certain topics, such as risk-pooling and claims conditions, needed to be emphasized and repeated on a continuous basis. Field officers also reported that explaining the value of life insurance in India was more difficult than talking about other kinds of insurance, because clients did not see the tangible benefits of life insurance. Field officers needed to focus on how life insurance helps the beneficiaries more than they had anticipated.

14.2.3 Link education and products

Improving risk mitigation and increasing access to insurance are complementary activities. On the one hand, the full potential of an education programme can only be realized when households have the option to apply their new knowledge and skills to select appropriate risk management tools. At the same time, insurance education can lead to greater product take-up, reducing costs of reaching households in the informal sector, and increasing the size of the overall risk pool.

When possible, consumer education should be linked to insurance products. Otherwise, people have little opportunity to change their behaviour. When education is tied to products, the content should also include a discussion on product-specific details. The question here is not whether marketing messages can or should be a part of wider education initiatives, but how they are integrated and if the education helps people make more informed choices.

ICICI Prudential provides life insurance with a long-term savings product to workers through tea estates in north-east India. Since most of the target group had never heard of insurance, the insurer organized an awareness-raising and education campaign. Stand-alone evening sessions run by trainers recruited from a community were accompanied by a movie initiative run by a community NGO. Video Volunteers taught and assisted selected youngsters from underserved communities to produce short movies on pressing issues such as health, sanitation, education and the importance of savings. During movie screenings, key features and benefits of the ICICI Prudential's microinsurance product were further clarified. The trainers found that they needed to use social issues (such as alcoholism) that intimately affected the lives of many in the community to reach the hearts of the clients, then introduce security topics such as financial management, savings and insurance. Delivery of evening sessions, screening of the movies, and background work by sales staff were all integrated into one coherent process to build trust and enable communities to make informed financial decisions.

14.3

Sustainability and business model for consumer education

Consumer education can be provided through different business models with varying funding arrangements that have implications for sustainability and outreach. In the most common model, the microinsurance practitioner (risk carrier or delivery channel) provides the education as part of its promotion strategy. These programmes typically have a short-term focus with a goal of raising awareness of insurance and specific products, so the education activities are integrated with marketing. These activities are typically timed to coincide with the enrolment period and, though the programme is connected to specific products, the content can be expanded to include broad risk management topics. The education programme is typically self-funded (through premium income for instance), and it thus becomes important for the organization to have a clear strategy for a sustainable business model from the beginning.

CARE India's partnership with Bajaj Allianz is an example of a slightly different business model where an external funder (Allianz SE) provides the seed funding required to develop the programme's infrastructure, including education materials and training capacity. In such programmes, it becomes important for

practitioners to create a business strategy to make the scheme sustainable so that the content can continue to be delivered once the initial funding runs out.

Old Mutual's "On the Money" in South Africa provides a different example of an insurer providing general financial education that is funded by its corporate social responsibility arm. This programme has a longer-term goal and a broader mandate than the previous examples, as its goal is to improve the financial practices of low-income South Africans; it is not focused only on insurance. The initiative has provided general financial education to over 50 000 South Africans since inception through workshops on how to manage finances.

14.3.1 Make use of existing institutions and pool resources

An improvement in a community's understanding of insurance is a public good, which means that many institutions could benefit from it. It may be difficult for one insurer to justify investing in a broad programme when competitors might equally benefit from the expense. If so, insurance associations, governments, donors, or non-profit organizations might be better suited to deliver broad programmes.

One approach is to pool industry resources at national level and have the education programme administered by an independent agency such as an insurance association. South Africa has adopted this approach. The South African Financial Services Charter requires all insurance companies to spend 0.2 per cent of post-tax profits on financial education. SAIA took this opportunity to promote a collaborative effort. It pooled the resources from various insurance companies and oversaw the consumer education efforts for the industry. The programme achieved impressive scale. However, the Charter placed limitations on insurers since it promoted generic education to the lowest income segments and did not allow insurers to build on the programme with their products. These constraints prevented insurers from thinking about education as a business opportunity and threatened the effectiveness of the scheme.

When a programme is delivered by an independent agency or insurance association, it is important to define its objective to ensure that all parties agree and guarantee continuous support. After four years of operations, SAIA changed its strategic direction to encourage its members to continue contributing resources while still pursuing a broader mission to educate consumers. SAIA re-evaluated its approach mostly because some insurers were concerned that the programme's design would not meet their commercial goal – educating potential clients in insurance to the point where they can make informed insurance decisions and thus promote insurance take-up. An evaluation of SAIA's programme also raised questions on whether it made sense for SAIA to focus on generic content, as other institutions may be better positioned to address this category of financial

education, for example the Department of Education or financial-sector regulator (Smith et al., 2010).

SAIA is looking for ways to link education to the marketing efforts of individual insurers. This is not easy, as an insurance association cannot promote the products of just one company. Approaches that have been tested by other associations include introducing a basket of products from different insurers, providing insurers with the details of various activities and opening an opportunity for them to be creative in building on them, and introducing vouchers with price discounts and promotions by different insurers (and distributing them randomly) (Smith et al., 2010). Most SAIA members now believe that it makes sense to pool resources for financial education as they can together create an insurance culture more effectively than through individual, uncoordinated actions.

FUNDASEG, the foundation of the Colombian insurance federation (Fasecolda), provides another example of an insurance education campaign with a long-term focus. FUNDASEG's education programmes are targeted at improving financial literacy among low-income households. The content includes a strong risk management and insurance component that is aimed at improving awareness of insurance amongst the low-income population. The programme is, however, not linked to specific products.

Each setting provides a different landscape of potential partnerships and options to deliver consumer education. Links to social programmes, government financial education initiatives, school education and consumer protection initiatives need to be explored. Consumer education should be delivered by multiple stakeholders, who should focus on their responsibilities vis-à-vis society and exploit their strengths to improve welfare. When a strong industry or government initiative exists, practitioners should explore partnerships with these initiatives. In the absence of broad initiatives, microinsurance practitioners can start individual programmes that demonstrate success to encourage broader consumer education initiatives. The private sector is well placed to pioneer consumer education as in the SAIA and FUNDASEG examples above. Yet, private collaboration is not common practice in most microinsurance markets, leading to the question of whether and how governments and donors can play a more active role in facilitating the creation of such public goods.

Each of the business models has specific strengths and challenges, as shown in Table 14.2.

Table 14.2

Business models – strengths and challenges

<i>Provider</i>	<i>Funding</i>	<i>Examples</i>	<i>Strengths</i>	<i>Challenges</i>
Risk carrier, distribution channel	Self-funding (e.g. premium income)	ICICI Prudential (India)	<ul style="list-style-type: none"> – Integrated with access to products – Potential for sustainability of clear cost-benefit established 	<ul style="list-style-type: none"> – Typically limited content leading to limited impact
Risk carrier, distribution channel	Donor funding, public funding – sometimes limited to initial set-up	CARE-Bajaj, SCC (Kenya)	<ul style="list-style-type: none"> – Integrated with access to products – Can serve as a demonstration case – a way to assess costs and benefits – Broad content, ability to test channels 	<ul style="list-style-type: none"> – Difficult to sustain programme after initial funding ends
Risk carrier	CSR funding	Old Mutual (South Africa)	<ul style="list-style-type: none"> – Broad content, ability to test channels – Can serve as a demonstration case – a way to assess costs and benefits 	<ul style="list-style-type: none"> – Limited ability and interest amongst insurers to run such programmes – Not integrated with products
Insurance association	Fee-based member funding, public funding, mandated contributions	SAIA, FUNDASEG (Colombia)	<ul style="list-style-type: none"> – Broad content, ability to test channels – Some potential to integrate with access to products – Potential of sustainability and professional management when members continue to see benefits 	<ul style="list-style-type: none"> – Difficult to link to products because of neutrality concerns – Difficult to pool resources of companies in competition with each other
Government agency (e.g. Department of Education, financial-sector regulator)	Public funding	Financial Services Authority programme (United Kingdom)	<ul style="list-style-type: none"> – Broad content, ability to test channels – Ability to reach youth through school programmes – Potential to address needs of different segments 	<ul style="list-style-type: none"> – Challenging to monitor impact on risk management behaviour – Subject to political change – Weak incentives need to be well managed

14.3.2 Incorporate monitoring and evaluation activities

Careful monitoring and evaluation are needed to track the costs and benefits of education against the stated objectives of the education programme in order to understand which mix of content and delivery strategies is the most cost-effective. The monitoring and evaluation activities can be designed to measure how the programme affects households' knowledge, skills, attitudes and behaviours, and their eventual impact on the household and practitioner. Table 14.3 provides examples of indicators that could be measured.

Table 14.3

Examples of monitoring and evaluation indicators	
<i>Knowledge</i>	<i>Skills</i>
<ul style="list-style-type: none">– Knowledge of the purpose of insurance– Knowledge of typical risks covered by insurance and the impact of these events on families– Understanding of how insurance works generally– Knowledge of insurance terms such as premium, claims and benefits– Knowledge of product details such as price, claims-filing process and policy exclusions	<ul style="list-style-type: none">– Ability to calculate cost of risk events– Ability to compare insurance policies and select appropriate policy– Ability to calculate premium costs and benefit payouts– Ability to outline premium collection cycle– Ability to complete application process– Ability to file a claim
<i>Attitudes</i>	<i>Behaviours</i>
<ul style="list-style-type: none">– Belief that insurance is suitable for low-income people– Trust of insurance providers– Belief that planning for a risk invites the risk– Likelihood of purchasing an insurance policy in the next twelve months	<ul style="list-style-type: none">– Creation and adoption of a risk management plan– Use of debt, savings or insurance during emergencies– Act of making timely premium payments– Purchase of insurance policy in last twelve months– Renewal of insurance policy in last twelve months

Most current monitoring and evaluation activities are ad hoc and limited to client satisfaction surveys or product take-up analyses. These activities provide important information but are often not enough to understand the effect of education on attitudes or behaviour, or the resulting social and economic impact on clients and practitioners. To measure the effect of the education on client behaviour the evaluator must isolate the effect of the education programme from the product and other external factors.

Important information on use and effectiveness can be extracted through qualitative research based on client interviews, focus-group discussions and financial diary analyses. However, assessing the impact on behaviours and well-being requires practitioners to apply experimental research methodologies such as randomized control trials that measure the impact of the programme using treatment and control groups. This type of research might seem challenging (not least due to the financial implication of conducting such rigorous research), but it is possible, and often necessary, to understand the effectiveness of different education approaches and convince stakeholders of the wisdom of investing in consumer education.

14.4

Conclusion

Creating an effective consumer education programme requires careful content, delivery design and strategic partnerships between various stakeholders. Monitoring and evaluation activities, while challenging, are critical to developing an effective education programme. This chapter presents preliminary lessons drawn from practitioners that can be replicated and tested in new contexts. More innovation and research in consumer education is clearly needed to understand what

it can and cannot do to improve the value and reach of microinsurance products. The key lessons that have been identified thus far are as follows:

- **Focus on risk management and insurance; layer other financial concepts where possible:** In the context of limited resources an approach that tackles all financial issues might not be feasible. In such instances, the focus should be on risk management and insurance.
- **Base education on what people know, and relate to their previous risk exposure:** The content of the programme should always be framed in the context of what the community already knows about insurance and how it currently manages risk. An easy way to make content relevant is to start the conversation by discussing the current risks facing the community.
- **Use a mix of channels and tools:** It is useful to use a mix of delivery channels, such as group-based training or mass communication, because each channel serves a different purpose, is geared to various learning styles and helps to reinforce key messages.
- **Deliver on-going education:** Financial education is not a one-time activity but an on-going effort that should deliver consistent messages through multiple channels in an integrated way.
- **Link education and products:** Linking education to insurance products provides an incentive for households to act and change their risk management behaviours. It also provides an opportunity for practitioners to strengthen their marketing interventions.
- **Make use of existing institutions and pool resources where possible:** Linkages to social programmes, government financial education initiatives, school education and consumer protection initiatives (*see Chapter 26*) need to be explored. When strong industry or government initiatives, such as social programmes, government financial education or consumer protection initiatives exist, organizations should explore partnerships with these initiatives. In the absence of broader initiatives, the private sector seems to be well placed to pave the way for consumer education.
- **Incorporate monitoring and evaluation activities from the start:** Careful monitoring and evaluation is needed to understand which delivery strategy is most effective, create a business model behind consumer education and measure the impact of education on household well-being.

15 Improving client value: Insights from India, Kenya, and the Philippines

Michal Matul, Clémence Tatin-Jaleran and Eamon Kelly

This chapter is an adaptation of Microinsurance Paper No. 12, published by the ILO's Microinsurance Innovation Facility (2011). The authors thank the staff of organizations that participated in the PACE tool testing for devoting their time, sharing data and providing useful comments on the final analysis. The authors are also grateful for comments on this chapter from Elizabeth McGuiness (Microfinance Opportunities), Michael J. McCord (MicroInsurance Centre), Barbara Magnoni (EA Consultants), Richard Coven (consultant), Pranav Prashad (ILO), Peter Wrede (ILO), Jeremy Leach (Hollard Insurance), Bert Opdebeeck (BRS) and Denis Garand (DGA).

In microinsurance, there is considerable emphasis on ensuring that the target market is receiving good value for its premiums. Microinsurance providers aim to improve their products to attract and retain their clients. Governments and donors are searching for effective ways to incorporate microinsurance into their development strategies. They all ask the same questions: Are clients really benefiting from microinsurance? How does one measure those benefits? And how do we improve the value proposition for the poor?

This chapter contributes to this discussion by focusing on improving client value rather than proving it.¹ It presents results from PACE (product, access, cost and experience), the ILO's client value assessment tool, which looks at the added value for clients from insurance products by comparing them to alternative means of obtaining protection from similar risks.

Section 15.1 briefly describes the PACE tool and its components. Based on an analysis of 15 microinsurers in India, Kenya and the Philippines, section 15.2 takes a practical look at opportunities to create value by expanding member benefits, facilitating access, lowering costs and enhancing client experience. Often these small improvements can make big differences in the way clients perceive and respond to microinsurance products. Section 15.3 illustrates the value of microinsurance in relation to informal mechanisms and social security initiatives. The final section provides a country-level analysis that compares the relative value of products in the same market, illustrating the importance of product and market maturity.

15.1 Client value assessment framework and tool

As summarized in Box 15.1, value creation is a complex process that can be analysed at many stages and from different perspectives. The PACE client value assessment tool deals primarily with the first stage of value creation, when the

¹ See Chapter 3 of this book as well as Dercon and Kirchberger (2008), and Magnoni and Zimmerman (2011) for literature reviews on the impact of microinsurance.

products are developed or refined (zone one in *Figure 15.1*). It caters to the needs of practitioners to develop a better value proposition to protect clients against specific risks. The PACE tool does not measure the impact of microinsurance, nor does it attempt to assess client satisfaction or purchase decisions. It is not a substitute for rigorous impact studies, which are needed to measure the effect of microinsurance on client well-being.

The PACE tool provides an initial analysis of the product and processes that can be complemented by market research or impact studies. It provides insights for practitioners that can support decision-making and can help instil a client-centred approach to microinsurance, at the same time providing information useful for the design of more rigorous studies or policy debates.

Box 15.1

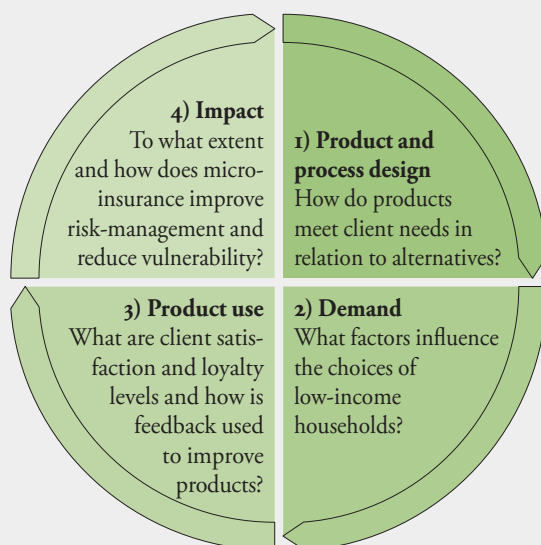
Client value definition and value creation process

Client value is defined from the client's perspective rather than the seller's perspective. The definition of client value used in this chapter combines the viewpoints from the development and marketing literature (Sebstad and Cohen, 2000; Dercon, 2005; Woodruff, 1997; Kotler, 1994; Plaster and Alderman, 2006). From a development perspective, the ultimate question is whether, and to what extent, the product enhances the welfare of policyholders, their families and their communities. In the context of insurance, client value is about reducing vulnerability due to improved risk management practices that then contribute to improved well-being. This client-focused approach is in line with a cornerstone of marketing: valuable products are a means to accomplish clients' goals and satisfy their essential needs. The marketing perspective brings into the picture the analysis of purchasing behaviours, product use and client satisfaction. If there is no demand, the product may be poor, but it can also mean that buyers do not perceive the value offered.

Creation of value in microinsurance is a process that starts with developing a product and setting up its distribution. Value is created when clients use the product and are satisfied enough to renew their policies. Using insurance does not mean that the clients need to make claims, as they can also get non-insurance or indirect benefits such as access to productive inputs. This client value creation process is outlined in *Figure 15.1*. The steps are building blocks and by separately analysing each stage of the value chain it is easier to highlight value creation opportunities.

Figure 15.1

Client value creation model



The PACE client value assessment tool is anchored in the current knowledge available on low-income households' preferences for insurance products. Cohen and Sebstad (2005) list some key issues that need to be considered when developing risk management solutions for the poor. The underlying assumption behind the PACE analysis is that microinsurance products can deliver value only if they are:

- **appropriate:** match the most important risk management needs of the target population.
- **accessible:** provide easy access, and products are explained in simple language and delivered in the vicinity of the target groups.
- **affordable:** provide good value for money at a price that the target clientele can afford.
- **responsive:** provide a timely response to shocks through prompt claims settlement and accurate answers to client queries so that the poor do not need to resort to expensive coping mechanisms such as borrowing from moneylenders.
- **simple:** are simple to understand and use; this is a fundamental principle given the low literacy levels of the target population.

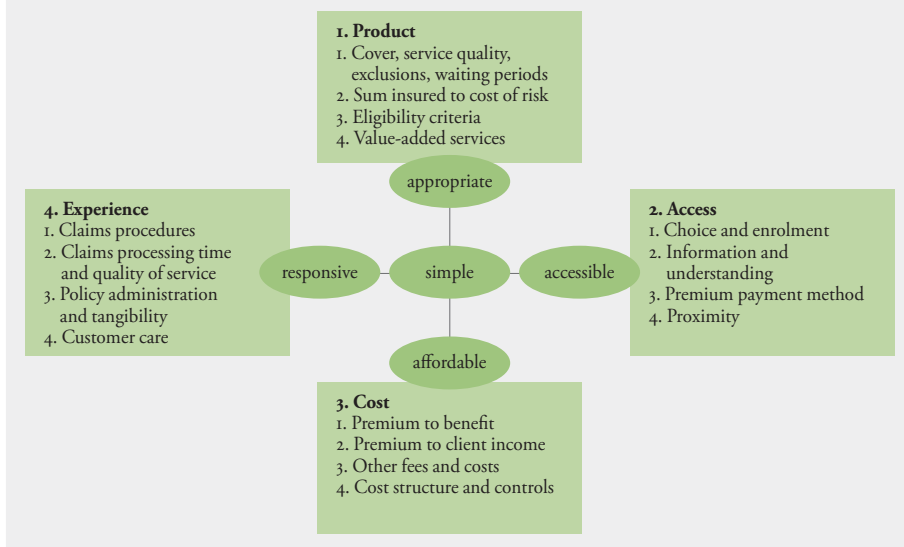
The PACE framework is designed around the five principles mentioned above and is structured into four main dimensions. As illustrated in Figure 15.2, simplicity is a cross-cutting characteristic that is relevant for four aspects:

- **Product:** describes appropriateness by reviewing cover, benefit level, eligibility criteria and availability of value-added services.
- **Access:** focuses on accessibility and simplicity by investigating choice, enrolment, information, education, premium payment method and proximity.
- **Cost:** measures both affordability and value for money, while looking at additional costs to keep down overall costs of delivery.
- **Experience:** assesses responsiveness and simplicity by looking at claims procedures and processing time, policy administration, product tangibility and customer care.

Although all four dimensions are important for clients, it can be argued that under certain circumstances some dimensions are more important than others for a specific market segment. However, from the client's perspective the ideal solution is a balanced value proposition, a product that scores well on all four dimensions. Given this assumption, and for the sake of simplicity, the dimensions are treated equally. Moreover, while PACE is assessed from the clients' perspective, it assumes that reviewed products are either financially viable or that there is a clear strategy for achieving viability. Unsustainable products provide poor value to clients in the long term.²

Figure 15.2

PACE added value analysis framework



² The scoring uses a five-point scale and criteria on all 16 sub-dimensions. Whilst it is plausible to assume that all four main dimensions are almost equally important, not all 16 sub-dimensions carry the same significance. For example, one cannot compare the importance of claims processing with that of policy administration. Therefore, under each main dimension, two sub-dimensions are allocated higher importance and contribute 70 per cent of the total score for the dimension, while the two other sub-dimensions contribute the remaining 30 per cent. More on PACE scoring criteria and weighting can be found in Matul et al. (2011).

The PACE analysis presented in this chapter relied mostly on available secondary data and a limited number of staff interviews. Key data sources were product specifications, performance data, manuals and process flowcharts, reports and staff feedback. The data collection approach is similar to an audit, for which answers to specific questions are validated on the basis of data from different sources. This analysis provides greater insight when it is compared to similar products (*see section 15.4*). Client value cannot be analysed in isolation because microinsurance often complements existing risk management mechanisms such as informal savings and credit groups or tax-funded government safety nets (*see section 15.3*).

An important facet of this tool is that it looks at both product specifications and related processes. By evaluating current processes from the clients' perspective, PACE can identify opportunities for improvement. Part of the problem with some microinsurance products is that processes put in place to facilitate access or to service claims are often poorly designed and undermine the value of the products.

15.2 Value-creation opportunities

Based on the application of this tool in India, Kenya and the Philippines, and analysis of 15 microinsurance providers, this section provides some preliminary insights into efforts to enhance value under each of the four PACE dimensions. In each country, analysts considered similar business lines – life products in the Philippines, health products in India, and health and composite products in Kenya (*see Table 15.1*). Consequently, the list of value creation opportunities presented below is based on the experience of these insurers and does not cover innovations in other microinsurance product lines.

15.2.1 Improving product features to expand member benefits

Life insurance is the most developed microinsurance product, and ways to make it more valuable are well documented. Churchill et al. (2003) and Wipf et al. (*Chapter 9* in this book) argue that to make the products more attractive to potential clients, it is important to extend benefits beyond basic credit life and to include death cover for additional family members and/or other benefits. As presented in section 15.4, the life products in the Philippines provide an example of how, in a mature market, providers have incorporated best practices to deliver value to their clients.

Table 15.1

Products included in the testing of the client value assessment tool¹

<i>Country</i>	<i>Insurer, product name</i>	<i>Product type</i>	<i>Delivery model</i>	<i>Start date</i>	<i>Outreach (lives)</i>
Kenya	National Hospital Insurance Fund (NHIF), informal sector cover	IP health	Government	2007	n.a.
	Cooperative Insurance Company (CIC), Bima ya Jamii	IP health, AD&D, funeral	PPP, partner-agent	2007	8 300 (June 2010)
	Pioneer Assurance, Faulu Afya	IP&OP health, term life, AD&D, funeral	Partner-agent	2010	11 000 (Sep. 2010)
	Britak, Kinga ya Mkulima	Whole life, IP health	Partner-agent, broker	2007	78 000 (Oct. 2010)
	Jamii Bora Trust (JBT), Jamii Bora health	IP health	Community based	2001	600 000 (Oct. 2010)
India	Government of India, Rashtriya Swasthya Bima Yojana (RSBY)	IP health	PPP, government	2009	45 million (Dec. 2010)
	ICICI Lombard, Health Insurance Scheme (HIS) for weavers	IP&OP health	PPP	2005	5.5 million (Dec. 2010)
	Yeshasvini Trust, Yeshasvini Scheme	IP health	PPP	2007	2.7 million (Nov. 2010)
	Bharti Axa, Palmyrah Workers Development Society (PWDS)	IP health	Partner-agent	2010	16 000 (Dec. 2010)
	VimoSEWA, Sukhi Parivar and Swastha Parivar	IP health, life and assets; IP health	Partner-agent	1992	100 000 (Dec. 2010)
	Uplift Mutuals, Uplift Health	IP health	Community-based	2003	100 000 (Feb. 2011)
Philippines	First Community Cooperative (FICCO), mutual benefit association (MBA)	Term life, AD&D	Regulated MBA	2007	330 000 (Nov. 2010)
	Centre for Agriculture and Rural Development (CARD), mutual benefit association (MBA)	Term life, AD&D	Regulated MBA	1994	4 million (Nov. 2010)
	Coop Life Insurance and Mutual Benefit Services (CLIMBS), Microbiz Family Protector	Term life, AD&D, funeral and fire	Partner-agent	2004	135 000 (Nov. 2010)
	MicroEnsure, Family Life with Taytay Sa Kauswagan (TSKI)	Term life, AD&D, funeral	Partner-agent, broker	2007	1 million (Nov. 2010)

¹ More details on the products and their performance can be found in section 15.4.

IP = in-patient; OP = outpatient; AD&D = accidental death and disability. MBA = mutual benefit association, PPP = public-private partnership

One of the few remaining issues with the value of life microinsurance is with accidental death and disability (AD&D) covers. Often the client value from those covers is questionable due to inappropriate pricing (high premiums for a very low frequency risk), exclusions and waiting periods, which, in principle, are not necessary to control adverse selection for accidental covers.

Given low-income households' high exposure to accidents and the difficulty they have in coping with unexpected expenses, it is important to continue to improve the value of AD&D products. Some providers in the Philippines, like CLIMBS, have simplified the list of exclusions and introduced no-waiting periods for accidental covers. Similarly, CARD and MicroEnsure provide accidental cover soon after enrolment, while natural death benefits increase incrementally over time. Another good feature of the CARD product is that disability benefits are paid out in monthly instalments rather than as a lump sum, so that for the insured it is similar to receiving a monthly wage.

As discussed in Chapter 5, designing valuable, sustainable health products is inherently more complex than other types of microinsurance. Many providers such as the Self Employed Women's Association (SEWA) and Uplift in India integrate preventive healthcare services in their hospitalization products, which is a good way to boost value (also to non-claimants) while lowering hospitalization claims costs.

Another relatively easy way to enhance benefits is a hospital-cash feature or a cover for loss of income due to hospitalization. This can be useful when clients need to pay (informally) for drugs or for services due to under-financed public health systems. In addition, it can also provide protection for informal workers who are not compensated for loss of income by social security systems. For example, CIC in Kenya pays out KES 2 000 (US\$22) per week for up to 25 weeks during the hospitalization period. SEWA health workers come to the hospital on the first or second day of hospitalization to provide an advance on a claim that is reimbursed in full later on.

Lastly, eligibility criteria and mechanisms for choosing additional members or appointing beneficiaries for health and life products require careful monitoring. As noted in Chapter 16, and observed for some products in India and the Philippines, letting the principal member select other members for health policies can lead to gender discrimination, as it may result in much lower enrolment for female family members. Consequently, products that cover the whole family tend to be preferred, as they have the advantage of lowering adverse selection.

15.2.2 Facilitating access

Choice and enrolment

Intuitively, offering a choice between products or specific features should be beneficial. However, too much choice can complicate decisions and discourage cli-

ents from buying an otherwise valuable product (*see Chapter 13*). In addition, mandatory products that offer no choice are usually less expensive, as they enable insurers to reach scale faster and avoid adverse selection. The merits and downsides of mandatory compared to voluntary products can be more usefully discussed if all client value dimensions are considered at once (see the Kenyan examples in section 15.4).

Some providers are experimenting with hybrid approaches. In the Philippines, MicroEnsure offers a mandatory product to borrowers of the microfinance institution (MFI) Taykay Sa Kauswagan, Inc. (TSKI), with an opt-in feature for clients who want cover to continue after their loans have been repaid, as many clients also save with TSKI. The basic idea is to control adverse selection through a mandatory product delivered with superior service that allows clients to appreciate the product and buy it voluntarily, or upgrade to a higher option in the future.

Clients' needs vary, yet many products have been standardized to reduce transaction costs. Although too much customization might be expensive to administer, giving clients some choice seems to be a valid solution. Among the insurers reviewed, only Pioneer Assurance and VimoSEWA offer such choice. As insurance literacy levels increase, it should be possible to let clients choose from a limited set of riders or even decide on a combination of composite products offering protection for health, life and/or property risks in one product. For the moment, the composite products available to low-income clients are rigid and expensive to deliver (see Kenya's experience in section 15.4).

The enrolment process matters, especially the timing and length of the enrolment period. VimoSEWA enrolls after harvest in rural areas to overcome liquidity constraints and reach farmers when they are flush with funds from the harvest. Some Indian health schemes include a single, short enrolment window during the year. While a one-week enrolment period may mitigate adverse selection and reduce marketing costs, it is not enough to capture all interested households and it can create major operational challenges.

Information and understanding

Low levels of insurance literacy make it difficult for clients to understand policies and use them properly. They need to be provided with easy access to information on the product and educated in its use while taking account of other available risk management solutions. The latter usually involves broad financial education and various channels need to be used to relay educational messages and change consumer behaviour.

Chapter 14 outlines various strategies and tools used by practitioners. The client value analysis revealed some additional insights from providers, such as MicroEnsure, VimoSewa and Uplift, which run systematic educational pro-

grammes on risk management concepts that go beyond basic information transfer. MicroEnsure's education programme, for instance, is based on three pillars: 1) using comic books, songs and CDs to improve clients' financial literacy and enable them to compare savings and insurance products; 2) explanation of product benefits and logistics; and 3) education of MFI staff in the same issues with an emphasis on claims administration.

These comprehensive efforts are worth evaluating further, but given the costs it is unlikely that providers will be able to organize such broad programmes without support from donors, government or industry bodies. Hence, providing clear information on the product is a good start for microinsurers. FICCO in the Philippines and ICICI Lombard in India provide useful examples, with the former providing a very simple policy document that conveys the key benefits and logistics of the policy, and the latter including a list of exclusions on the back of the insurance card. In general, the providers studied in the Philippines outperform their counterparts in India and Kenya with the simplicity of forms and clarity of language used during the enrolment process.

Education seems more important when clients either do not decide to buy the product themselves (mandatory products) or pay little for subsidized products. In these circumstances, use by clients is often lower than expected (or claims rejection rates are higher), because clients do not fully understand the benefits and claims processes. More education is required for complex products, which probably explains why MicroEnsure conducts a broad educational programme and Britak in Kenya confines itself to information transfer.

Premium payment

Collins et al. (2009) draw a detailed picture of how poor people all over the world live on small and irregular incomes. Paying for insurance is difficult for low-income households struggling to meet a multitude of needs with scarce resources. Microinsurers recognize that this problem is hampering access and are trying different ways to overcome it.

Greater flexibility in premium payment is required. Low-income households appreciate paying in small instalments (irregular, if possible) at their doorstep and having their payments spread over time. Mobile payments, albeit not practised by the schemes reviewed, can provide a breakthrough, provided transaction costs are affordable (*see Chapter 24*). Reasonable grace periods to avoid policy lapses are also desirable. It is not always possible to add flexibility though, as insurance regulations may limit the ability to introduce more flexibility to adjust certain product features. For example, for health policies, annual premiums paid in a lump sum are often required.

In developed countries, automatic deductions from salary provide an easy, client-friendly option. This option is rare in the context of microinsurance as

low-income households often work in the informal economy. Among the reviewed products, only Britak in Kenya, which works with the Kenyan Tea Development Authority, offered automatic deductions to small-scale tea growers, who were paid a regular monthly wage and an annual bonus.

Another solution to make payments more convenient involves linking micro-insurance to other financial services. For example, of CIC's Bima ya Jamii policies, almost 90 per cent are bought with a loan from savings and credit cooperative organizations (SACCOs). This is also practised by other providers in Kenya. The issue is delicate as there is a fine line between increasing client value and cross-selling credit services, which might lead to excessive debt or to an increase in premiums.

For this reason, using savings and remittances to finance premiums should provide clients with better value, but such solutions still need to be developed (*see Chapter 17*). VimoSEWA had mixed results with two savings-linked premium payment mechanisms. Automatic deduction from savings accounts did not work when the account balance was insufficient, and it was difficult to educate clients properly given the mandatory nature of the product. VimoSEWA clients also have an option to make a deposit into a special SEWA bank account, for which they receive cover instead of earning interest. While this mechanism reduces transaction costs, it does not overcome liquidity constraints, as clients need to make a deposit that is 20 times the annual premium. Previously, a quarter of SEWA members had used the fixed-deposit payment method but this proportion had been declining steadily (McCord et al., 2006).

Proximity

Given the limited and often expensive transport options, low-income households need an accessible point-of-sale network to enrol in insurance schemes and avail themselves of their benefits. This requirement is embraced by most of the insurers reviewed, especially VimoSEWA, Uplift and PWDS, whose staff are present in the community for the enrolment process. It is also the case for the life insurers in the Philippines that often invest significant resources in training the front-line staff of delivery channels, who are situated close to the clients, as well as developing a network of their own agents to support the distribution partners.

15.2.3 Lowering costs

Value for money

Value for money can be measured by the ratio of all insurance and non-insurance benefits to the total premium paid. Of the reviewed schemes, it is not surprising that the subsidized products provide the best value for money. Products with many value-added benefits, such as Uplift or VimoSEWA, also score well on this

dimension. Interestingly, in the Philippines, where there is a mature market for life products, all products provide similar value for money.

The value for money analysis helps to identify overpriced products compensating for inefficient processes. For example, in Kenya neither a relatively cheap product from Britak nor the most comprehensive scheme from Pioneer Assurance seem to provide the best value for money. Both products have claims ratios of between 80 and 120 per cent, which means that members get more for their premiums. However, such a high ratio is also indicative of a problem with the programme, which ultimately can be bad for both the provider and the client. It seems that other Kenyan providers have more efficient processes or better cost controls, because even with lower claims ratios they offer clients better value.

Affordability

Many of the products reviewed seem to be affordable, especially in the Philippines, where all the products are within a range of PHP 20 to PHP 30 (US\$0.44 to US\$0.66) per year. As described in section 15.4, the only ones that do not comply with the affordability dimension are composite products in Kenya from CIC and Pioneer, which might explain their slow growth.

Again, a subsidy can be used to make products affordable as long as it is permanent or designed in such a way that it does not undermine the long-term viability of a specific product. This is becoming more prevalent in countries with sound government policies, especially for health and agriculture insurance products. Three of the reviewed health schemes in India are subsidized by either central or state governments.

Other costs

In most of the cases reviewed, products do not require clients to pay extra costs. However, receiving healthcare benefits, and family visits to a sick person, can still involve travel costs, especially in rural areas. Schemes such as RSBY provide a travel allowance, which removes barriers to access and should significantly improve the value of microinsurance in rural areas.

Many health schemes have co-payments of 10 to 20 per cent. As the PWDS example illustrates (*see Box 15.2*), if members are given a choice they intuitively select an option with co-payment and thus lower premiums. This is in line with the high discount rate that is often reported for low-income households, giving rise to the notion that households value cash in hand more than cash in the future (*Chapter 13*). Some of the Indian schemes offer co-payments for expensive surgery or hospitalization following an accident. This kind of co-payment should have limited impact on controlling moral hazard but can significantly increase vulnerability for those who are exposed to the catastrophic risks. It seems that client value can be significantly increased if co-payments are eliminated for rare but expensive events, while still used for more frequent, low-cost incidents.

Box 15.2

Preferences for higher co-payments (and lower premiums) at PWDS in India

Palmyrah Workers Development Society (PWDS), an NGO in Tamil Nadu, offers in-patient health insurance to its self-help groups in collaboration with two insurers. PWDS wanted to involve community groups during the development of the product to understand their requirements and gain early buy-in. Two product options were discussed with the community: one with full payment of the claim and a higher premium, and the other with a 20 per cent co-payment and a lower premium. When the product was rolled out, four out of five community federations opted for the co-payment option. Members felt that a co-payment would reduce false and excessive claims since a portion of the cost had to be borne by the claimant. Their decision to opt for the co-payment option was probably driven by the lower price, but also illustrated that they understood the requirement for self-regulation and were willing to try it.

Cost structure and controls

As explained in the “value for money” analysis above, effective cost controls should result in better-value products that will provide access to services in the long term. This is also the case for cost structure and efficiency, because consumers do not want to pay for providers’ inefficiency. Detailed analysis of cost structure and controls goes beyond the scope of this chapter, but it is interesting to see various cost-reduction strategies among the participating organizations: eliminating intermediaries (MBAs in the Philippines), making use of staff from delivery channels (CLIMBS, Pioneer Assurance), involving specialized brokers (Micro-Ensure) or third-party administrators (TPA), maintaining adverse selection and fraud controls and monitoring costs at the healthcare provider level (Jamii Bora Trust, Uplift, RSBY). Lastly, technological advances should result in efficiency gains, though it is yet too soon for these cases to have provided evidence of this.

15.2.4 Enhancing experience*Claims processes and timeliness*

Microinsurance becomes tangible for clients when a claim is settled and this provides an opportunity for insurers to build trust and increase loyalty. Claims procedures need to be convenient and claims need to be paid in a timely manner to provide a service that is better than the informal ways in which low-income households manage risks.

Quick payouts on funeral riders of the life policies in the Philippines are good examples of client value enhancement. CLIMBS, CARD (see Box 15.9), and Micro-Ensure pay the funeral benefit component of life insurance within 24 hours, while the rest of the life benefit is paid slightly later and is subject to more documentation.

*Box 15.3***CARD's 1-3-5 claims settlement model**

At the Center for Agriculture and Rural Development (CARD) in the Philippines, the 1-3-5-day procedure for claims settlement ensures that members have a positive experience with the insurer. Verified by the CARD branch manager or CARD MBA staff, claims are settled within:

- 24 hours of notification: a claim for indemnity must be settled if the dead body is not yet buried at the time of validation.
- three days of notification and with complete documents: a claim for indemnity must be settled if the dead body is already buried at the time of validation.
- five days of notification: definitive action will be taken in respect of difficult claims.

Source: CARD MBA website, 2011.

As discussed in Chapter 6, health microinsurance providers are increasingly offering a solution to access benefits through “cashless” claims. Instead of advancing their own money and being reimbursed later by an insurer, a member can access healthcare services free. Most health microinsurance players, including ICICI Lombard, RSBY, PWDS, CIC, NHIF, Pioneer Assurance, Jamii Bora Trust and Britak, have moved to “cashless” solutions, though the approach has its critics. Uplift strongly believes that a reimbursement basis creates a stronger sense of ownership amongst clients and avoids inflated costs (because of unnecessary treatment, for example) from healthcare providers. Uplift believes that a reimbursement system is more efficient in keeping overall claims costs down.³ VimoSEWA practises something in between, by advancing part of the payout when the client is in the hospital and paying the balance after the documentation is submitted.

Despite these positive examples, many microinsurers can improve their handling of claims. The process can be cumbersome, especially for AD&D and some non-cashless health covers. Turn-around times of more than a month undermine value, as beneficiaries may resort to costly alternatives to generate the lump sum needed. High rejection rates for some schemes suggest that claims procedures are not clear or well communicated. The list of required documents for some products, especially in Kenya, is too long. It is uncertain whether the additional paperwork makes any contribution to the insurer's controls, but it definitely makes the clients' experience worse. MicroEnsure's commonsense approach to accident and death certificates is an example of a small change that improves the clients' experience (*see Box 15.4*).

³ Uplift tested cashless solutions and argues that the rates charged by healthcare providers were almost double those for clients paying cash.

Box 15.4

Process of improving client value at MicroEnsure

MicroEnsure started its partnership with Taytay Sa Kauswagen, Inc. (TSKI) in 2007, in the Visayas region of the Philippines, where the MFI was already self-administering a life insurance product to cover its members. The existing cover was used as a starting point to design an added-value product using the partner-agent model with support from MicroEnsure, a microinsurance intermediary (*see Chapter 23*), for product development, marketing and claims administration. Different features have been modified over time.

As a first step, the sum insured was increased from PHP 100 000 to PHP 120 000 (US\$2 222 to US\$2 666) so that the loan amount (on average PHP 30 000, US\$666) and funeral costs would be fully covered and an additional amount would remain for the beneficiaries. Benefits between life and burial were separated and pre-existing diseases were included in the burial benefits, resulting in quicker benefit payments. To simplify the cost structure and enable clients to understand the product better, a community rate was introduced, so that there was no differentiation in the premium for age group. The enrolment of family members then became compulsory and a family rate was introduced, ensuring all members were protected, although at different benefit levels. The definition of dependents was also reviewed several times to adapt the policy to the family situations in the Philippines.

To simplify claims processing, MicroEnsure made the MFI a trustee on the policy. The documentation required for the claim process was reduced, including the possible use of village head certificate and affidavits. Furthermore, an increasing-with-time benefit table was introduced to limit verifications linked to exclusions and pre-existing conditions. Thanks to these adaptations, the claims turnaround time had decreased from three months to 44 days as of November 2010, which is significant progress, but it can still be improved.

Sources: Data collected from MicroEnsure; Microinsurance Innovation Facility, 2011.

Policy administration and tangibility

Policy administration is less of an issue than claims handling because most insurers reviewed – especially FICCO, CARD and CLIMBS – excel at delivering policy certificates or insurance cards to their members quickly. RSBY uses technology to issue membership cards on the spot during its enrolment campaigns. However, in other cases clients wait three to four weeks for the cards. Many providers do not provide any policy document or tangible proof of insurance. It is hard to defend the cost reduction arguments, as the proof of insurance can be as simple as the card used by ICICI Lombard with some key policy information on the back.

For clients to have a positive experience, it is also important to make insurance tangible for the vast majority who have been fortunate enough not to make

a claim. The efforts by Uplift and VimoSEWA described in Chapter 5 are good examples of providing value to clients who do not submit claims, but providing additional services might be costly and for product lines other than health insurance might be of less direct benefit to insurers. Providing tangibility can be as simple as offering a membership card and sending follow-up text messages with information on the insurance policy.

Customer care

As products and distribution models become complex, the role of customer care in microinsurance has become more important. In the past, this consideration has been largely neglected and many microinsurers had not provided clients with a way to contact them in the event of a problem or if they needed information. Recently, however, insurers have been making a greater effort to provide support to clients before, during and after a sale.

With advancements in telecommunications, call centres are being tested in microinsurance and the clients of some schemes (CIC, Pioneer, ICICI, RSBY, Uplift) have access to a toll-free number. It enables clients to understand the basic features of the product at the time of purchase, establishes a feedback and grievance mechanism, and allows them to check their policy status.

Customer care goes beyond call centres and just being close to the client. It is about having an institutionalized process to provide satisfactory answers to clients' queries, mechanisms for responding to grievances, and a system to monitor and act on individual requests and complaints. For example, CLIMBS, CIC, Uplift and VimoSEWA, among others, have made an effort to put in place structures for customer care. This is often not the case with many community-based or partner-agent schemes, which assume that being close to the client is sufficient.

15.2.5

Balancing trade-offs in a continuous improvement process

Many of the products include value-enhancing elements, though it is rare for one product to score well on all of the client value dimensions as there is often a trade-off between affordability and enhancements in benefits, access and experience. Client value improvements, however, do not always require an increase in premium. They can also be achieved through efficiency gains, as many processes can be streamlined. In fact, continuous improvement of client value was observed in several schemes, including MicroEnsure and Uplift (see Boxes 15.4 and 15.5).

Client value enhancements should be strategic. There are intrinsic trade-offs between client value and business considerations. A "balanced" value approach across all four dimensions of PACE makes perfect sense for a client, but this might not be the best choice for a microinsurer in a competitive environment that wants to differentiate its offering.

Box 15.5

Process of improving client value at Uplift

Uplift Mutuals started its health insurance scheme in 2003 with a maximum cover of INR 5 000 (US\$111) for an annual premium of INR 50 (US\$1.11) per person. The cover included full reimbursement for in-patient treatment at public hospitals and 80 per cent at private providers. In 2007, outpatient discounts on consultations and medicines were added and day-care procedures and accidents were included in the cover, while pre-existing conditions were excluded for two years (previously only one year), and the premium was increased to INR 60 (US\$1.33) per person. At the same time, Uplift recruited fully dedicated field staff to improve customer care. In 2009, Uplift raised the sum insured to INR 15 000 (US\$333) for a premium of INR 100 (US\$2.22) per person.

Uplift had to address three problems during its early years: 1) a high claims rejection ratio; 2) an increase in the cost of claims; and 3) an increase in out-of-pocket expenses. Due to lack of awareness, many claims were submitted for excluded cases. The scheme was unable to control healthcare costs because it relied on a small network of empanelled providers, so it could not monitor (compare) costs. Uplift realized that its members valued access to information on health services as much as the financial benefit of insurance. To improve access, Uplift developed a network of more than 300 quality health providers offering price discounts of 10 to 50 per cent, and instituted a 24/7 helpline to point members to an appropriate health provider. To increase value for all members, even those with no hospitalization claims, Uplift also expanded its health initiatives to include drug discounts, monthly health camps, free check-ups and health education to prevent seasonal illnesses.

Uplift's efforts to improve client value seem to be paying off. As of early 2011 the scheme covered more than 100 000 people, the claims rejection ratio was 2 per cent, the loss ratio had increased to 47 per cent, the services ratio (proportion of members accessing outpatient or in-patient health services) was 56 per cent, out-of-pocket spending had decreased by 22 per cent, and the renewal ratio had increased from 48 per cent in 2008 to over 60 per cent in 2010. Uplift is currently not fully sustainable. Premiums are enough to cover insurance operations, but are not yet sufficient to sustain the value-added benefits, which are subsidized by a donor. Uplift management estimates that a tripling of the current outreach should generate economies of scale to sustain the full programme.

Sources: Data collected from Uplift; Microinsurance Innovation Facility, 2011.

Lastly, client value is contextual. Not all the enhancements that work in one country can be replicated or are needed in another. Clients' preferences might be different, availability of technology or distribution partners vary, and the land-

scape of informal mechanisms, national security schemes and microinsurance providers might make it necessary to find a niche for a specific product. The next section of this chapter compares various products at country level and illustrates the importance of looking at a product in relation to its alternatives.

15.3 **Setting benchmarks: Informal mechanisms and social security schemes**

Informal mechanisms and social security schemes provide benchmarks to assess the value of microinsurance in the context of other risk management options.

Low-income households use a multitude of informal mechanisms such as burial societies, savings or self-help groups to manage life, health and property risks. Through group risk-sharing mechanisms, households participate in an important social function nested within well-defined communities that allow risk-pooling without much fraud, moral hazard or adverse selection. However, as described by Dercon (2005) and Morduch (1999), they have many weaknesses. They can only handle idiosyncratic risks, and not covariant risks that affect entire communities (e.g. flooding). They are best suited for small disbursements for frequent events. Only well-structured groups, often managed by a remunerated committee, are able to respond to larger losses, but these are rare and found mostly in urban areas.

Low-income households tend to patch various strategies together because none can provide enough funds on their own to cover large losses. Households compensate by participating in multiple group schemes, or, in the event of an emergency, they deplete their savings, sell assets at low prices, or take one or more small loans from moneylenders or MFIs. These activities often involve high costs (Cohen and Sebstad, 2005; Collins et al., 2009).

The PACE client value assessment in Kenya on the use of informal risk management arrangements (*see Box 15.6*) confirms that they offer partial cover at a high price. Informal risk-sharing mechanisms in Kenya score low on product benefits and cost, high on access, and medium on experience.

Box 15.6

Client value from informal risk-sharing mechanisms in Kenya

In Kenya, “welfare groups” of 20 to 60 members are a popular, self-managed way to respond to life, and to a certain extent, health risks. They are better organized in urban areas, where members regularly contribute KES 200 to KES 400 (US\$2.20 to US\$4.40) per month to receive a KES 20 000 to KES 50 000 (US\$222 to US\$555) payout in the event of the death of the member or a family member. In the event of major illness, members are requested to contribute ex-post from KES 100 to KES 500 (US\$1.10 to US\$5.50), which results in lump sums of KES 5 000 to KES 30 000 (US\$55 to US\$333) to cover health bills. In rural areas the ex-ante collections are

rare, so members are requested to contribute during the funeral and sometimes groups organize special events to collect funds to help members respond to major health shocks (Cohen et al., 2003; Smith et al., 2010; Simba, 2002).

Since the cost of a funeral can vary from KES 150 000 to KES 200 000 (US\$1 666 to US\$2 222), risk cover from one group is insufficient. Many people belong to between two and five welfare groups at the same time or combine membership with other strategies such as borrowing or selling assets to generate the required amount. So even if regular contributions to one group may seem affordable (and are close to the premiums collected for similar microinsurance products), the cost-to-benefit ratio is low. Moreover, each membership incurs transaction costs in the form of time, fees and in-kind contributions, so relying on several informal group-based mechanisms can be a costly strategy for coping with shocks. Lastly, these groups do not have any reinsurance arrangement that could provide cover in the event of excessive claims, so the groups are financially vulnerable as well.

The welfare groups in Kenya are accessible, but seem to provide poor service to their members. Johnson (2004) reports that 40 per cent of households in one rural area belonged to at least one group. In most cases rules are simple, and groups are within the close community and have convenient ways to collect contributions in frequent but small instalments. Claims settlement procedures are also easy and quite flexible, but seem to work only for ex-ante schemes that provide good service in urban areas for life risks. In the event of a funeral, urban groups usually pay the benefit to the family instantly, but prompt payment is rarely the case in rural areas and in general for health risks. There is some evidence to suggest that ex-post contributions are provided with long delays, if at all. Simba (2002) says that collecting contributions from members can take many weeks after a funeral.

The other useful benchmark for analysing client value for microinsurance is social security schemes. Despite the emergence in many countries of social security schemes that go beyond the formal sector, their outreach is low and they rarely offer comprehensive protection, most often covering health shocks or catastrophic events, or aiming at reducing the vulnerability of children and elderly people (ILO, 2008).

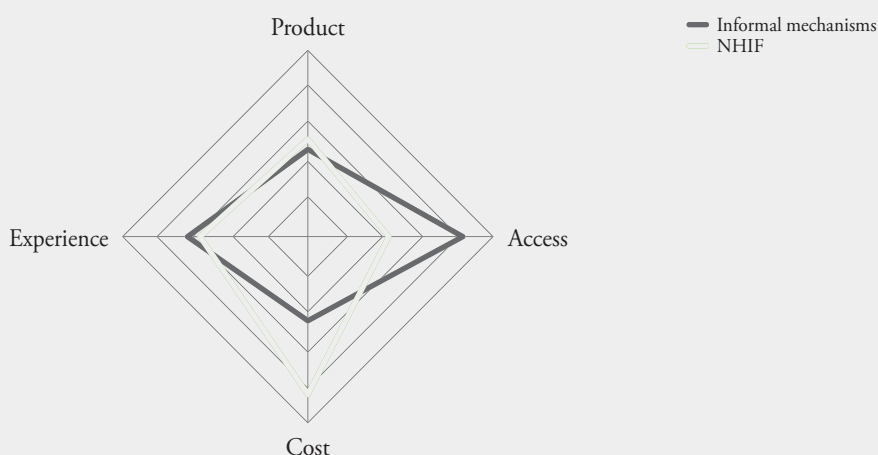
The National Hospital Insurance Fund (NHIF) in Kenya is a good example of a government effort to protect a poorer stratum of the population. Originally available for formal-sector employees and funded by their contributions, in 2007 NHIF was opened to include informal-sector workers for an annual premium of KES 1920 (US\$21) for the whole family, which is approximately 0.8 to 1.2 per cent of a low-income household income, well within the willingness-to-pay range identified in Chapter 7. The cover can be bought by anybody at NHIF offices, but given the limited public awareness, few people have enrolled. It offers close to full hospitalization cover at government hospitals and limited reimbursements for

services from private health facilities. As the cover is reasonable for the price, NHIF scores well on cost, moderately on product and experience, mostly because of the low service quality at government hospitals, and poorly on access. Government schemes in India obtained similar scores, which suggests that while social security schemes might solve the cost problem (mostly through subsidies), better solutions are needed to enhance access, establish efficient processes and control quality of care.

As shown in Figure 15.3, in Kenya in the broader risk management picture there appears to be an opportunity for microinsurance products to add value. To do so, microinsurance should emulate the informal ways of providing access and complement the benefits of social security schemes, while at the same time offering superior service.

Figure 15.3

PACE evaluation of informal risk management and NHIF in Kenya



15.4

Relative value from products at the country level

This section presents a country-level analysis of the three markets: life microinsurance in the Philippines, health microinsurance in India and composite products in Kenya. It shows the importance of a client value assessment of a product in relation to alternatives in the same market to identify advantages, disadvantages and opportunities for product improvement.

15.4.1

Unveiling weaknesses of composite products in Kenya

Low-income households in Kenya rank risks to health and life as their biggest concerns (Cohen et al., 2003), and this demand perspective is consistent with the supply of informal risk management arrangements and microinsurance schemes that often cover both health and life risks. The Kenyan PACE analysis compares

three composite products by CIC, Pioneer Assurance and Britak, and two in-patient health products by Jamii Bora Trust and NHIF (*see Table 15.2*).⁴ One may argue that this is comparing apples to oranges. However, as health risks are a greater concern for low-income households, a comparison of a health and life product with a health-only product is a valid exercise from the clients' perspective, as both address their highest priority. Additionally, the products are comparable as they target broadly similar market segments: CIC and Britak serve the same populations in rural areas and CIC and Pioneer in urban areas, while Jamii Bora Trust targets the slightly lower-income market of urban slum dwellers. None of the Kenyan schemes, however, has a business case at this point (*see Chapter 18 for results from CIC*).

Table 15.2

Products included in the PACE analysis for Kenya

	<i>CIC, Bima ya Jamii</i>	<i>Pioneer Assurance, Faulu Afya</i>	<i>Britak, Kinga ya Mkulima</i>	<i>Jamii Bora Trust (JBT)</i>
Start date	2007	2010	2007	2001
Product type	IP health, AD&D, funeral, voluntary, stand-alone	IP&OP health, term life, AD&D, voluntary, stand-alone	Whole life, IP health, voluntary, stand-alone	IP health, credit life, mandatory, credit-linked
Cover	KES 340 000 (IP), KES 50 000 (hospital cash), KES 100 000 (AD&D), KES 30 000 (funeral)	KES 200 000 (IP), unlimited OP, KES 100 000 (life), Disability on tables	KES 100 000 (life), including 20 per cent for IP health	Unlimited IP, outstanding loan cover
Annual premium¹	KES 3 650 for family	KES 6 995 for family	KES 1 860 for member and spouse	KES 2 400 for family
Distribution	SACCOs and MFIs	MFI	Employer (KTDA)	MFI
Targeted segment²	SACCO members and MFI clients KES 10 to 15 000 (rural) KES 15 to 30 000 (urban)	Urban micro entrepreneurs KES 15 to KES 30 000	Small-scale tea growers KES 10 to KES 15 000	Urban slum dwellers KES 10 to KES 20 000
Performance	8 300 lives (06.2010) 40 per cent claims ratio for life; 120 per cent for health 25 per cent renewal ratio	11 000 lives (09.2010) > 100 per cent claims ratio	78 000 lives (10.2010) 80 to 100 per cent claims ratio 1 per cent lapse rate	600 000 lives (10.2010) 80 to 120 per cent claims ratio

¹ Premiums do not include the cost of taking a loan to purchase insurance, which is very common for all the products reviewed except Britak.

² Average monthly household income based on estimations from the providers, on-going impact study of the CIC product conducted by EUDN and Oxford University, and Ana Klincic's study on Jamii Bora Trust clients (unpublished).

Note: US\$1 = KES 91.

⁴ CIC product sells NHIF in-patient cover and bundles it with life benefits underwritten by CIC.

According to the PACE analysis, Jamii Bora Trust's microinsurance product is the only one that adds significant value (*Figure 15.4*). This product mimics informal mechanisms in terms of access, fulfils social functions and provides superior service, while providing more comprehensive cover than NHIF at a similar price. The relatively good value for money stems from the fact that adverse selection is limited due to the mandatory nature of the product, as well as the adequate controls that are in place to reduce fraud and moral hazard by healthcare providers. The mandatory, credit-linked feature lowers the ranking for access as clients do not have any choice and in most of the cases use loans to finance premiums. However, this is counterbalanced by product simplicity and the proximity of Jamii Bora branches. The possibility of giving the members more choice is now being discussed, but it seems that making the product voluntary for all Jamii Bora Trust members might reduce value for money, as adverse selection and administration costs will increase substantially.

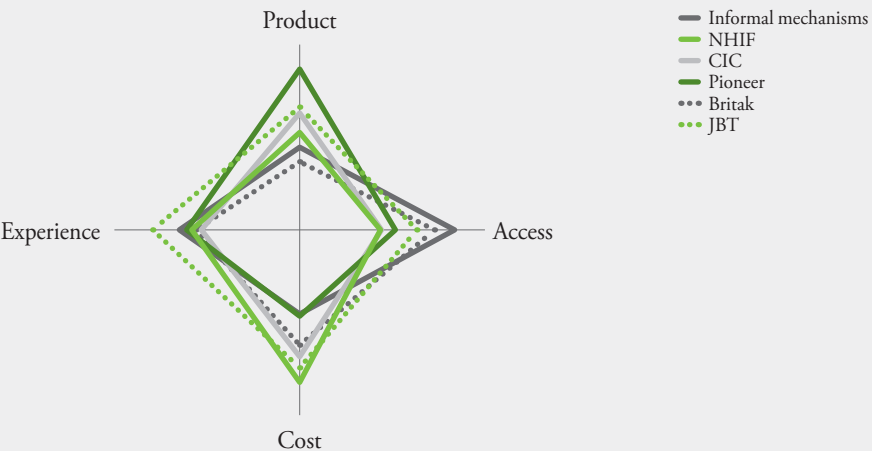
Bitak's is the most accessible product because of its simplicity and its very convenient delivery channel that allows automatic premium deduction from monthly wages. However, the relatively small benefits undermine its development potential. Moreover, the slightly lower value for money puts this product at risk when markets become more educated and less fragmented.

Bima ya Jamii has been a sound attempt by CIC to enable people to access to NHIF cover, while at the same time improving cover and service at a reasonable price. However, it has not worked well in practice and requires readjustment, as NHIF in 2010 announced its intention to include outpatient services in its cover, which will result in a substantial increase in premium. Therefore, CIC and NHIF are contemplating whether to stop offering the product in its current form. Despite improvements in proximity and client awareness, CIC and NHIF have encountered difficulties in streamlining the enrolment process, document requirements and synchronizing their information systems. CIC was also obliged by regulation to collect an annual premium up-front, which made it more difficult for people to afford or access the product.

Pioneer's composite product received a low ranking for different reasons. On the one hand, it is the most comprehensive product on the market and as such merits attention, but it is hard to explain to clients and difficult to maintain high service standards for a multiple cover, resulting in lower scores for access and experience. Moreover, the product struggles with adverse selection and there is a need to improve administrative processes to better manage the providers' network. Lastly, low-income markets are sensitive to price; a premium equivalent to 2.9 per cent of monthly income puts the Pioneer product above the limit of affordability. Nevertheless, it is the least mature of all the products and its value proposition is likely to improve over time.

Figure 15.4

Client value PACE analysis, Kenya



	<i>Informal mechanisms</i>	<i>NHIF</i>	<i>CIC</i>	<i>Pioneer</i>	<i>Britak</i>	<i>JBT</i>
Product	2.3	2.6	3.3	4.4	1.9	3.3
Access	4.3	2.2	2.3	2.7	3.7	3.3
Cost	2.2	4.2	3.4	2.4	3.2	3.8
Experience	3.3	3.0	2.7	3.1	2.9	4.0

The jury is still out on the client value from Kenyan microinsurance products as many of them are new; with their limited maturity, there is room for improvement. However, the PACE analysis raises a question as to the client value provided by composite products, at least in the rigid form used in Kenya. In theory, there are strong arguments in favour of composite products given the high acquisition costs in microinsurance. However, one needs to be conscious of their drawbacks. Inherent complexity makes it difficult to explain benefits to clients and to maintain high-quality service and expensive-to-administer policies, resulting in barely affordable products. From the client value perspective, the lack of choice is an issue as it cannot be assumed that one-size solutions fit all. All these factors have resulted in low take-up.

15.4.2 Comparing various models for health insurance in India

Over the last decade, a number of health microinsurance products have been developed in India, making it the most mature market for the provision of health covers to low-income households. As shown in Table 15.3, the PACE analysis captures this diversity by looking at six hospitalization products bundled with additional benefits. These products are delivered by a community-based scheme

(Uplift), by NGOs in partnership with insurers (PWDS, VimoSEWA), by an insurance company in collaboration with the Ministry of Textiles (ICICI Lombard), by a state Government in collaboration with cooperatives (Yeshasvini), and by the Government with various private insurers (RSBY).⁵ The RSBY and weavers' schemes are subsidized and the latter is the only one offering full outpatient cover. It may seem unfair to compare subsidized schemes to market-priced ones, but those comparisons make sense from the clients' perspective, which is the essence of the PACE assessment. The products serve similar target groups, but are sold in different locations (with the exception of RSBY, which has been rolled out across India).

The government-sponsored schemes score similarly to their Kenyan counterpart NHIF (*see Figure 15.5*). Although they can provide better products at a lower cost due to subsidies, as large-scale schemes they underperform on both access and experience dimensions. For RSBY, access is limited to the population below the poverty line (BPL) as identified by the ration card. More importantly, enrolment numbers are suppressed by the fact that enrolment is often done within a specific window of time and all family members need to be present in person. Limited information provided to the public and limited effort to educate members are likely explanations for low usage rates. In the case of ICICI Lombard, access to its scheme is constrained by limited member education for a relatively complex product. Low usage rates may suggest inadequate claims procedures, but an emerging "cashless" system should improve service quality in the near future. The Government of India and the insurers involved are investing resources to make the RSBY and other government-sponsored schemes work for low-income populations.

Improvements in the access and experience dimensions might make it difficult for market-priced schemes to compete with RSBY and other government schemes, at least for the poorest clients. Some households are currently still enrolled in RSBY and other health microinsurance plans, but it seems that schemes will in future align themselves with RSBY and reposition their products. Organizations like Uplift, VimoSEWA and PWDS can improve access to RSBY and make sure that their members benefit from the government system.

⁵ Various public and private insurers deliver RSBY; premiums vary slightly, but the product design and core processes remain the same. For the PACE analysis, the RSBY delivered in collaboration with ICICI Lombard is taken as a reference. For more information on RSBY and health microinsurance in India, see Chapter 20, section 20.2.4.

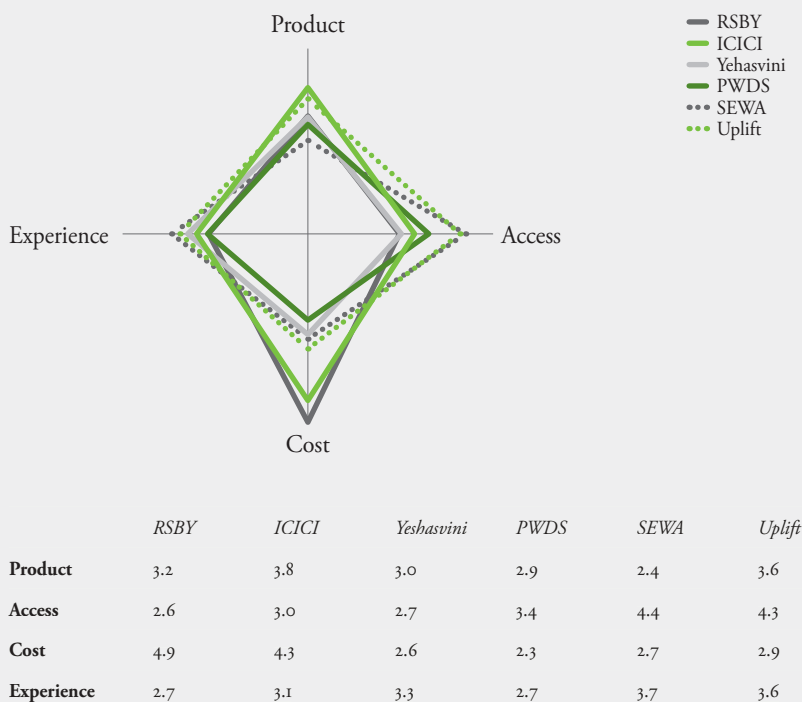
Table 15.3
Products included in PACE analysis, India

	<i>RSBY</i>	<i>ICICI Lombard, HIS scheme for weavers</i>	<i>Yashaswini</i>	<i>Bharti-Axa / PWDs</i>	<i>VmoSEWA, Sukhi Pariwar and Suastha Pariwar</i>	<i>Uplift</i>
Start date	2009	2005	2007	2010	1992	2003
Product type	IP health, voluntary, individual, stand-alone	IP and OP health, voluntary, group, stand-alone	IP health, voluntary, stand-alone	IP health, voluntary, group, stand-alone	IP health, voluntary, group, often linked	IP health, mandatory, group, credit-linked
Distribution	Varied	Cooperatives	Cooperatives	Self-help groups SHGs	SHGs	MFIs
Cover	INR 30 000 no sub-limits, pre and post IP, full maternity, transport allowance, OP discounts	INR 15 000 no sub-limits, comprehensive cover	INR 200 000 IP but limited to one incidence per person per year; mostly surgery	INR 30 000 no sub-limits, full maternity	INR 2 000 to 6 000 for composite products; INR 10 000 for the stand-alone product	INR 15 000 for IP, sub-limits pre and post IP, OP discounts, preventive health services
Targeted segment ¹	<ul style="list-style-type: none"> – BPL population in both urban and rural settings – Monthly household income: INR 1 500 (rural) and INR 2 000 (urban) 	<ul style="list-style-type: none"> – Weavers and other textile workers – Semi-urban and mostly rural (in 29 Indian states) – Mostly BPL members – Monthly household income: INR 2 000 (rural) and INR 2 500 (urban) 	<ul style="list-style-type: none"> – Members of the Registered Cooperative Societies in rural Karnataka – Upper poor, some BPL members – INR 3 000 (rural) and INR 3 500 (urban) 	<ul style="list-style-type: none"> – Members of SHGs in 7 Federations in 3 southern districts of Tamil Nadu – Rural only – Upper poor – INR 3 500 (rural) 	<ul style="list-style-type: none"> – Members of SEWA and other NGO beneficiaries, mostly in Gujarat – Informal sector, rural (60 per cent) and urban (40 per cent) – Poor, some BPL members – INR 2 500 (rural) and INR 3 000 (urban) 	<ul style="list-style-type: none"> – Mostly urban population, Pune and Mumbai, slum dwellers, microcredit clients – Poor, some BPL members – INR 2 500 (rural) and INR 3 000 (urban)
Performance	22.5 million cards issued (Feb. 2011) Average 2.5 lives per card enrolled	1.7 to 1.8 million policies; 5 to 6 million lives (Dec. 2010); 90 per cent coverage ratio 50 to 90 per cent claims ratio; low claims rejection ratio 95 to 100 per cent renewals ratio	2.7 million lives (Nov. 2010) 70 to 100 per cent claims ratio 70 per cent renewals ratio	650 policies, 16 000 lives (Dec. 2010) 140 to 160 per cent claims ratio	60 000 policies, 100 to 125 000 lives (Dec. 2010); 8 per cent of SEWA members 60 to 90 per cent claims ratio, 15 per cent claims rejection ratio 60 per cent renewals ratio	100 000 lives 47 per cent claims ratio, 2 per cent rejection ratio 70 per cent renewals ratio (Feb. 2011)

¹ Client income estimations should be treated with caution as limited data was available. Amounts stated above are based on estimations of providers in relation to BPL level in India, for which the threshold is set at approximately INR 1800 (rural) and INR 2 300 (urban) monthly income for a family of four.
 Notes: US\$1 = INR 44.

Figure 15.5

Client value PACE analysis, India



Interestingly, as with Kenya, the most “balanced” client value is provided by a community-based scheme. As described in Box 15.5, Uplift scores well on the PACE framework mostly because of value-added services, quality care management, systematic client education efforts and outstanding customer care. VimoSEWA is very close to Uplift in several dimensions except for product, as benefits are the lowest among the Indian schemes. At the same time, VimoSEWA has been financially viable for several years now,⁶ while Uplift is still dependent on donors, which suggests that the value-added benefits provided by Uplift might not be realistic for a market-based scheme. Premium increases might be an option to improve viability as most of the schemes reviewed in India are below the willingness-to-pay threshold for health insurance.

⁶ But performance has not been validated with insurers carrying the risk for the scheme.

Yeshasvini and PWDS products add slightly less value, but they serve their captive markets and provide decent cover at a fair price. Access seems to be an issue for Yeshasvini, while PWDS, the least mature of the Indian schemes, needs to improve claims administration and quality of service. If adverse selection and moral hazard problems are solved, there might be room for further improvement, resulting in higher client value.

To summarize, the PACE analysis for India draws an interesting picture of the value delivered by different models. Each model has different strengths that can be exploited to create better health insurance products for low-income households. Private-sector players and NGOs should align their products with large public schemes (provided that service quality improves) through integration or by targeting different market segments.

15.4.3 **Enhancing value from life insurance in the Philippines**

Just as India is one of the most mature markets for health microinsurance, the Philippines is for life microinsurance. Compulsory life covers with disability and funeral benefits were selected for the PACE analysis. The different models represented include CARD and FICCO, which are large mutual benefit associations (MBAs), CLIMBS, a regulated, cooperative insurer working in a partner-agent model with MFIs and cooperatives, and MicroEnsure, a specialized broker that develops and administers products delivered in a partner-agent model.⁷ The four products are similar and the microinsurers broadly target the same market segments (*Table 15.4*), which makes the PACE analysis easier than in the other countries where the presence of social security schemes and the complexity of health insurance made comparison more difficult.

⁷ The MicroEnsure product with TSKI is taken as a reference for the PACE assessment in the Philippines.

Table 15.4

Products included in the PACE analysis, Philippines

	<i>FICCO, MBA</i>	<i>CARD, MBA</i>	<i>CLIMBS, Micro-biz family protector</i>	<i>MicroEnsure, Family Life with TSKI</i>
Start date	2007	1994	2004	2007
Product	Term life, AD&D	Term life, AD&D	Term life, AD&D, funeral, fire	Term life, AD&D, funeral
Cover	PHP 40 000 (natural death, principal), PHP 10 000 for others, same AD&D	PHP 50 000 (natural death, principal), PHP 10 000 for others, same AD, disability up to PHP 100 000, PHP 10 000 hospital cash due to motor vehicle accident	PHP 30 000 (natural death, principal), 10-PHP 15 000 for others, same AD&D, burial benefit PHP 2 500 to PHP 10 000, PHP 40 000 for fire	PHP 90 000 (natural death, principal), PHP 15 to 30 000 for others, PHP 70 000 (AD&D, principal), PHP 10 to 20 000 for others, benefit PHP 5 000 to PHP 20 000
Monthly premium per family¹	PHP 90	PHP 60	PHP 87	PHP 78
Distribution	FICCO MFI	CARD MFI	MFIs and cooperatives	TSKI MFI
Targeted segment²	Microentrepreneurs, fishermen, farmers and formal sector workers loans from PHP 13 000 to PHP 2M PHP 5 to 20 000 monthly average family income	Women microentrepreneurs, trade, services, agriculture PHP 5 to 20 000	Members of credit and savings cooperatives PHP 5 to 20 000	Women micro-entrepreneurs, working poor, mostly in rural areas PHP 5 to 20 000
Performance³	85 000 members (330 000 lives insured) 30 per cent claims ratio Retention rate > 80 per cent	1 million members (4 million lives insured) 15 to 25 per cent claims ratio Retention rate > 80 per cent	135 000 lives	1 million lives 45 per cent claims ratio

¹ Half of the premium for MBAs goes to a guarantee fund and is reimbursed to members when they decide to leave the scheme.

² As all schemes target a population that is just below or just above the poverty line, the estimated income range for all schemes is PHP 5 000 to PHP 20 000, with average monthly household income at PHP 11 000. These calculations are based on the following sources: 1) PhilHealth (2010): low income threshold at PHP 246 109 annually, approximately PHP 20 000 monthly; average income in low-income group PHP 7 500; 2) National Statistical Coordination Board (2011) official poverty statistic: monthly poverty threshold for a family of five at PHP 7 017.

³ Claims ratio for MBAs is calculated on premiums collected. In reality, the ratio doubles as it should be based on the non-refundable portion only.

Note: US\$1 = PHP 45.

All the schemes in the Philippines provide better value to low-income households than similar informal risk mechanisms (*Figure 15.6*), despite the fact that in the Filipino culture community support to help bereaved families is well established. The main limitation of informal mechanisms is that they only cover funeral costs, which still leaves families vulnerable when a breadwinner dies. Otherwise, informal mechanisms to deal with life risks are accessible, not

costly and quite responsive, especially when compared to the same arrangements in Kenya.

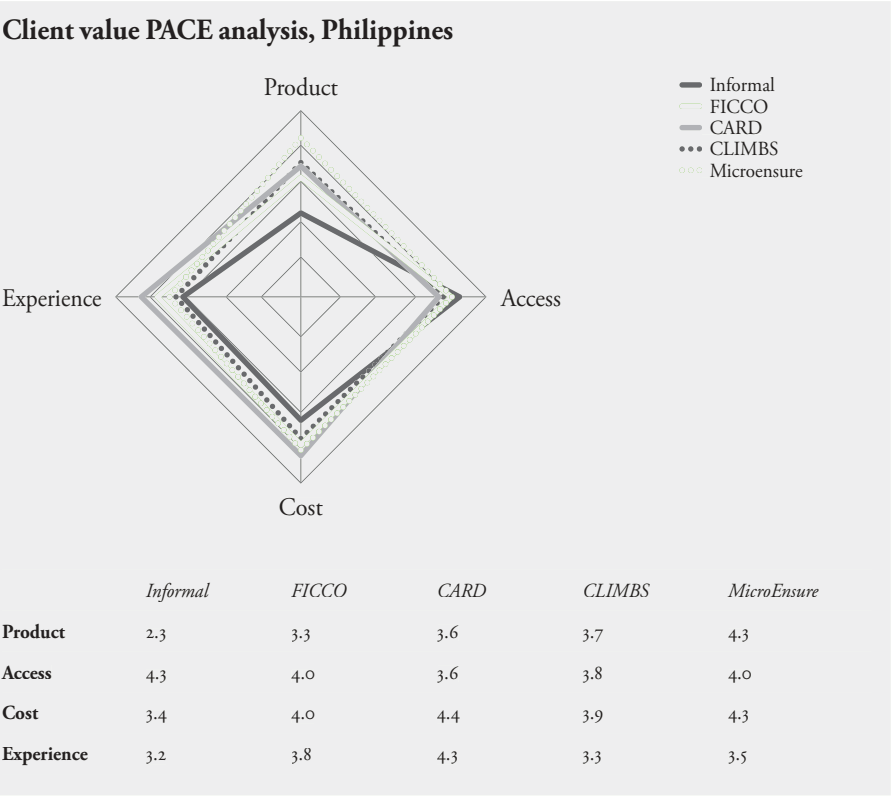
The fact that the life microinsurance products reviewed add value in the Philippines therefore merits attention, as it is hard to provide better value than the informal practice of *abuloy*.⁸ In fact, the origins of microinsurance in the Philippines comes from the formalization of *abuloy* by some cooperatives that required members to contribute ex-ante PHP 2 to PHP 5 (US\$0.04 to US\$0.11) per month for a death benefit of PHP 20 to 35 000 (US\$444 to US\$777), which is close to the price people paid to be part of *abuloy*. As regulated MBAs such as CARD and FICCO emerged, they then built on the cooperatives' semi-formal schemes and fully formalized them.

All four products reviewed score almost the same on the four core dimensions of the PACE framework. As described in section 15.2, the products have various strengths and weaknesses, but offer good cover and service at a reasonable price. According to Rimansi (2002) the price is within the willingness-to-pay range declared by low-income households. There remains concern over value for money as all of the products are very profitable, suggesting that there is an opportunity to raise benefits or reduce premiums.

It is interesting to see such a convergence in an environment where there is not much competition, since most of the insurers (especially those that are member-based associations) serve captive markets. However, with increased activity by CLIMBS and the recent entry of MicroEnsure, competition has begun and the clients seem to have benefited. The life products in the Philippines built on informal mechanisms and have continued improving their features to provide better value, providing evidence that maturity does matter and that client value improves over time. There are still improvements to be made and with increased competition there should be further benefit to the client.

⁸ Within *damayan*, a broader term for community support, relatives and friends contribute *abuloy* (informal support for funeral) to a family who lost a member.

Figure 15.6



15.5 Conclusions

Client value is a complex issue, yet it needs to be understood for practitioners to succeed in their business and for other stakeholders to support the development of microinsurance markets effectively. The PACE tool can be used to compare microinsurance to its alternatives through an audit-based system supported by secondary information sources. It fills a gap between key performance indicators, which can only indicate successes or problems, and full-fledged client studies, which are expensive and longitudinal in nature. The PACE framework looks at products through the clients’ lens in a holistic way by taking into consideration the dimensions that are important to consumers. Hence, it can be used by practitioners to improve the value of their products and contribute to strategic management processes. The PACE results even seem robust enough to engage governments, donors and regulators in debates at the policy level.

The initial analysis in India, Kenya and the Philippines shows that there is a place for microinsurance to add value on the top of informal risk-sharing practices and existing social security schemes to protect low-income populations against life and health risks. The findings presented in this chapter confirm the

limitations of informal risk management arrangements and further explore how microinsurance should complement social security systems.

The three-country analysis points to the correlation between client value and maturity of markets. In the Philippines, where for more than a decade micro-insurers have been continuously improving life products, the value of all the products reviewed appears beyond doubt. In Kenya, where innovation in composite products, such as health and life, has just started, the client value of most products is open to question as they are not much better than informal mechanisms and do not complement the social security scheme well either. Indian health microinsurance products seem to be half-way in their journey to delivering client value, with interesting interaction between valuable products delivered by community-based or NGO-run schemes and government-sponsored initiatives, which are growing in importance.

In the on-going value creation process, the competitive environment, market orientation and/or social commitment can lead to significant improvements. Enhancements have often been small adjustments that made a significant difference for low-income consumers. However, it is rare for an offering to excel in product, access, cost and experience. Hence, there remains room for improvement because clients are looking for value across the four dimensions. There are many trade-offs in this process, but if improvements lead to greater efficiency, a balanced proposition may be possible.

The examples described in this chapter are inspiring, but client value is contextual and not all ideas can travel across the borders to markets with different client preferences, social security set-ups, competitive landscapes and availability of technology or distribution channels. And yet, while context matters, some client value drivers seem sufficiently universal to be put on the global micro-insurance agenda to further improve client value. This includes exploring:

- improvements in claims processing, customer care, consumer education and enrolment processes;
- translation of efficiency gains (through process improvements and use of technology) into better client value;
- the value of mandatory compared to voluntary product designs;
- the balance between simplicity and cover (simple covers compared to more comprehensive, appropriate covers) in the context of marketing, demand and acquisition costs;
- ways of structuring public-private partnerships for health and agriculture micro-insurance;
- opportunities to build on informal mechanisms and ensure better coexistence with microinsurance.

Lastly, in microinsurance, as in any other retail business, client value should drive business viability. Better products mean reaching economies of scale, a prerequisite in microinsurance, more quickly. Some life products reviewed in this chapter show that it is possible to strike the right balance between client value and business viability. There is no simple answer on which business strategy is the most effective, but it is difficult to come up with a good strategy without understanding clients' needs and without a tool that will link market intelligence into the strategic planning process. To understand clients' needs, microinsurers need more client data.

Microinsurance that works for women

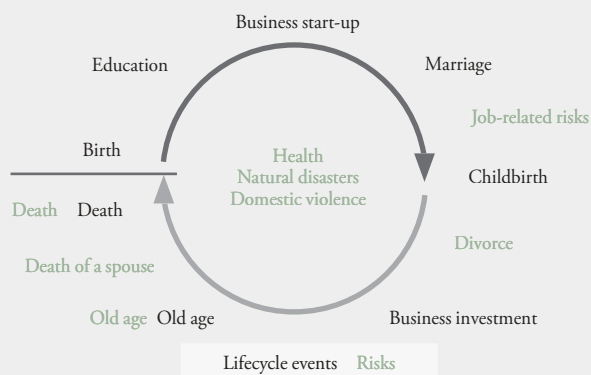
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For millions of women around the world, microinsurance cover can mean the difference between life and death. Having effective coping mechanisms is crucial for poor women, who not only face a heightened vulnerability to risk for themselves, but who also shoulder the burden of managing their families' risks. Over the course of a woman's lifetime, these risks can include health problems for herself and family members, the loss of a breadwinner's income due to death or divorce, vulnerability in old age, worry over the care of children in the event of her own death, domestic violence, job-related risks and natural disasters, as shown in Figure 16.1. Any one of these risks can deliver serious and often devastating financial shocks to poor women and their households, potentially intensifying poverty, instability and vulnerability.

Figure 16.1

Lifecycle events and risks for poor women



Poor men are confronted with many of these same risks. However, the impact on poor women is far greater. Globally, women account for 70 per cent of the world's poor (UNIFEM, 2010). They face disproportionate levels of physical vulnerability and violence. They earn less income, often from informal sector employment, with less ownership and control of property (Mayoux, 2002). When these vulnerabilities are combined with the responsibility of ensuring the welfare and security of their families, it is clear that women not only have a

unique and pressing need for appropriate means to manage risk, but also serve as agents for the risk management of their entire families.

Poor women have traditionally coped with risk using approaches that offer moderate protection, but are frequently limited, inefficient, unreliable, or even harmful. Microinsurance offers a promising solution for poor women if it is designed and delivered effectively. Women form a significant segment of the emerging microinsurance market because they seek cover both for themselves and their families, serving as risk managers for entire households. Nonetheless, millions of poor women are uninsured.

This chapter highlights the importance of understanding the specific risks that poor women face and the influence of household dynamics on the ways those risks are managed. With those insights, the chapter explores how microinsurance can be better designed and delivered for women. It also serves as a call to action to MFIs¹ and other delivery channels, as well as to donors, insurers and the research community, to develop gender-sensitive microinsurance schemes.

Findings for this paper are primarily drawn from qualitative market research studies conducted by Women's World Banking (WWB) from 2003 to 2008 in eight countries spanning Africa, Eastern Europe, Latin America, the Middle East and South Asia and the existing literature on savings and microinsurance.

16.1 Gender and risk in poor households

How do risk management decisions and strategies differ between women and men? Although there are differences across cultures, in general men often fill the roles of provider, authority figure and head of household, and are usually responsible for making major financial decisions. Women often fill the roles of caregiver, homemaker, and increasingly, income earner and household financial manager. Inherent to caregiving is the responsibility of coping with risks – such as health problems, deaths in the family and emergencies – to maintain the security, health and stability of the home.

These roles give rise to different risk management strategies for women and men, which can be explored from three perspectives described below. First, women's attitudes to savings, risk-aversion and financial management often differ from those of men. Second, there are some risks that arise for women as a result of intra-household relations. Finally, women have a heightened vulnerability to risks due to their physiology and position in the household and society.

¹ This chapter focuses primarily on microfinance institutions as delivery channels.

16.1.1 Women's attitudes to risk management

Women are keen savers and risk managers. Women typically utilize their earnings to improve the care and standard of living in their households by either spending business profits on household expenses or saving them to draw upon in case of need. This behaviour relates to women's role as caregivers and suggests that, if women are providing for the day-to-day needs of the family, it frees up men's resources to invest and expand their businesses. In this sense their roles are interdependent. A Pakistani man reveals: "Women use [their income] in the house, they think about the children. They save money for the dowry or the education of the children. That is what women do. Men want to expand their business" (WWB, 2008c).

Evidence from developed countries suggests that women are more risk-averse than men in investment (Jianakoplos and Bernasek, 1998). However, differences in risk-aversion may not be biological or innate but rather arise from the traditional roles within the household and the different degrees of risks that women and men face. Whether these differences arise from innate preferences or from gendered contexts, women and men do manage risks differently, and this has implications for microinsurance product design.

16.1.2 Intra-household relations and risk management

Some households operate with significant joint decision-making and negotiation. In others, there may be a strong separation of roles, with little discussion or collaboration, or there may be latent or overt conflict in which some members, usually women, feel that they are seeking to fulfil their responsibilities in spite of their spouses. In the latter cases men may offer little assistance, withdraw their contributions when women earn their own income or make demands on women's savings and incomes for their own purposes. In the worst cases, conflict may lead to domestic violence and divorce.

How a household operates significantly impacts resource allocation to saving and insurance. Where cooperation is strong, joint decisions to mobilize funds for insurance may be made more easily. In households where roles are clearly separated or where there is conflict, these decisions are more likely to be problematic. In these cases, women who desire to purchase policies that respond to the needs ascribed to their role – for example, health care for children – may have to draw on their own, usually lower, levels of income and savings. The very existence of household conflict may also increase a woman's desire to buy insurance and affect the features she chooses. Awareness of such intra-household gender dynamics will enable the design and delivery of microinsurance products to be improved.

16.1.3 Heightened vulnerability to risk for poor women

Women's risk management needs are shaped by the specific and unique risks they face due to their physiology and position in the household and society. The key risks facing poor women are:

- **Health:** Health shocks are among the biggest and least predictable risks that poor households face. Mounting medical costs and lost wages can push otherwise stable households into poverty (Chen et al., 2008). Women face a dual challenge when it comes to health risks: they are more susceptible to health problems and more likely to be responsible for caring for others' health problems. Examples of greater susceptibility to illness for women include issues in reproductive health, as seen by the estimated 300 million women suffering permanent health damage resulting from pregnancy and childbirth (Ahmed and Ramm, 2006). Women are also more susceptible to sexually-transmitted diseases such as HIV/AIDS, as they are often in weaker positions to negotiate safe sex (UNAIDS, 2008). Women's health can also be threatened through increased exposure to unsanitary water while cleaning their homes and to harmful firewood or charcoal fumes while cooking (Ahmed and Ramm, 2006). Poor women may be less likely to use their limited resources for treatment when they are sick, preferring instead to use resources to treat sick family members, especially children (Kern and Ritzen, 2002).
- **Death of husband:** In most countries, women tend to outlive their husbands. The likelihood increases in communities where women are likely to marry older men, and where male life expectancy is shortened by violence, unsafe working conditions or military participation. For poor women, the death of a husband can be devastating – not just emotionally, but also financially and legally. Widows who may have depended on their spouses for financial support must learn to survive independently, with few opportunities to remarry. The risk is magnified for women with young children to support and educate. Widows may also face significant legal and cultural battles to retain property upon their husband's death. The loss of property can leave them without a home to live in and can threaten income and food security. Insurers might play a positive role in such situations by requiring that insured assets be in the woman's name (Ahmed and Ramm, 2006).
- **Old age:** Old age exerts substantial pressure on poor households through the need for financial support and living assistance, and increased healthcare costs. Traditionally, women have primarily coped with this risk by relying upon their adult children to support them. Increasingly, however, women are worried that their children will be unable or unwilling to provide this support. This breakdown of traditional roles leaves many women vulnerable, particularly widows.
- **Divorce:** WWB research reveals that many divorced women are under intense financial pressure – a pressure that is heightened if they have children to care for. As in the death of a spouse, divorced women face the loss of financial support

from their husbands, a cost that is heightened in countries where alimony is either not required or not enforced, and are often confronted with significant legal battles to retain property after divorce. These financial risks become even more difficult when combined with the cultural barriers and social ostracism that divorced women may face. While “divorce insurance” may not be feasible, insurers and delivery channels can encourage women to have their name on the legal titles of assets being insured, to protect them in the event of divorce or the death of a husband. MFIs and other delivery outlets could also help divorced women by providing links to affordable women’s legal services that can help them retain their property after divorce.

- **Own death:** Many women worry that their children, especially their daughters, will not be properly looked after in the event of their own death. Women also worry about burdening their families with funeral costs and outstanding debt, and those that earn income fear that their family may not have the resources to survive without their contribution. Microinsurance is an obvious tool for providing financial support, including repaying outstanding debts and providing financial benefits to children, yet some women fear that their spouses, if declared the beneficiary of the life insurance policy, may spend part or all of an insurance payout for unintended purposes. To work around this problem, delivery channels might offer culturally-sensitive counselling to help women think through their options for naming a beneficiary. Microinsurance can also be designed to provide practical benefits directly, such as groceries or vouchers for school fees, to better ensure that women’s needs are met even after their death.
- **Domestic violence:** Domestic violence not only puts women’s physical and mental health at risk, but can also threaten their financial security. Women who suffer from domestic violence can incur serious financial costs for care and rehabilitation, which has implications for health insurance (Ahmed and Ramm, 2006). They may also find that their ability to earn an income is curtailed if their work subjects them to abuse or if abuse has rendered them unable to work. For poor women who do not own property, this risk is exacerbated. Research in South India found that 49 per cent of married women who owned neither land nor a house suffered from domestic violence, whereas that figure dropped to 10 to 18 per cent for those who owned either land or a house (Murray, 2008). Thus, MFIs’ efforts to encourage asset ownership through savings and credit can also be an important risk management tool for women.
- **Job-related risks:** Poor women face a range of job-related risks that are often not covered by available insurance products. Traders who work on streets or in marketplaces may be vulnerable to theft and physical violence. Sex workers are highly susceptible to sexually-transmitted diseases, rape and abuse. Women in home-based businesses are vulnerable because they lack the safety measures which may be in place in factories and because they are physically isolated from

others, decreasing their opportunities to join unions and seek equal pay for their work. Since women typically get paid less for their work than men and are more likely to work in the informal sector where they receive less legal protection against job-related risks, their ability to prevent or cope with these risks is more constrained.

- **Natural disasters:** The effects of natural disasters on poor people can be especially acute, yet rarely is this covered by insurance (*see Chapter 4*). A significantly larger proportion of disaster victims in many recent natural disasters have been women. This gender disparity results from various gender differences: as caregivers to children, women may be physically closest to dependents in a disaster situation and may therefore need to try to rescue them, reducing their ability to quickly evacuate. Cultural restrictions on the ability of women to leave their homes without male permission may also impede timely evacuation. Even if women survive the disaster itself, they suffer a second wave of risk as the threat of physical and sexual violence against women has been shown to increase, especially in shelters and relief camps, during the recovery phase (Dimitrijevic, 2007).

16.2 Traditional risk management and coping strategies

The mechanisms poor women traditionally use to deal with risk fall into two categories: 1) risk management or ex-ante strategies, actions taken to limit risks or prepare for the occurrence of a risk event; and 2) strategies for coping with risk or ex-post strategies, actions taken to deal with the consequences of shocks after they have occurred. This section discusses non-microinsurance risk management and coping strategies. Microinsurance as a risk management strategy is covered in section 16.3.

16.2.1 Ex-ante: Risk management strategies for poor women

- **Savings:** As discussed earlier, women use savings to pay for financial shocks associated with their caregiver role, including health, education and emergencies. Poor women employ a variety of savings strategies, including saving at home, in assets, in rotating savings and credit associations (ROSCAs) and in savings accounts held at banks, MFIs or cooperatives.
- **Making risk-averse business decisions:** With limited access to capital and education and significant constraints on their time due to caregiving responsibilities in the household, poor women often have little choice but to crowd themselves in undifferentiated, low-value-added, low-risk, low-profit business activities, such as tailoring or cooking that are extensions of their household duties. When profits are earned, women often avoid reinvesting their profits back into their

main business and opt instead for more risk-averse choices. This behaviour avoids large losses but also limits large gains, and is indicative of a preference for security and risk management over risky, but potentially more profitable, business decisions.

- **Investing in property:** Many poor women view owning property as an important strategy for managing the risks of divorce, widowhood or old age. With their name on the land title, they can avoid complicated and costly legal battles over property if divorced or widowed, thereby securing their place to live. Owning a home allows women to pass it on to their children, creates a place to live in their old age and gives them an option to rent either all or part of the house as a source of income, which is particularly vital for elderly women.
- **“Investing” in children:** Women often view investments in their children’s education and businesses as investments in their old-age security. “The biggest investment you can make is to educate your kids, to give them money to go to the university,” says a Dominican woman (WWB, 2008b). The hope is that well-educated children will have well-paid jobs that provide them with sufficient resources to care for their ageing parents and a sense of responsibility to “pay them back” for supporting them while they were young.
- **Participating in informal reciprocal social relationships:** Women in many cultures invest in informal reciprocal social relationships to prepare for various lifecycle events, such as the birth of a child or the death of a spouse. Risk management relationships, like *munno mukabis* (which translates to “friend-in-need associations”) in Uganda, provide an opportunity for members to collect funds over time to amass sufficient resources to aid their members should a specific financial need, such as a death or a wedding, occur (CGAP, 2000).

16.2.2 Ex-post: Risk-coping strategies for poor women

- **Slashing household expenses:** After a financial shock occurs, poor women often respond by cutting household expenditure. Depending on the financial need, these cutbacks can include a reduction in day-to-day expenses such as food and medical expenses, and/or longer-term cost reductions such as moving into less expensive housing or pulling children, especially daughters, out of school (World Bank, 2009).
- **Borrowing money:** Many poor women resort to taking out loans to cope with financial shocks, either from family, friends, MFIs, or high-cost moneylenders and pawnbrokers. Women may also divert funds previously borrowed for another purpose (i.e. business investment) into managing immediate risks. When loans have already been taken, a last-resort strategy for coping with the risk may be to default on the loan if the money is needed elsewhere.

- **Selling assets:** Another strategy for coping with risk involves selling assets, such as gold, land and housing, or income-generating assets, such as business equipment or livestock.
- **Starting or increasing income-generating activities:** Members of poor households may also take up or increase income-generating activities to earn extra money to cope with financial shocks (Ezemenari et al., 2002). Frequently it is a severe financial shock that pushes women, and in some cases their children, into the labour force. A recent study of women sex workers in western Kenya disturbingly reveals that they are nearly 20 per cent more likely to supply riskier, better-paid sex on days when a family member, particularly a child, falls sick as a way to cope with health-related expenses (Robinson and Yeh, 2009).
- **Participating in informal reciprocal social relationships:** Informal social relationships can also help poor families cope with financial shocks. In Kenya, women use *harambees* (which translates to “pool together”), where women come together to cover the cost of financial shocks, such as a death in the family. Similarly, a study in Nepal found that when someone dies, community members typically donate small amounts of money and food, which families use during the 13-day mourning period (Simkhada et al., 2000).

16.2.3 Consequences of risk strategies

Though many risk strategies that poor households use provide some protection, even together they are often inadequate to fully cover the costs associated with financial shocks (Dercon and Kirchberger, 2008; Cohen and Sebstad, 2009). Moreover, these strategies often have adverse secondary implications for women and their families.

Inadequacies

While WWB research suggests that poor women are keen to save and can save around 10 to 15 per cent of their net monthly income, the amount is rarely enough to cover more than basic emergencies and some health-related costs. Savings can also be ineffective when the security of those savings is in question, as is often the case with informal savings where the threat of theft, fraud or pressure from other family members to spend counteracts their ability to serve as an effective coping mechanism. Research in Uganda found that 22 per cent of savings are lost in informal savings schemes compared to a loss rate of just 3.5 per cent in the formal sector (Wright and Mutesasira, 2001). Since women are more likely to use informal savings mechanisms, this risk affects them disproportionately (WWB, 2003).

Furthermore, saving through ROSCAs can be unhelpful when a number of members require money at the same time or when a member facing a financial

shock is not due to receive her payout (WWB, 2006d). Other informal reciprocal social relationships are also unable to provide full cover for many risks. In the earlier example from Nepal, contributions from community members were found to cover only 25 per cent of the costs associated with the death of a family member (Simkhada et al., 2000). Social relationships may also provide little protection from covariant risks, such as natural disasters or health epidemics, because others may be facing similar problems, limiting their ability to help.

Adverse secondary implications

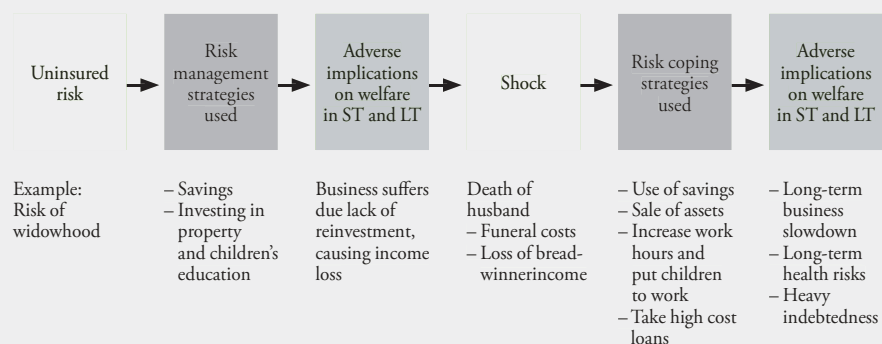
Several risk strategies, while sometimes effective in the short term, can lead to enduring adverse secondary implications, perpetuating a cycle of poverty for poor women and their households. Allocating business profits to savings instead of investment, for example, is one of the main reasons for women's businesses failing to grow to the same extent as men's businesses (Murray, 2008). Accumulating precautionary savings can also limit expenditure on other vital needs such as housing or education. Other risk-averse business practices, such as diversification into a number of smaller businesses, may reduce the impact of any one business failing, yet limit each business's chance of succeeding. These risk-averse choices cause poor women to forgo some profitable opportunities that might have helped them break the cycle of poverty (Dercon and Kirchberger, 2008).

When a woman copes with shocks by selling productive assets such as livestock or equipment, she may be forced to accept a below-market price out of desperation. Regardless, she wipes out her ability to earn income from the assets in the future. Similarly, pulling children out of school may reduce immediate household costs and free up children's time to work, but it causes a serious loss to children's development and severely curtails their long-term earning potential. Reducing food intake and medical expenses similarly can have a serious health impact on the household. Research from the recent economic crisis indicates that women and girls suffer disproportionately from these cutbacks (Institute of Development Studies, 2009).

Borrowing may help to smooth financial needs in the short term, but may lead to long-term indebtedness (Simkhada et al., 2000). Defaulting on existing loans may free up short-term cash, but may result in a future loss of access to finance. Figure 16.2 illustrates how many of the aforementioned risk strategies can fail the woman who employs them (Dercon and Kirchberger, 2008).

Figure 16.2

Examples of risk strategies and implications



Adapted from Dercon and Kirchberger, 2008.

The inadequacy and harm associated with many commonly used risk strategies suggest a strong need for more robust options that can provide more adequate and long-lasting cover without negative side-effects.

16.3 Gender-sensitive microinsurance

Microinsurance can provide adequate, long-lasting cover against shocks for poor women if properly designed and marketed to address their needs. While a diverse array of microinsurance products are becoming available, including schemes to protect against crop failures, property damage, natural disasters, unemployment, disabilities and the costs associated with women's roles as caregivers, this discussion will focus primarily on health and life microinsurance because those risks are typically reported to exert the most financial pressure on poor women (Roth et al., 2007).

Successful microinsurance programmes must strike a balance between providing cover that meets the needs of poor women, minimizing operating costs for the delivery outlet and insurers and keeping premiums low to foster affordability and accessibility (Churchill, 2006). There are several useful examples in the market. The Micro Insurance Academy presents clients with a “menu” of benefits, allowing them to pick and choose attributes depending on their needs and ability to pay. Others have offered clients other financial products such as savings accounts or emergency loans to supplement gaps in their microinsurance programmes. The boxes presented in this section provide some examples of gender-sensitive microinsurance.

16.3.1 Design attributes

Affordable women's health and maternity benefits

Health microinsurance for women must go beyond the coverage of basic health needs to cover women's lifecycle health risks, including reproductive health issues,

such as pregnancy, prenatal and well-baby care, contraception and menopause, as well as preventive care such as regular health screenings, vitamins, education on disease prevention, and immunizations and vaccinations for themselves and their children. Comprehensive health microinsurance should also cover various types of care, such as primary care, specialist care, mental health care, outpatient treatment, hospitalization, surgery and prescription drugs, as well as access to women physicians.

Many health microinsurance products lack comprehensive cover or offer it at a cost which is unaffordable to most women. Several schemes exclude pregnancy, citing the high costs for insurers and customers. When the Indian NGO Shepherd tried to negotiate the price for a health microinsurance programme that included maternity benefits with the state-owned United India Insurance Company, the premiums were roughly double the maternity-excluded amount, too expensive for Shepherd's low-income clients (Ahmed and Ramm, 2006). Others offer limited pregnancy cover. Delta Life in Bangladesh, for example, excludes coverage of women in their first pregnancy due to the higher risk of complications (Ahmed and Ramm, 2006). Other programmes have a nine-month waiting period for health cover to prevent women from enrolling in insurance upon discovering that they are pregnant, or restrict benefits to just one or two births per client (Herbas, 2009). Thus, the challenge is to find a way to provide comprehensive cover at an affordable price. Box 16.1 provides an example of how the Bolivian MFI BancoSol dealt with this problem.

Box 16.1

Bolivia's BancoSol negotiates to deliver better benefits to women

While many microinsurance programmes exclude maternity benefits or impose waiting periods of nine months or longer to prevent pregnant women from enrolling, BancoSol offers a uniquely comprehensive health microinsurance product to women in conjunction with Zurich. The programme provides full maternity cover with a seven-month waiting period, giving pregnant women a two-month window to purchase insurance to cover child birth. As Bolivia's top-performing MFI with nearly 200 000 clients in 2009, BancoSol was able to exercise its bargaining power to negotiate these women-friendly terms with Zurich, and quickly demonstrated the viability of such a programme through a pilot test. In the two years since that pilot, BancoSol's health microinsurance programme has reached over 14 000 clients. Sixty-two per cent of these clients are women, compared to just 45 per cent of borrowers, underscoring the high value of gender-sensitive microinsurance programmes for women.

Source: Authors.

Health microinsurance cover for the whole family

As caregivers, women strongly value health microinsurance that allows them to cover their whole family. However, high incremental costs for adding family members often make family cover unaffordable, or force women to pick and choose whom to insure. The latter response raises serious issues for women and girls because they are often the ones left out (Ahmed and Ramm, 2006).

In other cases, the choice to insure multiple family members is not available, as in the case of employer plans, which sometimes only cover employees. A woman in Jordan who faces this situation says, "My husband is insured alone for the company he works for. They take 7 dinars (US\$10) per month from his salary. He can go to private hospitals, but we are not covered. He would have to pay more to include us [and we cannot afford it]" (WWB, 2006c). The Self-Employed Women's Association (SEWA) in India has mitigated this problem by offering clients pre-packaged family health microinsurance plans which automatically include all family members. While the packages are more expensive than insuring one individual, SEWA found that they were able to keep incremental costs low by insuring a larger population. The product proved to be popular: the programme tripled in volume in 2005 (Chatterjee, 2005). This example suggests that it may be possible to offer low-cost family plans and highlights the multiplier effect for insurers when the women's market is targeted as a conduit for family health cover.

Life microinsurance cover for husbands

A critical aspect of life insurance for women is to make cover available to both themselves and their husbands, yet in many schemes only women are covered. This is often the case with loan-linked cover, one of the most common forms of life microinsurance, which protects only the life of an MFI borrower (*see Chapter 9*). Since MFI borrowers are usually women, basic credit life leaves them unprotected if their husbands die. This situation has been called "one of [microinsurance's] great ironies", suggesting that offering cover only on a woman's life effectively means that "for a woman to 'benefit' from insurance, she would have to die first" (Ahmed and Ramm, 2006). CARD in the Philippines recognized this need and modified its product to cover spouses. This created an added benefit for CARD's loan portfolio because the death of a spouse can impact a woman's ability to repay a loan (Ahmed and Ramm, 2006).

Protection for women's children: Option to designate beneficiaries and practical child-friendly claims

While many microinsurance schemes assume that husbands will be the beneficiaries of their wives' life insurance claims, many women want the freedom to choose another beneficiary if they feel that their husbands would not provide

suitable protection for their children in the event of their death, or if they worry that their husbands might use the insurance payout for unintended purposes, such as a second wife or personal consumption (Ahmed and Ramm, 2006). Given the option to designate a beneficiary, many women would choose friends, relatives or adult children over husbands, yet many products do not allow this flexibility (Cohen and Sebstad, 2006).

Another way to protect children is to structure claims to offer maximum long-term protection and incentives to avoid harmful strategies for coping with risks, such removing them from school. The All Lanka Mutual Assurance Organization (ALMAO) in Sri Lanka has introduced a life microinsurance plan that pays staggered benefits to children over a period of four years (20 per cent upon the death of a parent and 20 per cent each year for the following four years). See Box 16.2 for a description of the innovative approach that La Equidad in Colombia uses to encourage the children of a deceased parent to stay in school.

Box 16.2

Colombia's La Equidad structures life insurance benefits to protect children

In Colombia, an unfortunate yet common response to the financial shock of losing a parent is remove children from school. This decision cuts education costs and frees up the child's time to do paid labour, yet profoundly endangers a child's learning, development, and long-term income potential. To prevent this, La Equidad, a mainstream insurer of more than three million people, structured the benefits of its Amparar life microinsurance product to protect children. Besides a lump sum payment for death and funeral support, the policy pays monthly benefits that can only be used towards education for the two years following the death of a parent and also provides families with a monthly payout for food for one year. This programme is explicitly designed to prevent families from having to cut children's education or calorie intake to cope with the financial shock of the death of a parent.

Source: Adapted from Almeyda and de Paula Jaramill, 2005.

16.3.2 Delivery attributes

Availability for borrowers and non-borrowers

Many MFIs do not offer insurance to women who are not current borrowers. A Jordanian woman expresses her concern over this policy: "It should not be for [borrowers only]. Now I am a [borrower], but if my circumstances improve, I may not renew my loan. So insurance should be a different product from the loan. If I want a loan, I can buy a loan. If I want insurance, I can buy insurance" (WWB, 2006c). Unbundling life microinsurance and loans could be an effective

way to ensure more complete coverage for clients and raise the number of policies sold through MFIs to non-borrowing members, although this raises adverse selection risks.

Voluntary enrolment

Poor women often express dislike for mandatory life microinsurance programmes, particularly when cover does not meet their needs and when they are not fully aware of the benefits. The latter problem was observed in Uganda where women paid mandatory premiums without being aware of the cover, resulting in a misconception that premiums were actually loan-processing fees (Young et al., 2006). With limited information on how to use the policy, women did not reap any benefit from it.

Nevertheless, mandatory life microinsurance programmes are common. MFIs value the protection they offer on their loan portfolios and/or are motivated by the revenue potential from commissions. They also may not want to invest resources into convincing clients of the wisdom of buying the products voluntarily. These products, however, do feature an important upside for clients: because administration costs are kept low, the premiums tend to be significantly lower than for voluntary schemes. It is thus critical for MFIs and other delivery outlets to closely examine their clients' willingness to pay, in order to assess whether voluntary products are appropriate in the local context. SEWA in India and BancoSol in Bolivia both found that their clients were willing to pay for voluntary microinsurance if they valued the benefits and found the premiums good value (Chatterjee, 2005).

Gender-sensitive client communication

Effective gender-sensitive microinsurance programmes must contain an educational element to explain how microinsurance works and how it can offer valuable benefits to women and their households. Microinsurance will be a new concept for most and many may be reluctant or suspicious of it. They must be provided with easy-to-understand information on costs, eligibility, claims processing, cover, and long- and short-term benefits (*see Chapter 14*).

Communications must address the most common misunderstanding about microinsurance, expressed by a Jordanian woman when she says, "I joined an insurance scheme. We paid an amount for three children and my husband. The year finished [and] we did not benefit. So we saw we did not benefit from it and left the scheme. We paid 50JD (US\$70) per year for each individual" (WWB, 2006c). Educational messaging can help convince women that there is a benefit from microinsurance even if they do not claim.

Messaging for women should also take into consideration the tendency, in many cultural contexts, for women to require more information than men before

making a decision to purchase insurance, and the high rates of illiteracy amongst women in many countries (McCord, 2007a). As women must be fully convinced of the product's function and benefits if they are to enrol voluntarily, the most successful gender-sensitive communication strategies ensure frequent contact with women clients by helpful staff (Chatterjee, 2005). Tata-AIG found it useful to hire and train women sales agents from local communities as a means of ensuring that the agents were approachable and accessible to local women. These agents were encouraged to sell first to people they knew in their community and then to branch out from there (Churchill and Leftly, 2006). These interactions must be also handled in a way that is sensitive to women who are living in difficult or abusive relationships who may require additional support to negotiate the purchase of microinsurance with their husbands. Box 16.3 provides a description of SEWA's approach to women's microinsurance and discusses the strategies SEWA uses to maintain frequent and approachable communication with its clients.

Box 16.3

India's SEWA Bank: A pioneer in gender-sensitive microinsurance

With a tagline of "Our lives are full of risks, VimoSEWA makes our life secure!," India's SEWA Bank offers its clients – all self-employed poor women – a choice of three bundled microinsurance schemes designed to provide unique "cradle to grave" cover for many of the key lifecycle financial pressures faced by poor women. Available at various price points to ensure affordability, the schemes cover the death, health and assets of women, with options to also cover husbands and children for a lower incremental fee. The children's cover provides protection for all the children in the family, to avoid parents having to choose which of their children to insure. Starting with 7 000 clients in 1992, in 2009 VimoSEWA covered nearly 200 000 women, men and children. The products are uniquely integrated with SEWA's fixed deposit savings accounts, giving clients the option to pay insurance premiums with the interest accrued from their savings account.

SEWA uses a variety of communication strategies to promote the products and educate clients about microinsurance. It has found that regular face-to-face interactions are highly valued by women clients, who appreciate the feeling of involvement and the opportunity to ask questions about their policies and discuss broader family issues relating to risk. VimoSEWA has used both small and large client meetings to provide comfortable women-only forums to discuss issues such as what can happen when a woman or a poor family is confronted with a major risk and how they can protect their families from those risks by using microinsurance.

Source: Authors.

Simple insurance policies and claims processing: Suitable processes for less-educated women

Insurance policies should be simple and easy to understand. Exclusions and complex provisions should be kept to a minimum and payouts should be straightforward and clear, which will make it easier for potential enrollees to understand how microinsurance works and what the benefits are for them. Insurance policies must also feature clear and simple claims processing if the programmes are to be successful. This means that the delivery outlet (i.e. an MFI) must provide sufficient and easy-to-understand information on how to process the claim and offer support to clients who need assistance. Clear information and proper support is especially crucial for new customers who may not be familiar with the process. Without an easy-to-use claims process accessible even to illiterate customers, women may not only fail to receive the full benefits of microinsurance, they may also effectively forfeit money spent on premiums which could have been used for other risk strategies (Mayoux, 2002).

16.4 Conclusion: A call to action

Poor women face a range of potentially catastrophic risks. The traditional risk strategies at their disposal are diverse, but often inadequate. Microinsurance, when effectively designed to meet the unique needs of poor women, can offer compelling benefits to this target market. Yet, with extensive demands for comprehensive cover and pressure to keep costs low, the execution of successful gender-sensitive microinsurance products represents a serious challenge. This chapter has attempted to raise many of the gender issues related to the provision of microinsurance, and proposes an urgent call to action to donors, insurers, the research community, MFIs and other delivery channels.

16.4.1 MFIs and delivery channels

Many MFIs are in touch with the financial needs of poor women, and therefore have an opportunity to go beyond the provision of loans to offer gender-sensitive microinsurance. Other delivery channels may have less access to the women's market, but still offer large opportunities for reaching poor women.

We encourage all delivery channels, including MFIs that already reach many women with loans, to learn about women's risk management and coping needs through localized gender market research. We encourage these organizations to use research-driven customer insights to develop new or improve existing gender-sensitive microinsurance products. After a product has been launched, impact-assessment studies are critical to ensuring that the scheme responds to women's needs in the local context. Developing gender-sensitive microinsurance offers both direct

and indirect benefits to delivery channels, from commissions on policies sold to the effects of having clients with healthier and more financially secure households.

16.4.2 Insurers

We encourage insurance companies to seize this opportunity to work with MFIs and other delivery channels to provide gender-sensitive microinsurance. For insurance companies that primarily serve higher-income people in the developing world, reaching out to poor women opens up a market of millions of new clients. In 2010, Swiss Re estimated that the potential market for microinsurance was four billion people (Swiss Re, 2010b), yet Roth et al. (2007) found that just 78 million low-income people in the world's 100 poorest countries had insurance cover. This leaves a significant opportunity for insurers to tap into high volume sales, estimated to be US\$40 billion (Swiss Re, 2010b). Furthermore, by marketing microinsurance to women, insurers may enjoy a multiplier effect due to many women's preference to enrol husbands and children as well.

16.4.3 The research community

There is a vital need to better understand gendered responses to risks and how risk strategies such as microinsurance can help alleviate the financial burden of risks on poor women. *We encourage the research community to investigate the following research questions:*

- How do the cover and benefits of microinsurance compare to those of traditional risk strategies used by women? How do poor women combine microinsurance with other risk management strategies?
- Does microinsurance free up resources for women in poor households? How are these resources used? Does microinsurance affect women's rates of business investment, savings behaviour and/or levels of household consumption? How does this impact household economic security?
- How can secure savings accounts and microinsurance programmes complement each other to affect a poor women's ability to manage and cope with risks?
- What are the best practices in gender-sensitive microinsurance marketing, distribution and product design, including market education, pricing and claims servicing?

16.4.4 Donors

We encourage donors to use their resources to invest in developing microinsurance for women. With vast resources and missions to support poverty reduction, the donor community is in a unique position to provide critical support in developing microinsurance for women. Donors can fund research and consumer education, and can also provide critical technical assistance and capacity-building support to MFIs and other delivery channels seeking to develop microinsurance programmes (Latortue, 2008). As the costs associated with the initial research and development of microinsurance programmes can be quite high, and where commercial insurers may be reluctant to initially get involved, early donor support can be crucial to kick-start gender-sensitive efforts. At a higher level, donors can promote an enabling policy and regulatory environment for microinsurance, which considers the specific characteristics of women.

16.4.5 The future of microinsurance for women

Microinsurance is a new frontier of development, and there is much work to be done to create a gender-sensitive microinsurance industry. It is crucial to further develop an understanding of how women combine microinsurance with existing risk management strategies, how their attitudes to risk differ from those of men, and how microinsurance affects their rates of investment into businesses, savings behaviour and household consumption. Donors, researchers and practitioners each have an important role to play in creating a coordinated effort to further the development of gender-sensitive microinsurance.

Formalizing the informal insurance inherent in migration: Exploring potential links between migration, remittances and microinsurance

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In our increasingly global economy, the financial impact of migration has played a growing role in contributing to the financial flows across borders, in particular to developing countries. This migration is most commonly motivated by a desire to increase income and provide a better life for one's family. Over the past 20 years, the number of people living outside their country of origin has increased by nearly 40 per cent, from 155 million in 1990 to 214 million in 2010 (UN DESA, 2009).

Diversification of income and geography can help migrants and their families mitigate some risks, especially those related to large financial shocks in their home or host countries. For the families back home, the migrant often serves as informal insurance when an adverse event occurs. When there is an emergency that requires a significant cash outlay, the migrant is often called upon to send funds to cover the expense. Many migrants also find themselves in positions of extreme vulnerability in their host country, often working in the informal economy and unable to access basic social safety nets, or in dangerous jobs that increase the risk of accidents.

Insurance could be a useful tool for transnational households to manage some of these risks. However, traditional insurance is often too costly, complex or difficult to access for the low-income households of many migrants' families. These households require simple products that can be delivered inexpensively and conveniently, characteristics common to microinsurance. While there are significant obstacles to offering migration-linked insurance to migrants and their families, the opportunity to tap into the social capital created by migration and the money transfer channels that are already working with this population may help insurers overcome both the distribution and cost issues. In 2010, the international remittance flow was estimated at US\$437 billion, three times more than the amount of aid flowing to developing countries (Ratha, 2010). The majority of this money goes directly to the families of migrants to support basic household needs such as rent, food and school fees. Mechanisms that allow transnational families to use a portion of these funds to purchase insurance could go a long way to reducing their vulnerability and risks.

In many host countries, migrants make up a large portion of the population that is generally not well served by the financial sector and especially by insurers, presenting an opportunity for insurers to reach out to a relatively untapped market. In home countries, linking microinsurance to migration may help to overcome some of the challenges of regular microinsurance sales because migrants tend to have a higher ability to pay than those in the home country and multiple motivations for wanting to protect their families back home (GTZ, 2009).

A range of insurance schemes could be linked to migration, including: 1) products aimed at mitigating the unique risks faced by migrants in their host countries, such as accident or repatriation insurance; 2) products to cover the unique risks of migrants' families in their home countries, such as protecting the flow of remittances; 3) products that tap into remittance flows or the distribution channels and networks created by migration; and 4) products that tap into the migrants' desire to protect their families in their absence by formalizing the informal insurance provided by migrants.

This chapter uses desk research and a series of interviews with key migration and remittance experts, microinsurance practitioners and money transfer agents to explore existing and potential links between migration, remittances and insurance.¹ Section 17.1 illustrates how migration may affect the preferences and demand for insurance of migrants and their families. Section 17.2 provides a framework for migration-linked microinsurance products and an overview of the existing products. Sections 17.3 and 17.4 consider the opportunities for and challenges to developing migration-linked microinsurance, including the legal and regulatory challenges, and those related to marketing, sales, payments and operational processes. Finally, section 17.5 provides preliminary recommendations for stakeholders, especially microinsurers, as they seek to address the risk management needs of migrants and their families.

17.1 Demand considerations for migration-linked insurance

Microinsurance initiatives could provide cost-effective tools to shift some of the burden of mitigating risks from the migrant to a third party. The increased capacity to pay as well as the unique risks faced by transnational families may contribute to increased demand for insurance. In addition, the migrant's desires, both to control how remittances are spent and to transfer risks to a third party, can influence demand.

¹ A limitation of this research is that many schemes are in their nascent stages of development, so it is difficult to draw definitive conclusions. Another limitation is that most of the programmes identified seek to tap into international migration flows, not domestic migration flows. The demand challenges to developing domestic programmes are likely to be similar, although operational challenges are likely to be quite different.

Most studies have found that the bulk of remittances are used for consumption, basic household needs (Orozco, 2003; Alvarez Tinajero, 2009; Asfar, 2003; de Bruyn and Wets, 2006) and health care (Amuedo-Dorantes et al., 2007). Migrants' families typically make the spending decisions.² However, when the preferences of migrants and their families on how to spend remittances diverge, the migrant may wish to have greater control over how funds are spent. Studies have also found that if given full control over how remittances are spent, migrants would spend money differently, allocating less to daily consumption and more to savings (Ashraf et al., 2010).

A study on formal funeral insurance in South Africa indicates that convincing migrants' families that it is sensible to spend remittances on insurance may be difficult, even when their income levels are sufficient (Crayen et al., 2010). Migrants, on the other hand, may have an interest in purchasing insurance for their families to protect their loved ones as the migrants are the ones who often pay the bills in a crisis. A study conducted by SegurCaixa, an insurance company providing insurance to migrants in Spain, found that migrants would like cover for themselves when visiting their home country as well as cover for their family members. A survey of Haitian migrants in the Turks & Caicos, conducted by AIC, a Haitian insurance company, also found that migrants were interested in transferring some risks and responsibility for their families back home to more formal channels.³ Similarly, in focus groups with Guatemalan and El Salvadorian migrants, the Microfinance International Corporation (MFIC) found that they were interested in cover for their families, although less interested in protecting themselves, with the exception of repatriation and accident insurance.

Demand by migrants or their families for microinsurance is likely to vary depending on income level, degree of assimilation, documentation and other factors. SegurCaixa's study finds a strong correlation between income, assimilation and insurance demand. Take-up among immigrants was concentrated among those with higher incomes and those who had been in the host country longer. Magnoni et al. (2010) also showed that insurance take-up was more likely among Mexican immigrants in New York City who had been in the United States longer, as well as those with higher incomes, those who were married and those that had a bank account.

Transnational families face many unique risks. Therefore, in addition to the standard range of products that might be attractive to the migrant's family in the home country, there is a need to develop insurance specifically tailored to the

² Alvarez Tinajero (2009) found that in only 5 per cent of cases did the migrant decide how remittance funds would be spent and only in 12 per cent of cases was it a joint decision by the migrant and the head of the household receiving the remittance.

³ Interview with Isabelle Depeche, Head of Microinsurance, AIC.

risks these families face, such as repatriation, remittance protection,⁴ work accidents and unemployment.

17.2 Framework: The 3Hs of migration-linked insurance

Three types of models have emerged to address the microinsurance needs of migrants and their families. Dubbed the **3Hs** in Magnoni et al. (2010), these models are the **H**ost country model, the **H**ome country model and the **H**ybrid model (see Table 17.1). The defining characteristic of each of these models is where the risk-taking entity or insurer is based.

In the **H**ost country model, the insurer is located in the country to which the migrant has immigrated. Programmes of this type are best placed to insure the migrants themselves and may also have the potential to reach greater scale as they can easily serve migrants from multiple countries of origin. The Host country model typically does not insure the migrant's family back home, but may indirectly offer security to migrants' families. For example, SegurCaixa's repatriation and accidental death insurance provides families with a cash benefit that can ease the shock of losing remittance income in the event of a death or accident (see Box 17.1).

Box 17.1

SegurCaixa's repatriation and accidental death insurance

SeguraCaixa, an affiliate of La Caixa, one of the largest cooperatives in Spain, offers some of the few migration-linked insurance products to reach a reasonable scale. In 2008, 66 000 legal migrants, mostly coming from Africa and Latin America, were insured with SegurCaixa Repatriación, which pays a lump sum upon death of the migrant and repatriation of the migrant's body, and 14 000 were covered by SegurIngreso, which pays a lump sum upon death of the migrant and regular monthly income to the family for five years following death. Monthly premiums start at €7 (US\$10).

Sources: www.laCaixa.es and SegurCaixa Holding Annual Report, 2008.

In the **H**ome country model, the risk-taking entity is located in the migrant's country of origin. The insured can be the migrant and/or the migrant's family depending on the product and distribution channel.

⁴ Such products should consider the unique needs of those most likely to be left behind. For example, Magnoni et al. (2010) found that most family members back home are parents and in-laws, suggesting that health insurance related to the problems of ageing populations might be more appropriate for this community.

Risk-taking entities have a presence in both the home and the host country in the **Hybrid** model. This model is able to insure both the migrant in the host country and the migrant's family in the home country more easily than either the Home or Host model. Although the Hybrid model has many advantages, to date few insurers have attempted to serve the low-income market using such an approach.

Table 17.1

General characteristics of the 3H models

<i>Model</i>	<i>Insured</i>	<i>Mitigates risk for:</i>	<i>Need for an intermediary</i>	<i>Leverages remittances</i>
Insurer is in the migrant's Host country	Migrant	Migrant and migrant's family (depending on product)	Possibly for marketing purposes	Unlikely
Insurer is in the migrant's Home country	Migrant's family (most likely) or migrant (prior to departure)	Migrant (indirectly) and migrant's family (directly)	Definitely if targeting migrants; possibly if targeting migrant's family	Very possible
Hybrid: insurer is in both the host and home country	Migrant and/or migrant's family	Migrant and/or migrant's family	Possibly for marketing or money transfers	Possible

17.3

Legal and regulatory challenges

Legal and regulatory restrictions pose one of the most significant constraints to selling insurance to migrants and their families across borders as insurers are generally not licensed in both the home and host country. The constraints vary depending on the host and home country, whether the migrant and/or family members in the home country are beneficiaries of the policies, and the location of the insurance company. These constraints are often under-researched or underestimated, yet are one of the main factors preventing the launch of programmes. This section provides an overview of the types of regulations affecting migration-linked microinsurance products.

Choice of law. The first challenge in any cross-border transaction is to determine which jurisdiction's law applies. For migration-linked products, where insurance is sold by a foreign company and/or some or all beneficiaries are located abroad, it may not be clear which country's insurance law should apply. In general, parties can choose the law that governs a contract between them, but the issue is largely untested in respect of cross-border insurance sales.

Scope of regulation. Regardless of which country's law applies to the insurance contract itself, the parties must comply with the insurance laws of all countries in which they conduct activities. Insurance is typically governed at a national level by

a separate ministerial authority (Vollbrecht, 2000).⁵ The European Union employs a “passporting” regime, allowing insurers authorized by the regulator in their country of domicile to carry on business and insure risks throughout the EU countries (Krishnan, 2010), which may facilitate migration-linked insurance between European countries.

Migration-linked products must also cope with different definitions of insurance and insurance-related activities, which are often defined quite broadly, in home and host countries. Moreover, requirements relating to the type of cover and exclusions required or allowed may differ between countries, posing challenges to the uniformity of cover across borders.⁶

Licensing of insurers. Nearly all countries require insurance companies to obtain a licence to insure risks located within their borders (Krishnan, 2010). Licensing can be a significant obstacle to Home models, where 1) insurers are unlikely to compete with host-country insurers; and 2) the migrant population is often small, making it difficult to achieve the economies of scale needed to offset the financial and administrative costs of acquiring and retaining a licence. Home models may seek partnerships in the host country to try to overcome these challenges, although depending on the country, even this may be impossible. Two such programmes between Latin America and the United States were discontinued because of such legal concerns.⁷

The Host country model avoids many of the obstacles related to insurer licensing, as domestic insurers that are already licensed in the host country can enter into insurance contracts with migrants located in those countries. However, Host models may be limited to insuring the migrant and be unable to insure the migrant’s family abroad if they do not have a branch or an affiliate in the home country.

Regulation of intermediaries. Most countries require intermediaries involved in insurance contracts to be authorized (Sterling, 2000). In all three models, intermediaries may be subject to regulation in the home and/or host

⁵ In the United States, insurance and related activities are governed by individual state laws, which further complicates matters.

⁶ According to Warner (2004), these different laws, even if they are not in direct conflict with one another, could create significant administrative difficulties, and may lead to uncertainty where it is unclear which country’s law is applicable. For example, in the Philippines, insurers are liable under life insurance policies in the case of suicides only if they are committed after the policy has been in force for two years unless the policy provides for a shorter period, while many US-based life insurance policies exclude cover in the case of suicide regardless of when it occurs.

⁷ MFIC ceased offering EPSS’s medical health plans to Guatemalan migrants in the United States out of concern they would be considered illegal by regulators (*see Box 17.3*). BancoSol also stopped offering repatriation insurance to Bolivian migrants in the United States after it realized it had been misinformed by its partner about the legal restrictions on foreign insurers marketing and selling policies in the United States.

country, depending on where the advertising, entry into the contract, payment of premiums and other activities occur. The alternative channels described below may not have the capacity to obtain a broker or agent licence.⁸ Often even licensed agents and brokers have limited authority to market or otherwise assist in the sale of products by unlicensed insurers.⁹ There is some room for non-licensed intermediaries to promote migration-linked insurance schemes, although the scope of activities an intermediary may engage in without a licence varies greatly by country.

Documentation status. The undocumented status of many immigrants can pose serious challenges when purchasing insurance products in their host countries. Insurance companies often request identification documents that migrants may not have or may be uncomfortable sharing. In most developed countries, undocumented immigrants have broad rights to access courts and to enforce rights under contracts, but these rights are often limited in practice, which can penalize immigrants in the event of a dispute with the insurance company.¹⁰

17.4

Operational opportunities and challenges to migration- and remittance-linked insurance

Despite the potential market opportunities of migration-linked products, developing the products, distribution channels and administrative and operational functions to serve transnational families can be complex. This section outlines the opportunities and challenges facing migration-linked insurance in the following areas: 1) marketing and sales; 2) policy issuance; 3) premium payments; and 4) claims administration. Customer service is especially important, but also especially complex due to the transnational nature of the families covered (*see Box 17.2*). Table 17.3 at the end of the section summarizes the main opportunities and challenges by model.

⁸ Brokers (who represent the insured) are almost always required to be licensed, while agents (who represent insurers) often are not. The rationale for this distinction is that agents are indirectly supervised by virtue of the fact that they act on behalf of insurers, who are directly supervised. Agents are, however, often required to be registered with the regulatory authority or a professional association (Vollbrecht, 2000).

⁹ In addition, both insurers and intermediaries must also comply with advertising laws applicable in any country in which products are marketed.

¹⁰ In the United States, undocumented migrants have a legal right to pursue claims in court (*Hagl v. Jacob Stern & Sons, Inc. and Montoya v. Gateway Ins. Co.*) and in the European Union, many fundamental rights apply to everyone regardless of administrative status, but in practice undocumented migrants are denied a wide range of social protections (Carrera and Merlino, 2009).

Box 17.2

A review of Indonesia's mandatory overseas workers insurance

In Indonesia, approximately 90 to 95 per cent of migrants use a placement agency to arrange their work visas, travel and employment abroad. In 2006, the Government introduced regulations requiring all migrant placement agencies to provide migrants with insurance cover prior to their departure, during their stay in the host country and upon their return (TKI Insurance). This package includes cover for accidental death, death from sickness, funeral costs, accidental disability, medical expenses, trip cancellation, physical abuse, failure in work placement, early contract termination, unpaid wages, deportation, mental illness, unauthorized work transfer, and legal and court fees. The insurance is distributed by migrant placement agencies, with private insurers issuing the policies. One problem for all parties involved is the lack of a migrant database or comprehensive information on the claims figures, which negatively affects transparency, pricing and smooth claims processing.

Some other primary issues for the migrant include: 1) poor communication of coverage to migrant and family; 2) complexity of policies and claims procedures; and 3) minimal representation of insurers in host country, where the majority of incidents are likely to occur.

Some of the primary issues for the insurance companies include: 1) high broker's fees charged by placement agencies; 2) low prices set by regulation; 3) complexity of the product; and 4) requirement to insure "non-insurable" items.

Source: Interview with Yoko Doi, Financial Specialist, the World Bank Office Jakarta, 2009.

17.4.1 Marketing, sales and distribution

The challenges of distributing insurance to transnational families are significant due to the two locations of the target market as well as the cross-border nature of many programmes. Thus, for migration-linked microinsurance models to be successful, they must either find a way to market to both sides of the transnational family or structure their programme in such a way that one party has full decision-making power.

Home country models

For Home models, the biggest challenge in marketing to migrants is finding an appropriate distribution channel. When migration is legal and organized in advance, it is easier to market to migrants prior to their departure, as the terms of their migration are likely to be pre-defined with arrangements made through a formal channel, minimizing the legal constraints by avoiding the cross-border sale of insurance. For example, the majority of legal migrants from Indonesia and

the Philippines use placement agencies to secure employment, visas, and other documentation; these agencies can be an excellent distribution channel for microinsurance (*see Box 17.2*). It is important to note, however, that much legal migration is short-term in nature, usually seasonal or for one to three years, making product design and premium collection easier, but limiting the potential for client retention.

Marketing and sales by Home models when the migrant is already in the host country are more difficult due to regulatory restrictions on marketing and the physical distance from the migrant. Many Home models have sought partners in the host country to market their products; however, these partners may face their own legal, regulatory or capacity constraints to marketing insurance (*see Box 17.3*). Internet-based solutions may help to overcome some restrictions, but are unlikely to be effective without on-the-ground promotion in the host country.

Box 17.3

The right way to market? Medical plans for the families of Guatemalan migrants in North America

In 2007, IOM Guatemala brought together Empresa Promotora de Servicios de Salud (EPSS), a health-care services company in Guatemala, and Microfinance International Corporation (MFIC), a US-based microfinance and remittance processing company, to allow Guatemalan migrants in the United States the opportunity to buy pre-paid medical service plans for their families back home. EPSS has one of the largest networks of health clinics and hospitals in Guatemala and MFIC's affiliate, Alante Financial, was already working with unbanked migrant communities from Latin America in the United States to provide other financial services.

In theory, the match seemed ideal, but the programme never got off the ground, selling only 15 to 20 plans in the United States. According to staff interviewed, the programme's dismal results cannot be attributed to the product design as EPSS's plans are well priced and well regarded in Guatemala, but to legal and distribution challenges that limited sales.

Concurrently, EPSS worked with the Guatemala Canada Labour Migration Programme to market to migrants going to Canada for seasonal work. After a pilot in 2007, all 2 500 workers and their families in 2008, and 3 900 workers in 2009, were enrolled in the programme. It is expected that in 2010 the figure will reach 4 000. This disparity in outreach between the US and Canadian programmes highlights how key the distribution channel is to the success of migration-linked insurance and the additional difficulties encountered when trying to work with illegal or undocumented migrants.

Sources: Interviews with Sonia Pellecer, IOM Guatemala and Kai Schmitz, MFIC; www.saludosualcance.net, www.mfi-corp.com, www.munichre-foundation.org.

To avoid many of the challenges encountered when trying to market to the migrant in the host country, home country insurers may choose to market directly to the migrant's family so that they purchase insurance or relay the information to the migrant. However, these transmission channels can be slow and unreliable, and families may be reluctant to share information with the migrant where their demand for insurance differs. Seguros Futuro in El Salvador is an example of a home country model marketing directly to migrant's families, and it attempts to overcome some of these challenges with a financial education component (*see Box 17.4*).

Box 17.4

Seguros Futuro: Recognizing the need for consumer education

Seguros Futuro recently launched a repatriation and remittance insurance product designed to protect El Salvadorian migrants and their families. The insurer markets its products through a network of savings and loans cooperatives estimated to serve 100 000 persons with family members abroad. The insurance covers the cost of repatriating the migrant's body from North America and provides the family with an on-going monthly remittance for one year. Premiums start at US\$35 a year depending upon the level of cover selected.

Seguros Futuro believes that there is a need for such a product amongst its clientele as approximately 20 per cent of its affiliates have a family member abroad. However, the demand for the product is questionable, as most of the target market does not recognize the need for such insurance. Thus, Seguros Futuro is actively providing financial literacy to its target market on the benefits of insurance. Take-up has been approximately 25 to 30 per cent in the first six months for those attending training, with 222 policies sold.

Sources: Interview with Daysi Rosales, Executive Director of Seguros Futuro; and www.segurosfuturo.com.

Host country models

Host models face far fewer challenges when marketing to the migrant, as the insurers are already licensed in the host country. They may also have existing networks in the host country that can support distribution. Nonetheless, insurance markets in many host countries, especially developed countries, have evolved very little in terms of low-cost distribution and still rely heavily on relatively costly broker and agent models.

Host models may need to work in partnership with organizations already working with the target community, which can help locate migrants, help insurers gain the trust of migrants and also potentially help with consumer education. Such partnerships are even more important for undocumented migrants who are more difficult to reach and may require more consumer education.

Hybrid models

Hybrid models should be able to overcome many of the marketing and sales challenges faced by Home and Host country models. A home country-based insurer partnering a host country insurer does not face the same legal and regulatory constraints of the Home model, has proximity to both the migrant and the migrant’s family, and has the ability to develop products for both. Choosing the appropriate distribution channel is still important.

Box 17.5

Pioneer Life’s SparxX

Pioneer’s SparxX is a bite-sized savings and insurance plan designed to be accessible to the lower-income segments of the Philippine population. It comes in denominations as low as 300 Pesos (approximately US\$6) and provides a guaranteed return after a certain number of years, based on the individual’s age. Concurrently, it provides the purchasers with life insurance equal to the guaranteed future value. Multiple cards can be accumulated over time to increase savings and insurance protection.

Pioneer is currently testing a variety of distribution schemes for SparxX, including two targeting migrants and their families. SparxX is being promoted through a marketing entity in Hong Kong to Filipino migrants using a network marketing and points scheme. It is also bundling SparxX with other insurance products for the families of migrants in the Philippines through its Savings and Wellness Clubs (*see Box 17.6 for more detail*).

Sources: Interviews with Noel Deguzman and Geric Laude of Pioneer Life Inc. and Pioneer Group; and www.pioneer.com.ph.

Marketing and distribution partnerships

Table 17.2 outlines partnerships that can be used in migration-linked insurance programmes. These partnerships can influence the costs for the end user, and selecting partners that already have the trust of the community, and recurring transactional relationships with the community, or both, can add more value.

Table 17.2

Partners for marketing and distribution of migration-linked microinsurance

Host country

- Remittance-sending agencies (banks, MTAs, limited MFIs)
- Diaspora organizations
- Service providers (i.e. repatriation company)
- Religious organizations
- Sports groups
- Employers
- Other community organizations or NGOs

Home country

- Remittance-receiving agencies (banks, MFIs, MTAs, pawnshops, post offices)
- Migrant/job placement agencies
- Service providers (i.e. health care networks)
- Religious organizations
- Other community organizations or NGOs

Exploiting the social capital of migration

Organizations such as church groups, home town associations and immigrant outreach centres that have already gained the trust of migrants, either because of a long-standing relationship with the community or through the provision of other services, can help insurers gain the trust of migrants, as Pioneer has done with the Catholic Church in the Philippines (*see Box 17.6*). Another way insurers can informally make use of the social capital created by migrant communities is through referral schemes, whereby insurers reward migrants for referring their friends to the company. In Hong Kong, for example, the migrants can be awarded points for buying its SparxX cards and referring others.

Box 17.6

Pioneer's Savings and Wellness Clubs

Pioneer Group partnered with the Catholic Church in the Philippines to reach out to the families of migrants. Through its parishes, the church organizes Savings and Wellness Clubs that seek to help the families better manage their finances and make better use of their remittances. The Savings and Wellness Clubs bundle Pioneer's SparxX savings and life insurance product with personal accident and accidental medical reimbursement cover. In addition, financial literacy training is provided periodically in a group setting. The annual cost of joining the clubs is US\$10 for adults and US\$8 for those under sixteen.

As at June 2010, Pioneer had signed up approximately 1 000 club members in its first six months. Around 20 per cent of those attending the launches it co-hosted with the Church have enrolled, which the insurer considers reasonable. A bigger challenge is the Church's capacity to organize promotional campaigns as there is only one full-time Church employee working on the project. In addition, few members regularly save or top up their SparxX cards after paying the initial fee.

Sources: Interviews with Noel Deguzman and Geric Laude of Pioneer Life and Pioneer Group; and www.pioneer.com.ph.

17.4.2

Policy issuance

In schemes where migrants are paying for insurance for their family members, it can be logistically challenging for insurers to obtain the necessary information and issue the policy to the family, partly due to restrictions on insuring third parties. Some insurers have structured their schemes so that the migrant makes the payment in the host country and passes on the personal details of the family member to the insurer. The family member is then responsible for filling out the application. For example, a home-country-based insurer might insure migrants'

family members through a partnership with a money transfer agent (MTA)¹¹ in the host country; the MTA could collect personal information necessary for the application, transfer that information to the insurer and release the premium payment after the application is completed by the family member. In some countries, however, there may be legal restrictions on an MTA's ability to play this role without holding a broker's or agent's licence.

17.4.3 Premium payments

One of the potential opportunities for migration-linked microinsurance is the ability to tap into remittance flows to ensure timely premium payments. The insurers can do so by working in partnership with an MTA in the home or in the host country, intervening at either the inception point or the reception point of the remittance flow. Eventually they may also be able to make use of technological innovations that facilitate cross-border premium payments.

Partnerships with money transfer agents

Home models can use local MTAs as partners to market their products and encourage premium payments when migrants send remittances directly to their families, as in the case of Seguros Futuro in El Salvador (*see Box 17.4*). Home models working with migrants in their host country typically depend on a partnership with an MTA if receiving payment directly from the migrant. In BancoSol in Bolivia, remittance payments are made from MTAs into migrants' savings accounts in Bolivia from which insurance premiums are debited directly. Host and Hybrid models can also benefit from agreements with MTAs to serve as payment centres or channels for unbanked migrants in host countries.

Partnerships with MTAs are most effective when remittances are sent through formal channels such as banks, MFIs or other MTAs, rather than informal channels. MTAs also have a greater potential to become a regular payment channel for insurers when remittances are "smooth" (those sent frequently, usually in small amounts and through formal channels) rather than "chunky" (those sent in larger amounts but with less frequency and regularity and often through informal channels).

Other constraints on using MTAs as payment channels in some countries include the concentration of MTAs in urban areas, the high cost of services and a lack of competition, which may increase the cost of insurance and/or discourage MTAs from broadening their services. Regulations often set high thresholds for

¹¹ MTA is defined broadly and could include a specialized money transfer agency such as Western Union, a bank, an MFI or a financial institution, or other type of institution authorized to send or receive remittances (such as pawnshops in the Philippines).

MTAs' net worth and/or require them to post large bonds resulting in limited competition and high costs. Insurers may find some financial institutions resistant to such a partnership if they view the insurer as competition. In the Philippines, for example, Pioneer Life Inc. considered a partnership with an MTA to promote its Savings and Wellness Clubs and the SparxX "savings product". The alliance was not possible, however, because most remittances go through banks in the Philippines and the banks viewed SparxX as direct competition.

For partnerships between insurers and MTAs for a migration-linked product to be successful, it is essential for both parties to be fully committed to the project and the relationship. It can take significant time and resources to set up the guidelines and systems to allow for the direct payment of premiums, and explain to staff and customers how payments can be made. The MTAs need to be convinced of the market potential of the product, which needs to be in line with their other strategic goals.

Harnessing technology to facilitate premium payments

Online platforms and other technological innovations promise to reduce the overall cost of money transfers and increase convenience. Some MTAs, including Western Union, have already begun to introduce online platforms worldwide, adding payments for utilities, credit cards, and financial services to their menus. Safaricom, a mobile phone service provider in Kenya, has introduced money transfer services (M-Pesa) via its mobile phone network. In partnership with Vodafone, it is possible for Kenyans to send money home from the United Kingdom via their mobile phones.

None of the programmes identified in this study have developed a platform for the direct payment of insurance premiums, so it is difficult to know how receptive migrants will be to these payment channels. It is likely to depend on the level of computer and technology literacy of the target group, and their comfort level and trust in such payment systems. It may also depend on whether there is a supporting organization in the host country to direct migrants to the site and answer their questions.

17.4.4 Claims verification and administration

Another challenge of cross-border insurance programmes is processing claims, especially when the policyholder and the beneficiary are in different countries. Obtaining the paperwork to meet claims requirements from abroad can be complex and time-consuming, and not easily accessible to the migrant's family back home. To address this issue, some Home models offering repatriation insurance manage claims through alliances with companies based in the host country that support the claims process. For example, Banorte's life and repatriation insurance

for Mexicans in North America works in partnership with a repatriation company based in the United States. SegurCaixa has entered into a partnership with a repatriation company in Spain to assist with collecting and processing documents, and also works with consulates if there is no living family member in Spain to file the claim.

Some insurers have also worked in partnership with brokers who represent the beneficiary if they are out of the country. For example, BancoSol in Bolivia has a representative in Spain that helps migrants fill out claims applications and then forwards them on to Bolivia to be processed. This support is possible because Spain allows brokers to conduct limited activities on behalf of foreign insurers not licensed there.

Table 17.3

Summary of opportunities and challenges of the 3H models

	<i>Opportunities</i>	<i>Challenges</i>
Home country models	<ul style="list-style-type: none"> – More likely to understand needs of target client group – More inclined to enter microinsurance given it is a big market in many “migrant-exporting” countries – Can more easily market, sell and administer policies for migrant’s families – especially useful for insurance requiring service providers, such as health care – Can tap into local distribution channels already working with the target clientele including remitters and MFIs to reach migrants’ families or migrant placement agencies to reach migrants 	<ul style="list-style-type: none"> – Legal barriers to marketing and selling insurance in host country – Lack of proximity to migrant makes marketing to them more difficult – Need a distribution channel in host country to work with migrants or to facilitate direct payment of premiums – Demand constraints for products in home country such as lack of consumer education required and trust
Host country models	<ul style="list-style-type: none"> – Legal and regulatory barriers likely to be less significant as insurers already licensed – Can be a large untapped market, as migrants are generally not as well served by the financial sector and there is little competition from other insurers – May have existing models that can support distribution although not always tailored to the target population – Migrants are more likely to demand insurance and be able to pay for it than family members – Migrants often organized in associations/networks which facilitates marketing 	<ul style="list-style-type: none"> – Less likely to understand the needs of the target group – Less likely to have access to distribution channels working with the target – Customer support and claims administration are complicated where beneficiaries are family members in the home country
Hybrid models	<ul style="list-style-type: none"> – Avoid many of the legal and regulatory challenges because there are licensed insurers in both countries – Can market more effectively to migrant and family – important where families make joint decisions – Existing distribution channels in both countries (although may not be tailored to target market) – Can provide continuous service to migrants who return to home countries 	<ul style="list-style-type: none"> – Premiums may be higher as the partnership creates an additional layer – Claims administration more complicated where beneficiaries and services are in both countries, and two insurers are involved – Choice of law issues are more complicated

17.5

Conclusion

This chapter examines how insurers can address the specific risks faced by the transnational family and how the networks and connections created by migration may be used to reach this market. Although migration-linked microinsurance is nascent, the experiences highlighted above illustrate initial lessons to develop and promote schemes to protect migrant workers and their families. These include:

- Legal and regulatory constraints pose one of the most significant challenges to migration-linked insurance as insurers are generally not licensed in both the home and host country. It is essential to fully analyse legal and regulatory issues prior to launching a project, as activities permitted in one jurisdiction can be illegal in another.
- It may be more effective to market migration-linked insurance products directly to the migrant, given the often divergent spending preferences of migrants and their families, and the informal insurance responsibility of the migrant.
- Finding an appropriate distribution channel – which depends on the model, the migrant population's characteristics, and the regulatory environment, among other things – is key to achieving scale.
- The selection of partners that already have the trust of the community, and recurring financial transactions with them, can add value to insurers.
- The undocumented status of many migrants can pose serious challenges to marketing insurance products to them in their host countries, but this population's need for insurance from a risk management perspective is often great, signalling a possible role for donors and government agencies.
- There is a significant need for consumer education and financial literacy to promote migration-linked insurance. These programmes are costly and could benefit from new efforts involving mass media outlets, cell phone and internet platforms.
- To facilitate payments, migration-linked insurance products can tap into remittance flows through partnerships with MTAs, which are most effective when remittances are inexpensive, “smooth” and sent through formal channels. Technological innovations may provide alternative payment channels, although it is difficult to know how receptive migrants will be.
- Programmes must take special care to develop claims procedures and customer support facilities that are accessible to migrants and their families from abroad.

Migrants and their families represent a relatively untapped market for insurance, one with some unique and insurable risks. While the challenges are significant, the potential rewards, for both insurers and transnational families, of formalizing the informal risk management created by migration can also be substantial. However, establishing a successful migration-linked insurance scheme

requires a clear understanding of the market segment and its specific needs. Success is contingent on a firm commitment to the project by all parties involved, the microinsurer, the intermediaries and any supporting organizations to resolve the legal, marketing, distribution and payment challenges. To continue to expand migration-linked microinsurance schemes, especially to communities where the development potential is highest, further efforts to overcome the many challenges are needed.

VI Insurers and microinsurance

18 Is microinsurance a profitable business for insurance companies?

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The question “Under what circumstances can insurance companies generate profits from microinsurance?” is important, because in many markets insurers are showing an increasing interest in expanding into the low-income market. To maintain the involvement of commercial players in this market, microinsurance needs to contribute to the overall profitability of the insurer and generate value for its shareholders. Profits over time must be sufficient to justify the investment required to support the development of the business.

This paper presents a case study analysis of the profitability of microinsurance provided by five insurers operating in different regions across the globe.

- Co-operative Insurance Company (CIC) in Kenya offers a compulsory credit life product and Bima Ya Jamii, a bundled voluntary health and life cover.
- Old Mutual in South Africa offers a group funeral cover.
- ICICI Lombard in India offers Manipal Arogya Suraksha Yojana (MAS), a group-based health insurance product, as well as crop cover based on rainfall index.
- Aseguradora Rural (ASR) in Guatemala offers a death and disability cover as well as a student cover, which provides a life policy with an additional health cover.
- Malayan Insurance in the Philippines offers a life cover with additional benefits such as fire assistance.

Although the experiences in these case studies are unique, the challenges and successes of these microinsurance initiatives provide insights into possible approaches to improving viability for other players in the market.

This chapter considers exclusively the commercial viability of microinsurance, but there are other reasons for insurers to target the low-income market (*see*

Chapter 19). Most evident from the case studies are social objectives to improve quality of life for the poor. Given the importance and prevalence of social objectives, a complete review should factor in an initiative's client value proposition (see *Chapter 15*). The question of profitability needs to be balanced with the extent to which products provide value to the client, because long-term sustainability depends on the value proposition.

Despite the social motivation, it is important that microinsurance be viable to maintain the involvement of insurers. The case studies indicate that microinsurance can be profitable. However, there are instances where the insurers have found it difficult to establish a profitable initiative and have engaged in an iterative process of restructuring it to achieve profitability.

For the most part, the insurers have not formally monitored the costs associated with microinsurance. As a result, expenses were allocated using a proportional method, where the management costs of the relevant business segment or overall company were allocated to the microinsurance business on the basis of premium volumes. It is possible that if the costs were more accurately allocated to microinsurance, expense ratios would be higher. As business grows, it will become more important for insurers to monitor expenses accurately to better understand the commercial viability of microinsurance.

The chapter is organized as follows. Section 18.1 provides an overview of the framework and drivers of profitability. Section 18.2 sets out the context for the insurers, the sector they operate in and their microinsurance initiatives. Financial analysis and an examination of the drivers of profitability for each of the microinsurance initiatives are outlined in section 18.3. Section 18.4 concludes with the main findings from the case studies and recommends areas for future research.

18.1

Framework for the assessment of profitability

Table 18.1 provides an overview of the framework developed to assess the profitability of microinsurance, which includes three main drivers of profitability: achieving scale, managing claims costs, and managing acquisition and administration costs. The two aspects at the base of the diagram cut across the drivers of profitability and form the foundation needed for successful initiatives.

Table 18.1

Framework for assessing the profitability of microinsurance initiatives

<i>Scale: selling and retaining large business volumes</i>	<i>Claims costs</i>	<i>Acquisition and administration costs</i>
<ul style="list-style-type: none">–Defining and accessing the market–Providing valued benefits and meeting the needs of the market while maintaining premiums at a reasonable level–Incentivizing distribution channels to sell and renew voluntary products–Building relationships with the market and servicing policies efficiently	<ul style="list-style-type: none">– Pricing the risk– Managing anti-selection, moral hazard and claims fraud– Use of reinsurance and managing claims volatility and co-variant risk	<ul style="list-style-type: none">– Working with partners and groups– Making use of existing infrastructure– Simplicity and efficiency in distribution and administration systems
Organizational structure and market context Monitoring experience		

The framework shown in Table 18.1 uses excess of income over outgoings as shown in the revenue account as the measure of profit in the period. The profit for a given period is an absolute measure and is therefore difficult to compare with the profits of other microinsurance initiatives or lines of business in isolation. The framework therefore measures the overall profitability of the microinsurance initiative relative to premium income, as depicted in Box 18.1.

Box 18.1

Measurement of profitability

Gross insurance profit ratio = $\frac{\text{Gross insurance profit}}{\text{Gross earned premiums}}$

Profit is also measured in terms of net insurance profit to net earned premiums (after allowing for reinsurance).

The return demanded by investors is usually related to the capital required as well as the risk of the initiative. If insurers want to have a better understanding of the value to shareholders generated by microinsurance, it is important to keep track of capital and other resources devoted to this business, and monitor the profits on the investments. It was not possible to provide insights into the return on investment for the case studies due to a lack of data from insurers on the amounts invested in building the business. Some qualitative insights into the resources devoted to the business are given in the analysis section.

18.2 Context and setting the scene

This section gives an overview of the five microinsurance initiatives studied and the environments in which they operate (see Table 18.2 for a summary).

18.2.1 Co-operative Insurance Company (CIC), Kenya

The Kenyan insurance industry is underdeveloped compared to other sectors of the economy with insurance penetration remaining at around 2.6 per cent in the past few years. The majority of this penetration is attributable to compulsory motor third-party insurance and compulsory government insurance and pensions from the National Hospital Insurance Fund (NHIF) and the National Social Security Fund (NSSF). Insurance activity in the low-income market has increased in recent years, with many traditional insurers showing interest in this market. A range of products has recently been introduced, including health, credit life, personal accident and crop insurance.

Co-operative Insurance Company (CIC) is an established insurer that is owned by over a thousand cooperatives. It is the only cooperative insurer in Africa and is the eighth largest insurer in Kenya. CIC has been active in the low-income market for a number of years, administering a handful of products through its existing traditional insurance departments. Given its experience in the market and dedication to expanding its microinsurance business, CIC established a microinsurance department in 2010. CIC has benefited from its links with the cooperative movement in Kenya, which have allowed it to form partnerships with many credit cooperatives.

Among the microinsurance products offered by CIC are a group credit life product and a bundled product known as Bima ya Jamii (Insurance for the Community). Credit life is the oldest of CIC's microinsurance products, offered to microfinance institutions (MFIs) and savings and credit cooperatives (SACCOs) since 2002. The product is compulsory for all borrowers. It covers the borrower for the period of the loan and pays the value of the outstanding loan plus interest to the lender in the event of a borrower's death or disability. An additional payment of US\$130 to the disabled borrower or their surviving dependents was introduced in 2010 at no additional cost.

The credit life product has been a means for CIC to generate profits to support the development of riskier microinsurance products, such as Bima ya Jamii, which provides a hospitalization, funeral expense, loss of income and personal accident benefit for the principal member and named dependants. Bima ya Jamii has been revised over time, mainly as a result of difficulties experienced with the hospitalization component of the product. In the most recent (and most successful) version of the product, CIC outsourced the hospitalization benefit to the NHIF, which has more experience in managing health insurance risk.

Bima ya Jamii, like the credit life product, is sold through SACCOs and MFIs. However, it is not compulsory for all members of the MFI or SACCO. CIC relies on these channels to sell the product to their customers. This structure posed challenges for CIC, with partner remuneration needing improvement to

incentivize sales. CIC has recently engaged an agency to assist in managing sales at the MFI and SACCO branches. The agency is responsible for training the sales clerks in the workings of Bima ya Jamii, providing consumer education at the point of sale, and providing customer support on behalf of CIC (for both the partner and the policyholders).

Table 18.2

Overview of microinsurance initiatives

	<i>Products</i>	<i>Target market</i>	<i>Distribution and administration</i>	<i>Structure</i>
Co-operative Insurance Company (CIC), Kenya	<ul style="list-style-type: none"> – Credit life: compulsory – Bima ya Jamii: voluntary bundled hospitalization and life insurance cover <p>Credit life shows large profits from inception Growth difficult to achieve for the voluntary product</p>	<p>Members of micro-finance institutions (MFIs), savings and credit cooperatives (SACCOs) and other self-help groups</p> <p>Large MFI and SACCO membership in Kenya</p>	<p>MFIs, SACCOs and other groups</p> <p>Exploited existing relationship with these groups</p>	<p>Planning to set up a separate microinsurance business unit</p>
Old Mutual, South Africa	<p>Burial Society Support Plan: group funeral cover</p> <p>Funeral cover is popular in South Africa, but this is a highly competitive market</p>	<p>Members of burial societies, funeral parlours and savings clubs</p> <p>Difficult due to small group sizes</p>	<p>Salaried agents who work with groups are responsible for the selling and servicing of policies</p> <p>Costly distribution model</p>	<p>Set up the Foundation Market business unit to focus on the low-income market</p>
ICICI Lombard, India	<ul style="list-style-type: none"> – Manipal Arogya Suraksha: group-based health insurance – Index-based weather insurance: crop cover based on rainfall index (bundled with credit) <p>The Government created awareness for index-based insurance Difficult to make health insurance product profitable</p>	<ul style="list-style-type: none"> – Community groups along western coastline of India – Customers of MFIs, rural banks and other credit providers 	<ul style="list-style-type: none"> – Network of health-care providers – MFIs and other credit providers <p>First mover advantage is important in establishing relationships with these groups</p>	<p>Microinsurance products are managed under business units organized by product line. There is no separate microinsurance business unit.</p>
Aseguradora Rural (ASR), Guatemala	<ul style="list-style-type: none"> – Life cover: death and disability cover – Student cover: life policy with additional health cover <p>Both products have been profitable since their launch</p>	<p>Clients of BANRURAL (rural bank)</p>	<p>BANRURAL network of bank branches</p> <p>Built on infrastructure of the parent company</p>	<p>Microinsurance products are managed under the life insurance business department</p>
Malayan Insurance, Philippines	<p>Life cover with additional benefits (e.g. fire assistance)</p>	<p>Clients of pawn shops, rural banks and lending institutions, cooperatives and NGOs</p>	<p>Pawn shops, rural banks and other credit providers</p> <p>Exploited partner's large footprint in the low-income market</p>	<ul style="list-style-type: none"> – Managed by the Retail Underwriting Group – Plan to move microinsurance to subsidiary in 2011

18.2.2 Old Mutual, South Africa

Traditional insurance provision in South Africa is highly developed and is comparable to developed nations in terms of both size and degree of sophistication. However, the low-income market is underserved. As a result, there have been increased efforts in recent years, in both the public and private sectors, to improve the provision of insurance in this market. A variety of insurance products are now available to low-income South Africans, the most dominant of which are voluntary funeral products provided by both formal (e.g. insurers) and informal providers (e.g. burial societies and funeral parlours). The funeral insurance market is highly competitive. Insurers have used a range of distribution channels to reach the market from the traditional agent model, to partnerships with church groups, retailers, burial societies and funeral parlours. Products are also sold through banks.

Old Mutual is the country's largest and oldest life insurer, offering a wide range of products across all income segments in South Africa. The Retail Mass Market, which targets clients in the middle- to low-income groups, is an important business unit for Old Mutual, making a significant contribution to its growth and profitability. The success of the Retail Mass Market unit led to the creation of the Foundation Market business unit in 2008 to develop products exclusively for the low-income market. The Foundation Market was set up as an independent business unit to provide microinsurance with sufficient attention to allow it to grow and eventually contribute to Old Mutual's profitability.

Old Mutual's burial society support plan provides a cash payout on the death of a covered life. It covers the principal member, with the option to add immediate family members, and is distributed through burial societies and funeral parlours using salaried agents. Once a burial society or funeral parlour opts to take the cover, the cover becomes compulsory for all members, who each pay a monthly premium. Burial societies and parlours can select from a range of sums assured, with the selected cover level applicable to all members, who therefore all pay the same monthly premium. Both the product design and the distribution model are common in the South African market.

Due to existing cultural norms, the product is popular and therefore relatively easy to sell. However, using salaried agents to distribute the product is expensive. Furthermore, burial societies tend to be small, so that scale has been difficult to achieve. Another challenge has been the large number of competitors in the market, which has meant that the high distribution costs of the product could not be fully reflected in the product premiums. The Foundation Market unit has, however, benefited from access to technical skills and infrastructure in other business units, which has helped keep overheads low. Old Mutual is prepared to provide this support until the business unit becomes profitable and can sustain its own expense base.

18.2.3 ICICI Lombard, India

ICICI Lombard was established in 2001 when the Indian insurance market opened to privately owned operators (*see Chapter 20 for more details*). Today, it is the largest private-sector non-life insurer in India, offering a full range of retail and commercial products. ICICI Lombard's microinsurance business mainly originates from group schemes sold through partnerships with large and reputable NGOs and MFIs, as well as government-funded schemes. In 2008, the Indian Government introduced a national health insurance fund known as Rashtriya Swasthya Bima Yojana (RSBY). ICICI Lombard has focused on successfully procuring RSBY bids from various districts, and this is a major part of its continuing microinsurance strategy.

Among the many microinsurance products underwritten by ICICI Lombard is an index-based weather insurance product, which the insurer pioneered in 2003 with a leading MFI, BASIX. The product is sold to farmers throughout India through credit providers. The Government also plays a significant role in promoting sales by subsidizing the product premiums by up to 80 per cent for farmers applying for agricultural credit. The product provides a payout in the event of either low rainfall or excess rainfall, at the option of the insured. Payouts are progressive once rainfall in an area falls short or is in excess of a predetermined limit. The weather product has benefited from government campaigns to heighten awareness of index-based insurance (*for more details see Chapters 4, 11 and 20*).

ICICI Lombard also underwrites several health products including one known as Manipal Arogya Suraksha Yojana, (MAS) which is offered to low-income families in the coastal districts of the states of Kerala, Karnataka and Goa. This product provides a hospitalization benefit and additional cover for 30 days prior to and 15 days after hospitalization for the principal member and their immediate family. It is sold on a group basis to community groups (or clusters) such as churches, temples and self-help groups. This product was developed in conjunction with the Manipal Group, a diversified enterprise engaged in areas of health care and education. Manipal owns 11 hospitals, at which the benefits under the health product can be redeemed. Administration of the product is shared between ICICI Lombard and the Manipal Group.

Manipal Foundation, a corporate social responsibility team of the Manipal Group, provides premium subsidies in varying proportions to families who cannot afford the premiums.

18.2.4 Aseguradora Rural (ASR), Guatemala

A large proportion of the Guatemalan population in both low and the middle-income groups are excluded from formal financial services. The insurance market in Guatemala is relatively small, with 17 insurers in total covering the life and

non-life markets. Insurance penetration in the country is low at 1.2 per cent and has remained relatively stable over the past few years. Few insurance companies in Guatemala have ventured into microinsurance, with only three showing significant activity. Competition is therefore limited.

Aseguradora Rural (ASR) is a small insurer, established in 1999 to operate in both the life and the non-life markets. It is wholly owned by BANRURAL, a large local bank focused on extending financial services to the rural population. ASR's strategy is aligned with that of BANRURAL, with a focus on providing insurance to the rural market. The insurer has launched four microinsurance products to date and this business has experienced significant growth since its inception accounting for 28 per cent of ASR's total gross premiums in 2009. The microinsurance business is administered under the traditional insurance operational structures within ASR. There is, however, a team allocated to managing the relationship between ASR and BANRURAL's agency network, which currently distributes all of ASR's microinsurance products.

This study considers a life product and a health policy for students. The life product constituted approximately 90 per cent of ASR's total microinsurance gross premiums in 2009. It was ASR's first microinsurance product, providing life, funeral and disability cover. A range of annual premium and benefit levels are available to choose from, with different plans available for the 15 to 50 age group and the 51 to 64 age group. To purchase a policy, the client needs to be a BANRURAL accountholder, though it is not compulsory for BANRURAL's customers to purchase the product.

ASR's student policy provides a death and disability benefit for principal members and a health benefit for financially dependent minors. The product benefits include:

- for minors, healthcare services provided by ASR's partner healthcare network Empresa Promotora de Servicios de Salud (EPSS) or reimbursement of health expenses in a different healthcare centre in the event of an accident, ambulance service in the event of an accident, daily payment for hospitalization in the event of an accident or disease, and medical assistance 24 hours a day.
- for the parent, cover in the event of death deriving from a natural or accidental cause and cover in the event of permanent and total disability.

A range of premium and benefit levels for both components are available. As with the life product, policyholders are required to have an account with BANRURAL, although the product is not compulsory for all accountholders. ASR spends a significant amount of time managing BANRURAL's role in the distribution of the product, and motivating the bank's agents to sell the product has posed a challenge.

18.2.5 Malayan Insurance, Philippines

The Filipino insurance industry is small but growing, accounting for 1.2 per cent of GDP in 2006. Insurers are starting to target the low-income market and are offering a range of products: whole life, accident, burial and medical benefits plans, asset protection for microentrepreneurs hit by fire, lightning, flood, typhoon or earthquakes, and weather-index crop insurance. In addition, the Government developed the “National Strategy and Regulatory Framework for Microinsurance” to promote growth in the microinsurance sector, while protecting consumers by requiring retail sellers of insurance policies to either register a mutual benefit association (MBA) or form a partnership with a regulated insurer (*see Chapter 25*).

Malayan Insurance, the largest general insurer in the Philippines, has been active in the low-income market as part of an expansion strategy into new markets. It relies on three distribution channels to service the low-income market:

- **A national pawn shop network**, with more than 1 200 branches, provides personal accident insurance with fire assistance
- **Rural banks and lending institutions** provide consumer and retail lending to livelihood projects and microenterprises through 78 branches nationwide
- **Cooperatives and NGOs** provide weather-index, life and fire insurance

18.3 Financial analysis and drivers of profitability

This section investigates the overall profitability of these microinsurance initiatives and explores the factors underlying their financial viability. The analysis uses a combination of performance indicators derived from financial information and insights gained from the interviews with managers at the insurers. These insights are particularly helpful in understanding the financials and identifying elements of the initiative that may be contributing to the profit or creating losses for the business.

18.3.1 Overall assessment of profitability

For microinsurance initiatives to be viable business propositions, they need to make a contribution to overall profitability of the business relative to their risk and the investment of capital and other resources required. Table 18.3 shows the gross insurance profit ratios (i.e. before reinsurance costs) for the products investigated in this study.

Table 18.3

Gross insurance profit ratios¹

<i>Insurer</i>	<i>Product</i>	<i>2009 (%)</i>	<i>2008 (%)</i>	<i>2007 (%)</i>
CIC, Kenya	Bima ya Jamii (accidental death and disability bundled with National Hospital Insurance Fund)	27	51	60
	Credit life	66	66	69
ICICI Lombard, India²	Manipal Arogya Suraksha (MAS) (health insurance)	(32)	(30)	(30)
	Weather insurance (index-based weather insurance)	1	5	(35)
Old Mutual, South Africa	Burial Society Support Plan (funeral insurance)	0 to 5	(25 to 35)	(20 to 25)
ASR, Guatemala	Life cover (accidental death and disability)	67	46	85
	Student cover (accidental death and disability)	56	67	
Malayan, Philippines	Microinsurance business (mainly accidental death and disability)	47	35	47

¹ Gross insurance profit ratio = (Gross premiums – Gross claims – Expenses)/Gross premiums.

² All the figures for India in the financial analysis section are for the financial year 1 April to 31 March.

CIC

The allocated expenses for Bima ya Jamii were based on the direct expenses determined by CIC with an addition of a proportion of the group life expenses allocated to this product, based on assumptions made by the researchers. No expenses were allocated individually to the credit life product.

Both of the CIC microinsurance products investigated in this study are profitable. The credit life product is more profitable than the bundled health insurance product and is the most profitable of all the products in the case studies. CIC used its experience with credit life to learn about the market. The profitability of credit life supported the expansion into other microinsurance products such as the bundled health product.

The bundled health insurance product was loss-making until it was relaunched as Bima ya Jamii with the health insurance component underwritten by the NHIF. The following keys to the profitability of the CIC microinsurance products were identified:

- partnerships with a large number of MFIs and SACCOs;
- exploiting the existing infrastructure of the distribution channel and paying low fees for selling and servicing business;
- compulsory nature and high margins of the credit life product;
- bundling life benefits with the more popular health benefits;
- outsourcing the risk of the health cover to the NHIF;
- difficulty in achieving adequate business volumes for Bima ya Jamii due to a lack of incentives for individual sales staff;

- more accurate monitoring of expenses for Bima ya Jamii led to a decline in profitability levels.

ICICI Lombard

ICICI Lombard restructured its operations in 2008. Since then, there has been no separate business unit for microinsurance or rural and social sector business. Both of the business units where the two microinsurance products are housed are also responsible for products sold to other market segments.

Actual administration costs and non-commission acquisition costs relating to microinsurance were not available from ICICI Lombard. In addition, researchers were provided with budgeted, rather than the actual expense amounts. However, given ICICI Lombard's policy of strict adherence to expense budgets, there is little scope for variance between the budgeted and actual costs. The expense allocation method assumes that the cost of writing the business is proportional to the premium income.

There is no reserving for the index-based weather product due to the structure of the product. Premiums earned and claims incurred are equivalent to written premiums and paid and reported claims. The financial analysis for the index-based weather insurance is based on results gross of reinsurance premium. ICICI Lombard did not disclose the figures net of reinsurance premium or claims information for the weather insurance product, as this would constitute commercially sensitive information. For consistency, the figures show the results gross of reinsurance for both products.

It has proved difficult to achieve profitability in either of these microinsurance initiatives. The weather insurance product appears to be just breaking even before reinsurance is taken into account. The MAS health insurance product has been consistently generating negative returns due to high claims ratios. ICICI Lombard has introduced measures to improve the claims experience of the health insurance business, but the effect of this action has yet to be seen in the profit ratios. The following keys to the profitability of the ICICI Lombard microinsurance products were identified:

- partnerships with a large number of credit institutions for the weather insurance product and the healthcare provider network for the MAS product;
- compulsory nature of weather insurance for all members of the group;
- using the longstanding relationship of the healthcare provider with the community, as well as the insurer's staff, to encourage enrolment;
- claims risk poses a challenge for both products, protected by reinsurance for weather insurance, which is a key reason why ICICI Lombard can provide this cover;
- mutually beneficial relationship with the distribution channel facilitates lower fees for services and access to infrastructure;

- managing microinsurance together with traditional insurance business on a product line basis facilitates access to the resources of the business unit and allows expenses to be subsidized by the business unit as a whole;
- support from government and the healthcare network creates awareness of the products;
- combining social objectives with insurance enables premiums to be subsidized by the government (weather index) and by the Manipal Foundation (health).

Old Mutual

Old Mutual's practice in the traditional insurance market is to maintain sufficient information on each customer to monitor experience with the customer portfolio. Such business practices follow through into the Foundation Market's business. Expenses are monitored and allocated to each product within the Foundation Market's portfolio, permitting accurate pricing.

The data received from Old Mutual was fairly comprehensive, providing details of the reserves for the product as well as management expenses allocated to it. Since reserving is relevant for the burial society product, the financial ratios are based on earned premiums and losses incurred. The allocated management expenses were used in assessing the profitability of the initiative.

Old Mutual's group funeral product had been loss-making since its launch in 2003 and has only in the last year managed to break even due to action taken to manage loss ratios. The following keys to the profitability of the group funeral products were identified in the case study:

- actions taken to reduce the number of loss-making groups on the books are starting to improve the poor claims experience;
- the salaried-agent delivery model is expensive relative to premium volumes generated, a problem exacerbated by small group sizes;
- setting up a separate business unit for the Foundation Market to focus on expanding insurance into the low-income market, but still having access to resources from other business units at the insurer.

ASR

ASR does not analyse claims and expenses specifically for microinsurance in its monitoring and performance management system. Expenses are managed at company level and any deviation from the budget objectives is analysed.

The analysis of profitability in Table 18.3 is based on the premiums received and claims reported in the year, and an allocated amount of expenses, reserves and investment income. The claims expenses were identified both for each product and for the consolidated microinsurance business.

The marketing expenses and training expenses are managed at company level and were distributed on the basis of gross premium. The expenses relating to promotion activities that were directly identified for the microinsurance products were allocated accordingly. The allocated amount of sales incentives is based on the number of policies sold. The rewards, bonuses and administration expenses were allocated on the basis of the gross premium.

Relevant reserves were taken into account and the financial statements are based on premiums earned and claims incurred.

The microinsurance initiatives of ASR have shown good annual profits since the inception of the business in 2007. Both products have achieved comparable levels of profitability. The life product is a major contributor to overall profitability due to the sales volume it generates. The following profitability drivers were identified in the case study:

- providing simple products that have not previously been widely available in the market;
- using limited underwriting and exclusions to manage claims risks;
- partnership with the parent bank with a vast footprint in the low-income market;
- paying no fees for access to the infrastructure and the services provided by BANRURAL.

Malayan

Malayan's microinsurance initiatives have been profitable since the initial investment in 2004. The following keys to the profitability were identified:

- providing simple accidental death and disability products with additional cover (e.g. fire) that is valued by the target market;
- partnership with the pawn shops, rural banks and credit providers with a vast footprint in the low-income market;
- making changes to the cover over time based on experience (e.g. removing the “unprovoked murder and assault” exclusion from products sold through pawn shops).

18.3.2 Achieving scale

Microinsurance needs to reach high volumes to generate profit and justify the resources required to build the business. This can be a challenging task in the low-income market and insurers use strategies to achieve scale, such as working with aggregators, tapping into existing demand and offering compulsory products. The scale reached by a microinsurance initiative is often measured in terms of covered lives and premium volumes (*see Table 18.4*).

Table 18.4

Premium volumes and covered lives

<i>Insurer</i>	<i>Product</i>	<i>Gross written premiums (US\$'000)</i>			<i>Covered lives</i>		
		<i>2009</i>	<i>2008</i>	<i>2007</i>	<i>2009</i>	<i>2008</i>	<i>2007</i>
CIC, Kenya	Bima ya Jamii ¹	142	137	27	18 872	17 461	3 625
	Credit life ²	3 919	2 356	2 196	256 762	170 725	159 047
ICICI Lombard, India	MAS health insurance	1 323	1 008	539	550 194	511 456	318 334
	Weather insurance	20 490	4 637	1 383	259 958	108 819	43 278
Old Mutual, South Africa	Group funeral	n.a. ³			400 000 to 450 000	400 000 to 450 000	500 000 to 600 000
ASR, Guatemala	Life cover	4 789	2 603	2 143	123 429	75 004	42 184
	Student cover	175	36		20 554	3 984	
Malayan, Philippines	Microinsurance business	1 913	1 246	815	5 009 089	4 334 887	4 113 975

¹ The low policy volumes for ASR's student cover and Bima ya Jamii are partly explained by the fact that these products are relatively new, having been launched in 2008 and 2007 respectively.

² Compulsory products bundled with credit.

³ Old Mutual was unable to disclose premium volumes as this would constitute competitively sensitive information for the insurer.

Although the case studies show a substantial number of covered lives, microinsurance premiums are relatively small compared to premium volumes for traditional business (at 3 per cent or less for all the initiatives except CIC's credit life and ASR's life cover).¹ Microinsurance product lines will need to expand significantly before they make a tangible impact on the business of the insurer as a whole.

Growth in credit life for CIC and the life product for ASR has enabled these products to make up a significant proportion of the gross premium volumes of the life business of these insurers (25 per cent and 37 per cent respectively in 2009). At ASR, the growth in the microinsurance business exceeded the expectations of the insurer. ASR attributed the boost in sales to a new commercial direction strategy and the establishment of a department in charge of the relationship with the distribution channel. ASR developed and implemented a new marketing and promotion methodology and an incentive system to focus on the microinsurance initiatives.

For several schemes viability depends on continued growth. Old Mutual's policy volumes are not high enough to cover distribution costs. ICICI Lombard's health product has not gained sufficient penetration within groups to counter anti-selection. ICICI's weather insurance product has not attained the geographical spread needed to enable the insurer to retain more of the premiums and rely less on reinsurance.

¹ This information is not available for Malayan.

Growth in premiums

A number of products investigated show substantial growth trends. These trends, coupled with the large size of the untapped market, indicate opportunities for growth in these markets. Table 18.5 shows the growth in premium volumes over the past two years.

Table 18.5

Growth in premiums and renewal rates

<i>Insurer</i>	<i>Product</i>	<i>Growth in gross written premiums (%)</i>		<i>Renewal rate (%)</i>	
		<i>2008–2009</i>	<i>2007–2008</i>	<i>2008–2009</i>	<i>2007–2008</i>
CIC, Kenya	Bima ya Jamii	3.7	412.4	30	6
	Credit life ¹	66.3	7.3	81	78
ICICI Lombard, India	MAS health insurance	31.3	87.2	n.a.	
	Weather insurance	341.9	235.2	n.a.	
Old Mutual, South Africa	Group funeral	18.0	2.0	60	50
ASR, Guatemala	Life cover ²	84.0	21.5	87	64
	Student cover	389		68	
Malayan, Philippines	Microinsurance business	54	53	n.a.	

¹ The renewal rate for the credit life product is based on the number of partners.

² Average premium.

Growth in the premium volumes for the CIC credit life product and the ICICI Lombard weather insurance product is supported by the increase in the number of partner savings groups and credit providers as well as high levels of retention of existing partners.

The main challenges in growth have been experienced by CIC with Bima ya Jamii and Old Mutual with the group funeral product. The policy volumes and retention levels for Bima ya Jamii are below the level targeted by the insurer, partly due to the lack of active selling to individual group members. For group funeral products, Old Mutual has undertaken an exercise to reduce the number of loss-making burial societies on the books over the past three years. As part of this exercise, Old Mutual increased the premiums for burial societies where the business was loss-making. This resulted in many of these schemes failing to renew cover and a decline in business volumes.

The experiences of the various insurers provide insights into factors underlying the growth in business volumes and the achievement of scale.

Working with partners and existing groups to access the market

All these insurers work with aggregators such as MFIs, SACCOs, NGOs, health service providers and burial societies to access the market. Their experiences illustrate the following benefits of working with partners to reach scale in the low-income market:

- Working with a partner with a large number of branches or access points allows the insurer to develop a broad, diversified customer base. ASR benefits from access to four million BANRURAL customers and Malayan's partnership with pawn shops provides access to a large segment of the low-income market.
- The insurer can use the partner's infrastructure to access the market as part of the existing activities of the policyholders (e.g. making repayments on the loan to the MFI). This reduces costs for the insurer and the customer. ASR is able to exploit the large presence of BANRURAL in the country (around 750 sales points covering 80 per cent of the country).
- It is easier to achieve scale where products are compulsory and bundled with other financial products provided by the partner (e.g. credit from MFIs). Compulsory cover for all group members or selling the policies in bulk is used for CIC's credit life product, ICICI Lombard's weather product and Old Mutual's group funeral product.
- The partners' existing links to the market and relationship of trust can facilitate expansion into the market. ASR uses the good image of the bank to promote its microinsurance. ICICI Lombard works with the trusted Manipal Group, which has been involved with the communities for a long time.

Insurers were able to build successful partnerships by employing the following strategies:

- Existing relationships with partners of the same financial services group created a competitive advantage for CIC, ICICI Lombard and ASR.
- First-mover advantage to lock in the relationship with the partners and maintaining these relationships by delivering efficient service was shown to be important in the longer-running initiatives of CIC and ICICI Lombard.
- Creating mutually beneficial relationships with partners, where the insurer is able to negotiate lower fees with the partner. The credit life and index-based insurance products directly benefit the partner by protecting the loan from default in the event of death or crop failure. ICICI Lombard's health insurance product offers the healthcare provider a tied client base.
- Building and maintaining relationships with partners through good service levels and the satisfaction of individual clients. High retention rates of partners of

between 80 per cent and 100 per cent seem to indicate that most of the insurers in this case study appear to have achieved this (as seen in *Table 18.5*).

- Old Mutual's distribution model requires agents to sell business in and around the community in which they live. This promotes a relationship of trust between the agents and the policyholders. This was an important factor in its growth, especially in the case of burial societies, which are community-centred. While Old Mutual has been able to reach a large number of lives using this model, the policy volumes do not support the costs of the salaried agents and there are other players in the South African market that have reached higher policy volumes using partnership distribution models, e.g. through church groups and retailers.
- All the insurers have been involved in building the capacity of partners. Insurers helped partners set up infrastructure and systems to achieve efficiency in processes and ease of flow of information between the insurer and the partner.

Affordability and competitiveness of premiums

Setting premiums at a level that is appropriate for this market is critical. It is often difficult to balance provision of the benefits demanded by the market with premium affordability and financial viability. The insurers in the case studies handled the issue of affordable premiums in the following ways:

- For the life cover and weather products, the insurers deal with the issue of affordability of premiums by offering products with limited benefits.
- Old Mutual and ASR introduced a range of benefit-level options to allow customers to select an affordable price point, while the cover level is still of value. For Old Mutual this was in response to a finding that a number of burial societies were lapsing as they were forced to select options that were too expensive.
- Flexibility in premium payment options is important. ASR allows for monthly, quarterly or annual payment of premiums. By contrast, CIC indicated that its annual premium payment for the Bima ya Jamii product was too expensive for many prospective clients.
- Competitiveness of premiums is an important issue in the group funeral insurance market in South Africa. The premium amount is often a key consideration in the selection of an insurer for the larger funeral parlours and burial societies. To remain competitive, Old Mutual has had to maintain premiums at a lower level than that which would support the high cost of distribution of the initiative until business volumes reach a commercially viable level. This fiercely competitive environment was not found in the other case studies, but may become an issue as more players enter the various markets.
- The difficulty in reconciling provision of the benefits demanded by the market with premium affordability and financial viability is illustrated by the experience of CIC with the bundled health product. CIC expanded benefits on the bundled

health insurance product on the basis of suggestions by partners, which led to the business making large losses. This prompted CIC to enter into the relationship with the NHIF. In addition, the NHIF proposed a 50 per cent premium increase in 2010, which will affect the affordability of Bima ya Jamii.

- Regulation can affect how premiums are set, as seen in the experiences of Malayan and ICICI Lombard (*see Box 18.2*).

Box 18.2

Regulatory implications for premiums

For Malayan and ICICI Lombard, external factors such as regulated maximum premiums for microinsurance and premiums subsidies have played an important role. Malayan's microinsurance products must meet the regulatory requirements in the Philippines, where maximum premium levels are set as a proportion of the disposable income of various segments of the low-income market (*see Chapter 25*).

In India, the need for affordability of premiums is addressed through premium subsidies rather than an intervention in pricing. These premium subsidies allow the products to reach market segments that would otherwise be excluded because of affordability issues. The advantage to ICICI Lombard of expanding the potential target market for products demonstrated the benefits of aligning products with social objectives, where there are benefits to the community beyond insurance cover (e.g. improved health of the community).

Products and benefit design

Insurers in the case studies developed products with generic benefits that appeal to a broad customer base. The advantages of this can be seen in the scale reached by the CIC credit life product, ICICI Lombard's index insurance, Malaysia's microinsurance business and ASR's life cover. By contrast, ICICI Lombard's MAS health product is designed for a specific segment of the market, the target market being limited to the geographical areas in which the healthcare provider operates. This constraint limits the overall market, but allows the insurer to develop cover that is more tailored to the needs of the community.

Demand for healthcare services in the low-income market is high. CIC and ICICI Lombard have taken advantage of this in linking insurance to a healthcare provider that has a reputation for providing quality services. CIC has worked in partnership with the public NHIF to provide the hospitalization component of the bundled Bima ya Jamii product. This partnership offers unique benefits to CIC in that the insurer is able to increase the appeal of the product by including the health benefit, but the risk is carried by the NHIF. ICICI Lombard has worked with the Manipal Group to provide cover through its hospital network. The challenges of achieving sufficient scale for voluntary products are seen in the

low policy volumes of both these products. For CIC the policy volumes are only 63 per cent of the targeted policy volumes set by the insurer after three years, and for ICICI Lombard enrolment rates are below the target of 60 per cent for the majority of clusters.

These insurers all receive input from the partners and community groups at the inception stage and over time on possible improvements to the benefit design:

- CIC approaches the potential partner MFI or SACCO with the product idea, so that the partner can provide input on whether sufficient demand for the product exists. The product is then piloted with the partner and, if successful, rolled out to other partners.
- ASR benefits from BANRURAL's agents' knowledge of customers. ASR receives input from BANRURAL when developing a new product in order to evaluate whether the product meets customers' needs.
- The Manipal Group has a long-standing relationship with the community that has helped ICICI Lombard develop health insurance that meets the needs of the market.
- Old Mutual has relied on insights into the needs of the market from its social responsibility initiatives.²
- Customer inputs are a major component of Malayan's product development process.

Although the analysis of the factors underlying retention of business indicated that providing benefits that were perceived by the customer as providing value is important, the value of products to customers was not explicitly assessed as a measure for the success of the initiative.

Incentives to sell and retain business

ASR and Malayan implemented incentive programmes for their partners' agents. ASR saw an increase in premium volumes after the implementation of a programme that provided incentives to the sales staff at an individual as well as team level.

Old Mutual structured its incentive packages for salaried agents to focus on servicing existing schemes as well as selling new business. Old Mutual agents

² The Foundation Market has strong ties to Old Mutual's corporate social responsibility initiatives, including a consumer education programme and a Masisizane Fund that provides loans to small and medium-sized enterprises. Old Mutual has used its experience with these initiatives to gain an understanding of the market and generate leads for marketing.

receive rewards based on the volume of the business and on the claims ratios of the groups that they sign up.

The importance of incentivizing sales of individual products is seen in the challenges experienced by CIC in reaching targeted policy volumes and retaining business with the Bima ya Jamii product (*see Box 18.3*).

Box 18.3

Creating a dedicated sales force

CIC's Bima ya Jamii product was initially sold by staff at the MFI or SACCO. There were no incentives for individual sales staff and selling insurance products was not the core responsibility of the staff. Sales of insurance products were not therefore given priority, resulting in low premium volumes. CIC is addressing this issue by setting up an agency force responsible for the sale of individual products and introducing commission for the agents. Individual incentives increase the cost of distributing the products, but seem to be necessary to reach the required policy volumes.

Client satisfaction and building relationships with the community

Client satisfaction and maintaining high levels of service are important to maintaining business volumes:

- Old Mutual makes a commitment to pay a claim within 48 hours of receipt of all documentation. The agent assists the beneficiary in gathering and submitting the necessary documentation. Maintaining customer satisfaction through the additional services provided by the agents is important in the competitive South African funeral insurance environment.
- The quality of the treatment provided by the hospital network is important for ICICI Lombard's health insurance product and the cashless benefit allows for a more efficient claims process (*see Chapter 6*).
- Old Mutual and ASR provide initial and on-going training for agents on products to maintain a high standard of customer service. This training has cost implications for the insurer and is one of the reasons for the salaried agent model having been an expensive strategy for Old Mutual.
- ICICI Lombard investigates reasons for cancellations of the health insurance product. ASR conducts surveys to evaluate client satisfaction after the sale of the policy and monitors on-going customer satisfaction and reasons for cancellation of policies.
- Consumer education and awareness programmes can be used to build the relationship with the community. The health awareness campaigns run by the Manipal Group help to maintain a trusted relationship with the community.

18.3.3 Managing claims costs

The risk of higher-than-expected claims can be significant for microinsurance, especially if companies are expanding into markets where there is little previous experience on which to base assumptions on expected claims (*see Chapter 21*). The ratio of the claims to the premiums can give an indication as to whether claims are higher than assumed by the insurer when the product was priced.

Table 18.6

Gross claims ratios

<i>Insurer</i>	<i>Product</i>	<i>2009 (%)</i>	<i>2008 (%)</i>	<i>2007 (%)</i>
CIC, Kenya	Bima ya Jamii	15	7	4 ¹
	Credit life	5	8	5
ICICI Lombard, India	Manipal Arogya Suraksha	110	109	110
	Weather insurance	77	75	115
Old Mutual, South Africa	Group funeral	65 to 75	80 to 90	90 to 100
ASR, Guatemala	Life cover	32	38	2
	Student cover	31	11	
Malayan, Philippines	Microinsurance business	18	27	13

¹ The Bima ya Jamii product and the ASR microinsurance products are relatively new initiatives begun in 2006 and 2007. The small claims ratios in the first year are very probably due to unfamiliarity with insurance and delays in claiming. As business volumes grow over time, it is expected that the claims ratio will stabilize to reflect the risk profile of the lives covered.

The analysis in Table 18.6 shows that claims experience is closely linked to the type of product and the profile of the target market:

- The low claims ratios for the compulsory credit life product in Kenya is consistent with compulsory credit life business.
- The claims ratios are also relatively low for the life products with limited benefits found in the Bima ya Jamii product, the life cover and student cover from Guatemala, and the microinsurance initiatives of Malayan.
- Managing claims ratios for health products is a common challenge in microinsurance. High claims costs do not appear to be related to a specific region, insurer or initiative. The difficulties in managing the cost of claims are demonstrated by the loss-making experience with the health insurance product in India. ICICI Lombard has taken action to improve claims ratios by increasing premiums, negotiating lower treatment fees with the healthcare providers, encouraging enrolment and managing anti-selection. However, to date these efforts have had only a small perceptible effect. Similar experience was seen in the previous bundled life and health insurance product provided by CIC, which

later re-launched this product as Bima ya Jamii with the health risk outsourced to the NHIF.

Insurers employed the following measures to manage claims costs, including pricing for risk and implementing measures and controls to manage claims risks:

Pricing for the risk

Credit life and basic accidental death and disability products are easier to price than health products. This has been the advantage for CIC, ASR and Malayan. Both CIC and ICICI Lombard have had negative claims experience with the health insurance products, which was exacerbated by the difficulty in balancing the demand for higher levels of cover with affordability of premiums.

To price the products, insurers generally used existing experience in similar products from the traditional insurance market and made adjustments for the low-income market. Old Mutual and ICICI Lombard experienced difficulty with this approach (*see Box 18.4*). Claims experience with the group funeral insurance and the MAS health insurance product did not reflect initial estimates. International standards in pricing index-based insurance were used to price the weather product, for which ICICI Lombard received support from the reinsurer.

Box 18.4

Re-pricing risk

Old Mutual's claims ratio has been higher than the target of 60 per cent since inception, at close to or above 100 per cent in 2006 and 2007. This is partly due to the profile of the market, where mortality experience was higher than expected in the initial pricing based on other market segments.

Old Mutual adjusted the pricing for the group funeral cover and introduced differential pricing among groups. It actively monitored claims and adjusted premiums on an on-going basis, providing discounts for good claims experience and increasing premiums in the case of poor claims experience. These efforts resulted in the claims ratios declining to between 65 per cent and 75 per cent. Though these efforts resulted in a decline in premium volumes, they have resulted in the retention of better-quality business.

Implementing measures and controls to manage claims risks

Insurers need to find a balance between setting up sufficient controls to manage risks and maintaining efficiency and low acquisition costs. Insurers utilize similar techniques to manage claims risks to those used for traditional insurance business, including the following:

- **Anti-selection**, also known as adverse selection, can be a significant risk to the insurer and should be managed in the design of the product. This is particularly important as microinsurance products are generally not underwritten and rejection of claims should be minimized to maintain the confidence of the low-income market. The risk of anti-selection on an individual basis is not an issue for credit life, which is compulsory, and the benefit is used to pay the outstanding loan. Nor is there much room for anti-selection in weather insurance as claims are triggered by rainfall measures that are outside the insured's control. For the ASR life cover, the risk of anti-selection is managed through limited selection criteria. Exclusions at the claims stage are used in the case of the student cover product. Old Mutual uses product features like a six-month waiting period and the compulsory nature of the product for all group members to manage anti-selection. The claims experience of the group funeral product seems to have been adversely affected by anti-selection by groups with poorer claims experience. Old Mutual introduced differential pricing based on the claims experience of the group to curb the problem. Anti-selection is a significant risk in health insurance and has been a serious challenge for the MAS health insurance product. ICICI Lombard has attempted to control the risk of anti-selection by targeting a minimum enrolment rate of 60 per cent for each group, but few groups have reached this target. In addition, distribution of the product through the healthcare provider may exacerbate the effects of anti-selection as healthcare providers are likely to have more contact with families that use healthcare services more frequently. Efforts by ICICI Lombard to improve enrolment rates have not yet shown signs of reducing claims ratios.
- **Claims fraud** is managed by working with partners and distribution agents. Old Mutual and CIC rely on group and community leaders as well as partners to validate claims for most products. There are, however, risks if the partner fails to validate claims properly. For the health insurance product Old Mutual, ASR and ICICI Lombard have implemented systems at the insurer to check the validity of claims. The risk of claims fraud is high in health insurance. To manage the risk for their product, ICICI Lombard works only with the Manipal network of healthcare providers to provide treatment for policyholders. The claims team at ICICI Lombard closely monitors treatment protocols.
- **Co-variant risks and reinsurance:** Benefit levels for microinsurance products are small, so the risk of large individual claims is not an issue. Moreover, business volumes for microinsurance initiatives represent a small proportion of the overall business volumes of the insurer for all the products investigated. The insurers have therefore not purchased reinsurance to mitigate claims risk above the minimum amounts required by regulation, with the exception of ASR and ICICI Lombard for the weather insurance product (*see Box 18.5*). Despite the low benefit levels, high levels of claims due to the accumulation of small claim amounts

remain a risk in microinsurance. This is seen in the experience of Malayan, where the higher claims ratio in 2008 is partly attributable to losses due to Typhoon Frank.

Box 18.5

Reinsuring weather risk

The risk of an accumulation of claims due to adverse rainfall conditions is significant for the index-based weather insurance product. ICICI Lombard makes use of a multi-layered reinsurance programme to protect the company from large losses on the weather portfolio. The protection provided by this reinsurance programme is the main reason for ICICI Lombard being able to provide the weather insurance product and it is key to the success of the business line. However, this protection comes at the cost of passing profits on to the reinsurer. With the increasing volume of weather insurance, ICICI Lombard will be in a position to retain a larger portion of the risk of this business.

18.3.4 Managing acquisition and administration costs

Managing the costs of microinsurance is key to creating a viable business whilst keeping premiums affordable for the low-income market.

Table 18.7

Expense ratios

Insurer	Product	Expense ratio			Acquisition cost ratio			On-going administration cost ratio		
		2009	2008	2007	2009	2008	2007	2009	2008	2007
CIC, Kenya	Bima ya Jamii	58	41	35	19	15	16	38	27	20
	Credit life	29	26	27	15	5	12	14	21	15
ICICI Lombard, India	MAS health insurance	16	20	20	9	15	15	7	6	5
	Weather insurance	20	20	20	15	15	15	5	5	5
Old Mutual, South Africa	Group funeral	>40	>40	30–40	30–40	30–40	n.a.	10–20	10–20	n.a.
ASR, Guatemala	Life cover	10	14	7	6	5	1	5	9	6
	Student cover	9	13		6	5		5	9	
Malayan, Philippines	Microinsurance business	35	38	40	32	33	36	3	5	4

Expense ratios for the product lines are summarized in Table 18.7 and key observations include the following:

- Expense ratios are highest for CIC, Malayan and Old Mutual.

- The expense ratios for CIC reflect an allowance for the contribution for corporate expenses that are not directly allocated to a single business unit. It makes sense for the credit life business to be making a contribution to the overall costs of running the insurer, as the premium income from this product is becoming a significant part of its life insurance business. For Bima ya Jamii, the high expenses reflect the significant amount of resources devoted to developing the new product line and building the capacity of partners around the new initiative.
- Old Mutual's group funeral product uses a relatively expensive delivery model of salaried agents, leading to higher expense ratios, which is a significant barrier to profitability. The increase in the expense ratios in 2008 resulted from the increased cost of running the Foundation Market as a separate business unit as well as greater accuracy in identifying the costs of writing the business.
- For Malayan, the high expense ratios are due to the high commissions paid, which have contributed to achieving significant scale.
- The lower expense ratios for the microinsurance products of ICICI Lombard and ASR partly reflect the lower fees paid to partners for the distribution of business and lower management costs attributed to this business.
- The MAS health product and the group funeral product are loss-making before taking on-going administration costs and general company expenses into account. The claims ratios for the MAS health product are above 100 per cent, implying that this product is not contributing towards supporting the expenses of writing this business. The combined ratios for the group funeral product and the weather insurance product are in excess of 100 per cent, indicating that these products are not contributing to the management expenses of the company or to the use of resources to write this business that are reflected in the expense allocation. CIC received a donor grant to develop the Bima ya Jamii product. If the company had funded these costs itself, this product would also have been loss-making over the period investigated.

It should be noted that expenses for the Bima ya Jamii and the group funeral products have been more accurately analysed than for the other initiatives investigated. ASR and ICICI Lombard do not monitor the costs of managing the business at product level, but allow for the management costs of microinsurance by allocating the management costs of the relevant business segment (ICICI Lombard) or overall company (ASR) on the basis of premium volumes. If the costs were more accurately allocated to the other microinsurance products, expense ratios might be higher.

Low acquisition costs

To manage their acquisition and administration costs, insurers have undertaken various strategies. For example, CIC, ICICI Lombard, ASR and Malayan use partnerships to lower the costs of distributing their microinsurance business:

- CIC and ASR work with partners that are effectively the owners of the insurance company. This affords them special concessions in terms of access to the infrastructure of the partners without having to pay fees for these resources, which represents a considerable advantage in keeping acquisition costs low.
- The partners of CIC and ICICI Lombard have also been willing to forgo or reduce fees because there are other benefits to providing insurance to the customer base of the partner. In the case of credit life, the MFIs and SACCOs benefit from having their loan portfolio protected against default due to the death of the borrower. Similarly, the weather insurance protects the lender against default on the loan if the crop fails due to extreme rainfall patterns. The health insurance product offers the healthcare provider a tied client-base where the cost of treatment is covered by the insurer.
- The payment of fees to the partner for distributing and servicing products is common in microinsurance. Even where partners are paid a fee for distributing the product, as is the case for the CIC's Bima ya Jamii product and ICICI Lombard's products, using partners to distribute is still less costly than using an employed agency force solely responsible for selling and servicing microinsurance policies, as evidenced by the higher acquisition cost ratios for Old Mutual.
- Most of the insurers offer individual incentives to the staff of the partner or the agency force for selling and retaining business. CIC recently engaged an agency force to distribute the Bima ya Jamii product. These incentives increase the acquisition costs of the microinsurance business, but are necessary to encourage staff to sell voluntary products.

The acquisition costs for the microinsurers in the case studies also reflect marketing and promotional activities:

- Marketing and promotion accounted for 25 per cent of the acquisition costs for ASR in 2009. ASR and CIC are planning to increase their spending on promotional activities for their microinsurance products.
- ICICI Lombard has increased the involvement of its staff in the marketing of the health product and enrolment of policyholders, but since costs are not monitored on an individual product basis, this cost is not evident in the available financial information. ICICI Lombard has benefited from the promotion of index-based insurance by the Government and the promotion of the MAS health insurance product by the healthcare provider.

- The salaried agency force employed by Old Mutual is a costly distribution model. At present, business volumes do not support the costs of the agency force, but the aim is for the group funeral product to support the costs relating to this product through growth projected in the next two to three years. The salaried agent model was chosen because agents need to be remunerated for servicing the needs of group members, over and above sales. The experience of Old Mutual illustrates the trade-off between managing the costs of the distribution force, and relying on the agency force to build up a relationship with clients and take on some of the tasks involved in servicing the policies.

Efficient administration procedures

CIC, ICICI Lombard and ASR make use of the partner's infrastructure to collect premiums, pay claims, make policy amendments and communicate with policyholders. This has the advantage of reducing the cost of the initiative to the insurer, but relies on the partner's ability to provide quality service and sell or renew policies.

Working with groups rather than individuals facilitates cost reduction and enables Old Mutual to make use of scheme structures to perform some of the policy administration. However, the average group size is relatively small (55 in 2009, 65 in 2008) and the larger groups organized by funeral parlours are necessary to spread the costs of this business.

Simplicity of products, limited levels of on-going policy administration, limited or no underwriting at the policy inception stage and efficient claims payment processes contribute to managing the costs of administering the microinsurance business. By contrast, Old Mutual allows changes to lives covered under the insurance policies on a monthly basis. The flexibility in the product increases the administrative burden for the scheme, the agent and Old Mutual, and adds to the costs of writing this business. This illustrates the difficulty of providing the flexibility that is demanded by policyholders while still keeping the administration costs low.

18.3.5 Cross-cutting factors

Two aspects of initiatives cut across the drivers of profitability: monitoring experience and the organizational structure.

Monitoring experience

All five insurers have devoted resources to this business and have incurred marketing, development, training and systems costs relating to the microinsurance business. However, for the most part, they have not formally monitored these costs. As a result, it is difficult to assess the cost of writing the micro-

insurance business and the financial impact of the measures discussed above. Managing expenses at a business unit or company level permits cross-subsidization in expenses, which allows the microinsurance initiatives access to the broader resources of the company, but does not allow the insurer to accurately assess the profitability of the microinsurance business.

A number of companies assess the profitability of products and business units by allocating expenses on the basis of premium volumes. Where actual expense information was not available, this is the approach that was taken in this investigation (i.e. for all products except Bima ya Jamii and the group funeral product). This gives an indication of how the insurers themselves assess the profitability of the microinsurance business lines. However, it is not ideal since insurers have invested significant resources in developing microinsurance and these costs may not be reflected in proportional expense allocations.

Microinsurance can experience costs that may not be present in traditional insurance, in terms of developing relationships with partners and building the capacity of partners in insurance-related matters. It is therefore important to monitor expenses more accurately to understand the full costs of underwriting this business and to identify deteriorations in experience and take remedial action at an early stage.

All the insurers have ambitious plans to expand microinsurance and devote future resources to this business. CIC is planning to set up a separate business unit, introducing an agency force and a high marketing spend on Bima ya Jamii, which will take a number of years to recover from business profits. ICICI Lombard is devoting more resources from the insurer to work with community groups to encourage higher levels of enrolment for the MAS health insurance product. ASR is planning to begin marketing individual insurance products. All these measures are expected to increase the expense base of the microinsurance initiatives. As business grows and insurers spend more time building and maintaining the business, it will become increasingly important to monitor expenses relating to microinsurance more accurately.

Organizational structure

The organizational structure of the insurer and the position of microinsurance business within that structure affect the costs of managing the business and the support for this business through cross-subsidies from traditional insurance products.

- Microinsurance is not managed separately from traditional insurance for ICICI Lombard and ASR. ICICI Lombard allocates resources across the business at a vertical business unit level (e.g. health business). The costs of microinsurance are supported by premium income from the same type of business where necessary.

The situation is similar at ASR, except that microinsurance is managed under the life insurance department at company level. This provides for an overlap of skills and resources from the overall business units and allows the expenses of the business to be supported by premium income from other business lines.

- The Old Mutual Foundation Market has been set up as a separate business unit to give the necessary level of focus to the market in the development stages. It therefore needs sufficient premium volumes from a variety of products to be sustainable. To date, the group funeral product has generated premium volumes at a level that could make some contribution to the infrastructure and internal management costs of the business unit, but the corresponding costs of distributing the product have limited the scope for this contribution. As a result, the Foundation Market still makes use of general infrastructure, resources and expertise from other business units, which can be important during the early stages of developing a microinsurance initiative.
- Activities relating to microinsurance have previously been undertaken by various departments within CIC. The insurer has now set up a separate microinsurance department, and it will be a challenge to become a self-sustainable unit as currently the micro-business relies heavily on the traditional business for support. It is likely that the microinsurance department will rely on resources from other departments where necessary.

18.4

Conclusions and recommendations

Profitability experience has been mixed for the five different insurers:

- CIC, ASR and Malayan's compulsory credit life products and basic accidental death and disability products are the most profitable.
- Old Mutual and ICICI Lombard are finding it challenging to achieve profitability with the group funeral and MAS health insurance products. Although these insurers have seen a decline in losses on this business following remedial measures, the initiatives are not yet showing profits, as measured in this study.
- In addition, the MAS health product is loss-making from a claims point of view before expenses relating to this business are taken into account. This means that it is not contributing to the expenses of developing and administering the business or general corporate expenses.

The analysis of the factors driving the profitability revealed that:

- Compulsory products and products with simple life benefits that are easier to price have shown profitability.

- Failure to reach scale and control adverse selection have led to high claims ratios.
- Reinsurance has been important for the index-based weather insurance.
- Working with partners can help insurers manage the costs of distributing and administering the business. The Old Mutual salaried agent model had the highest expense ratios.
- Working with partners that have a social motivation can lead to benefits to members exceeding the cover provided by the insurance policies. The Manipal Group provides healthcare awareness campaigns to the community.
- ICICI Lombard has benefited from premium subsidies for the index-based weather insurance product. The subsidies make the product affordable for a higher proportion of the market and have contributed to the achievement of scale in these initiatives.

Obtaining feedback from partners and the market as well as monitoring the financial performance is key to building a commercially viable microinsurance initiative. All the insurers in these case studies actively monitor the claims experience of their microinsurance portfolios. However, most do not monitor start-up or on-going expenses relating to microinsurance separately from the expenses of other insurance business. Insurers need to monitor the total costs to gain a fuller understanding of the performance of their microinsurance business.

The experiences of CIC, ICICI Lombard and Old Mutual show that expansion into microinsurance can be an iterative learning process where costly lessons are learnt through experimentation. This observation illustrates the importance of monitoring experience, continuously learning from the market and adjusting the product and the pricing to improve the viability of products.

All the insurers in this investigation see the vast untapped low-income market as offering a potentially viable business opportunity. Insurers are placing increasing emphasis on the low-income market in their expansion plans. They are devoting resources to building capacity in the market and creating a solid foundation for the microinsurance business. Markets are becoming more competitive and building relationships with partners such as MFIs and rural banks is becoming more important. Despite these efforts, some initiatives have not as yet shown profits and still only cover a small part of the potential market.

While these five case studies provide valuable insights into the profitability of the microinsurance initiatives of the insurers, it would be premature to draw broad conclusions on the profitability of these initiatives and caution should be exercised in applying the findings from these case studies to other contexts and products. Further research into the performance of other microinsurance will be helpful in this regard.

Although this chapter considers only the viability of microinsurance, a complete review should incorporate the initiative's client value proposition to provide a holistic perspective. The question of profitability needs to be balanced with whether products provide value to the client (*see Chapter 15*), because long-term sustainability depends on the value proposition of products. Future research design will need to consider this important issue.

Teaching elephants to dance: The experience of commercial insurers in low-income markets

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In the second half of the 20th century, many commercial insurers in developed markets shifted their focus from the middle class to wealthier clients.¹ More recently in emerging markets however, the pendulum may have been swinging back the other way as some insurers become optimistic about and committed to serving the low-income market with what is broadly called “microinsurance”. Yet these companies – the elephants in the chapter’s title – must generally work to develop the products, processes and instincts to serve smallholders, domestic workers, artisans, market vendors and the like, as few insurers are familiar with the needs and characteristics of this market. Based on the pioneering experiences of early entrants, this chapter provides some insight into getting started.

The formal insurance industry has vast capital resources – money, people, access and experience. The deployment of its resources to benefit low-income households promises to make a great contribution to poverty reduction. Dercon et al. (2008) point out that uninsured risk is a cause of poverty. It is difficult to imagine a more suitable opportunity for insurers to contribute to the betterment of society. Applying core competencies and motivated by medium- and long-term profitable growth, insurers can address some of the vulnerabilities that perpetuate poverty and inhibit economic development. To get there, however, insurers need a degree of change or innovation.

Whether “low-income” means poor, working poor, or emerging middle class can be debated. The overarching practical challenge for a commercial insurer in this unfamiliar market is getting the cost-benefit balance right. Costs include everything required to drive change – from management time and investments to project management and reputation risk. Benefits are most easily summed up as profit, but also include additional value from increased competitiveness through useful innovations and improved reputation.

¹ *Wall Street Journal*, 3 October 2010: “Shift to wealthier clientele puts life insurers in a bind.”

This chapter summarizes the experiences of and recommendations for commercial insurers working to extend their business to the low-income segment. Organized into three sections, the chapter starts with the motives and goals of insurers. The second part discusses the process of achieving those goals within the company, and section three considers the external activities with customers and partners that are needed to achieve scale and sustainability.

19.1 Involvement of commercial insurers in microinsurance

19.1.1 The role of commercial insurers: Potential and challenges

Commercial insurers are increasingly involved in the low-income market and are actively establishing ways to expand their business. Perceptions that the low-income market cannot be insured are being challenged or disproved, and microinsurance initiatives are seen to offer an opportunity to realize the potential of the “fortune at the bottom of the pyramid” put forward by Prahalad (2005). The poor are now considered to be a vast untapped market that aggregates substantial financial resources and has great need, facing risks that are routinely insured in higher-income segments.

Many multinational insurers aim to grow rapidly in emerging markets. Chartis has even rebranded its “Emerging Market” division as “Growth Markets”. Companies like Allianz, Chartis and Zurich have established dedicated initiatives to improve reach to low-income customers. Some national insurers are also engaged in this market segment, possibly because they face competition in wealthier segments or because they are entrepreneurial.

Globally, the involvement of commercial insurers in microinsurance has seen significant growth on multiple fronts:

- **New markets:** A number of international players are expanding their businesses into emerging economies, e.g. Allianz in several African countries, Colombia, India and Indonesia, and Mapfre across Latin America. A significant proportion of business in these countries is expected to come from the low-income market, with some insurers reporting that 20 per cent of their policyholders are microinsurance clients. It is also possible to find examples of commercial insurers playing a role in development-driven initiatives, such as public-sector programmes and corporate social responsibility (CSR) activities. For example, commercial insurers have become involved in the Rashtriya Swasthya Bima Yojana (National Health Insurance Scheme) in India (*see Chapter 20*). Premiums in these schemes are often subsidized by the government or donors to make products more affordable for the low-income market.

- **New entrants:** The market has seen interest from and entry by insurers not previously concerned with the low-income market. For example, general insurers in South Africa, Santam and Mutual and Federal, have developed products providing buildings and contents insurance for low-income households. Because of the regulatory requirement in India (*see Chapter 20*), multinational insurers operating there are becoming exposed to microinsurance and some are beginning to export the lessons learned.
- **New products:** Commercial insurers have expanded their product range beyond credit life (*see Chapter 9*), funeral insurance (*see Chapter 10*) and simple accidental death and disability policies. Other products such as property insurance, index-based crop insurance (*see Chapter 11*), fire assistance and commuter insurance are showing promise (*see Box 19.1*).
- **Innovation in intermediation:** Insurers are taking advantage of advances in information and communications technology (*see Chapter 24*) and opportunities for linking with aggregator groups (*see Box 19.2*) to expand into new markets.
- **Level of competition:** Although first-mover advantage is still very important in establishing a relationship with partners and accessing the market, some markets, such as Colombia, India and South Africa, are experiencing increasing competition for microinsurance business. Group funeral insurance and credit life are highly contested markets, with distribution channels actively comparing quotes, commission and service levels when selecting an insurer to underwrite the cover.

Box 19.1

Increasing diversity of products by commercial insurers

Commercial interest in the provision of microinsurance has resulted in the proliferation of different types of microinsurance products across the globe:

- Kenya Orient Insurance re-launched the Safari Bima product in 2010 providing accidental death, disability and health insurance to commuters.
- In 2008, Mutual and Federal piloted livestock insurance covering small-scale farmers in South Africa.
- Allianz launched a savings life insurance product in India in 2008, attracting three million policyholders and over US\$100m in annual premiums.
- Also in India, Agriculture Insurance Corporation, IFFCO-Tokio and ICICI Lombard are participating in a subsidized weather-based crop insurance scheme for farmers. Having seen the opportunity, more commercial insurers have applied to be part of the scheme for the next cropping season. Reinsurers have also shown keen interest in reinsuring this scheme.
- In Jordan, Zurich launched a hospital cash product marketed as “Caregiver” and distributed by MicroFund for Women, which is affiliated to Women’s World Banking.

*Box 19.2***Innovative distribution used by commercial insurers**

As discussed in detail in Chapter 22, innovative distribution has been facilitated by the greater availability of partners that commercial insurers can use to access the low-income market. These partners often lead the discussion and approach insurers to establish microinsurance initiatives:

- Mapfre has formed a partnership with CODENSA, Colombia's largest electricity supply company, with approximately two million customers in Bogota. A number of insurance products are offered to CODENSA's clients as part of a customer loyalty programme including funeral insurance, life, extended warranty and personal accident. Products are marketed through a face-to-face sales force and outbound call centres. Sales and marketing channels are administered by CODENSA with support from Mapfre (Smith et al., 2010b).
- In South Africa, Hollard has successfully expanded its relationships with retailers from the Edcon Group to lower-end PEP Stores, and it also distributes through the Best Funeral Society.
- Zurich has experimented in Bolivia and Mexico with pre-paid insurance cards sold at magazine stands and retail stores. In Chile, it has linked door-to-door agents with a utility company to collect premiums, and in South Africa used agents equipped with an application on mobile phones in efforts to improve sales.

Besides business labelled “microinsurance”, commercial insurers more frequently reach the low-income market through initiatives called “alternative distribution”, “mass market”, “group business”, “loyalty” or “affinity marketing”. While positioning the business as microinsurance can attract new partners interested in a longer-term benefit for their clients, no matter what the initiative is called, innovation or change is frequently required to bring new products through new partners to new customers. It is important to move past labels and to develop a unified strategy for low-income segments to build a business portfolio that is cost-effective in the short term and sustainable in the longer term.

So far, the market has seen both successes and failures in various products and partnership agreements – as is the case in traditional insurance. However, unlocking the economic opportunity in the microinsurance market is a challenge for insurers. The next section discusses the opportunities provided by microinsurance and the “returns” it can generate for the insurer.

19.1.2 Motivations and measures of success

Innovations aimed at effectively reaching the low-income segment incur costs, and therefore a successful microinsurance portfolio should generate returns that justify the investment. The potential returns related to microinsurance fall into three main categories: 1) financial returns; 2) innovation; and 3) reputation. The relative importance of each element will vary depending on the insurer and the level of development of the initiative. However, in the medium and longer term, microinsurance initiatives need to produce financial returns for insurers to continue the business, even if those returns are recognized in other business segments through improved innovation or partnership.

Financial returns

To establish a large microinsurance portfolio at a commercial insurer, profitability must be achieved. Investors require a level of return commensurate to the risk in the business. With greater effort required and more unknowns, microinsurance might require an even higher profit were it not for the corresponding innovation and reputation benefits. Financial viability must be attained within a reasonable period – otherwise insurers will exit the market or impose low limits on their exposures.

Lower absolute premiums mean that large business volumes must be sold to generate profits at a level justifying the effort. Likewise, scale is required to produce real benefits at low cost to microinsurance customers. While the exact number of clients at which a scheme becomes profitable varies according to the cost structure and client conditions, most insurance companies will be hesitant to participate in schemes with fewer than 10 000 microinsurance clients. Since scale may only be achievable in the medium term, it is also important to measure its forerunner, growth.

Microinsurance offers diversification opportunities for commercial insurers. For multinationals, diversifying into new territories, risks and target groups is attractive. Picking up risks in businesses uncorrelated to their core portfolio is particularly useful for improving the insurer's overall risk profile and cash-flow management.

Innovation

Central to the microinsurance discourse is the realization that the distribution channels, products and processes commonly used by insurers underperform in the low-income segment. Consequently, innovation is required, which involves radically reducing costs, increasing efficiency, and making insurance propositions simpler and more straightforward for customers – even if doing so is complex for the insurer.

Insights and competencies gained through successful microinsurance activities can often be transferred to the company's core business over time. Innovations that allow insurance to be sold profitably to a low-income customer at a magazine kiosk or through a mobile phone can be adapted to serve wealthier customers. Insurers have also indicated that lessons learned in making microinsurance more cost-effective can be fed into the wider business, resulting in lower costs for the company as a whole.

Reputation

A good reputation among investors, regulators and the public, and being trusted by policyholders, are important for insurers to access capital as well as to retain and expand their business. Investments and action taken with social objectives in mind have reputational benefits for insurers.

Expanding access to financial services in unserved markets has gained increasing attention over the past decade. Policymakers in several emerging economies are taking the initiative and expanding access to insurance to the low-income market (*see Chapter 25*). "Financial inclusion" has received international attention in the G-20 discussions. Providing microinsurance can allow insurers to build a reputation of contributing to the achievement of wider social objectives, including the Millennium Development Goals.

Microinsurance can also contribute to CSR motives. If a socially committed firm attracts and motivates employees, shareholders and customers, the social promise of microinsurance – improving the lives of the low-income market by providing protection against risks that would otherwise lead to further poverty – indirectly improves the company's results.

Insurers that move beyond the view that social impact and profitability inevitably require a trade-off may be more likely to realize synergies in the development of these goals. From a social impact perspective, for example, profitability is required to mobilize the investments required to reach scale and improve product and service quality for customers. From a profitability perspective, increasing social impact can build long-term demand by improving the standard of living of customers. In the long term, microinsurance needs to create value for clients by protecting them from risks at an acceptable price, whilst at the same time creating value for the insurer by contributing to overall corporate profits (*see Box 19.3*).

*Box 19.3***Zurich's global “emerging consumer” microinsurance practice**

The aspirations and objectives of Zurich's microinsurance practice encapsulate the dual objectives of financial and social return, with the objectives of sustainable financial growth, process and product innovation, and commitment to society by proactively offering Zurich's financial and human resources to address the challenge and promise of greater financial inclusion.

Zurich has started moving away from the term “microinsurance”, using “emerging consumer” instead. The company feels it better reflects the customer's needs, which are not micro (at least from the customer's perspective), nor does the prefix “micro” adequately describe the scale of this business. The initiative thus does not see low-income households as “poor”, but as ambitious and “emerging” consumers, as evidenced by the growing middle class in emerging markets. Insurance protects assets and income – and emerging consumers have both.

In 2010, Zurich had 2.3 million policies covering “emerging consumers” in seven countries, up from 1.8 million in 2009. Approximately 75 per cent of the volume comes from Latin America, 15 per cent from Asia and the remaining 10 per cent from Africa.

Source: Adapted from the Zurich Financial Services website.

In addition, an important motivation for insurers to become involved in microinsurance is to secure first-mover advantage while the market develops. In this way, insurers intend to build a customer base that will remain loyal and expand insurance product usage as income levels rise.

As summarized in Table 19.1, microinsurance has the potential to provide financial returns and benefits relating to innovation and building the reputation of the insurer. However, initiatives need to be structured carefully to be commercially viable. The next section outlines an approach, first focusing on internal issues, to achieve that success.

Table 19.1

Microinsurance activities of commercial insurers and their measures of success

<i>Example</i>	<i>Key measures of success</i>		
	<i>Profitability</i>	<i>Innovation</i>	<i>Reputation</i>
CareGiver hospital cash product launched by Zurich and distributed through an MFI in Jordan	The product was launched in 2010, but early claims and expense ratios look promising	The product offers unprecedented health cover, including maternity complications; it caters to the specific characteristics of women policyholders (see Chapter 16)	The product has given Zurich and its partner press coverage in leading global media outlets
Allianz launched the Sarva Shakti Suraksha (SSS), a savings life product with MFIs and cooperatives in India	With over US\$100m in revenue and sufficient profitability, the product is being adapted for other markets	SSS is a leading product for savings microinsurance in India and has opened the way to new distribution channels; the insurer has adapted the product for the Indonesian market as well	International media have repeatedly reported on the product and Allianz's cooperation with key partners
Mapfre Brazil's "micro-insurance segment"	Within five years, Mapfre multiplied its revenues to the point where it sells in 20 days what used to take a year	Targeting workers in the informal economy has expanded the potential market exponentially	Attracted the attention of media and development agencies

19.2 Internal organization: Models for success

Developing microinsurance as a viable business for an insurance company may require changing internal structures and processes, sometimes significantly. This section discusses the key steps and changes required, as well as the success factors identified at a number of commercial insurers.

As Figure 19.1 shows, the actual shape, development and timing of these changes will be influenced by factors within the company as well as the regulatory and market environment. Additionally, microinsurance, as with any business initiative, should be underpinned by good business practices – including sound risk management and strong implementation. Continuous monitoring and feedback on the changes can help to implement them effectively.

Figure 19.1

Model to develop sustainable microinsurance initiatives

Environment, regulation and industry practice	1. Securing internal understanding and commitment	Monitoring and feedback
	2. Learning and refining models	
	3. Structuring the business for scale	
	Risk management and good business practices	

19.2.1 **Securing internal understanding and commitment**

The first phase begins by defining microinsurance within the commercial insurer – identifying the company’s motivation, consolidating support and planning first steps. It is necessary to establish indicators of success in the short and longer term at this early stage, which is likely to include a combination of the goals discussed in the previous section. Objectives should be framed around commercial viability in the longer term in order for the initiative to be sufficiently resourced for it to have a chance of success.

As a pre-condition for running microinsurance effectively, senior-level sponsorship and the will to innovate at different levels of the company are essential. The concept of microinsurance is fundamentally attractive: helping low-income customers, capturing emerging market growth, contributing to society and making a profit. However, investing in it requires a deeper understanding and commitment than “love at first sight”. The development of microinsurance business requires managerial attention and allocation of resources in the face of competing priorities. It is important to identify an internal sponsor, who should be an executive with sufficient authority, resources and interest.

Establishing support can be challenging due to perceptions of microinsurance as charity or, worse yet, as cynical public relations. The low-income segment is often characterized as high-risk, unprofitable or even impossible to serve (*see Box 19.4*). This is driven, at least in part, by circular reasoning that concludes that because low-income customers do not buy insurance today, they will not buy it in the future. This reasoning brings to mind the famous observation by the founder of Digital Equipment Corporation that “There is no reason why anyone would want a computer in their home.”

Low expectations lead insurers to fail to make the changes necessary for success. When Zurich in South Africa first offered a microinsurance property cover, management insisted on changing as little as possible “to prove that microinsurance works before we make changes”. Not surprisingly, with no change in the proposition, the customers who did not previously want insurance continued not to want it.

Box 19.4

Mixed reactions from management

Some of the reactions by top managers to microinsurance include:

- “The poor only buy three things: alcohol, cigarettes, and lottery tickets.”
- “Too volatile ... not in my portfolio.”
- “Even if it will be a big thing in 10 years, look around this room ... do you see anyone here who won't be retired in 10 years ...”
- “That might be your definition, but to me, microinsurance is only microinsurance if it is losing money ...”
- “It sounds good ... I suppose you need people, or money, or both ... let's see how we can get them.”
- “Microinsurance is a part, but one has to say a very small part, of our business ... that means, microinsurance is a ‘nice to have’.”
- “Even if it's often in the media ... for us it's a niche business, a side business.”
- “The fastest way to clear the room of anyone who knows anything about insurance is to say the word ‘microinsurance’.”

Source: Internal memos and meeting notes from various companies.

Once key sponsors accept microinsurance as being both commercially attractive and useful to customers' lives, the project will need space to succeed, including human and financial resources, authority and performance targets. It is vital not to underestimate the importance of middle management in this process. Middle managers will often be responsible for the practical decision-making and implementation of the processes required for success in microinsurance. Even with backing from top management, managers and colleagues who work in a certain way and have no incentive to change can present an obstacle to the development of microinsurance within an insurance company.

The two main challenges at manager level are: 1) the nature of microinsurance as an initiative focused on a customer segment; and 2) the structure of incentives for managers. Microinsurance is not a single product, function or process; it is a collection of activities aimed at expanding access to low-income customers. It involves the coordinated efforts of different functions and departments at the insurer. For example, coordinating an approach with both life and general products at most companies involves working with separate underwriting, claims, finance and even human resources (HR) departments.

Regarding incentives, the remuneration of managers responsible for implementation is usually based on short-term growth targets and medium-term consistent results; in this context, the uncertainty and perceived volatility of microinsurance is unattractive. Incentive systems for microinsurance must

therefore be aligned with the higher-level strategy and business requirements. Once a strategy for microinsurance has captured the interest of top management, it needs to be made tangible and concrete to solicit support (or at least to avoid active undermining) among middle managers.

Support for microinsurance can be gained by demonstrating the size of the potential market, highlighting competitor successes, illustrating the social dimension of microinsurance, and exhibiting the learning and innovation opportunities. While this tactic can win the hearts and even the minds of colleagues, it does not replace a proper authority and incentive system.

The insurer may also involve external partners such as development organizations and distribution partners at this early stage. Opportunities to visit existing projects and exposure to real circumstances in emerging markets through these institutions help to create tangible experiences and images of the low-income market and microinsurance. Exploratory initiatives, often supported by donors, have been crucial to demonstrating the market opportunity and business models, creating awareness, and providing material for microinsurance managers to convince their colleagues and management of its potential.

Entering into a long-term, contractual relationship with a respected and patient partner to jointly explore the space can bring internal legitimacy and attention, and secure credible, long-term support within the business. For example, under its global initiative, Zurich worked in partnership with the Swiss Agency for Development and Cooperation (SDC) early on; Allianz and Munich Re have formed similar partnerships with Gesellschaft für Internationale Zusammenarbeit (GIZ); and dozens of insurers have benefited from their collaboration with the ILO's Microinsurance Innovation Facility. While the amounts provided by donors are relatively small from the perspective of an insurer, several microinsurance managers cite the political and symbolic support by public agencies as crucial to catalysing and sustaining internal commitment and support.

19.2.2 Learning and refining models

Creating an open learning culture

As a next step to enter the market, commercial insurers need to devote time and resources to developing skills and capacity, learning about the market, building relationships and negotiating partnerships with relevant players.

Creating a culture of learning about the microinsurance market and a willingness to innovate is important in building microinsurance business. Hollard, a South African insurer that covered approximately four million low-income lives in 2010 (Coydon and Molitor, 2011), attributes its success to its entrepreneurial

corporate culture that creates an open and unbureaucratic approach. Nevertheless, it emphasizes that this does not imply any compromise of basic business principles, and that new ideas need to be backed by a sound business proposition.

Expansion into the low-income market is often an iterative learning process, where initiatives are fine-tuned as the insurer gains experience. A big part of learning is the willingness to get things wrong, whereby new tactics are attempted and failure is tolerated as long as the company learns from the effort it makes (*see Box 19.5*).

Box 19.5

Creating space for errors and learning

At the outset of Zurich's global microinsurance initiative, the Chief Executive Officer (CEO) was asked, "We aim to do some new things and eventually we will 'stub our toe'. Are you ready for that?" He answered, "If the mistake is strategic – we didn't know something that was unknown – I have a lot of tolerance. But I will not tolerate sloppy execution."

Using experiments and pilots

Experiments and pilots are two approaches that form part of the learning process that can be used to refine models.

Experiments are one-off projects with clearly defined hypotheses, meant to confirm that it is possible for the company to achieve its microinsurance goals. As far as possible, the core business should be sheltered from these one-off projects and costs should be limited to the minimum required to learn the results.

Experiments can be invaluable in developing initiatives and learning about customers' needs and preferences, potential partners, local conditions, and regulations without major up-front resource commitments or liabilities. Systems requirements can be kept low with data often being handled in spreadsheets or with readily available software solutions. External funding during this phase may be especially helpful if those who make resource decisions are not rewarded for achieving the goals supported by these experiments.

Clear evaluation criteria for experiments need to be established and the projects regularly assessed against these criteria. By eliminating or clarifying certain variables, initial findings from the experiment stage help to build the case for pilots. Insights from experiments form the basis for the innovation necessary to secure the long-term success of a project.

Pilots to start the business are initiated after experiments provide answers to prove the hypotheses. By the pilot stage, most of the key questions about how the business will eventually work have been answered. While pilots need to be

flexible and agile, they are also the point where more permanent initial investments are made. A pilot is an interim investment to confirm the best methods before rolling out, gaining scale and industrializing. Pilot methods are more flexible than industrialized processes, but more substantial than experiments. The basic shape of the endeavour should be seen at the pilot stage, even if the individual elements are still relatively easy or inexpensive to replace. Like experiments, a strong focus on learning will speed up efforts during the pilot stage.

Pilots and experiments are valuable opportunities for insurers to get things right before going to scale, but due consideration of the impact on all participants is recommended. Experiments create expectations with staff and colleagues as well as with customers and other external stakeholders. Colleagues are often invigorated by the chance to use insurance to do good in society and may even contribute personal time to help. The further an experiment reaches into vulnerable populations, the more important it is to consider the effects on the target customers. Besides the insurer's time and money, low-income customers are asked to invest their time and trust into experiments and pilots.

Box 19.6

Iterative learning process

In Kenya, the experience of Cooperative Insurance Company (CIC), which offers a bundled life and health product that was re-launched as Bima ya Jamii in 2007, illustrates how the development of microinsurance products can be an iterative learning process through changes to the product, risk carrier and distribution model.

CIC began providing the bundled product through selected microfinance institutions (MFIs) and savings and credit organizations (SACCOs) in 2003. Over time, the product was enhanced at the request of the partners with increased benefit levels and options for higher-cost hospitals. The business soon became severely loss-making. CIC then formed a partnership with the Government's National Hospital Insurance Fund to provide the health benefits.

Under this new arrangement, the claims ratio for the life cover component retained by CIC was at an acceptable level, but policy volumes were much lower than expected due to a lack of individual incentives to sell the product for the staff of the MFIs and SACCOs. To compensate, CIC has entered into a relationship with an independent agency to distribute the product through the microfinance intermediaries.

Source: Angove and Tande, 2011.

19.2.3 Structuring the business for scale

Microinsurance initiatives have vast scale opportunities due to the size of the target population and the aggregation potential of distribution channels. With fine-tuning in the pilot phase, the focus will naturally turn to industrialization. When entering into microinsurance with new products, partners and processes, insurers often make use of skills, infrastructure and financial resources from other lines of business at the initial stage of the industrialization. However, this arrangement may not create an ideal fit and can jeopardize the success of the scheme. Iterative learning processes will continue into the industrialization phase as microinsurance initiatives are adapted on the basis of experience and feedback from the market (*see Box 19.6*).

Matching traditional resources to a new business model

Stable systems and processes are required to protect client data and to ensure compliance with underwriting and regulatory standards, and therefore resources are often sourced from the core business. For example, Old Mutual in South Africa created the Foundation Market department to serve low-income households, but until it can achieve scale and generate sufficient profits, this business unit remains financially and technically supported by other departments (*see Chapter 18*).² To achieve scale, a wider group of individuals comprising higher-level managers, technical experts and operational staff need to be involved in developing microinsurance into an established business line. While product pricing may happen on an ad hoc basis for experiments and pilots, technical underwriting and actuarial resources are required when establishing a scalable initiative.

As microinsurance grows, traditional insurance platforms will struggle to operate with the required efficiency and agility (*see Box 19.7*). Low-cost policies cannot support the same expense structures as traditional products. One multinational company in India found that it cost over US\$20 to issue a policy – and that there would be no way to serve the microinsurance target group while carrying such a cost. To profitably reach ever further into the low-income market, products need to be highly cost-effective. To achieve this, some insurers invest a significant amount of time and effort into negotiating cost savings and making operational structures more efficient.

As a result, drawing on traditional business resources may require significant “un-learning” and restructuring. Insurers need to prevent the growing initiative from being strangled by legacy systems and processes, such as inflexible information technology (IT) systems, and the staff responsible for them. Additionally,

² Govindarajan and Trimble (2005) point out that this is the riskiest way to do things, but it is the natural tendency among established firms.

working with external sponsors and distribution partners requires that systems and operations respond flexibly to different partner requirements.

Box 19.7

Microinsurance in multinational insurance companies

Multinational companies offer specific opportunities and challenges for microinsurance. Their financial strength and resources can allow strategic investments into longer-term opportunities and their strong international brands can provide motivation for more speculative investments to produce the social benefits or research for the public good. Additionally, their presence in many countries can help to transfer product and system innovations proven in one setting to others. Microinsurance experts based at head office can contribute to building the global knowledge base, exercise thought leadership, and be a contact point for public or civil society organizations.

On the downside, multinational insurers have plenty of competing priorities, especially in emerging markets. They have also achieved sufficient scale to break processes down into functional departments – gaining a comparative advantage and risk management benefit, but creating barriers to agile adaptation. In companies fractured by product lines, functions (underwriting, claims, sales, IT) and geography, any initiative that aims to serve a new customer will have to either simultaneously coordinate all the elements of the company (in essence, have proxy authority of the CEO) or, more reasonably, change its ambition, or split off, as Christensen (2003) recommends.

Working within the system will bring the budding microinsurance “intrapreneur” no end of interesting learning about his or her company. For example, one South African insurer intended to recruit a three-person team to run a microinsurance field office. In the insurer’s HR system, the lowest possible salary was hard-coded at level zero. For the microinsurance business model to work, the plan was to pay salaries at less than half of the level zero. As a result, the company could not hire the staff directly without changing the company’s entire compensation plan – an obvious non-starter. Instead, the three staff were recruited using an outside agency, reducing their connection to the company and increasing cost.

The emerging experiences of multinational insurance companies that are developing sizable microinsurance portfolios around the world show that it is profitable. To achieve this, and to develop their microinsurance activities systematically, many global insurers have established special teams or units to advance the topic. Some of these teams play a coordinating role in promoting microinsurance, setting quality standards and managing global public relations and media activities. Other companies have a more active approach, with group-level employees that manage local pilots, product development and the acquisition of new distribution partners.

Organizational arrangements

To integrate old resources with new processes, insurers may use different approaches to supporting microinsurance: drawing on existing resources, outsourcing functions, or establishing a separate business unit or joint venture with dedicated microinsurance resources. Naturally, each approach has advantages and disadvantages, as illustrated in Table 19.2, but for companies that are really committed to serving the low-income market over the long term, the “ring-fenced” model appears particularly compelling.

Table 19.2

Various approaches to structuring the business

	<i>Pros</i>	<i>Cons</i>	<i>Example</i>
Coordinating: Drawing on existing business resources, coordinated by a central microinsurance team	Relatively low start-up and overhead costs for microinsurance	<ul style="list-style-type: none"> – Constant tension between traditional and microinsurance business – Access to resources is highly contingent and unpredictable 	<ul style="list-style-type: none"> – Mutual and Federal and Santam manage microinsurance under their New Markets and Emerging Markets business divisions respectively
Outsourcing: Acquiring microinsurance resources externally (actuaries, systems, etc.)	<ul style="list-style-type: none"> – Relatively low start-up costs – Higher flexibility to choose between different systems – Ability to get “proven” solution for systems, etc. 	<ul style="list-style-type: none"> – Limited learning opportunities for insurer – Limited ability to capture long-term value – Reliance on outsourcing partner for innovation projects 	<ul style="list-style-type: none"> – Allianz relies on its partner PlaNet Guarantee to manage microinsurance relationships with various MFI in African countries (Gradl et al., 2010)
Separate business unit or joint venture (ring-fencing): Building separate division/joint venture with the resources needed for microinsurance	<ul style="list-style-type: none"> – Better accessibility of resources – Greater flexibility to utilize ring-fenced resources in an appropriate manner – Build a microinsurance culture that supports innovative approaches – Develop a sound understanding of the market needs and preferences – Address competition for resources and attention with other business areas 	<ul style="list-style-type: none"> – Higher start-up costs – Need to utilize resources built up fully, loss of short term flexibility 	<ul style="list-style-type: none"> – Metropolitan Life set up Cover2go as an innovation hub outside the headquarters with its own IT system and a mandate to innovate (Smith and Smit, 2010c)

19.3

External outreach: Building market relations

While establishing a solid internal platform, the focus must also include the external environment, particularly the client and the distribution channel. While alternative distribution (*see Chapter 22*) and client value (*see Chapter 15*) are covered in depth in other chapters, this section focuses on the special challenges faced by commercial insurers to industrialize and manage partnerships.

19.3.1 Industrializing: Achieving scale

For microinsurance to be viable, insurers need to reach large numbers of low-income clients cost-effectively, and this involves three components: 1) appropriate products; 2) the sales process and trust building; and 3) the volumes of transactions.

Offering appropriate products

Microinsurance needs to offer a sound value proposition to the low-income market for the business to be sustainable over the long term. Unlike other segments, almost by definition, the microinsurance target market is at best very weakly represented on the staff of insurance companies. Thus, to really understand how a segment perceives risk and the adequacy of existing coping mechanisms, insurers cannot rely on “gut feel”.

Some insurers have successfully worked with community-based partners to understand the market. Feedback from microcredit clients obtained through loan officers has helped Allianz to create better-value products. On the basis of the insights gleaned through this process, Allianz is adding disability cover to its life insurance product in Senegal to cover lost income if the policyholder is unable to work (Gradl et al., 2010).

A key approach to reaching the market on a large scale is to understand existing coping mechanisms and provide corresponding benefits that offer a more enhanced value proposition. Funeral insurance in South Africa is an example of insurers exploiting existing demand for cover when expanding into the low-income market. Informal mechanisms such as burial societies and funeral parlour benefit schemes are common in South Africa. A number of life insurers have seen the opportunity to provide insurance in this market, resulting in a relatively high proportion of the low-income market having formal cover. Forty per cent of adult South Africans have funeral insurance, and the majority are likely to be from the low-income market (FinMark Trust, 2009).

In the case of funeral cover, the low-income market is particularly interested in the actual funeral service and support during preparations for the funeral. Some insurers thus work in partnership with funeral parlours to provide service packages rather than cash benefits to policyholders. Hollard in South Africa is also providing support to the family of the deceased that is traditionally the responsibility of informal burial societies (“helping hands”) at the funeral.³

Benefit design needs to be in line with market expectations. Insurers should not provide cover that is so different from expectations that customers do not trust it. For example, if a policy has benefits that appear “too good to be true”, the cautious buyer will avoid it. Insurers also need to bear in mind the market’s

³ Interviews with insurance managers involved in microinsurance.

preferences to find appropriate ways of interacting with the target group, particularly with regard to technology (*see Box 19.8*).

Box 19.8

Meeting the market where it is

Cover2go, a subsidiary of Metropolitan Life in South Africa, developed an innovative commuter insurance product combining the use of agents at transport centres and mobile phone technology. The product provided personal accident cover of US\$2 140 for a one-off premium of US\$1.40 over a holiday period when a large number of people are travelling. It was sold through agents at the transport centre, with the premium being deducted from the mobile phone credit. Confirmation of purchase of the policy was sent to policyholders via SMS. The research conducted prior to the launch suggested that there was much interest in the product, but very few policies were actually sold. Investigations into the poor sales of the product revealed that:

- Benefits and premiums did not match the market's expectations. The product seemed “too good to be true” and policyholders did not expect such high benefits to be paid.
- Policyholders did not have sufficient mobile phone credit to pay premiums.
- Policyholders were uncomfortable using SMS to provide information and inform beneficiaries of cover; they preferred tangible policy documents.

The Cover2go experience provides important insights into the need to bear in mind the customers' expectations regarding premiums and benefits, and meeting customers where they are in terms of the use of technology.

Source: Smith and Smit, 2010c.

Building loss prevention techniques into the benefit design can be important to cover risks or market segments that were previously considered uninsurable. Encouraging risk-mitigating behaviour also allows insurance cover to be provided at lower premiums, which is important in the low-income market. For example, a livestock insurance pilot by Mutual and Federal in South Africa is linking with agricultural officers to ensure that cattle are branded (for identification when a loss occurs) and dipped (for protection from diseases). This initiative introduces risk management into the insurance process. The farmers benefit as their cattle are protected from diseases and they have access to insurance cover. The insurer can provide cover at more affordable levels because the risk is lower. Working with the community in this

way can be onerous, but the insurer benefits from developing a relationship with the community and gains access to a market that was previously untapped.

Getting the sales process right and building relationships of trust

A relationship of trust is very important in the sales process. This starts by establishing trust with the people selling the product, who may be as unfamiliar with insurance as their customers. On-going communication with the community is also important to assure the market that the insurer understands them. Insurers also need to focus on service in order to retain business. Some insurers have chosen to build a relationship directly with clients through agents. Others, such as India's ICICI Lombard and CIC in Kenya (*see Chapter 18*), exploit the relationships that partners have established with the market. In this case, the reputation of the insurance product therefore relies on the service that the partner provides to customers (*see Box 19.9*).

Box 19.9

Building a cascade of trust

In Senegal, Allianz works in partnership with the MFI CAURIE and PlaNet Guarantee (a specialized microinsurance intermediary – *see Chapter 23*) to provide credit life cover. The MFI's clients need to be confident that the insurer will pay a claim in the future. This is achieved through a “cascade of trust”. There is a mutual relationship of trust between Allianz and PlaNet Guarantee. CAURIE trusts the advice of PlaNet Guarantee, the loan officers trust CAURIE, and the borrowers trust the loan officers.

Source: Gradl et al., 2010.

Many commercial insurers are also taking a longer-term view of investing in the market and are building awareness and understanding of insurance in the low-income market through investment in consumer education campaigns (*see Chapter 14*).

Managing transactions with customers

In time, the transactional scale for microinsurance becomes completely unlike what most insurers handle within their traditional segments. Moreover, existing systems and processes are built for highly customized individual products, whereas microinsurance is mass-produced.

Many insurers are thus exploring new ways to use technology to access the market, increase efficiency and cut costs (*see Box 19.10 and Chapter 24*). Tech-

nology can be useful in administration, keeping contact with policyholders and servicing policies better, especially in the claims process. Major developments and innovations in mobile payments and mobile platforms are encouraging commercial insurers to explore ways of exploiting this technology to achieve scale and lower the costs of acquiring business, administering policies and collecting premiums (Zurich, 2011). Nevertheless, it is a tool for microinsurance rather than an overall solution.

Box 19.10

Using technology

Distribute policies and collect premiums

Cover2go's commuter product and the Safari Bima product offered by Kenya Orient both use mobile phone technology to activate policies and collect premiums, with mixed success – mainly because technology alone does not explain the product sufficiently. Additionally, regulators did not permit the collection of airtime as premium payment. Apart from the problem of low sales volumes, the use of technology in these cases was relatively costly, with the mobile phone provider taking 50 per cent of the premium in the case of the Cover2go product.

Source: Interviews with insurance managers involved in microinsurance.

Risk management

In India, radio frequency identification devices (RFIDs) injected under the skin of cattle make it easier to determine whether the dead cow was insured by Bajaj Allianz, thus significantly reducing potential fraud.

Source: Gradl et al., 2010.

19.3.2 Working with partners and groups

In most of the examples described above, a wide variety of distribution partners (or “sponsors”) are involved in connecting the microinsurance consumer with commercial insurers. Accessing the market is an important area where focus is necessary because traditional distribution mechanisms do not generate sufficient volumes. Developing relationships with distribution partners that have access to a large segment of the market is an approach that has been used successfully by the vanguard of insurers (*see Box 19.11*). The same basic requirements to establish the microinsurance practice within the existing commercial insurer also make

sense when building and maintaining relationships with distribution partners: identify and be clear about motivations, implement through experiments and pilots, and then industrialize.

Box 19.11

First-mover advantage

First-mover advantage is critical in establishing relationships with partners and can secure long-term relationships that allow insurers to build sustainable microinsurance initiatives. Many insurers have long-standing relationships with partners that were established early on in the expansion into microinsurance business:

- The partnership between Sanlam Sky (previously known as African Life) in South Africa and the Zionist Christian Church was established 20 years ago and now covers more than one million lives.
- Also in South Africa, in 2001 Hollard established a joint venture with the Edcon Group, the country's leading clothing, footwear and textiles retailing group. Hollard now offers a broad range of insurance products through Edcon's various retail outlets. Both companies have created a "joint learning" culture with fast and continuous exchange of ideas that is difficult for competitors to match.
- Since 2003, ICICI Lombard has had an index insurance programme in India with BASIX, a holding company for a range of for-profit and non-profit entities involved in livelihood promotion, including microfinance and business support services, and reaching more than three million low-income households.
- Zurich Bolivia began offering voluntary cover through the world's first commercial microfinance bank, BancoSol, in 2003, and continues to write business through the account.
- AIG formed a number of successful partnerships including Casas Bahia in Brazil, Bank Rakyat Indonesia and the microfinance network FINCA in several countries.

As illustrated in Boxes 19.11 and 19.12, potential partners can take many forms: church groups, retailers, banks, post offices, utility companies, MFIs, SACCOs, agricultural cooperatives, workers' associations and trade unions, and affinity groups such as sports clubs. Many insurers make use of existing relationships of trust between partners and the target customers by obtaining the support of the partner or group leaders to endorse, co-brand or even label the product. In insurance vernacular, these sponsors often fall within direct marketing or partnership programmes. The fact is that consumer goods reach every corner of the planet while financial services do not. IFFCO-Tokio's accidental death and disability product distributed with bags of fertilizer in India gives an inkling as to what is possible. From the industry's viewpoint, such partners are considered alternative distribution; but from the customer's perspective, the corner market and the mobile phone operator are their trusted providers.

Box 19.12

Hollard's partnership philosophy

Hollard is recognized as one of the most innovative insurance groups in South Africa. Hollard's partnership strategy has been key to the growth of its microinsurance business. This partnership philosophy focuses on "recognizing like-minded partners, understanding respective strengths and then driving long-term value through optimized structures to ensure mutual success".

Hollard has built relationships with a variety of partners:

- low-income focused retailers such as Jet and PEP stores, which offer funeral insurance and other products
- microfinance providers such as Bayport, Blue Financial Services, Opportunity International (Mozambique), Beehive, and the Savings and Credit Co-operatives League (SACCOL), where credit life insurance and funeral insurance is available
- providers of legal services such as Legalwise
- affinity groups such as the football club Kaizer Chiefs
- direct marketing agencies, such as Amway in India
- low-income groups such as unions (South African Municipal Workers' Union) and burial society groups (South African Federation of Burial Societies)
- mobile telephone companies, such as MTN Ghana (*see Box 24.7*)

Source: Adapted from the Hollard website.

Realizing value from partnerships

Working with partners allows the insurer to extend the existing relationships, infrastructure, physical footprint and contact points that the partner has with the low-income market. This facilitates the sales process, efficient collection of premiums, communication with policyholders and payment of claims. The partner may perform some functions on behalf of the insurance programme such as the administration of policies and premium collection, especially if it already has systems for collecting money from customers (see the Aseguradora Rural example in *Chapter 18*). Insurers may even work with several partners that perform different functions, for example, one partner to sell and distribute policies and another to administer the business.

Working with partners can also encompass developing and implementing improvements to microinsurance initiatives. Partners, which usually have more direct contact with the market, can provide valuable feedback to the insurer on benefit design, operational processes and customer satisfaction. Active partner participation and ownership seems to produce better results, but places more pressure on the insurer to demonstrate and deliver value. Insurers that fail to respond risk having to shelve or redevelop products if partners are not satisfied.

Trust in the provider of insurance is important; however, it is often the partner that has the relationship with the client. The insurer must therefore ensure that the partner has a good reputation and is trusted by the market before entering into a cooperation arrangement (see *Box 19.13*).

Box 19.13

Image and reputation of partners

Metropolitan Cover2go formed a partnership with *spaza* shops, small informal retailers in the local communities, to distribute funeral insurance. Although these local retailers were easily accessible to low-income households, the insurer eventually learned that they had a fly-by-night image and the target market was reluctant to purchase insurance from them. The insurer later entered into a relationship with a national retailer; although these outlets were less accessible to the market, the national retailer had a more trusted brand and stable image in the market, and greater success with sales.

Building and managing partnerships

As illustrated in Chapter 22, there are numerous potential partners through which insurers can gain access to the low-income market. The challenge lies in finding them and negotiating a relationship that works best for both the insurer and the partner.

To start building a relationship, insurers need to select partners that have the best fit with them and can perform the required functions. It is wise to be aware of motivations and expectations from the outset, and to be cautious where these are different for the partners. The partner should provide access to the intended target market, and/or be able to deliver other services that the insurer needs. The partner also needs to be a good match for the insurer operationally and from a systems point of view. A number of the risks can be mitigated through a solid due diligence and selection process up-front, and by involving the partner in the product development process (*see Box 19.14*).

Box 19.14

Importance of creating full buy-in at the partner level

A South African insurer partnering with a church group hit a snag at the initial stages in marketing its household buildings and contents product to church members. The insurer developed an elaborate marketing campaign for the product, but failed to involve the partner in its development. Church leaders refused to allow the insurer to roll out the marketing campaign. Although the product was endorsed by the church leaders, it was not actively marketed initially. Consequently, it has taken longer than anticipated to reach the targeted volumes.

Partnering arrangements are most successful when the relationship offers an attractive value proposition to both parties. The interests of insurer and partner need to be aligned in the sale and servicing of the products, and incentives should be structured to facilitate this alignment. Structuring the arrangement so that there are benefits to the partner besides commission revenue has contributed to the success of some insurers in the market, for example by increasing the utilization for healthcare providers and funeral parlours (*see Box 19.15*).

Box 19.15

Partnerships and products responding to partner needs

Developing products that specifically address the needs of a distribution partner can help to convince partners of the benefits of collaboration:

- **Credit life**, a typical entry-level product, pays off a loan if the borrower dies. It is normally sold through microfinance institutions, and directly improves the risk profile of these organizations. Increasingly, it also pays a benefit to the borrower's survivors and perhaps provides other benefits as well (*see Chapter 9*). Covering these risks is intended to make borrowers more confident in taking the loan and lenders more ready to make loans.
- **Weather insurance** covers risks from adverse weather, such as too little or too much rainfall. When it is coupled with the sales of inputs – such as seeds or fertilizers – it can help producers of these inputs to increase their sales to small-scale farmers wary of weather risks. For example in Kenya, the Syngenta Foundation is promoting an indexed insurance product for corn and wheat underwritten by UAP, a local insurance company, and distributed by agriculture input suppliers (*see Box 24.3*).
- **Property insurance** covers the continued use of specific items of property. A product offered by Zurich in Indonesia, in collaboration with the multinational cement company Holcim, is coupled with building materials for low-income houses and gives clients more confidence in the quality of the housing.
- **Health microinsurance** is often offered together with healthcare providers, which benefit from more stable incomes and improved client demand. For example, in the partnership between ICICI Lombard and the Manipal group of healthcare providers described in Chapter 18, Manipal benefits by gaining access to a client base that is required to make use of the group's hospitals for their treatment.

Developing such products requires high levels of flexibility on the part of the insurer, and the willingness and resources to get to know the priorities of partner organizations before developing the product.

Source: Angove and Tande, 2011; Interviews with insurance managers; Syngenta Foundation website.

Addressing partnership risks

Given their importance in accessing the market, establishing trust, and managing key insurance processes, it is critical to identify and control the risks involved in working with partners. They are not unique to microinsurance but worth noting:

- **Over-promising and under-delivering:** Working with alternative distribution partners requires investment by the insurer and the partner. Insurers are typically unfamiliar with selling through non-insurance entities and these entities do not usually have much experience selling insurance. As partnerships can be time-consuming to negotiate, there is a lot of time to build expectations, which can cause a rush to launch once the partnership has finally bedded down. The importance of testing processes and training frontline staff should not be underestimated.
- **Duration and flexibility of agreements:** The more ambitious the initiative, the more critical it is to have sincere commitment to work together over the long term.
- **Fraud** can be an issue at the partner level, perhaps by failing to remit premiums to the insurer or colluding with policyholders to submit false claims. While insurers have established mechanisms to avoid or reduce fraud, these need to be adapted to deal with fraud at the multiple levels of such a scheme.
- **Non-compliance with regulation:** It is important that the partner comply with all insurance and other regulations relating to the services that it provides to and on behalf of the insurer. This includes regulations relating to intermediaries and sales of policies. While new microinsurance regulation in some jurisdictions (*see Chapter 25*) allows flexible ways of working with partners, it normally creates responsibilities for insurance companies to ensure, for example, proper training of agents and processes to avoid mis-selling by the partner.
- **Failure to deliver:** Relying on partners for the distribution and servicing of products can become a problem when these partners fail to perform functions as agreed. Zurich Bolivia and Prodem terminated their partnership after two years due to the failure of the MFI to give priority to sales, resulting in low policy volumes (Churchill and de Grandchant, undated). CIC in Kenya faced similar difficulties distributing its voluntary Bima ya Jamii product via MFIs and SACCOs (*see Chapter 18*).

These risks could affect the reputation of the insurer among existing and potential customers, investors, regulators and other stakeholders. Risks to the reputation of the insurer are mitigated by the alignment of interests between the partner and the insurer. The partner also needs to maintain a good reputation with customers to retain their business. Risks can be addressed through better training of the partner's staff, structuring incentives around the sale and servicing of policies, and careful monitoring of the quality of service provided by the partner.

19.4

Conclusion

Involvement of commercial insurers in the microinsurance market is growing at a rapid pace. Given the nature of the insurance industry, commercial insurers are well placed to contribute to developing microinsurance into a global sustainable industry and expanding access to insurance for the low-income market. The vast untapped market offers a clear opportunity for commercial insurers to expand their business profitably for themselves and their customers, but to do so, it is useful to consider the following recommendations:

- **Balancing objectives:** Products driven purely by profit motivation and disconnected from any consideration of customer needs would be provocative at best in a business aimed at low-income households unfamiliar with insurance products. Social objectives are perceived to be a good motive, but also often fail to achieve scale in a commercial venture as they are not reinforced or aligned with company incentive and measurement systems. Placing undue emphasis on either objective limits the degree to which a commercial insurer can engage the broadest variety of business partners. Successful insurers strike a balance between the financial, innovative and social objectives of microinsurance in order for the business to grow in the short term and to be profitable in the medium and long term.
- **Giving yourself permission to innovate:** Success is achieved through an iterative learning process where initiatives are fine-tuned over time on the basis of performance and feedback from the market (*see Chapter 21*). Insurers need to make a committed investment and to try new things in developing the business line, while still maintaining sound business practices. Insurers also need to bear in mind the longer-term prospects of achieving commercial viability, reaching scale and building a stable microinsurance market when developing strategies and structuring microinsurance initiatives.
- **Failing to learn, learning to fail?** In microinsurance, as in all innovations, failure can come in many forms – and result in financial losses for an insurance company or in a social performance that does not meet the expectations of the insured. Measurement of performance against the goal is critical and needs to be objective. Companies should structure their projects to shield the core business from the effects of experimentation and to learn the appropriate lessons as quickly as possible. While large companies have sufficient capital to make some mistakes, if they do not learn from those mistakes their commitment will fade.
- **Learning and adapting locally:** Insurance for the low-income market is largely dependent on local factors, i.e. risks faced by the market, availability of partners and insurance regulations. Growth is likely to be achieved through the success of local initiatives. Success in the microinsurance market is therefore more like a small trickle of successes in individual initiatives, rather than a break in the dam wall where a single innovation changes the face of microinsurance for

commercial insurers. A portfolio of smaller initiatives can outperform substantial investment in any single effort when aiming for innovation.

- **Learning and replicating:** On the other hand, core processes, products and even partners provide enormous opportunity for multi-market replication. Success factors may be applied in different contexts but are likely to be implemented differently depending on local conditions. The challenges of scale, access, data scarcity, and even sales techniques are entirely common to most if not all countries and regions, giving a distinct learning advantage to an insurer able to coordinate or guide efforts across multiple markets.
- **Actively creating and shaping the market:** Microinsurance requires an “ecosystem” around the end-client. Large insurers have the resources and the convening power to bring the different players together. When building sales channels, insurance companies must aim for active participation and co-ownership by the partner – making sure the organization understands the basic principles of the product and supports the creation of a commercially viable microinsurance market. Likewise, insurers can grow exponentially when they learn new methods from their partners.
- **Commitment to creating an enabling environment:** Formal statements by policymakers – such as the G-20 – influence standard-setting bodies. Proactive and inclusive regulatory approaches are being developed in many emerging markets in order to support the expansion of microinsurance. The Access to Insurance Initiative, the International Association of Insurance Supervisors and international development agencies are actively working to establish an enabling environment for microinsurance. Keeping abreast of these discussions, or even engaging in them, can aid development of a more inclusive insurance sector.

State and market synergies: Insights from India's microinsurance success

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India is the global leader in microinsurance innovation. The Indian context brings together a number of factors that contribute to improved risk management for low-income households by effectively governing the intersection between financial inclusion in the insurance markets and the extension of social protection to workers in the informal economy, including:

- **Public investment in safety nets:** At 2.1 per cent of its gross domestic product (GDP), India's share of public spending on safety nets is higher than most low- and middle-income countries (Weigand and Grosh, 2008). India's economic growth has permitted an expansion in social protection since the mid-2000s, particularly through mass health insurance schemes.
- **Public-private partnerships:** To support the extension of insurance coverage to populations below the poverty line (BPL), the government has contracted both public and private insurance companies to manage state-subsidized schemes.
- **Incentivizing through subsidies:** India's central and state Governments have subsidized some insurance products to support productive activities by low-income households, making them more affordable, with a particular preference for agriculture and livestock.
- **Quota-driven innovations:** Insurance companies are required by the Indian Insurance Regulatory and Development Authority (IRDA) to originate a percentage of their portfolio in the "rural and social sectors". Servicing these markets required new approaches, leading to significant innovations.
- **Microinsurance regulations:** In 2005, the IRDA promulgated the "Micro-Insurance Regulations", which reduced the certification requirements to be a microinsurance agent and defined a microinsurance product. This facilitative regulation legalized alternative delivery channels to enable insurers to diversify their distribution methods.
- **Large government-owned insurers:** Despite the rapid growth of private insurance companies, the market is still dominated by large public companies with a mandate and infrastructure to assist the poor.

- **Active aggregators:** Approximately 90 per cent of the labour force is employed in the informal economy or the “unorganized sector” in India. However, there is in fact a high degree of organization in the unorganized sector, through non-governmental organizations (NGOs), microfinance institutions (MFIs), self-help groups (SHGs¹), cooperatives and other aggregators. These potential intermediaries are often positively disposed to insurance, and some even carry the risk themselves outside the purview of the insurance supervisor.
- **Large low-income market:** Out of a total population of 1.3 billion, 42 per cent of rural and 26 per cent of urban households live below the poverty line (Tendulkar et al., 2009). These households, as well as economically active rural households above the poverty line, provide insurers with a huge potential market and the prospect of achieving economies of scale.

The convergence of these factors, all in one very large country, creates a dynamic environment for the development of microinsurance. Section 20.1 provides an overview of the general and life insurance industries in India, particularly with regard to their outreach to the rural and social sectors. The second section considers specific product innovations that have enabled livestock, agriculture, life and health insurance to become relevant for low-income markets. Section 20.3 describes the channels commonly used to distribute insurance to the poor. The chapter concludes by summarizing key factors that have contributed to the development of microinsurance in India, which might provide insights for practitioners and policymakers interested in extending social protection and enhancing financial inclusion in other countries.

¹ A self-help group (SHG) is a village-based group usually composed of 15 to 20 local women. Members make small regular savings contributions over a few months until they have enough capital to begin lending among themselves. SHGs are common in India because they have been promoted by the National Bank for Agriculture and Rural Development (NABARD). Through NABARD's SHG-bank linkage programme, SHGs with a track record of regular repayments with their own capital can access additional funding from banks with re-financing from NABARD. NABARD estimates that there are 2.2 million SHGs in India, representing 33 million members, which have taken loans from banks under this programme. This figure does not include SHGs that have not borrowed from banks (Annual Report NABARD, 2011).

20.1

Industry overview

In 1999 the IRDA, the newly formed regulator, opened up the previously nationalized insurance industry to private insurers and foreign investment. Consistent with the requirements for public insurers, the IRDA obliged all private insurers to have a certain percentage of their portfolios in the rural and social sectors, using the logic described by the then Chairman of the IRDA as “forced familiarity” (*see Box 20.1*).

*Box 20.1***Rural and social sector obligations**

The IRDA issued the “Rural and Social Sector Obligations” notification for all insurers in 2002. The obligations require life insurers to originate 7 per cent of the total lives insured from the rural sector, increasing annually to 16 per cent by the fifth year. For general insurers, the rural obligations start from a target of 2 per cent of their insured premium in the first year, rising to seven per cent in the tenth year. Social sector targets for all insurers begin with 5 000 lives insured in the first year and progressively rising to 55 000 lives in the tenth year of operation (IRDA, 2008).

According to former IRDA Chairman Rao, this “forced familiarity” with rural business will encourage insurers to discover profitable business models to serve this market segment, and in subsequent years they will voluntarily increase their investment and expand outreach to low-income households. Although some insurers see their obligations as a cost of doing business, others have validated this argument by regularly exceeding their rural and social targets.²

Source: Authors.

The Indian insurance industry has experienced significant growth since it was opened up to private companies, with 19 general and 23 life insurance companies starting since 2000. In recent years, the microinsurance portfolio has grown even faster than the insurers' traditional lines. Not even counting coverage under the Government's mass health insurance schemes (*see section 20.2.4*), in 2009–10³ an

² In this chapter, the data reported under “Rural and Social Sector Obligations” is used as a proxy for microinsurance, although not all of the rural insurance business is exclusively focused on vulnerable communities. Wherever available, microinsurance data, referring to products registered under the Micro-Insurance Regulations, 2005, is used to further improve assessment of targeting.

³ The Indian fiscal year begins on 1 April and ends on 31 March, so all data is presented mentioning the two years.

estimated 163 million low-income persons had some form of insurance.⁴ This unrivalled outreach has been achieved by a variety of approaches with public and private insurers, and general and life insurers, taking different paths to serve the low-income market.

Aside from regulatory targets, growth has been propelled by the Government's willingness to provide subsidies to promote access to a range of products, as summarized in Table 20.1. While most subsidized schemes address microinsurance challenges, such as the "willingness and ability to pay" and "limited awareness", some subsidies are designed better than others. For example, a fully subsidized premium may not be appropriate as it does not allow user-fees to signal client value, and thus could result in inefficient products and players. Also poor targeting, when subsidized products are available to clients who can afford to pay, crowds out market-based solutions. This applies particularly to the many subsidized insurance schemes distributed through banking networks providing "directed credit", which is subsidized and targeted for specific purposes (e.g. buying livestock) and/or for specific target groups (e.g. SHG members), but in fact is not a particularly effective means of targeting the poor.

The priority targets and the availability of state-funded premium subsidies to private companies have contributed significantly to the development of their rural portfolios. However, these government interventions are not the only explanation for the private insurers' rural portfolios. Some are also keen to have first-mover advantage, building up their brand in the low-income market, recognizing that millions of India's rural poor will not stay poor for long. One of the best ways of distinguishing themselves from the public insurers, who already have strong brands, is through innovations. Those innovations are particularly powerful if they not only help private players to efficiently undertake rural business, but also provide lessons that could benefit the insurers' traditional business lines.

This section highlights some of the key differences between the micro-insurance outreach of general and life insurance companies, primarily using rural sector data as a proxy to assess performance in serving low-income households.

⁴ These are rough estimates based on published data of state schemes and outreach of insurance companies through other models. The outreach mentioned here does not include the estimated 300 million low-income persons covered by mass health schemes, as described in section 20.2.4.

Table 20.1

Making subsidies work

	<i>Natural and accidental death (for SHG members)</i>	<i>Natural and accidental death (for landless labourers)</i>	<i>Livestock (for mortality)</i>	<i>Agriculture (area yield)</i>	<i>Agriculture (weather index)</i>
Scheme	Janashree Bima Yojana (JBY)	Aam Admi Bima Yojana (AABY)	Livestock Insurance Scheme (LIS)	National Agriculture Insurance Scheme (NAIS) Programme	Weather-based Crop Insurance Scheme (WBCIS)
Year of launch	2000	2007	2006	1999	2007
Risk carrier	Life Insurance Corporation of India (LIC)	LIC	Multiple insurers, mostly public	Agriculture Insurance Corporation (AIC)	Initially only AIC, but now multiple private insurers
Subsidy	50 per cent premium subsidy plus scholarship for high school student	Entire premium is subsidized by central Government	50 per cent premium subsidy	Premium subsidies vary by crop and state, up to 80 per cent; funded 50–50 by the state and central Governments Claim subsidy: Aggregate claims exceeding the premium are covered by Government (implicit reinsurance)	Premium subsidies vary by crop and state, up to 80 per cent
Outreach	130 million lives (2009–10)	7 million households (2008–09)	Nearly 1 million cattle (2005–08) in 100 selected districts	19 million farmers (2008–09)	9 million farmers (2010–11)
Primary distribution channel	Banks through SHG-bank linkage programme	Government schemes and credit linkage programme of regional rural banks	State Livestock Development Board (SLDB) and State Animal Husbandry Department (SAHB)	2/3 of insureds are members of credit linkage programme of regional rural banks; short-term crop loan is insured	Primarily credit linkage programme of regional rural banks replacing NAIS in districts where it is offered

Source: Adapted from various sources, available on Micro Insurance Map, 2011. The Micro Insurance Map is a available databank, located at www.microinsurancemap.com, replete with statistics on microinsurance in India, managed by the Centre for Insurance and Risk Management (CIRM).

20.1.1 General insurance companies

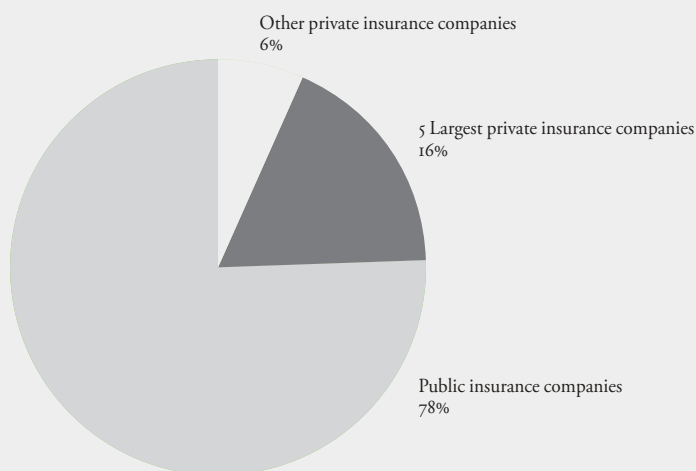
Of the US\$8 billion in general insurance premiums collected in 2009–10, 17 per cent were in the rural and social sector. In 2009–10, ten insurers exceeded their mandated targets, while only one missed its rural target. Furthermore, the rural portfolio grew at a faster rate, with a year-on-year growth of 39 per cent compared to 19 per cent for the overall industry.

With a longer history and higher quotas than the private insurers, the five public insurers are bigger players in the rural and social sectors. In 2009–10, the public insurers – AIC, United India, New India, National and Oriental – had a

78 per cent market share, primarily covering agriculture, livestock and health risks. The five largest private insurers together had 16 per cent of the market. The remaining 14 general insurance companies generated only 6 per cent of the US\$1.3 billion premiums of the rural and social sector (*see Figure 20.1*). Yet, the private insurers' market share has grown steadily from just under 12 per cent (approximately 4 million risks covered) in 2004–05 to 22 per cent (approximately 13 million risks covered) in 2009–10, indicating that private players are undertaking more rural business even though they lack the rural infrastructure of the public insurers.

Figure 20.1

Total rural and social sector premiums for general insurers (2009–10)



Source: *Micro Insurance Map*, 2011.

20.1.2 Life insurance companies

Life insurance premiums in the rural sector amounted to 2.5 per cent (US\$1.5 billion) of the US\$59 billion of total life premiums in 2009–10. Only one life insurer did not achieve its rural and social mandate, while five exceeded their targets.

As the oldest and largest player, Life Insurance Corporation (LIC), India's only public life insurer, has approximately 76 per cent of the overall life insurance market. LIC is required by the regulators to maintain a special rural target of 25 per cent of its total annual lives insured. In 2009–10 it accounted for 95 per cent of all life microinsurance premiums, attributed to its early market entry, its army of individual agents and more recently, exclusive access to state-subsidized microinsurance products. LIC's deep rural market outreach is rivalled only by the Rural Postal Life Insurance (RPLI) products of the Department of Posts,

which benefits from having the world's largest postal network, including 150 000 post offices.

In 2009–10, LIC's microinsurance products, which are a subset of its much larger rural insurance portfolio, accounted for approximately US\$84 million in premiums.⁵ The next largest microinsurance portfolio is that of Aviva Life at US\$1.9 million, illustrating the state insurer's massive market share. However, the private insurers are expanding as they grow to maintain their compliance with their increasing rural targets and, while today the products registered as "microinsurance" are not the most prominent contributors to this portfolio, they are expanding fast.

An important difference between LIC and the private insurers is their distribution models. While LIC relies on a large network of individual agents, a historical legacy that may not be considered a "good practice" for microinsurance today, private insurers typically offer loan-linked products that reach low-income households through MFIs and cooperatives. SBI Life is different because its rural portfolio can be attributed to the bancassurance model; it exploits the extensive rural infrastructure of its parent company, State Bank of India, the largest commercial bank in the country, to reach the borrowers of the SHG-bank linkage programme. Product distribution is discussed in more detail in section 20.3.

20.2

Products

In recent years, India has seen an explosion of new products covering the priority risks of low-income households. This section highlights some of the innovations emerging in the livestock, agriculture, health and life insurance lines.

20.2.1

Livestock insurance

Approximately 100 million Indians derive their livelihood from livestock, as either their primary or a secondary source of income. Despite this huge market, only 7 per cent of the country's livestock are insured. Raising cows and buffaloes is a riskier livelihood than agriculture because an animal's death causes permanent asset erosion, not just a seasonal loss of income. The livestock economy can be divided into two categories: a) large animals, primarily bovines for milk production; and b) small animals such as goats, sheep and fowl. Few products are available for the latter group, even though small-animal owners often include the more vulnerable communities like nomadic tribes.

⁵ Since accurate data on the rural portfolio of life insurance companies is not available, this estimate is based on the mandated rural portfolio target of 25 per cent of its total portfolio.

Since 1971, the Government has catalysed the livestock insurance market through the Small Farmers' Development Agency (SFDA), which has introduced various schemes for livestock-rearing farmers over the years. Historically, livestock insurance has been offered as a compulsory product, linked to bank loans with a 50 per cent premium subsidy. Voluntary distribution through direct sales has a 10 per cent premium subsidy; however, it has high growth potential considering the emergence of private dairies, prospective aggregators that have an incentive to invest in protecting the livelihoods of their milk-supplying farmers (Sharma et al., 2009).

In 2004-05, approximately 80 per cent of the 7.9 million insured cattle were covered by public insurers, particularly United India, the largest cattle insurer. Despite their market dominance, public insurers have introduced few modifications in product design. Even though the Government allowed private insurers to avail themselves of the subsidized rural credit-linked portfolio, few private insurers attempted to cover this pool. In 2007, after the IRDA removed the restrictions on premium rates, six private insurers entered the livestock insurance market, introducing new products and processes to discover a profitable business.

Even with subsidies, premiums from livestock cover account for less than 1 per cent of the total rural premiums. Besides the challenges summarized in Chapter 12 – which include high transaction costs, fraud and moral hazard – the pricing of livestock insurance is complicated by a lack of mortality data on regional breeds and limited information on the net present value, which is necessary to establish the sum assured. There remains significant scope for improving product design, which is generally limited to one-year terms and linked to loans rather than to cattle productivity phases; the risks covered are limited to the death of the animal; and livestock cover is notorious for cumbersome claims settlement procedures – all of which inhibit demand.

The biggest challenge for livestock insurance is the high claims ratios, often exceeding 100 per cent, which is exacerbated by fraud at two levels. At the client level, for example, when insurance agents provide the owner with ear tags to identify the insured animal, the owner may not tag the cattle, effectively allowing the household to insure the full herd for the cost of one animal. Alternatively, owners may cut the tagged ears of live animals and submit them for claims. The second level involves fraud by intermediaries, including agents and banks. For example, if the loan is used for a purpose other than to buy cattle, bank staff may retain the tag for this “paper cow” and then submit it for a claim in the event of the death of an uninsured animal. Veterinarians may also be an accessory to fraud at either level by providing false death certificates for an additional fee (Sharma et al., 2009).

To control fraud, insurers are experimenting with various strategies. For example, IFFCO-Tokio introduced Radio Frequency Identification (RFID) tags

and corresponding changes to its operational processes to improve the identification of insured animals distributed through cooperatives (*see Box 12.2*). As a result, it has experienced an incidence rate of 0.8 per cent, which is substantially lower than the industry average of four per cent. During a two-year pilot test, only four claims were rejected while 117 claims were settled out of a pool of 15 080 insured cattle. Similarly, HDFC Ergo is testing a range of innovative features to reduce claims. Besides controlling fraud through the use of RFID and photographs, the insurer collaborates in providing risk-reduction services, such as vaccination, de-worming and fodder enrichments, to reduce cattle death and improve productivity (Joseph and Ruchismita, 2011).

20.2.2 Agricultural insurance

Agriculture's share of Indian GDP, while declining, remains significant at around 18 per cent (in 2008) and the sector employs more than 60 per cent of the labour force. The need to protect farmers from risks and irregular incomes has been an on-going concern of national policymakers. India has 116 million operational farm holdings covering 163 million hectares, with a vast majority being small and marginal in size. Approximately 80 per cent of farmers operate in less than 2 hectares, and a significant proportion of such households are below the poverty line (GFDRR and World Bank, 2011). Since only 40 per cent of India's gross crop area is irrigated, farmers are particularly vulnerable to adverse weather conditions, punctuated by periodic news of farmer suicides during drought years. This section first describes area-yield insurance promoted by government schemes and then introduces weather-index insurance, initially piloted by the private sector and now also offered as a government programme.

Area-yield insurance

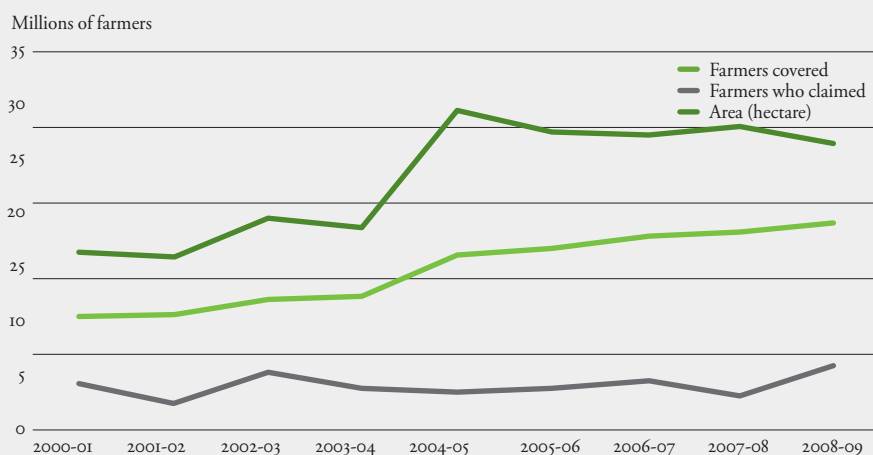
The vast majority of India's farms cultivate rain-fed crops and are particularly vulnerable to the vagaries of the Indian monsoon. During the decade ending in 2009, an estimated 350 million people were affected by drought in India (GFDRR and World Bank, 2011). To protect farmers against agricultural risk, the Government has historically relied on two interventions: a) minimum price support; and b) subsidized crop insurance via area-yield indices. The government-sponsored Comprehensive Crop Insurance Scheme (CCIS) introduced in 1985–86 was replaced by the National Agriculture Insurance Scheme (NAIS) in 1999. Underwritten by AIC, NAIS is usually distributed through rural banks as a compulsory product tied to subsidized crop loans (*see Table 20.1*).

Since farmers plant multiple crops to diversify their risk, NAIS's multi-crop product attempts to insure the farmers' total agriculture income better than CCIS's single crop cover. The NAIS index is based on major individual crop

yields under cultivation in the area, weighted by their acreage. It compares deviations in historical crop yields in that location, and treats all farmers in its defined perimeter as identical in terms of risks and loss. By 2009, NAIS had covered 19 million farmers and 26 million hectares, covering approximately 16 per cent of the cultivated land (*see Figure 20.2*). The scheme was effective in reaching smallholders: the average premium per farmer insured slightly exceeded INR 400 (US\$9). As for landholdings, the average area insured per farmer has come down from 1.6 hectares in 2000–01 to 1.4 hectares in 2008–09, suggesting that the scheme is covering more small and marginal farmers (GFDRR and World Bank, 2011).

Figure 20.2

Growth of NAIS coverage (2001–09)



Source: *Micro Insurance Map*, adapted from AIC, 2009.

Despite these advantages, a scheme that uses an index, rather than a farmer's actual losses, is subject to basis risk (*see sections 4.3.2 and 11.1*). Although the index approach is more cost-effective than assessing the loss of each farm, area-yield schemes still involve high manpower costs in undertaking local crop-cutting exercises to measure yield. In India, this measurement is done by government agencies, which reduces the cost for the insurer, but the insurer cannot control the process of loss assessment. The involvement of the additional party also contributes to substantial delays in claims payout (Sinha, 2007).

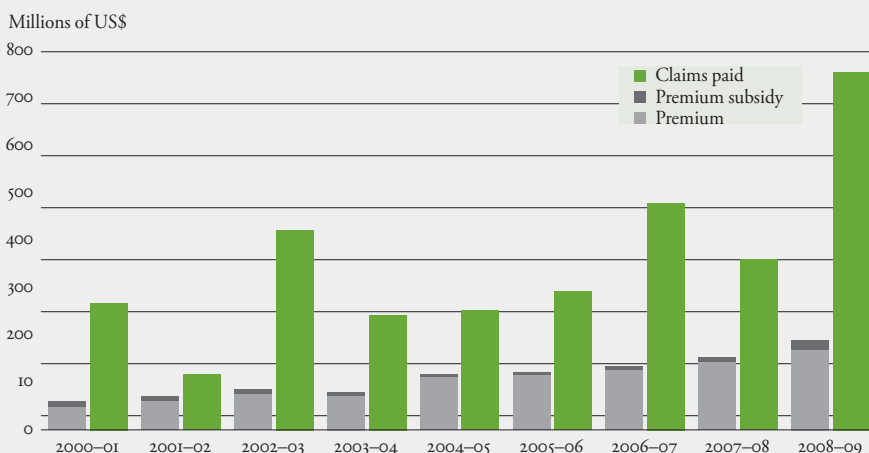
The underwriter, AIC, receives premium and claim subsidies from the Government to keep the product affordable for the farmer. Although NAIS provides limited cover to farmers, the product still has high claims payouts and is inherently unsustainable, as shown in Figure 20.3 – hence the need for implicit reinsurance through claims subsidies from the Government.

While NAIS continues to be the largest agriculture insurance programme, its growth is inhibited by the limitations discussed above. The Government is testing

a new approach, Modified National Agricultural Insurance Scheme (MNAIS), which has key features to make it more relevant to farmers as well as attractive to private insurers. MNAIS is described in Box 20.4 at the end of this section, but first it is necessary to introduce weather-index insurance.

Figure 20.3

NAIS performance (2001–09) (in US\$ million)



Source: *Micro Insurance Map, adapted from AIC, 2009.*

Weather-index insurance

The private sector's involvement in agriculture insurance has primarily taken the form of weather-index cover. As described in Box 4.1, in 2003 the World Bank supported ICICI Lombard and its distribution partner BASIX in piloting India's first weather-index insurance contract, a product that made payouts to farmers based on recorded rainfall (or other weather parameters) instead of actual losses.

The success of the private sector in responding to farmers' specific needs with a profitable business model led the Government to provide subsidies, available to both the public and private insurers, resulting in dramatic increases in product take-up. Nearly two million farmers were covered by WBCIS in 2009–10, which grew to nine million Indian farmers in 2010–11 (Kumar, 2011). Today, India has the largest, most vibrant weather-index insurance market among developing countries.

The evolution of the weather-index market can be described by a review of three topics: 1) contract design; 2) data quality; and 3) distribution models, which provide interesting insights and valuable lessons.

Contract design

An important debate is the trade-off between accurate and complex contracts that are more responsive to farmers' risks, compared to simple, more easily understood products. Before 2008, simpler products were dominant since sales were voluntary

and therefore farmer understanding was crucial. These were very clear contracts, but rarely involved crop-stage specific covers. Crop-stage contracts address the different risks faced during germination, vegetative stage, flowering and maturity or harvesting phase, and allow different covers and payout thresholds for each stage (*see Box 20.2*). It is a difficult choice, as farmers understand simple contracts better, but if they are unable to make claims during bad years, they will lose confidence and are unlikely to renew, which is a strong motivation to invest in contracts specific to crop stages.

Box 20.2

Crop-stage weather tickets

HDFC Ergo, in collaboration with the International Food Policy Research Institute and CIRM, is running a weather-index pilot that attempts to strike a balance between simple, easy-to-understand products, and more accurate but more complex contracts.

In this pilot, weather insurance contracts are sold in the form of tickets that are for specific crop risk phases and clearly state the amount of payout. Using a building block approach, the farmer can choose the amount of cover as well as the crop stage to be covered, allowing flexibility and choice. As the contracts are for shorter risk phases, the premiums are lower and considered more affordable.

For a cropping season, two types of tickets are available for each of the four-month periods. Both tickets have similar benefits but differing probability of payouts. The ticket with a higher payout probability costs INR 352 (about US\$8, equivalent to four days of agricultural wage labour), while the one with a lower probability is available for INR 265 (about US\$6). The first ticket pays in the event of moderate rainfall, whereas the other pays in the event of excessive rainfall, representing severe losses. Both tickets allow a payout of either INR 1 000 (US\$22) per acre when the index reaches the “strike” amount of high rainfall, or INR 4 000 (US\$88) per acre when the index hits the “exit”. Farmers can choose how severe an event they want to cover, and for which phase, allowing them to build their own cover based on liquidity constraints and risk perception. The process of choosing their own cover creates a better understanding and transparency about when and how an index insurance product works.

About 93 per cent of the contracts sold were high value options. This indicates farmers’ preference for moderate risk covers, which have a higher probability of payouts, even when they have a higher up-front cost. As expected, the sales in the three-cover period were uneven with the highest sales in the second cover period. These buyer choices suggest that a customizable approach could induce greater take-up.

Source: Adapted from CIRM, 2011.

With improved data correlations between crop yield and various weather conditions, India has graduated from its pilot years of single-weather, one-crop covers with comparatively weak crop-to-weather correlations. Now products with multi-weather covers are common, which also allows for the development of contracts with greater precision. In theory this lowers the basis risk for the farmer. However, improved product design may not result in increased take-up because the resulting complexity may place a burden on sales and distribution channels (*see Chapter 13*). For example, the multi-peril weather-index insurance product for rice developed by Weather Risk Management Services (WRMS) was subsequently replaced by single peril covers (temperature and rainfall separately), which made distribution and sales easier, even though it increased transaction costs and limited the risk cover for the farmer.

The other concern with data is timing, where a delay in the receipt of certified weather data by insurers leads to claim settlement delays. Some innovations have tried an immediate interim payout approach based on available data to improve turnaround time. An additional way to improve the process is to transfer data automatically from weather stations to insurers.

Weather-index insurance has also evolved to include a broader range of crops, such as coriander and grapes, and additional weather parameters, such as frost for fruit orchards. Such innovations are also valuable for a limited range of non-agricultural risks, as illustrated in Box 20.3.

Not all product evolution has been positive. For example, there has been a change in claim payment periods, resulting in products with less client value. In the pilot years, claims were settled after each crop phase, but now payouts often come at the end of the season because of the limited financial infrastructure and the high cost of reaching farmers. A key advantage of a weather-index contract should be its ability to make immediate payouts to help farmers pay for alternate remedial measures such as hiring water pumps to reduce actual crop losses. Therefore, shorter payment periods should be retained, with payments made via low-cost cash transfer mechanisms.

Box 20.3

Weather-index for non-agricultural groups

Lac insurance for indigenous populations

With support from the Department of Tribal Affairs, NGOs BASIX and PRADAN, WRMS and ICICI Lombard developed a specific product for tribes producing lac, a natural resin secreted by insects that thrive on specific trees. Lac, a highly remunerative income source for forest dwellers, is used to make jewellery, varnish, dyes and sealing wax.

During their short production cycle, the insect larvae are vulnerable to sudden variations in temperature. The weather index is triggered by temperature variation, unlike other contracts that mostly cover extreme conditions. Claims payout is made immediately to allow the insured to buy more larvae in time for a second crop cycle. It is conceptually similar to a “sowing period seed cover” in an agricultural context, which provides replacement seeds if there is scarce rainfall during the sowing phase.

Salt insurance for salt-pan workers

In another example of non-agricultural weather-index cover, insurers IFFCO-Tokio and ICICI Lombard came together to offer a unique contract designed by WRMS for salt-pan workers. Salt pans, mostly in coastal areas, are fields where brine water is spread by seasonal labourers for drying and salt production. The salt-pan workers are typically landless labourers belonging to lower social and economic groups.

This excess rainfall cover contract is unique because it has zero design basis risk. There is 100 per cent correlation between farmers' losses and excess rainfall since the drying salt dissolves when exposed to rain. Such weather-index contracts have very high value for the client. However, after two years the product was discontinued, even though there was substantial interest from the farmers, after catastrophic losses due to Cyclone Laila. The insurers were unable to aggregate salt producers across the country to achieve scale, so the scheme was not large enough to interest reinsurers.

Source: Adapted from Baidya and Ruchismita, 2011.

Data quality

While the starting point is access to digitized historical crop productivity and weather data to identify correlations and develop the index, the expansion of weather-index cover depends on the creation of reliable data transmission mechanisms for weather measurement infrastructure.

A critical driver of the weather-index market was the access to historical data from weather stations by the Indian Meteorological Department. The majority

of stations were just rain gauges and there has been considerable effort to expand the network of automated weather stations (AWS). The investment in AWS was made by various government departments, such as meteorological, space research and educational institutes, and has also attracted investment from private agencies with incentives to access more accurate data on a wider range of weather phenomena (e.g. wind speed). Future efforts to improve the standardization of the data from public and private sources should improve access to affordable reinsurance.

Instead of relying exclusively on weather stations, IFFCO-Tokio is testing new technologies to build transparency and improve claims settlement time, such as the normalized difference vegetation index (NDVI) to reduce basis risk in weather-index insurance (Patankar, 2011).

Similar to the market-making role of microinsurance intermediaries (*see Chapter 23*), the involvement of WRMS, a weather insurance intermediary, has supported the weather-index market in reaching scale by putting together bulk deals and investing in digitizing data and risk modelling. However, in general, poor data quality and uncertainty regarding the impact of climate change (*see Chapter 4*) are on-going challenges, and lead to high reinsurance premiums that could inhibit the development of better and more affordable products.

Distribution

In the initial years, there was only one insurer (ICICI Lombard) and it distributed weather-index insurance through NGOs and MFIs. This relationship served as a learning opportunity from which various products were designed to provide customized solutions for specific risk groups. Subsequently, scale was achieved by diversifying distribution, for example by working with cooperatives and exploiting the rural outreach of agriculture input suppliers and procurement agencies.

The Government responded to farmers' voluntary take-up of weather-index schemes by offering premium subsidies for such contracts, initially to AIC and then to all insurers. The inclusion of AIC in the weather-index market has been a major driver of scale because it enabled cover to be extended to the captive clientele of the credit-linkage programme. The massive volumes of weather-index cover in India, and interest among private players to collaborate with the Government to offer WBCIS, can be partly attributed to the seamless premium collection and distribution. Rural banks deduct the premium from the farmer's loan and the matching state subsidy is made available in a single transaction, minimizing administration costs for insurers.

Such subsidies, however, are restricted to specific crops in identified districts and are not available to all farmers. This selective provision of insurance is inherently inequitable and influences the cropping decisions of farmers, causing them

to focus on mainstream insured crops. Some of the limitations of the WBCIS may be overcome by the MNAIS (*see Box 20.4*).

Box 20.4

Modified National Agricultural Insurance Scheme (MNAIS)

MNAIS is a hybrid yield and weather-index product, combining AIC's NAIS and WBCIS index schemes, pilot tested in 34 districts in 12 states for the Rabi (winter) season of 2010–11 to overcome some of the challenges associated with NAIS. If it runs successfully, it may replace NAIS and provide small and marginal farmers with better risk cover.

MNAIS is using what is expected to be a more accurate basis for calculating the threshold yield for triggering payouts: the average yield of the last seven years excluding up to two years of declared natural calamity. It draws from both the area yield as well as weather index contracts. The area yield for major crops is measured at village level, reducing spatial basis risk substantially. One of the key advantages of the weather-index aspect of the contract that MNAIS retains is its ability to pay claims during the cropping season, providing immediate relief, allowing the farmer to invest in alternate strategies to arrest crop loss for the whole season.

The product covers “prevented sowing” for 25 per cent of the total sum insured if the monsoon is late and the farmer decides to postpone sowing until the rains arrive. The product also covers “post-harvest” losses for up to two weeks after harvest. Due to limited rural warehouse infrastructure, farmers “cut and spread” the crop in the field for drying after harvesting. A sudden bout of rain could spoil the harvested crop leading to substantial loss.

In MNAIS, actuarial premiums will be paid for insuring the crop and hence claims liability will be on the insurer, unlike NAIS where the State provided claims subsidies. This modification could lead to improved price transparency (where the premium reflects the true risk), and stimulate the use of informed reinsurance arrangements instead of the Government acting as a free reinsurer. MNAIS could also lead to better management of the programme, as the actual losses will have to be borne by the insurer. Premium subsidies will continue to make the product affordable.

This product could expand the outreach of weather-based contracts, catalyse private investment in weather infrastructure, ensure better reinsurance pricing by pooling risk from diverse regions, and generate considerable guaranteed demand to encourage new insurers to offer agriculture insurance. While stand-alone agriculture insurance companies like AIC are critical, greater competition is necessary to serve the huge untapped market at an affordable cost.

Source: Adapted from CIRM, 2011.

20.2.3 Life insurance

India has 32 registered life microinsurance products. Aviva Life has the most products with seven, and LIC, the largest insurer, has four products. The growth in the number of registered products, mostly by private insurers, can be attributed to two factors. First, the longer insurers are around and the more their mainstream portfolio grows, the higher their rural and social sector targets, which puts pressure on insurers to grow through new approaches. Second, since the public insurer has been operating longer, the “low-hanging fruit” have been taken, so private insurers have to try new approaches.

As described in Chapter 8, an increasing number of insurers are supplementing loan-linked life products with voluntary products. Both endowment and term life products are being adapted to household liquidity constraints and product preferences, for example:

- **Composite product:** SBI Life, the largest private life insurer, is pilot-testing a composite product – a life product with covers for hospital cash and critical illness, along with a personal accident and an asset insurance (dwelling and contents) cover to increase client value while reducing transaction cost through integrated delivery.
- **Guaranteed benefits:** Bajaj Allianz works in partnership with rural banks and large MFIs to distribute its voluntary savings and insurance cover. By November 2010, this product had scaled to cover three million lives and generated approximately US\$100 million in premiums, illustrating the customers' preference for savings-based products with features such as a high surrender value, even though the maximum insured amount is low.
- **Unlapsable endowment:** Max New York Life's (MNYL) unique Max Vijay product is a savings plus insurance product designed to be “unlapsable”. To accommodate the irregular incomes of the target market, policyholders can top up their account whenever they have additional funds (*see Chapters 8 and 22*).
- **Short terms:** Birla Sun Life's Bima Kawatch Yojana product, which has a three-year term option, and Tata AIG's Navakalyan Yojana, which provides cover for five years, both allow customers to quickly experience the benefits of their premium payments, instead of having to wait for ten or 15 years.
- **Flexible payment options:** LIC's Jeevan Madhur offers a range of premium options, including minimum weekly payment of INR 25 (US\$0.50), fortnightly INR 50 (US\$1), and monthly INR 100 (US\$2.20). LIC has made use of its microinsurance agents to sell more than 100 000 of these policies in its first year, and has also started distributing through NGOs, MFIs and SHGs. This product has also been customized and offered to a previously excluded group: commercial sex workers, where the cost of the medical examination is borne by LIC.

For life insurance, product design is often less of a challenge than getting the product to the target market, which is covered in section 20.3.

20.2.4 Health insurance

Perhaps India's greatest contribution to the global microinsurance discussion has been in the area of health. This section highlights some of the innovations emerging in the critical function of claims administration, and then introduces the accomplishments of the mass health insurance schemes that are subsidized by the Government.

Towards better claims management

India's active and diverse health microinsurance models developed by mutuals, MFIs and insurers have been widely reported (for example, Radermacher and Dror, 2006; MicroInsurance Centre, 2009). Although these efforts have pioneered affordable health microinsurance in India, they have found it difficult to establish systems and processes to ensure high service quality in claims management and supervision of hospitals (*see Box 20.5*).

The partner-agent model, for example, has achieved scale, but has had problems with service quality. The insurers, as the partner in the model, often worked with a mainstream third-party administrator (TPA) to serve their rural health portfolios. However, the limited rural presence of TPAs and their complex claims management processes did not respond well to the basic health insurance products offered by MFIs. The resulting client dissatisfaction led some MFIs to move away from cashless schemes, away from private insurers or away from the partner-agent model. For example, Bandhan, an MFI with more than three million members, reverted to reimbursement-based benefits when it began experiencing loan defaults due to problems with "cashless" claims processing. Claims management had become cumbersome and faced numerous challenges, including incomplete documentation provided by clients, clients' failure to understand exclusions, and occasional collusion between client and provider.

More recently, new TPAs have started "rural focused" business operations. Also, mainstream TPAs encouraged partly by vast state-supported health schemes have modified systems to serve rural clients better. The capacity of the TPAs should continue to play an important role in helping manage huge volumes of high-quality health insurance contracts.

Box 20.5

Bringing in the absent TPA

With limited on-the-ground monitoring and servicing controls, insurers typically rely heavily on third-party administrators to evaluate and settle claims, and carry out controls to detect padded invoices and outright fraud. The TPAs' complicated processes and higher overheads, however, were not originally geared to the microinsurance market, and the resulting claims rejections led to client dissatisfaction.

Because of the difficulties with TPAs, when agents like MFIs and NGOs offered health covers underwritten by insurers, they often built in-house administration capacity or used the insurer's systems for TPA-like services to improve servicing ability. These efforts required investment in customized processes and IT systems to manage the volume of business and to align the systems of the agent, insurer and the healthcare facilities. However, the partner-agent model did not create financial incentives for the NGO or MFI to facilitate better claims servicing or investing in fraud control.

In contrast, the mutual model encourages the scheme to monitor claims and ensure better servicing as the financial benefits of fraud control and high re-enrolments are retained. Some MFIs have switched from the partner-agent to the mutual model to improve claims servicing and cater to their members' specific product needs. Here are a few examples of how players addressed the "missing middle" of claims administration:

- **Carry the risk in-house:** The MFI Grameen Koota moved from working with mainstream insurers to cooperating with a service partner, SAS Poorna Arogya Healthcare, to provide TPA services to its members and manage it as an in-house health insurance scheme. Similarly, the NGO SHEPHERD moved from the partner-agent to the mutual model, with assistance from the mutual "insurer" Uplift. By carrying the risk, both organizations have more incentives to manage claims effectively.
- **Outsource to a trusted administrator:** The MFI SHARE worked with Micro-Ensure in specific locations to handle its data management requirements with the insurer.
- **In-house administration:** NGOs BASIX and Sri Kshetra Dharmasthala Rural Development Programme (SKDRDP) built in-house technology to manage TPA-like operations to facilitate seamless integration of systems with the insurer and allow better-customized products and servicing. They are also providing these services to other organizations.

Source: Authors.

Mass health insurance schemes

What is particularly interesting about health microinsurance in India is the emergence of state-driven mass schemes. These schemes are considered under the broad heading of microinsurance because several of them involve some sort of user fee, and they are often implemented by the insurance industry through public-private partnerships. Furthermore, the design of the schemes has drawn considerably on the experiences of the mutual and NGO-based health microinsurance.

From 75 million people covered under such schemes in 2007, it is estimated that 302 million people had health microinsurance in 2010.⁶ Three of these schemes – Aarogyasri in Andhra Pradesh, Kalaighar in Tamil Nadu, and the national Rashtriya Swasthya Bima Yojana (RSBY) programme – reportedly insured 54 million families by the end of 2010 (PHFI, 2011). Backed by political will and the ability to aggregate huge numbers, these schemes are transforming health microinsurance by addressing key challenges such as data creation, investment in identification technology and setting industry standards for healthcare provision.

Figure 20.4

Chronological evolution of pro-poor mass health insurance schemes in India

Scheme	Yeshasvini Cooperative Farmers Health Care Scheme	Weavers' Insurance	Rajiv AarogyaSri Community Health Insurance Scheme	RSBY	Chief Minister Kalaighar Insurance Scheme for Life Saving Treatments
– Location – Year started – Outreach	– Karnataka – 2003 – 3 million lives	– Multi-state – 2005 – 6.4 million lives (1.6 million families)	– Andhra Pradesh – 2007 – 70 million lives (20.4 million families)	– National – 2008 – 63 million lives (23 million families)	– Tamil Nadu – 2009 – 35 million lives

Figure 20.4 illustrates the timeline of the major schemes and their current outreach. While the first mass health insurance scheme, Yeshasvini, started by the Karnataka Department for Cooperation in 2003, has been an inspiration for the later schemes, most of its features remain unique. It has no risk carrier and is managed as a health fund through a TPA. It is a voluntary product with a premium contribution from the members. In contrast, the Weavers' Health

⁶ These numbers seem optimistic and may be assuming larger family sizes. Based on an analysis of RSBY, Krishnaswamy and Ruchismita (2011) calculate that there are on average 2.7 persons per family for each card issued, whereas the estimate by the Public Health Foundation of India (PHFI) seems to assume the average household size is larger.

Insurance Scheme launched two years later by the Ministry of Textiles for poor handicraft artisans is managed by insurers. The Weavers' scheme is unique because it includes outpatient cover, while the other mass schemes primarily cover hospitalization.

The key features of RSBY, Yeshasvini and the two state schemes are summarized in Table 20.2. The differences between the two state-funded programmes, Aarogyasri and Kalaiggar, are attributed to the health status of each state, suggesting that the product design is customized to respond to regional requirements. Aarogyasri in Andhra Pradesh initially provided a hospitalization cover, but over the years its package expanded to include critical illness. Kalaiggar, on the other hand, operates in Tamil Nadu, which has a more robust and functional public health infrastructure, and consequently it only needed to cover critical illness.

Yeshasvini invests less in identification technology, but all schemes rely heavily on electronic data collection and transmission and have fairly robust management information systems (MIS). With the exception of Aarogyasri, the schemes have few human resources allocated to monitoring and supervision. RSBY and Kalaiggar use biometric cards to control fraud; RSBY issues real-time health cards (at the enrolment camp) to improve customer service and control any rent seeking behaviour by the card-issuing agency (*see Box 20.6*). There is a marked variation in the average cost of hospitalization, which can be attributed to four factors: the type of medical risk covered, the profile of households targeted, the rising healthcare costs in the region, and the scheme's ability to negotiate preferable rates with health providers.

Yeshasvini continues to have a high utilization rate, which could be partly attributed to the client contribution, which increases awareness and induces usage. The concern with this scheme is the rising average claims ratio (157 per cent in 2010), which would make a fund with no insurer or reinsurer insolvent.

*Box 20.6***RSBY: Delivering at scale**

By the end of 2010, RSBY had been launched in 340 districts in 25 states, with 23 million active cards, insuring approximately 63 million individuals living below the poverty line. The successful implementation on such a scale can be attributed to the public-private partnership the scheme has forged. While AarogyaSri and Kalaighar collaborated with one insurer, Star Allied Insurance, RSBY in its first year worked with eight insurers and 16 TPAs to implement the scheme. Many TPAs have more localized strengths, which RSBY can exploit through its district-level bidding and contracting arrangement. While three insurers account for 75 per cent of RSBY's operations, the programme performance is correlated to the TPA and not to the insurer.

In the first year, RSBY had a 2.4 per cent incidence rate, which is lower than one might have expected since the previously uninsured target population would presumably have had a pent-up demand for healthcare services. Utilization rates are higher when cards are issued promptly. Villages that have at least one claim have a higher percentage of cards activated within the first 20 days of enrolment. To improve enrolment as well as usage, the scheme may need to engage in direct contracts with TPAs, instead of only contracting the insurers. A direct relationship with TPAs may improve performance monitoring and avoid multiple levels of sub-contracting of enrolment activities by TPAs.

Regions with more networked private hospitals show greater utilization, with a 0.2 per cent higher hospitalization rate. This could be attributed to the perceived (or actual) better quality of health infrastructure and to the availability of supplies at private facilities, and also to the proactive seeking of business by the private hospitals. RSBY is currently implementing a quality improvement initiative, which relies on a tiered incentive structure to encourage public and private hospitals to improve their health infrastructure.

Source: Adapted from Krishnaswamy and Ruchismita, 2011.

Table 20.2
Comparative features of the four largest mass health insurance schemes

Features	Criteria	Yeshasvini (Karnataka) 2003	Aarogya Sri (Andhra Pradesh) 2007	RSBY (National) 2008	Kalaigaur (Tamil Nadu) 2009
Product	Unit of enrolment	Individuals	Families	Families	Families
	Sources of funds	Contribution: Beneficiary 58% + Government 42% (in 2009–10)	by state	US\$0.60 by beneficiary +75% by centre and 25% by State government in most cases	by State
	Premium rate in 2009–10	US\$3.30 per person	US\$6 per family	Average US\$12 per family	US\$10 per family
	Maximum insurance cover	US\$4,444 per person	US\$3,333 per family with additional buffer of US\$111	US\$666 per family	US\$2,222 over 4 years, per family
	Common operations	Cardiac, ear, nose, and throat (ENT), general surgery, paediatric, obstetric, ophthalmic operations	Oncology, cardiac, trauma, gynaecological and urinary surgeries, general surgeries	Medical treatment, ophthalmic operations, neurology, infectious diseases, gynaecological and obstetric operations	Orthopaedic, oncology, urology, cardiology, hysterectomy, ophthalmology and ENT
Management tools	Cost containment measures	– TPA provides pre-authorization for all procedures – Tariffs for 1600 procedures pre-negotiated	– Predefined diagnostic package rates and pre-authorization control for medical escalation – MIS, medical vigilance teams and deep network of project monitoring staff in hospitals	– Smart card to identify verification and prior authorization – Close ended diagnostic package rates for common operations. – In-depth analysis of claim experience	– Predefined diagnostic package rates and pre-authorization control for medical escalation, – Discharge planning with liaison officers
	IT tools used	– Electronic claims submission – Software in all network hospitals, linked to TPA's systems	– Digital signature for all users, patient digital photographs pre- and post-procedure – Comprehensive MIS and electronic claims operation and payments	– Photos and biometric data of families collected on smart chip at enrollment – Smart cards enable offline authorization and batch transfer of data	– Digital smart card to identify beneficiary and family – Web-based pre-authorization and claim submission – Webcams for coordination and monitoring of liaison officers in network hospitals
	Hospital empanelment criteria	Minimum 50 in-patient beds + intensive care (ICU), ambulance, qualified doctors	Minimum 50 beds and other infrastructure criteria like ICU with 2 ventilators	At least 10 beds + medical, surgical, diagnostic facility + registration with IT department	Minimum 50 beds
	No. of full-time staff in implementing agency	Less than 10	117	Approximately 10 at central level and 100 at state nodal agencies	Less than 10
Performance	Number of beneficiaries (Sept. 2010)	3 million	Approximately 70 million (20.4 million families)	63 million	35 million
	Average cost per hospitalization (INR)	8,240	27,848	4,262	33,720
	Number of hospitalizations per 1000 persons	22	5	25	4
	Claims ratio	157%	69.6–128.3% (average 89%)	About 80% in 2009–10	80%

Source: Adapted from PHFI, 2011.

20.3 Distribution channels

The distribution of insurance to low-income households is difficult for several reasons, including the challenges of accessing remote areas and encouraging take-up by individuals who lack experience with complex financial products (Gaurav et al., 2011). In addition, poor households by definition face liquidity constraints in paying premiums and are reluctant to buy an intangible product with benefits that may or may not be available at some point in the future.

Listed below, more or less chronologically, are four prominent channels through which insurance has been distributed in rural India with attempts to address these challenges. Initially, before the term microinsurance was used, the Government's extensive rural banking infrastructure, the Post Office, and LIC's agent network were the primary channels for distributing affordable products, and today they remain the most prominent. In the 1990s and early 2000s, NGOs and mutuals built upon their social capital in the community to educate households in insurance and risk management, and offer customized products. Later, MFIs entered the market and provided a solution to the affordability problem by financing premiums. They also offered strong data and cash management systems, and helped facilitate the evolution of the sector from a "development" initiative to having a more commercial orientation. More recently, insurers have expanded their distribution strategy to include rural supply chains and technology-enabled direct sales channels such as rural Internet kiosks and banking correspondent networks, which have a high potential to help insurance achieve scale with basic products at affordable prices.

20.3.1 Government-facilitated channels

Before the introduction of private insurance companies in India in 1999, insurance distribution to rural areas was generally through three main channels: the vast network of LIC agents, the Government's financial infrastructure, and India Post.

For decades, LIC relied on its agents to sell life policies across the country. The scalability of this channel is attributed to three factors: 1) LIC's state-directed mandate to serve low-income households; 2) LIC's robust brand which is well known in most rural areas; and 3) its popular savings-based products with features such as return of premium. Even though its agent commission structures are at par with industry standards, the large and stable business volumes, government subsidies, and an elaborate agent development programme contributes to the viability of the model. One of the factors contributing to their popularity is the agents' ability to offer a reliable savings instrument through a convenient "doorstep service". This distribution model remains effective today. In 2009–10, LIC agents sold 38 million of the industry's total 45 million life insurance policies, highlighting these agents' success and their relevance for LIC.

India has over 32 000 rural bank branches, mostly public-sector commercial banks and regional rural banks, approximately 14 000 cooperative bank branches and 98 000 primary agricultural credit societies (PACS) (Basu, 2006). This vast network of government-dominated rural financial institutions provides directed credit, which is often accompanied by the associated mandatory and subsidized insurance cover. In addition, these financial institutions maintain a prominent life and personal accident insurance portfolio.

India Post is the world's largest postal network, with 90 per cent of its post offices in rural areas. Its long history and deep outreach has helped make it a successful channel for the delivery of financial services, managing more than 240 million saving accounts. In 1995, India Post introduced its Rural Postal Life Insurance (RPLI) scheme with a specific mandate to provide cover to rural households, disadvantaged persons and women workers. In 2009–10, RPLI had 9.9 million active policies with an aggregate sum assured of INR 596 billion (US\$12 billion) from its six life insurance products.⁷ Besides distributing its own product line, the postal network also acts as an agent to distribute Oriental's general insurance products. Oriental's personal accidental insurance policy at an annual premium of INR 15 (US\$0.30) for a sum insured of INR 100 000 (US\$2 222) has been particularly popular (India Post, 2010–11).

20.3.2 **Mutuals and NGO-led models**

Mutuals and NGOs are community-based organizations with broad development agendas that also use insurance to achieve their objectives. They tend to be involved in diverse activities, such as women's empowerment, livelihood creation, disaster relief, and infrastructure development such as schools, wells and clinics. India is fortunate to have more than 25 000 civil society organizations, many of which have paved the way for the present vibrant microinsurance market, particularly health cover by community-based health insurance (CBHI) schemes.

Membership in CBHIs has been stable due to the high value provided by their client-responsive products and services, but financial viability has been a concern. Members have positive perceptions of their unique features, such as payment of premiums in grains, no-claims bonuses and loyalty incentives that increase the cover limit from the previous year. Greater product maturity has been demonstrated through additional services. For example, SKDRDP's scheme provides surgical and non-surgical hospitalization without waiting

⁷ The six products are Whole Life, Convertible Whole Life, Endowment, Anticipated Endowment for 15 and 20 years, Joint Life Endowment, and Children's Policy. In 2008–09, 45 000 claims were settled amounting to INR 1.3 billion (US\$26.4 million). All operations of RPLI are computerized (India Post, 2010–11).

periods for domiciliary treatment,⁸ maternity services, accidental death and natural calamity covers. Other CBHIs offer “value-added services” ranging from consultations through telemedicine to the provision of drugs and ambulance services. CBHIs tend to be affordable when they work in tandem with the government health infrastructure to ensure easy access to care. They also intervene to increase access to drugs at affordable prices.

While these models have high re-enrolment levels and perceived higher client satisfaction, they are often unable to scale up due to limited management capacity and insurance expertise. There are some notable exceptions, such as the DHAN Foundation, VimoSEWA, SKDRDP and Uplift (*see Box 5.1*), which have all shown impressive membership growth, but in general CBHIs tend to remain small.

The relationship between CBHIs and insurers has evolved over the years. In some cases, CBHIs prefer to carry the risk themselves (e.g. DHAN Foundation); others work in partnership with insurers for standard covers and then retain some of the risks to provide benefits that the insurers do not cover (e.g. VimoSEWA and SKDRDP).⁹ However, CBHIs that retain all of the risk often offer products with limited cover in part because reinsurance facilities are not available to them in the current regulatory environment. Indeed, these schemes operate in a regulatory vacuum because IRDA recognizes only insurance companies as entities that can offer insurance contracts.¹⁰

The mass health insurance programmes such as RSBY, which target similar populations, may also pose as competition to mutuals and NGOs. To accommodate these social protection programmes, community-based schemes are exploring ways of supplementing the benefits provided by the Government. Government programmes offer a unique opportunity to involve CBHIs by building on their core skills of community mobilization, which could improve enrolment rates and client awareness of the mass health schemes. Additionally they provide capacity to monitor local health facilities, which would be mutually beneficial as it could ensure better health services for low-income households while providing greater legitimacy to mutuals and NGOs.

⁸ Domiciliary hospitalization is provided when the condition of the patient is such that he or she can be treated from home under nursing supervision.

⁹ For example, SKDRDP's health scheme has a “zero rejection” policy whereby the NGO covers claims it considers genuine but are not approved by the insurer. It also offers domiciliary treatment cover and rest allowance, which the insurer does not. However, in only three of its seven years of operation have the claims paid by the scheme been less than total premiums collected, making it difficult for SKDRDP to find private insurers, who, unlike public insurers, rarely have access to state subsidies and are keen on insuring sustainable portfolios.

¹⁰ For more details about regulatory conditions for mutuals and community-based schemes, see section 25.4.

20.3.3 MFI distribution

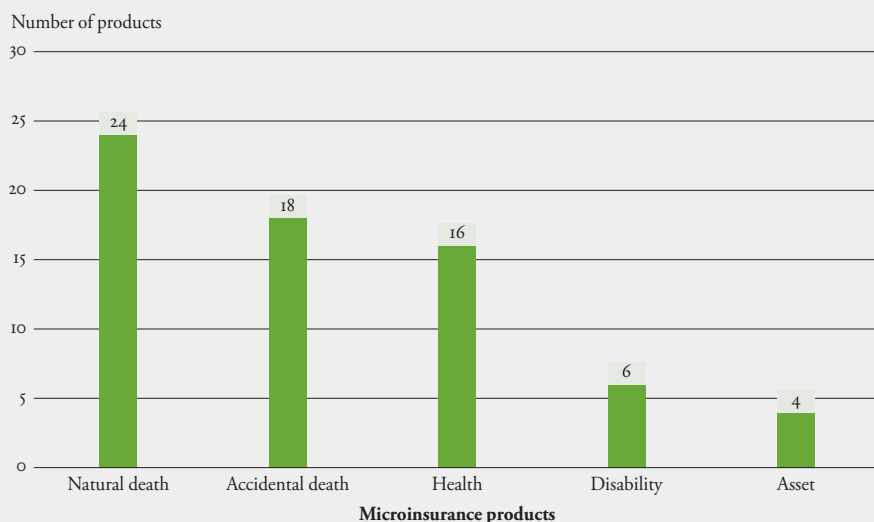
Unlike NGOs and mutuals that often provide microcredit as one of many interventions in the community, Indian MFIs are focused primarily on providing financial services. Their close links to their clients reduce transaction costs, adverse selection and fraud for the insurer. In addition, credit-linked insurance decreases the MFI's repayment risk, and therefore incentives for the delivery channel are well aligned with the interests of the insurer. With the exception of the 2010 Andhra Pradesh crisis, the success of microfinance in India raised hopes that these institutions with strong data and cash handling systems could serve as an effective channel for the provision of insurance and other risk management solutions.

MFIs are spreading rapidly in India, thus representing a scalable delivery channel. According to the industry association Sa-Dhan, MFIs served more than 26 million customers in 2009–10, an 18 per cent growth in clients and a 56 per cent growth in the loan portfolio from the previous year (Srinivasan, 2010). Compulsory credit-linked products have already demonstrated how MFIs can help insurers reach their rural targets. There have been problems with more ambitious products, however, which can be partly attributed to the insurers' lack of capacity to cope with clients and healthcare providers in rural areas, as well as the misalignment of incentives where MFIs are only compensated for originating policies, not for servicing them.

In 2007–08, CIRM surveyed 47 MFIs to understand their involvement in microinsurance and found that the vast majority of the products were mandatory and credit-linked on behalf of insurance companies. Figure 20.5 shows the type of products offered.

The few voluntary products primarily covered health and accidental death. While there is a demand for health risk solutions, available products generally cover rare catastrophic events and therefore do not respond to households' needs to cover moderate and more frequent risks. MFIs have found it difficult to offer affordable voluntary cover because of two major factors: a) staff are ill equipped to advise households on risk management solutions; and b) it consumes considerable staff time. Investing in client education and insurance origination is difficult for Indian MFIs known for their streamlined processes aligned to offer a basic loan product. Few MFIs have modified processes to accommodate product diversification.

Figure 20.5

The top five products offered by MFIs¹

¹ The natural death category includes credit life and products that have pension and money-back features. The accidental death category includes personal accident insurance and disability covers.

Source: *Micro Insurance Map, 2011.*

Insurers working with MFIs often assume that they have the ability to provide on-the-ground support for the early reporting of claims and assistance to beneficiaries in producing the necessary documentation. Although many of the larger MFIs are able to support claims settlement and manage insurance activities, this is not the case with newer, smaller MFIs. Over half of the MFIs surveyed did not maintain a separate microinsurance balance sheet, did not undertake claims analysis, and did not invest in staff training to deliver microinsurance.

Even large, capable MFIs can be risky delivery channels. Insurance is not their core business, but rather a supplementary activity. The microfinance crisis in 2010 directly affected the portfolios of large, and some medium-sized MFIs with substantial exposure in the state of Andhra Pradesh. The crisis had additional global implications, as described in Box 20.7, which could present an opportunity for microinsurance depending on how players respond to the regulatory change that prohibits MFIs from charging clients service fees in addition to the commissions they receive from insurers.

*Box 20.7***Opportunity in the crisis?**

A rivalry between competing MFI and state-supported SHG models in Andhra Pradesh had been simmering for years. In 2010, the initial public offering of SKS, India's largest MFI with a sizeable share of its portfolio in Andhra Pradesh, along with media reports linking loan collection practices to suicides, prompted Andhra Pradesh's Chief Minister to pass "an ordinance to protect the women self-help groups from exploitation by the microfinance institutions". This ordinance sought to impose a range of new conditions on MFIs, including district-by-district registration, requirements to make loan repayments near local government premises, a shift from weekly to monthly repayment schedules, and other measures to contain supposedly unethical collections, high interest rates and profiteering. This ordinance has contributed to a general environment where MFI ground-level operations are impeded and loan repayments for MFIs in Andhra Pradesh dropped dramatically. MFIs unable to effectively negotiate their financing could become illiquid and insolvent.

Following concerns about customer protection, the banking regulator, Reserve Bank of India, imposed an interest-rate cap on MFIs' loans. In this environment, identifying alternate sources of revenues are critical for MFIs to survive. As they explore other revenue-generating opportunities, the crisis may become an opportunity for microinsurance. The big question is whether microinsurance can become part of the MFIs' core business, and whether they can evolve beyond mandatory loan-linked schemes to offer a range of customized insurance and risk management solutions.

Source: Adapted from CGAP, 2010; Balkenhol, 2010.

20.3.4 New distribution channels

Even though MFIs are growing rapidly, they reach only a small percentage of the rural population. Indian insurers are also distributing cover to the poor through new channels, including supply chains, banking correspondents and direct agent sales.

Rural supply chains: Other aggregators involved in extending insurance in rural areas include agriculture supply chain firms, such as:

- **Dairies:** In Tamil Nadu, United India in collaboration with Hatsun Dairy is attempting to address the liquidity constraints of rural households by distributing livestock insurance where premiums are paid up-front by dairies and collected against the household's milk income.
- **Tractor sales points:** HDFC Ergo distributes state-subsidized weather-index insurance in Madhya Pradesh through a tractor retailer.
- **Fertilizer and seed companies:** Similar to the bundled personal accident cover IFFCO offers with its fertilizer bags, Pioneer Seeds also experimented with a free insurance cover, underwritten by ICICI Lombard, which would pay benefits in seeds if there was insufficient rain during the germination period.¹¹ Such a link reduces marketing and distribution costs for insurance.
- **Farm input outlets:** AIC has leveraged agricultural input providers such as Hariyali Kisan Bazaar to distribute agriculture insurance.

Rural Internet kiosks: Internet outreach in rural India has been expanding. One big fillip to this growth has been the Government's ambitious e-governance plan to set up kiosks in rural areas to facilitate information and data services. Known as common services centres (CSC), these kiosks with an Internet-connected computer are delivery points for public, private and social sector services. As of August 2011, there were 96 000 functional CSCs in rural India managed by 15 private state-designated agencies (SDAs). Some SDAs offer insurance, such as SARK Systems offering products by Birla Sun Life and HDFC Ergo, while 3i Infotech has collaborated with MNYL to distribute life insurance. Besides the Government's CSC network, there are also private kiosk channels, such as COMAT, which distributes LIC's life insurance products through its 2 000 rural business centres in five states (Department of IT, 2011).

¹¹ This product was offered for one year with mixed success. A key challenge was the lack of incentive for the retailers to undertake the additional paperwork involved in providing insurance receipts. Also, since the insured year was a good year, no claims were paid. According to the retailers, the intangible benefit of insurance did not influence the farmers' seed purchase decision as much as the popular free umbrella scheme of previous years (Akhilandeswari and Patankar, 2010).

Box 20.8

New distribution channels and technology

An important factor supporting the emergence of these new distribution channels is the availability of new technologies that provide a “light” customer interface in rural areas without a branch office infrastructure, facilitate transparent communication between the various organizations involved in the supply chain, and improve the claims experience. Three technologies that support different aspects of that process are mobile phones, PoS devices and biometric smart cards.

Mobile phones

Even though Indian regulation inhibits premium collection through mobiles, they have been used for other purposes, such as:

- **Insurance origination:** Thinkways, a mobile technology player, has collaborated with HDFC Ergo to develop a mobile application for insurance data collection and policy issuance.
- **Value-added services:** WRMS offers weather forecasts as text messages along with its insurance products to improve client retention.
- **Transaction accounts:** While banking correspondent FINO uses PoS machines and mobiles (*see Box 25.6*), Eko relies exclusively on mobile phones to open up transaction banking accounts, which will be a powerful platform for insurance distribution.

Point-of-sale devices

- **Connectivity challenges:** MNYL piloted PoS machines because there was an assumption that policyholders would want receipts when making their premium payments. Yet the PoS devices had major connectivity problems and were therefore eventually scrapped in favour of scratch cards and mobile phones, both of which were well received by customers.
- **Remote diagnosis:** CARE Foundation uses a handheld device to offer outpatient insurance services through a village health champion (*see section 24.2.2 and Box 5.3*)

Biometric cards

- **Fraud prevention:** RSBY along with other mass health schemes employs a biometric smart card to reduce identity fraud.

Linking client enrolment with transaction processing systems, technology players such as Gradatim offer front- and back-end solutions for intermediaries to allow greater integration of systems among players. This integrated approach streamlines processes and reduces the cost of sales, underwriting and claims administration.

Source: Authors.

Bancassurance and banking correspondents: SBI Life, the largest private life insurer in the country, distributes the majority of its portfolio through the bank branches of its parent company to reach self-help groups. The new variation of bancassurance is with banking correspondent companies, such as Financial Information and Operations Network (FINO), A Little World and Eko Indian Financial Services, which are catering to the huge unmet demand for convenient banking services and offering an avenue for insurance distribution. This channel is unique because it relies on voluntary sales by a local agent, so products must be simple and pre-underwritten, with easy claims adjudication. Bharti Axa has collaborated with Eko to provide Bachat Bima (savings insurance), while HDFC Ergo's alliance with FINO sold 100 000 personal accident policies. These products are part of the trend to achieve high business volumes by distributing simple, low-value, affordable products.

Direct sales: Historically LIC, and more recently Tata AIG, have used individual agents to deliver life insurance in rural areas. A more recent innovation with potential to scale has been MNYL's technology-enabled agents distributing the Max Vijay product and servicing it through point-of-sale (PoS) machines. This model has experienced mixed success. Although the insurer managed to sell more than 90 000 policies, it had less success encouraging top-ups, or the on-going payments, possibly because the completely flexible approach with no payment schedule was too flexible, and did not instil sufficient discipline (*see Chapter 8*).

In general, the potential success of many of these new delivery channels hinges on technological solutions, as illustrated in Box 20.8, which facilitate greater outreach and efficiency of microinsurance (*see Chapter 24*).

20.4

Conclusion: Catalysts of success

By most accounts, the development of microinsurance in India is a success story. While there is certainly room for improvement, anyone interested in expanding social protection and/or developing inclusive insurance markets could learn valuable lessons from the Indian experience. Perhaps one of the more interesting observations is how closely integrated the state and the market can become.

Based on the evidence from India, the following are critical to a sustainable and scalable microinsurance market: 1) government commitment; 2) conducive regulation; 3) technological solutions; 4) new stakeholders; and 5) specialized products.

1) Government commitment

- **Public insurers and market liberalization:** Large public insurance companies with an explicit mandate to reach underserved areas have been a major asset for the development of microinsurance in India. However, the participation of private insurers with foreign investment has been critical to encourage competition and stimulate innovation.
- **Cautious allocation of subsidy:** Premium subsidies can be a way to incentivize markets to provide relevant protection for the poor. However, subsidies that crowd out market-based solutions should be avoided. Some government schemes, like the agriculture and livestock programmes, end up catering to large and medium-sized farmers who can afford insurance. In addition, products with subsidies at both ends – premiums and claims – inhibit transparent price discovery and make it more difficult to produce a reliable evaluation of programme costs and success. It is also advisable with subsidized products to maintain partial premiums, which allow users to signal the relevance of the product and its providers through take-up and renewal.
- **Accreditation and standardization of infrastructure:** The government can be an important player in creating industry-wide standards, which would lead to greater efficiency as service-quality monitoring costs for insurers diminish. For example, mass health schemes have started to create protocols and to invest in the accreditation of health providers and standardization of health care. In agriculture insurance, to improve data reliability and allow reinsurers to charge lower “unknown risk” premiums, a certification process for data from private weather stations has been implemented. Going forward, a more comprehensive accreditation and standardisation process will lower entry barriers for insurers.
- **Public-private partnership:** The Government's transition, from directly providing insurance through its own insurers and distribution channels, to financing premiums for portfolios managed by public and private insurers, has successfully supported the achievement of scale, as seen in the mass health insurance schemes and weather-index insurance market. Effective implementation requires a transparent tendering process and the public sharing of risk data.
- **Relevant infrastructure:** Microinsurance has benefited significantly from extensive financial sector infrastructure, with its network of bank branches, post offices, Internet kiosks and, soon, banking correspondents. It is important to also consider healthcare facilities, weather stations, telecommunications and other supportive infrastructure that are critical to the expansion of microinsurance. Where possible, governments should encourage the private sector to invest in some of that infrastructure.

2) *Conducive regulation*

- **Forced familiarity:** The IRDA's Rural and Social Sector Obligations have contributed significantly to ensuring that insurers focus on the low-income markets. With many companies exceeding their rural and social sector targets, it appears that the industry sees microinsurance business opportunities. Quotas are controversial and certainly not for everyone. But would the private companies have become involved in microinsurance if they had not been obliged to? Perhaps some would, but not with the same level of investment and commitment that they have shown to date. Microinsurance has developed more quickly in India because of the rural and social sector mandates.
- **Microinsurance regulations:** Unlike the obligations, which are mandatory, the Micro-Insurance Regulations, 2005 are facultative in nature, to create an enabling environment to help insurers serve low-income households. While the results have been mixed, the regulations have allowed NGOs, SHGs and some MFIs to operate as microinsurance agents and offer both life and non-life products, providing a legal identity for social aggregators.
- **Supportive regulation in allied sectors:** Draft guidelines from the Ministry of Health and the Ministry of Information and Technology on issues such as e-health, via the Internet, and telemedicine have sent positive signals for private investment in more comprehensive health insurance products involving alternative models of healthcare provision and health information management.

3) *Technological solutions*

- **Identification systems:** Most products at scale have adopted new identification technologies, such as RFID and biometrics, to improve efficiency, control fraud and ensure timely claims settlement. Efforts to create a nationwide unique identification number will also make significant headway towards addressing the challenges of identification and data management, and will enable insurers to reduce origination and claim settlement costs.¹²
- **Information management:** Technology platforms are needed to allow seamless interaction among players: between insurers, TPAs and the distribution infrastructure. Such technologies have also allowed insurers to harness existing infrastructure such as post offices and banks.
- **Front-end solutions:** Investment in tools such as the use of point-of-care diagnostics (e.g. CARE Foundation in its outpatient insurance pilot) and

¹² Approximately 9.5 million individuals have already received the Aadhar unique identification card. It will store basic demographic data and biometric information on each individual, such as photograph, ten fingerprints and an iris scan, in a central database. A similar effort in Pakistan titled National Database and Registration Authority (NADRA) has already covered 96 million individuals and has been valuable in identifying households for delivery of government programmes.

hand-held devices (e.g. by MNYL) is required to provide reliable and low-cost products. Going forward, it is anticipated that insurers will make use of technology-heavy channels such as banking correspondents, which use mobile and PoS devices along with biometric cards to address operational challenges.

- **Risk reduction:** Technology does not mean just high tech; many low-tech solutions can make significant contributions to better risk management practices, for example through health education of preventable diseases and improved livestock management practices. Insurers have incentives to prevent claims, which result in positive development results.

4) *New stakeholders*

- **Specialized players:** WRMS played a critical role in enabling the weather insurance market to reach scale through innovative products customized for specific risk groups, distribution channels and crops. Now software companies are emerging, such as Thinkways and Gradatim, to build information systems for origination and claims management while creating actuarial data for programme improvement.
- **Third-party administrators:** Microinsurance requires huge volumes and insurers often do not have the in-house capacity to manage the administration themselves. For health microinsurance, TPAs can play a critical role in supporting the development of large schemes, although they are not for everyone. Dissatisfaction with administrators has led some MFIs and NGOs to set up in-house processing centres, which reduce claims origination delays and overall claims management time. Such efforts require closer collaboration with insurers to ensure seamless process integration.
- **Alternative distribution:** The next wave of distribution channels may be the most promising – including agriculture supply chains, banking correspondents, kiosks offering Internet access, and local retailers with point-of-sale devices – all focused on facilitating access and reducing transaction costs for customers. Incentives are better aligned where distributors have a vested interest in partnerships, such as dairies that want to ensure the predictability of milk supply or seed companies that provide benefits in kind.

5) *Specialized products*

- **Portfolio covers:** With a huge untapped market, the microinsurance industry's key challenge has been that of market entry, i.e. reaching out to households that have had no prior insurance access. Products that are light and can easily go “viral” have received greater attention from practitioners. Transaction cost is a prominent part of microinsurance products, being as high as 40 per cent of the premium, making formal insurance undesirable for households. Low insurance

literacy further exacerbated by a lack of sales channel training makes direct sales costly and exposes the client to possible mis-selling. An alternative, more affordable approach to market entry is to offer portfolio or meso-level covers to intermediaries, as tested by BASIX for its agriculture loan portfolio, which circumvents the client education cost and helps cover insurable risk at affordable rates.

- **Composite products:** With the weak last-mile connectivity available to low-income households, life and general insurers face distribution problems. While the microinsurance regulation has allowed composite products, few insurers have offered them. The SBI Life composite product aimed at insuring life and property risk cuts down on a double transaction cost to the household, and therefore may be a step in the right direction towards more affordable, comprehensive cover.
- **Products for moderate risks:** Many initiatives offer cheap products that cover low probability events to make them more affordable. These products tend to generate fewer claims, leading to low re-enrolment rates, which is an important yardstick for measuring perceived customer value. To increase value, products can give households the option to choose between moderate and catastrophic covers, increasing household awareness of cover and exclusions.
- **Providing value-added services:** The preferred model of bundling services would be where the additional package reduces the insured risk, thus aligning the interest of the insurer (or the intermediary) in delivering it. For example, intermediaries may provide vaccination and fodder enrichments with cattle insurance. Another such example is the provision of outpatient coupons or healthcare camps to reduce incidents of hospitalization. Such arrangements ensure that the clients receive something tangible for their premium, even if they are unable to make a claim, increasing the perceived value of the product.

The Indian achievement over the past decade to protect the poor through the involvement of all sectors of society has been nothing short of remarkable.

Certainly, India has not figured everything out. There is a need to recognize that poverty and vulnerability are urban as well as rural phenomena, and to consider interventions that will benefit slum dwellers and migrants. The compulsory nature of many state-subsidized products does not allow feedback for product improvement. Additionally, dependency on the credit programme and banking network reduces the ability of insurers to control the quality of their portfolios. There is certainly scope for improved consumer education and consumer protection, to support sales while avoiding a microfinance-like crisis in the microinsurance sector. And the regulatory constraints that prevent insurers from using mobile-phone-based insurance sales and premium collection are impeding the next wave of innovation.

Regardless of the challenges that remain, India's success, involving a diversity of approaches and players, combining financial inclusion and social protection, serves as a beacon of inspiration.

Pricing of microinsurance products

Denis Garand, Clémence Tatin-Jaleran, Donna Swiderek and Mary Yang

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The premium or price of a microinsurance product is an important feature that affects client value and viability. If the premium is too low, the plan may collapse; if it is too high, the take-up may be low (*see Box 21.1*). A clear understanding of each component of the premium allows one to assess the validity of the proposed price when negotiating with a risk carrier or when selling to customers.

The pricing of a microinsurance product cannot be isolated from the context in which the product is offered or from the product design itself. Pricing is heavily influenced by the socio-economic state of the target market, the way the product is distributed, the operational processes that support the product and the overall management of the scheme. While the steps required to price a microinsurance product are similar to those for a mainstream insurance product, pricing specialists must adapt to the sparse data available, take different factors into consideration and assess expected trends to develop a logical price for a market with limited capacity to pay. To maintain relevance, experience with the product must be continuously monitored and the pricing structure refined once sufficient observations have been made.

Proper pricing is crucial for the long-term viability of a product. Microinsurance providers should seek pricing assistance from specialists with actuarial skills. Perhaps more importantly, microinsurers must develop a deep understanding of how pricing is affected by product features and market behaviour, as well as by operational and administrative processes. Successful pricing specialists strike a balance between affordability and viability by understanding the target market, working closely with the product design team, and liaising with other stakeholders who influence product performance.

This chapter, which complements Wipf and Garand (2006), presents the pricing cycle, discusses the handling of data limitations and expands on the additional factors to be considered when pricing a microinsurance product. The chapter concludes by demonstrating the experiences of two organizations and suggesting additional work that can be carried out by the actuarial community to address the current pricing challenges.

Box 21.1

Consequences of gross pricing errors

It is important to understand the possible consequences of errors in the pricing of a microinsurance product. These errors affect not only the financial results of the provider, but also the nascent microinsurance market.

If the premium is set too high:

- Low take-up may result if potential customers perceive a product as unaffordable or as providing poor value. If take-up is low or does not increase over time, scale is not achieved and sustainability cannot be attained.
- Anti-selection may increase because an expensive product will attract only clients who see value in a high-premium product, i.e. those more likely to submit claims.

If the premium is set too low:

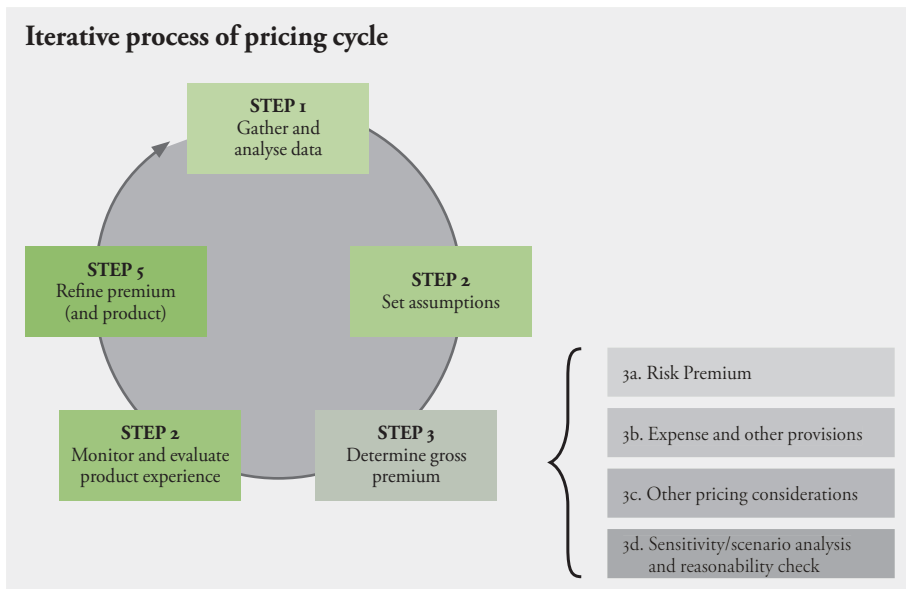
- Premiums collected will not be sufficient to cover claims and other expenses, leading to poor financial results for the provider.
- Large price increases may be required in the short term to correct inadequate pricing and maintain solvency. As a result, the current policyholders may not renew their policies, sales effort could be wasted and the target population may lose confidence in the microinsurance provider. For example, Karuna Trust in India provided a highly subsidized health insurance product. When the subsidy was removed, the renewal rate dropped to 10 per cent.
- Insolvency could result, leading to the discontinuation of the product, which could turn the target population away from insurance as a financial risk management tool.

21.1

The pricing cycle

Like the pricing process applied to mainstream insurance products, a microinsurance pricing specialist should improve the premium over time through an iterative process that includes gathering information, setting assumptions, calculating a premium, reviewing past experience and adjusting the pricing (*see Figure 21.1*).

Figure 21.1



Step one

Before jumping into the pricing exercise, it is important to understand the target customers and the context of the insurance product. This information will help determine the type of data to gather, the sources for the required data, and how the data should be assessed for suitability.

Step two

Based on the data and actuarial judgement, appropriate assumptions are set. The pricing exercise consists of incorporating the quantitative and qualitative information on the target population, claims frequency, average claims costs, expenses (taking into account the implementation processes and product management approach), a profit margin and other loadings. Other assumptions may need to be incorporated depending on, for example, the take-up.

Step three

Using these assumptions, underwriting rules and the product design, the pricing specialist models the expected experience of the product to arrive at the risk premium. As with pricing for a mainstream insurance product, to produce the premium, also known as the gross premium (which this chapter refers to as simply “premium”), additional elements will be incorporated.

A sensitivity analysis testing the impact by tweaking a particular variable – whether an assumption, a product feature or a cost associated with a step in the operational process – can help identify factors that drive the financial performance of the product. It can also indicate the effect of different actual experiences on the product’s financial performance.

At this point, alternative product designs may need to be considered, for example reducing or changing the benefit structure to make the product more affordable. The initial premium should also be checked with the target customers to verify that it is reasonable and acceptable to them and that the product features are suitable.

A number of iterations of the process described in step two and step three may be required to arrive at an acceptable premium.

Step four

Once the product is launched, it is essential to collect data on actual claims and expense experience so that anomalies can be investigated and assumptions, premium, product features and processes can be improved. Besides a quantitative experience analysis, feedback from key field staff on the product and the processes related to both distribution and servicing could lead to refinements that in turn affect the premium. Interviews with policyholders and prospective customers can also help verify qualitative data and confirm the project team's understanding of the market's perception of the value the insurance product provides.

Step five

On the basis of the experience analysis and feedback on the product, assumptions and the premium can then be refined. Lessons should be drawn on the sustainability of the premium and the adequacy of the product features. If necessary, the product features and/or operational processes may need to be adjusted to match the expectations of the population and ensure the sustainability of the scheme.

Lack of data remains the main constraint for pricing microinsurance products. In many cases, it can be overcome by making initial informed assumptions from general population data and qualitative data on the target population. It is important to remember that the process does not end with the initial pricing. To keep the pricing relevant, it is necessary to collect data once the product has been launched, monitor results, and then refine assumptions as necessary. The steps in the pricing cycle are discussed in more detail in the following sections.

21.2 Gather and analyse data

21.2.1 Getting to know the target customers

Pricing a microinsurance product is similar to being the first risk carrier to develop a new product in an emerging market. It presents challenges that arise from the lack of information about the underlying risk, and the absence of competitors to benchmark a product or assess the market. There may be additional difficulties if the underwriting and pricing specialists lack microinsurance experience.

There are striking differences between the customers a commercial insurer would usually serve and the lower-income segment of the population. This segment does not have the same priorities or financial resources, and may not be reachable through the same distribution channels. Serving the bottom of the pyramid (BoP) requires a different approach to product design, distribution and delivery. It is therefore logical that, in pricing microinsurance products, new factors related to the context and the different approach need to be taken into account.

Before designing and pricing an insurance product, the project team, including the pricing specialist, should examine the intended customer segment. Information gathered not only influences the product features that can meet the needs of the segment, but also how potential usage of the product can affect pricing. Gathering quantitative and qualitative data on the following aspects helps the project team identify and prioritize the target customers' insurance needs:

- the type and range of outlay expended by low-income households as the result of a risk event;
- how they have been coping with financial shocks resulting from different types of events; and
- what they perceive as the major causes of financial shocks.

This market research can even shed light on other product design aspects, such as how the target market defines the “family” unit. In an emerging market, the family may include grandparents, multiple spouses, and other extended family members. This information will affect the estimation of family composition for the purpose of pricing family covers.

Depending on the type of insurance, one could also determine the value at stake by gathering, for example, data on livestock value, crop value or the value of other assets owned. This information provides the project team with clues on suitable cover amounts and the expected severity of claims.

A major constraint for a potential microinsurance customer is limited financial resources. Income is often irregular and insufficient. Coupled with little or no savings, budgeting for the primary needs of the household becomes extremely difficult. Although the need for protection may be acknowledged by the household, the ability to pay (ATP) and willingness to pay (WTP) are major factors in the decision to opt for insurance as a risk management tool (*see Chapter 7*). In serving the low-income market, an appropriate price is all the more important as it will have a significant impact on product take-up.

By gathering data on the households' income patterns, the project team can gain a sense of the poverty level and the ATP. Through focus group discussions (FGDs) or surveys, the project team can accumulate information on WTP and the available alternatives to formal insurance. Respondents often overestimate the amount they would be ready to spend on insurance and their input should be considered with caution. Results are not transferable to other countries, or even regions in the same country, due to attitude and cultural differences (*see Box 21.2*). Although collecting information on ATP and WTP is a rough exercise, it helps the project team understand both the constraints on the premium structure and "competition" for the proposed insurance product, and ensure that the premium falls in a price range affordable and acceptable to the target population.¹

Box 21.2

Cultural barriers to WTP

The WTP is not just a factor of pure household economics, but also one of cultural orientation. In the Philippines, a one-week mourning period observed by the family is the way loved ones pay respect to the dead. The amount expended on the funeral and related events raises the status of the person who passed away. Therefore, Filipinos see value in funeral insurance. On the other hand, in India, costs and customs are different. Funeral ceremonies do not have the same social importance as in the Philippines. So funeral insurance may not be as relevant in India, and the WTP for this type of product may be much lower. Furthermore, in many cultures there is an aversion to buying insurance as it is believed that it will bring on the event: appropriate communication can help overcome the cultural barriers and promote take-up.

The constraints of ATP and WTP should not eclipse the need for adequate cover. If low-income households do not see value in the product offered, they will not spend their hard-earned money on it. It is thus crucial to compare the initial premium with the cover to determine whether the product offers value for money. The benefit levels may need to be adjusted to ensure a balance between affordability and coverage (*see Box 21.3*).

¹ For further details on product design and demand research, see Wipf et al., 2006; Cohen and Sebstad, 2006.

Box 21.3

Financial limitations and liquidity of low-income households

In Chennai, India, a slum dweller, like others in his community, has miniscule savings of US\$2 at his disposal for emergencies. When he has to see a doctor, he asks his relatives and neighbours for a loan to pay for medication (outpatient episode costs are usually US\$2 to US\$7). If the treatment exceeds US\$10, he resorts to borrowing from a moneylender to finance outpatient or in-patient services.

On the basis of observations from several focus groups of urban MFI clients, low-income households usually have access to a social network to support minor expenses (US\$10). Participation in the social lending of this type of network is an obligation deeply ingrained in the culture of the community. Despite the limited financing accessible through social networks, they are valued for their flexibility. As an alternative, moneylenders may provide emergency relief, but charge exorbitant interest rates.

These details serve as clues to a product type and product design suitable for a slum dweller in Chennai. The product design, along with information such as disposable emergency funds, income and WTP, can help check that the suggested premium is reasonable.

21.2.2 Prudence in utilizing data with limitations

The risk premium for any insurance product should be determined from a quantitative basis. Unfortunately, if the product or the market is new, historical data is not likely to exist. The event frequency, loss and severity, and demographic data from which assumptions can be derived are often insufficiently documented to permit accurate pricing. Except for a mature product for which a sufficient volume of risk data has been properly collected, loss data is often not available, not readily usable or not as reliable as for a mainstream insurance product. The first step is then to determine the type of data needed and available data sources. Following data collection, the quality of the data must be assessed and analysed to set appropriate assumptions.

Data sources can range from public data (e.g. census or academic) to distribution channel records (*see Table 21.1*). This data is usually not the same as the claims data maintained by a commercial insurer. For a health product, information on the average annual family medical expenses or the frequency of a particular disease may be available, but it would be difficult to obtain a complete record of illnesses affecting the target segment. Depending on the type of risk, data availability will vary. As another example, records on livestock losses are usually difficult to obtain.

Although demographic information on the target segment may be limited, delivery channels that serve this segment may be a source for this type of data. For

example, if a life insurance product is compulsory for clients of a microfinance institution (MFI), then one can use the MFI's database.² This information may not be fully accurate because some MFI clients may not know their age or the organization may not have captured this information properly. If the product is voluntary, then the uncertainty is even greater and a better understanding of the defined target segment is required to set the initial demographic assumptions such as age distribution, gender and occupation.

Table 21.1

Potential sources of data to price a health product for a farmers' cooperative

<i>Data type</i>	<i>Data sources</i>	<i>Content</i>
Demographic	Records of members maintained by MFIs and cooperatives serving as distribution channels	Age, gender, family composition, income level
Socio-economic	Survey of target population and FGDs	Income level, WTP, ATP (as well as demographic information)
Health expenditures, costs and service access	Studies on or records from any prior schemes. Local NGOs and other organizations working in health or agriculture may also have valuable information	Data on health of the farmers and their relatives
	Service providers	Frequent health conditions and cost of treatment, medical cost inflation
	National data	Surveys and data from the Ministry of Health can provide information on, for example, hospitalization frequency, average cost of hospitalization in a public hospital. The Committee for Public Health Surveillance can provide information on incidence of the most frequent diseases
	Case studies and academic papers	A medical study may describe whether this group has access to health services and/or prevention programmes. A health economics paper may provide data on services accessed
Economic	National data	Interest rate, general inflation

While public data are a reasonable alternative, they should be validated by comparison with data from other sources. This means that the quality of the limited data available must be understood. Since the data on which microinsurance pricing relies is often not intended for insurance calculations, attention must be paid to its definition and quality when considering its use for risk premium computations.

² An MFI in Fiji wanted to add a funeral product to its portfolio. The premium was obtained from an insurance company that could serve as the risk carrier. This premium was compared to the client information maintained by the MFI. An analysis indicated an expected loss ratio of 40 per cent, pointing to poor client value. Hence, the MFI did not proceed with this insurance product.

Data from national censuses, surveys, studies and international development indicators, often collected by public organizations, may be available. However, their quality could be inconsistent. Furthermore, national survey data is usually not representative of the microinsurance target customers. Sufficient details may not be available if only macro-level information is published. Other information such as weather data used to develop weather indices does not exist on a sufficiently large scale to be useful to practitioners. Particular care must be taken when comparisons are drawn across schemes from different geographic regions and countries.

Since quantitative data of sufficient quality may not be available and obtaining more detailed and reliable data may be costly and time-consuming, the available quantitative data should be supplemented with qualitative data collected through FGDs and interviews with key sources that have a good understanding of the target population (e.g. NGOs, social workers and MFI staff). Living conditions (e.g. sanitation, shelter), occupations (e.g. hazards, income flow, income level), access to health and financial services, literacy and cultural references are all useful for the assessment of potential take-up, claims frequency and claims severity for an insurance cover. For example, what kind of access does the target population have to health services or, in the case of livestock insurance, to veterinarians? When and how often do they access these services? What per cent of the target population has savings accounts? This type of information can help determine the required cover, willingness to purchase a particular type of insurance, and the riskiness of the target population relative to the data available for the general population.

Assumptions on the expected loss will need to be derived from the limited information available. Qualitative data can improve pricing by verifying that the assumptions are realistic. Microinsurance pricing should not be based only on hard data, but must also consider additional information such as customs and culture, local demographic and economic factors, quality of health care and agricultural practices, and in particular, how the plan will be managed.

Once the data has been assessed, data gaps need to be identified and discussed in the project team. A systematic approach to filling the data gap can then be designed and implemented to monitor actual experience after the product is launched.

National data might not be a good substitute for experience of the low-income segment because it does not necessarily represent the experience of the target customer segment. National-level data includes private health insurance and the experience of the well-off segment of the population. The specific characteristics of a region and/or population segment are buried inside the national view. Assumptions based on national-level data may lead to under- or

over-pricing. In the absence of more information on the distribution of healthcare expenses, using only the data shown in Table 21.2 does not enable conclusions to be drawn on a cover limit that would exclude very risky expensive profiles, but still cover most health treatment costs for the target segment. Average and distribution are two different types of data and cannot be used interchangeably.

Table 21.2

Common errors in deriving health insurance assumptions from scant data

<i>Regional data and cover limit</i>	<i>India</i>	<i>Bangladesh</i>
Percentage of gross domestic product spent on health	4.9	3.8
Percentage paid privately	75	64
Per capita out-of-pocket expenses	INR 1 540 (US\$31)	Tk 487 (US\$7)

21.3

Setting assumptions

The assumptions underlying a risk premium calculation may seem intricate but are actually limited to the frequency of the risk events, distribution of claims costs and characteristics of the insured population. The assumptions on which risk premiums are usually based – maturity of the scheme, controls, size of the portfolio and diversification of the risk – are often not met. Because of the dynamic nature of the underlying risks, actual experience will probably be different from the underlying assumptions. The aim of a pricing exercise should include minimizing frequent and significant adjustments in the risk premiums presented to the target customers. This section suggests areas for consideration when setting assumptions supporting risk premium calculations so as to avoid disruptive premium adjustments.

When setting assumptions, the pricing specialist should consider the time horizon over which the risk premium will be valid and the trends of factors that affect claims frequency and severity. For example, the initial claims frequency for a health scheme may be low immediately following the launch of the product, due to poor awareness of the claims procedure. Later, it may rise sharply as policyholders become better educated in the claims procedures and gain the confidence to access health care. In this case, if the assumption is reviewed on the basis of first observations, the risk premium will not be sufficient to cover the actual outlay over time. To achieve sustainability in the medium to long term, assumptions should include some element of trends in expected experience that may vary over time.

The risks covered by a product sold in a small geographical area may be correlated. The target customers may be exposed to the same risks. For example,

a natural disaster could hit the area and trigger many health or livestock claims. At inception and depending on the distribution and risk-carrying model, this correlation may adversely affect any pricing. Rather than further loading the risk premium, an appropriate reinsurance cover may help maintain the premium at an affordable level. Reinsurance will of course come at a cost; however it may be necessary to make the scheme viable over the long term.

More so for microinsurance than for mainstream commercial insurance products, pricing is very dependent on the approach taken to acquaint the market with the use of the product and to administer and manage the product. Mandatory cover that is poorly communicated to the insured often results in low claims ratios. In contrast, if a healthcare provider is involved in an insurance programme, the over-provision of services may be observed if proper control is not in place. To improve access and client value, some fraud control mechanisms are adapted for microinsurance. These different implementation approaches and control mechanisms could potentially impact pricing and must be taken into account when setting assumptions.

The pricing specialist should check the initial assumptions against the qualitative information for plausibility. For example, even if there are public clinics accessible by the target population, sick low-income workers might not take a day off from work to see a doctor because they would lose income. A worker might wait until the condition becomes severe before seeking help. Furthermore, cover by an insurance product may affect the behaviour of the worker. The pricing specialist should take account of such factors observed during exchanges with the target population and anticipated behavioural changes in the frequency and severity assumptions. Besides the possible low number of policies sold at the initial stages, which leads to variability in experience data, the lack of information also creates greater uncertainty for the pricing specialist. It is therefore even more difficult to assess expected loss and predict financial results.

Once again, when setting assumptions, the pricing specialist needs to remember that affordability is a major constraint under which they will have to work. When serving customers at the BoP, it is critical to give ethical business practices priority over conservative pricing.

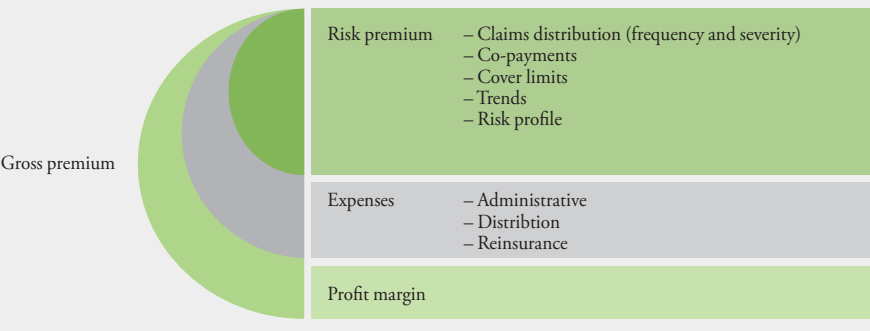
21.4

Determining the premium

The premium essentially includes three components – a risk premium equating to expected claims; 2) operating expenses; and 3) a profit margin – as illustrated in Figure 21.2.³ This section considers these three items, and other pricing considerations, in more detail.

Figure 21.2

Determining the premium



21.4.1

Calculating the risk premium

Once assumptions have been set for the expected frequency and severity of claims, the risk premium can be calculated, taking into consideration the items. The risk premium represents the expected cost of claims over a specific period and, in its simplest form, is calculated using the following formula, as illustrated in Table 21.3.

Risk premium = expected claims severity X expected claims frequency.

Table 21.3

Sample risk premium calculations

Life product	Benefits (severity)	10 000
	Expected death rate (frequency)	5%
	Risk premium	$10\,000 \times 5\% = 50$
Health product	Treatment costs	2 levels: 5 000 or 10 000; 75% of the time, the incurred cost is 5 000; 25% of the time 10 000
	Frequency	4 per cent
	Risk premium	$(5\,000 \times 75\%) + (10\,000 \times 25\%) \times 4\% = 250$

³ In this chapter, the term “premium” is used to refer to gross premium; the “risk premium” is specifically referred to as such when applicable.

Because of severe data limitations and the inherent uncertainty in quantifying the underlying risk, the pricing specialist should not over-engineer claims distribution modelling. The pricing specialist needs to provide a best estimate, taking into account the particularities of the context while being aware of the limitations of the initial set of assumptions.

21.4.2 Calculating the expenses

Once a risk premium has been computed, an expense ratio, usually stated as a percentage of the risk premium, is then set. This expense ratio usually covers product sales and distribution costs, cost of administration, reinsurance and other expenses. The costs related to microinsurance distribution and administration are significantly different from mainstream insurance products. Efforts to educate the BoP about the use of insurance as a risk management tool, developing unconventional distribution channels, and servicing scattered and remote populations may all contribute to the higher costs for microinsurance.⁴

As part of the pricing exercise, the cost implications of the particular administrative set-up supported by processes applicable to the product should be quantified. A cost-benefit analysis of the processes should be undertaken to identify cost drivers and take-up drivers. For example, a communication strategy may be expensive to implement, but could greatly increase take-up and improve financial results. If the cost of administration is substantial, alternatives should be explored, such as innovations through technology (*see Chapter 24*) and simplifications of processes (e.g. paperwork, authentication, validation). Then, the project team should suggest alternative approaches and work with the pricing specialist to assess the effect on pricing and financial results.

In addition, there may be specific regulations that need to be considered, such as restrictions on commissions for microinsurance agents. The specific regulation and actual remuneration costs must both be taken into consideration when determining the expense ratio.

In aggregate, these expenses may represent a large percentage of the gross premium and they must therefore be monitored. The accounting system used by the provider should ideally be adapted to allocate expenses to product lines and facilitate the split into the various categories outlined above. The implementation and management of a microinsurance scheme has a great impact on expenses and financial results, as illustrated in Box 21.4. The review of these expenses is an integral part of the subsequent pricing and product review. The expense ratio should be reviewed and the administrative practices should be improved to reduce expenses to reasonable levels, ideally below 30 per cent of gross premium.

⁴ For further details on distribution and administration costs, see McCord et al., 2006.

Box 21.4

Processes influence expenses

The amount of expenses varies greatly from product to product and depends on the processes used. For example:

- 1) An endowment product in West Africa has total expenses and commission of 7.1 per cent of premium. There was an effort to improve the efficiency of the manual process through automation with the expectation of reducing expenses to 4 per cent.
- 2) In many health schemes, expense levels as high as 30 per cent of premium have been observed.
- 3) Membership cards may be issued to identify members of a health microinsurance programme and streamline claims processing. This is a way to store information, authenticate membership and potentially reduce fraud. The card, whether equipped with a chip or a magnetic strip or photo, may have a low cost (under US\$1). While this expense would represent a small percentage of the premium for a mainstream individual policy, it could be a significant portion of, for example, a policy with a premium of US\$12 per annum.

21.4.3 Profit margin

For long-term viability, besides taking into account administration expenses, all microinsurance products must have a profit margin. But what is a reasonable profit? This should be calculated on the basis of the risk and capital required. For most products, such calculations would yield a range of profitability from 2 to 10 per cent of gross premium, which is a reasonable return on risk-based capital requirements. A principle of serving the BoP is that profits from the low-income market should be based on high volume rather than high margins. This is a point to be taken into consideration, as the microinsurance provider builds profit margins into the premiums of the products it offers.

21.4.4 Other pricing considerations*Community pricing*

While customer-based segmentation and understanding the differences in the risk profiles of the individuals in a target segment are important, an overriding objective is to offer insurance protection at a fair, affordable and adequate price to a large number of low-income people. Community pricing, similar to pricing for a group policy, is the preferred approach for three main reasons:

- **Financial inclusion:** Financial protection should be accessible for a large number of people who are currently underserved and under-protected. If risk

premiums are actuarially determined for each sub-group of a target population, some sub-groups may not be able to afford the product. Cross-subsidization is therefore acceptable as long as anti-selection does not become a threat to the scheme's sustainability; for example, the older cooperative members could be excluded (de facto or due to higher premiums) from a life insurance cover if pricing is not on a community basis.

- **Simplicity:** A simple premium structure will be easier to administer, and easier to explain to the target population, thus increasing understanding of the product, which may lead to higher take-up.
- **Scale:** If a large number of people purchase the product because of its affordability and simplicity, then it will be easier to spread fixed costs and make the scheme more sustainable in the long term. If scale is achieved, uncertainty as to pricing and other financial criteria is reduced.

In the long run, community pricing permits better development objectives and allows the risk carrier to achieve scale and better profitability. The shortcomings of community pricing can be mitigated with underwriting rules (e.g. eligibility conditions). While pricing is conducted at community or group level, factors such as age and gender should be taken into account in the detailed analysis and monitoring of the results. Analysis at a more granular level ensures that there is no anti-selection and that the risk premium remains fair.

Scenario analysis and reasonability checks

Once a premium has been calculated, a sensitivity analysis testing the impact of variations in a single assumption can help identify the variable to which the financial performance of the product is the most sensitive. Since the financial results will vary depending on take-up, the maturity of the scheme, the behaviour of the population and the uncertainty related to these factors, different experience scenarios should be explored to understand the range of possible financial outcomes for the scheme priced.

Once the pricing specialist has produced a suggested premium, it should be checked against the ATP and WTP to ensure that it is reasonable. A major challenge for the project team is to offer protection that matches the needs of low-income households at an affordable premium that covers claims, other expenses and any reserving requirements and profit margins required for the product to be sustainable. It is likely to take several iterations of the pricing process to reach an acceptable balance so that it is valued by and affordable for the customers. To do so, it may be necessary to review the product design by reducing or changing the benefit structure to make the product more affordable, or exploring scheme implementation and process improvements.

21.5 Monitoring and evaluating product experience

Once the product is ready for launch, it is essential to set up a management information system (MIS) to collect data on actual claims and expense experience so that the assumptions, premium, product features and processes can be improved. This will support the close monitoring of initial assumptions against actual experience so that necessary pricing adjustments can be made when appropriate. The data should include demographic details of the insured, claims submitted and the product's financials so that key performance indicators (KPIs) can be computed and further analysis undertaken. The sensitivity/scenario analysis undertaken in step three of the cycle will highlight which of the KPIs require monitoring on a regular basis (i.e. those to which the financial viability of the product is most sensitive). It is very important to continuously monitor claim patterns and investigate anomalies. This exercise can be supported by an MIS and an accounting system that is sufficiently robust and well-managed to enable all administrative processes to be monitored.⁵

21.6 Refining the premium

Premiums should be adjusted over time on the basis of sufficient observations. While mainstream insurance companies usually have large portfolios, with the take-up for a single product reaching hundreds of thousands, a microinsurance product may not reach critical mass in its early years, depending on the country and the distribution channel used. Take-up is often limited at inception of a scheme, since a major communication effort is required to create awareness and educate a target segment that is unfamiliar with insurance. Initial low take-up will have an impact on the following:

- **Frequency of claims** may vary from period to period, but the intrinsic frequency that represents an average over several periods may remain the same. Therefore, this assumption should be based on a long-term expectation and adjusted when sufficient credible evidence suggests a material change.
- **Administration expenses:** If the number of policies sold is low, the amount of fixed expenses allocated amongst these policies will be high. However, in the long term the fixed expense amount allocated to each policy should decrease as sales increase. High administrative expenses increase the premium, thus reducing affordability. Therefore, an average long-term expected expense ratio should be used from the launch of the product.⁶

⁵ See Wipf and Garand, 2010; and Wipf and Garand, 2006 for more details.

⁶ The start-up cost should be amortized over a suitable period.

- **Marketing and distribution expenses** allocated per policy will be higher in the start-up years because of the small number of policies sold. Education and awareness costs may also be higher in the early years, as efforts to educate the population are the key to generating sales. Similar to the administration expenses, these should be amortized over the expected life of the product line or, for example, five years.
- **Credibility of data/experience collected:** A small sample of claims and insureds does not carry much credibility. Adjusting assumptions too soon or on the basis of a small sample may lead to other errors. Assumptions on claims costs should be reviewed only once sufficient experience data has been gathered. Observed experience may differ from assumptions, but this should not necessarily lead to a pricing or assumption adjustment because, for low-incidence events, a large amount of data is required.

In addition to a quantitative experience analysis, feedback from key field staff on the product and the processes related to both its distribution and service could lead to product and process refinements that in turn change the premium. Interviews with insureds and potential clients may also help verify the experience and perception the target population has of the product.

21.7 Summary example

To illustrate the pricing cycle and the challenges of pricing with limited data, this section provides two actual examples from the same country, described in Boxes 21.5 and 21.6.

Box 21.5

Pricing: Organization A

Organization A delivers rural support services throughout the country. In collaboration with an insurer and with minimal direct input from its members, Organization A developed and provided its members with a mandatory cover for a premium of US\$1.18 plus a fee to cover administration expenses. The plan covers individuals from age 18 to 65 with a maximum hospitalization benefit of US\$294; maternity is excluded.

Box 21.6

Pricing: Organization B

Organization B focuses on one region of the country and has sister organizations providing microfinance, health services and technical support in agriculture. The organization conducted research on client needs, obtained expert assistance with product development and process set-up, found an insurance partner and set up back-office operations to manage the scheme. A voluntary health insurance scheme is offered to a village on the condition that 50 per cent of the village participate. Participating families are required to insure all the members of the household. The scheme provides insured members of all ages with a cashless hospitalization benefit of US\$400, maternity cover, outpatient consultation vouchers and a life insurance cover of US\$350 per insured.

Organization A has experienced incidence rates of below one per cent and an average claim of US\$140 for several years. However, contact with the members has suggested that they are unaware of this health insurance cover and do not understand how to access healthcare services. Furthermore, the reimbursement basis of claims settlement may be an obstacle to members' obtaining service.

Organization B, on the other hand, has a different set of issues. It had initial assumptions, as summarized in Table 21.4.

Table 21.4

Organization B, expected health claims

	<i>Incidence (%)</i>	<i>Average claim (US\$)</i>	<i>Risk premium (US\$)</i>
Non-maternity	3.60	51.44	1.85
C-section	0.33	209.50	0.69
Normal delivery	1.87	29.19	0.55
Total			3.09

While actual average claims experience was within 4 per cent of expected average claims for the first year and within 20 per cent for the second year, actual incidence experience was materially different:

Table 21.5

Organization B, incidence results

	<i>Expected (%)</i>	<i>Actual year one (%)</i>	<i>Actual year two (%)</i>
Non-maternity	3.60	9.40	9.70
C-section	0.33	0.40	3.00
Normal delivery	1.87	2.80	4.90

What were the reasons for the divergence in experience for Organization B? There seem to be two principal issues:

- 1) The expected community solidarity did not materialize. The target population reached was only 3 per cent, indicating a severe case of adverse selection.
- 2) The health service providers probably over-provided and over-charged. About 54 per cent of the claims were for one-day stays. The average cost per claim for maternity was higher than in other regions in the area. The health providers admitted to an external party that the health insurance scheme was a money-maker.

The main point illustrated by these two examples is that schemes can experience a huge divergence between actual experience and expectations if they do not:

- take steps to understand the target market;
- develop suitable processes to service the product; and
- educate the client on the use of the product.

However, failure to implement and manage a needs-driven product in a thoughtful manner could also contribute to the divergence of experience from assumptions. Furthermore, the pricing specialist cannot infer assumptions for a specific situation from the experience of another without considering the differences in context, implementation and management. As demonstrated by these two examples, similar products can have very different experiences even if they are offered in the same country.

Lastly, the pricing exercise must consider how various stakeholders, including the insureds and the service providers, will respond to the scheme so that experience does not diverge drastically from expectations. This also indicates the importance of managing and monitoring experience so that corrective action can be taken.

21.8

Conclusion

This chapter has focused on pricing insurance products for low-income markets, including the basic pricing process and the importance of engaging a trained specialist to carry out the exercise. Microinsurance providers should seek pricing experts (whether internal or external) to ensure that the premium is appropriate and that processes and product features are adequate to achieve sustainability and offer insurance services of value to the client. Those experts must understand how the design and implementation of the product and supporting processes, as well as market behaviour, affect pricing.

Initial assumptions and the premium will not be perfectly accurate. Because of severe data limitations and the inherent uncertainty in quantifying the underlying risk, the pricing specialist should not over-engineer claims distribution modelling. The pricing specialist needs to provide a best estimate, taking into account the particularities of the context while being aware of the limitations of the initial assumptions. Data gaps need to be identified so that the project team can systematically work towards filling them after the product has been launched.

Since pricing results are only as good as the data and assumptions fed into the exercise, the pricing specialist must ensure that the project team and key stakeholders work through the iterations of the pricing cycle. This can help improve the quality of the data gathered, the implementation of improvements and communications to the market.

For actuaries, pricing with little data in new markets may be a new challenge. Actuaries can contribute by first getting to know these new markets, understanding the culture and learning to go back to the basics. In addition, actuaries can lend a hand by:

- building the insurance capacity of the developing market players, for example by improving the financial statements to enable managers to focus on key issues;
- providing technical assistance in MIS development for microinsurance projects, focusing on capturing the essential data and gathering the information needed to manage the product (with an eye for collection of the correct amount of data – not too much or too little);
- facilitating the gathering and sharing of data at industry level until sufficiently robust databases have been developed; comparing schemes and helping implementing organizations to understand their performance compared to the best-performing plans;
- analysing trends and drawing lessons for the microinsurance community; and
- providing technical assistance/seminars on reserving and reinsurance.

VII Delivery channels and intermediaries

22 New frontiers in microinsurance distribution

Anja Smith, Herman Smit and Doubell Chamberlain

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Achieving scale through cost-effective distribution is one of the biggest challenges for the development of viable, small premium products. To effectively reach as large a client base as possible, the emphasis is increasingly falling on innovative distribution models as alternatives to traditional microinsurance distribution, which typically relies on microfinance institutions (MFIs).

During the last decade, insurance providers and distribution partners have experimented with innovative ways to extend insurance to low-income households. This chapter considers the experiences of 14 sets of microinsurance innovators from Brazil, Colombia, India and South Africa which are using partnerships to distribute insurance through the following channels:¹

- **cash-based retailers**, including supermarkets and clothing retailers, offering simplified personal accident and funeral insurance products;
- **credit-based retailers**, such as furniture and electronic goods stores offering credit life, extended warranties, personal accident and life insurance products;
- **utility and telecommunications companies** offering disability, unemployment, personal accident and, in some cases, household structure insurance; and
- **third-party bill payment providers** offering personal accident and life insurance products.

These models were selected because of their unique and interesting approaches to both the product-development and distribution processes. Case studies on their experiences were produced on the basis of information collected through interviews with insurance providers, their distribution partners and, in some cases, with third-party administrators or brokers. The interview information was supplemented by evidence gathered from company websites and annual reports, as well as available media reports and other research documents. Given that the case studies are public documents, data that may provide a more detailed view on the success

¹ The examples described in this chapter are drawn from the following case studies available at www.cenfri.org: Smit and Smith, 2010a, 2010b; Smith and Smit, 2010a, 2010b, 2010c, 2010d; Smith, Smit and Chamberlain, 2010; Zuluaga, 2010.

and value of different models and products, such as the number of policies sold, claims ratios, policy persistency and profit generated, could not always be included.

This chapter is structured as follows. The first section examines the concept of alternative distribution in the microinsurance context and introduces the case studies. Section 22.2 focuses on the emerging categories of alternative distribution and their respective strengths and weaknesses. The third section considers the key themes and issues emerging from these new distribution models. Section 22.4 concludes with a brief look at the future of microinsurance distribution.

22.1 Rethinking distribution

For the purpose of this study, alternative distribution was loosely defined as voluntary insurance models utilizing partnerships with institutions traditionally not involved in insurance to reach underserved, low-income households. These models typically share the following characteristics:

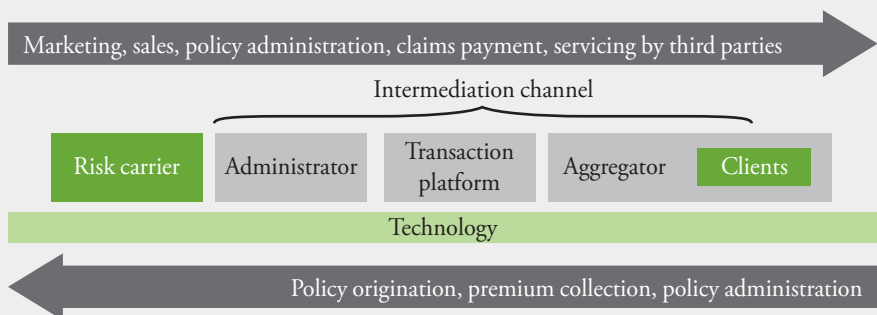
- **Scale through aggregation:** Ability to achieve scale by targeting large client concentrations such as specific non-insurance client groups, including clients of retailers, mobile-phone companies and utility companies.
- **Presence of infrastructure footprint:** When entering into partnerships with organizations with large client concentrations, alternative distribution models typically rely on a community presence that is larger than what an insurance company could achieve on its own. The infrastructure could be physical, such as store buildings, or virtual, such as a mobile-phone network.
- **Transaction platform:** The sales channel typically doubles as a premium-collection platform. One example is adding premiums onto a utility bill.
- **Stand-alone voluntary product:** Models often distribute voluntary products on an “opt-in” rather than “opt-out” basis. Buying insurance is therefore an explicit choice by the customer, rather than an automatic addition to another product or service.
- **Trusted brand:** The majority of models rely on a distribution partnership with a well-trusted brand. Where models do not have this benefit, it has negatively impacted the success of the model.

Distribution is a much wider concept than simply getting the insurance product to the client. In Figure 22.1, distribution refers to all interactions that take place between the underwriter of the risk and the ultimate client, which includes policy origination, premium collection and policy administration, as well as all marketing, sales and claims-payment activities. This process may involve several different entities, including; 1) insurance companies (risk carriers); 2) outsourced administrators; 3) third-party payment providers (who, in some cases, also aggregate clients); and 4) the client

aggregator or distribution partner. In reviewing distribution performance, consideration has to be given to all the different activities and entities in the value chain.²

Figure 22.1

Innovation throughout the distribution process



Source: Bester et al., 2008a; Leach, 2005.

22.1.1

What constitutes success?

The performance of a particular distribution model needs to be assessed from both the client and business perspectives, because what works for the insurer and distribution partner may not work for the client. Table 22.1 sets out some of the perspectives of the business and the client on what can be considered distribution success. The table indicates a lack of alignment between the business and the client perspective regarding the most important aspect of the distribution process. While client acquisition and premium collection can be most important to businesses, the claims processing phase matters most to the client. In the short term, businesses have the greatest incentive to invest and innovate in the sales and premium collection aspects and the least incentive to change and optimize the claims-processing component. However, in the long run, an efficient and convenient servicing and claims-processing system is in the interest of business partners as it will increase customer loyalty and keep clients coming back.

22.1.2

Active or passive sales

The sales aspect of distribution may be the client's first exposure to a particular insurance product. It is thus important that the sales process allow the client to make an informed purchase decision. The 14 distribution examples reviewed for this chapter are characterized by varying levels of interaction with the prospective client during the sales process. Client interaction can be thought of as a continuum, where the one extreme of client interaction during the sales process can be thought of as a "passive" process, whereas the other extreme can be thought of as an "active" process.

² For more information on this see Bester et al., 2008.

Table 22.1

Perspectives on distribution success

	<i>Business perspective</i>	<i>Client perspective</i>
Product features	<ul style="list-style-type: none"> – Realistic pricing – Ease of administration 	<ul style="list-style-type: none"> – Meets needs – Simplicity
Sales	Most important for the business <ul style="list-style-type: none"> – Achieve take-up – Client retention and persistency 	<ul style="list-style-type: none"> – Informed purchase decisions – Understand value proposition and costs – Understand how to successfully realize value from product (servicing and claims)
Premium collection	<ul style="list-style-type: none"> – Low cost – Integration into insurer management system 	<ul style="list-style-type: none"> – Ease/convenience – Flexibility – Low transaction cost
Servicing and administration	<ul style="list-style-type: none"> – Real-time information and reporting to track performance – Low cost 	<ul style="list-style-type: none"> – Easy access – Ease/convenience – Low transaction cost
Claims processing	<ul style="list-style-type: none"> – Only pay legitimate claims – Cost-effective claims assessment and administration – Risk monitoring and management 	Most important for the client <ul style="list-style-type: none"> – Ability to claim successfully – Easy access – Low transaction cost – Simplicity (not many documents required) – Quick turnaround

In a passive sales approach, a prospective client is provided with no prompting to purchase insurance and no verbal communication on the product. An example is when insurance products are on a shelf at a retailer and clients purchase one along with their groceries without any encouragement by retailer staff. By contrast, active selling involves a representative of the insurer or distribution partner, who informs a client of the benefits of a particular product and may even provide advice regarding which product features are relevant for the customer. For most examples of passive sales, the purchase is initiated by the client, while for active sales the sale is initiated by the intermediary.

The majority of the examples, summarized in Table 22.2, can be plotted somewhere between the two extremes of the scale. The concept of passive versus active sales is important as it has implications for product take-up and distribution costs, especially for complex or lesser-known products, as well as premium persistency and consumer protection. The decision on which sales approach to utilize is often influenced by regulatory considerations. Passive sales processes tend to evolve in countries, such as South Africa, where market-conduct regulation is relatively strict on who can qualify as an intermediary and how insurance products should be sold (*see Chapter 25*). This type of regulation makes it more costly to sell insurance on an active basis.

Summary of insurance business models considered

<i>Underwriter</i>	<i>Distribution partner(s)</i>	<i>Channel classification</i>	<i>Product and distribution description</i>	<i>Take-up</i>	<i>Policy servicing & claims management</i>
Holland Insurance (South Africa)	Pep Stores	Cash-based retailer	Individual and family funeral insurance, launched in March 2006, sold through low-income clothing and small appliance retailer, Pep. The product is sold off-the-shelf in packaging similar to mobile phone starter packs, with no active sales by Pep staff. Monthly premiums are paid in-store in cash.	Significant take-up: 215 000 policies in force (2009).	Third-party administrator responsible for servicing policies and managing claims. Pep is responsible for cash premium collection.
	Take it ezi	Third-party bill payment providers	Individual and family funeral insurance cover, launched in January 2007, sold through rural vendor network, Take-it-Eezi. Take-it-Eezi vendors (typically small informal shop owners) are located in townships (informal settlements) and use wireless General Packet Radio Service (GPRS) technology to facilitate sales of cellular airtime, electricity and insurance. Monthly premiums are paid at vendor in cash.	Low levels of take-up with 1800 policies in force (2009)	Third-party administrator is responsible for servicing policies and managing claims. Take-it-Eezi is responsible for client registration and cash premium collections.
Metropolitan Cover2go (South Africa)	Shoprite	Cash-based retailer	Family funeral cover, launched in November 2008, sold through low-income supermarket, Shoprite. The product is bought off-the-shelf on a "no-advice" basis. The product offers a cash-back component if the risk event does not transpire during the 5-year cover period. Monthly premiums are paid in-store in cash.	Low levels of take-up	Shoprite is responsible for registering clients and collecting cash premiums. Cover2go is responsible for policy servicing and claims.
	Wireloop	Third-party bill payment provider	Family funeral product sold through rural vendor network, Wireddoop, with the use of GPRS-enabled point-of-sales terminals (POS). The products are sold on a passive basis.	Low levels of take-up: less than 1000 policies sold (2010).	Wireddoop is responsible for registering clients and collecting cash premiums. Cover2go is responsible for policy servicing and claims.
	Accessible through all South African mobile-phone service providers.	Third-party bill payment provider	Personal accident insurance product, launched as pilot during Easter of 2007, targeted at minibus taxi passengers. The product is advertised on billboards and fliers. Individuals obtain the cover by sending an SMS to a premium-rated short-code that will deduct the insurance premium from the available airtime. The conversion of airtime to cash is facilitated by a wireless access service provider (WASP).	Low levels of take-up	WASP is responsible for premiums collection. Cover2go is responsible for policy servicing and claims.
Old Mutual (South Africa)	Shoprite	Cash-based retailer	Family funeral and accidental death cover, launched in November 2007. Product is sold off-the-shelf on a no-advice basis at low-income retailer, Shoprite. The product is designed for seasonal workers and allows flexible premium payments, up to a maximum of 6 months between premium payments. Premiums are paid in cash in-store.	Low levels of take-up	Old Mutual is responsible for servicing policies and managing claims. Shoprite is responsible for registering clients and cash premium collection.
MAPFRE (Colombia)	CONDENSA	Utility and telecommunications companies	Separate life, personal accident, funeral, home and vehicle insurance, first offering launched in 2001, sold through electricity provider, Codensa. The product is sold through multiple distribution channels – including an out-bound call centre, face-to-face sales and mass mailing – using Codensa's bill payment system to collect premiums.	Significant take-up: 300 000 policies sold (2008)	Product administration and servicing is performed by both parties. Claims directed to Codensa call centre. Mapfre manages operational aspects of claims management.

Alico Chartis (Colombia)	gasNATURAL	Utility and telecommunications companies	Personal accident, cancer, critical illness, home and small and medium-sized business cover sold through gas utility company, gasNatural. The product, launched in 2003, sold via multiple call centres, mass mailings and face-to-face sales, using the gasNatural bill payment system to collect premiums.	Significant take-up: 783 224 Chartis policies and 59 892 Alico policies in force (2009)	Administration is performed by Alico and Chartis. Claims can be submitted either to gasNatural call centres or Alico and Chartis directly.
Colseguros (Colombia)	Carrefour	Cash-based retailer	Personal accident insurance sold at international retailer Carrefour's counters since 2007. The product is offered to customers of Carrefour after they have concluded a purchase transaction. The insurance premium is equivalent to the change the client receives from their grocery purchase, with cover provided in proportion to the premium.	Significant take-up: 2.8 million policies sold (2008)	Premium collection and registration conducted in-store by Carrefour. Policies serviced by ColSeguros. Claims handled by Colseguros.
MAPFRE (Brazil)	Casas BAHIA	Credit-based retailer	Life, unemployment and personal accident insurance sold through low-cost electronic appliance store, Casas Bahia. The first product offering was launched in August 2004. Additional policy benefits include a lottery ticket and pharmaceutical discounts. Insurance is offered and explained to customers by Casas Bahia sales staff during the appliance sales process.	Significant take-up	Joint policy servicing and administration. Casas Bahia provides on-the-ground after sales support through their sales agents and assists Mapfre in back-office policy administration. Claims handled by Casas Bahia.
QBE (Brazil)	Vivo	Utility and telecommunications companies	Insurance against the theft of mobile phones – launched in 2006 – offered through the retail outlets of telecommunications company Vivo. The insurance product is presented to Vivo customers during the purchase of a mobile phone.	Significant take-up: 300 000 policies sold to date (2010)	Joint policy servicing and administration. Claims handled by Mapfre.
ACE (Brazil)	Brasil Telecom	Utility and telecommunications companies	Individual or family hospital indemnity plan – launched in 2006 – sold to clients of fixed-line operator Brasil Telecom through an out-bound call centre. The Brasil Telecom bill payment system is used to collect insurance premiums.	Significant take-up: 600 000 policies sold to date (2009)	Policy servicing, administration and claims are predominantly handled by the broker, Aon Affinity.
ACE (Brazil)	AES Eletropaulo	Utility and telecommunications companies	Bundled insurance offering providing household structure, personal accident and life insurance policies. The product was launched in 1999 and is offered to AES Eletropaulo clients through a mail offering and premiums are collected using AES Eletropaulo's billing system.	Significant take-up	Policy servicing, administration and claims are predominantly handled by the broker, Aon Affinity.
Max New York Life (India)	Max Vijay Formal and informal retailers, MFIs, coop banks, NGOs etc	Multiple channels	Max Vijay is a savings-linked life insurance policy launched in 2008 and sold through multiple sales channels that involve both push (active, and pull channels (passive channels, e.g. retailers)). These sales and premium collection channels include the use of rural vendors and mobile GPRS devices. The product is structured as a flexible premium savings product with an initial savings deposit required, which can then be topped up from as little as 10 rupees (US\$0.21).	Moderate take-up: 90 000 policies sold (2010)	Policy servicing, claims and administration are handled by Max New York Life.

22.2 Comparing the distribution channels

When considering the examples in Table 22.2, four categories of distribution channel emerge: 1) cash-based retailers; 2) credit-based retailers; 3) utility and telecommunications companies; and 4) third-party bill payment providers. These categories reflect the distribution partner's primary business and the nature of their interactions with clients. Similarities in the types of products sold, sales interaction, and the premium collection and claims processes for each type of distribution channel are summarized in Table 22.3. An analysis of these four categories provides a number of useful insights about their relative effectiveness.

Table 22.3

Characteristics of the distribution channels

	<i>Products</i>	<i>Sales</i>	<i>Premium collection</i>	<i>Claims</i>
1 Cash-based retailers e.g. supermarkets and clothing retailers	Simplified personal accident and life (funeral) insurance policies	Limited, un-incentivized sales interaction between retailer staff and client	Cash premiums paid in-store, with optional debit order payment available in some cases	Claims directed to insurance company rather than retailer
2 Credit-based retailers e.g. furniture and white goods store	Credit life, extended warranties, personal accident and life insurance	Active, incentivized, face-to-face sales by retailer sales staff; passive sales in South Africa due to market conduct regulation	Bundled premium collection and credit repayments	Claims facilitated in-store
3 Utility and telecommunications companies e.g. electricity, gas and fixed-line telecommunications companies	Disability, unemployment, personal accident and, in some cases, household structure insurance	Multiple sales channels including mail, out-bound call centres and face-to-face sales	Premiums are bundled with client's utility or phone bill and collected using existing bill payment system	Claims directed to the insurance company; in some cases, benefit payment is made directly to client's utility or telephone account
4 Third-party bill payment providers including wireless access services providers (WASPs)	Personal accident and life insurance	Limited (un-incentivized), sales interaction between bill payment operator's employees and client	Cash or electronic collection point	Claims are made directly to insurance company

A key difference between these channels is the type of sales practices that they employ, which has implications for the product that they can offer, the volume of customers that they serve, and the value that they can provide to low-income households.

Staff members of cash-based retailers generally do not actively engage with customers or “push” merchandise during the sales transaction, making it difficult to enhance the performance of the existing sales force. The lack of active selling by retailer staff has led cash retailers to rely primarily on passive or “off-the-shelf” sales. As a result, their product range is limited to simple, group-underwritten personal accident and funeral policies (*see Chapter 10*).

Maintaining the persistency of their policies poses a challenge for cash-based retailers, because the retailer often does not have an automatic premium-collec-

tion mechanism, so that clients must come to the store to renew. Consequently, the retailer has to position its value offering and its brand to attract customers afresh for each transaction. Any insurance product should add to the value proposition the store uses to motivate clients to come back for repeat purchases. Cash-based retailers therefore have to amend their business models or implement innovative mechanisms to overcome these challenges.

Credit-based retailers often have a dedicated sales force in-store for the sale of credit-linked merchandise. The sales force provides advice, structures credit repayment agreements and offers the client insurance. Insurance is actively sold and is usually linked to the credit agreement or the goods sold, including credit life and extended warranties. In most cases, the term of the policy corresponds to the credit repayment period. The sales force in credit-based retailers is also responsible for follow-up advice and assisting clients with claims.

Distribution through credit-based retailers is a good business model, but it offers questionable value to clients. These channels typically achieve significant take-up due to incentivized sales, low policy lapse rates because of the contractual obligation between the retailer and client, and the presence of an existing premium collection system. Because of the retailer's familiarity with financial services, it often has the management information systems and the staff to assume responsibility for policy administration and client servicing. However, given the basic qualification criteria for credit, it means that the lower-income clients are often excluded. Furthermore, low claims ratios on these credit-linked products suggests poor value for the client. An exception are stand-alone insurance policies that are not linked to the purchase and/or financing of goods, such as the policies sold through the Brazilian credit retailer, Casas Bahia, or stand-alone policies sold at the Mexican furniture and white goods retailer, Elektra.

Utility and telecommunications companies generally have detailed information on their extensive client base that can be used to design appropriately priced policies and targeted marketing campaigns. Insurance sold through these companies is often linked to the primary relationship between the client and the service provider (e.g. electricity or phone service), and covers the client's contractual obligation to the provider in the case of death, illness, unemployment and/or disability. These channels experience significant take-up of insurance, particularly if products are actively sold by an agency sales force. However, they suffer from high distribution costs attributable to the active sales effort, the required commission payments to agents, and the participation in the value chain of many entities that all have to be remunerated.

Third-party bill payment service providers have been set up in many countries to allow organizations (e.g. utility companies, telephone companies and municipalities) to outsource the collection of payments, often through a network

of retailers. This infrastructure can be used for other purposes as well, such as selling insurance. This channel tends to offer simplified life and personal accident insurance, although product complexity can be increased when payments systems are operated by individuals, compared to other systems with no human interaction, such as mobile-phone-based distribution using a short message service (SMS) sent to a premium-rated short code.³

Third-party payment providers have had limited success in achieving scale. This is mainly due to the absence of a trusted brand and reliance on passive sales practices. In addition, the use of premium-rated short codes for mobile-phone-based distribution is an expensive premium-collection method, as the wireless access services provider (WASP) that converts airtime to hard currency often requires a substantial commission.

Table 22.4 summarizes the main strengths and weaknesses of these distribution channels.

Table 22.4

Strengths and weaknesses of distribution channels		
	<i>Strengths</i>	<i>Weaknesses</i>
1 Cash-based retailers	<ul style="list-style-type: none"> – Offers easy, low-cost access to existing customer base – Retailer has good understanding of customer needs – Motivated to offer higher-value products to maintain/strengthen brand 	<ul style="list-style-type: none"> – Cash-based premium collection may suffer from higher initial lapse rates – Not oriented towards provision of financial services
2 Credit-based retailers	<ul style="list-style-type: none"> – High levels of persistency due to account-based premium collection – Sales point can double as a service and claims desk – Existing client information available (through credit repayment) to support product design and distribution approach – Familiar with provision of financial services 	<ul style="list-style-type: none"> – Credit-linked insurance sales, even when voluntary, often deliver low value to clients – Sales of insurance products not linked to credit risk may not be viewed as relevant to core business – Insurance cover period linked to credit repayment period
3 Utility and telecommunications companies	<ul style="list-style-type: none"> – Existing client information assists in product design and targeted insurance sales – Efficient payment collection due to presence of account relationship with client 	<ul style="list-style-type: none"> – Low claims rates on personal accident products offered through these channels suggest low-value proposition to clients – Extensive involvement by broker/administrator, distribution channel and third-party operators can increase management costs
4 Third-party bill payment providers	<ul style="list-style-type: none"> – Large distribution network with extensive formal and informal outreach – Facilitates use of e-money for premium payments 	<ul style="list-style-type: none"> – Low take-up due to passive sales – Premium collection using airtime as currency is very expensive – Absence of trusted brand at sales point – Insurance company has little control over informal third-party bill payment providers

³ Premium-rated short codes are codes, rather than phone numbers, to which an SMS can be sent. The sender is charged a higher amount than the standard SMS rate. It is commonly used to pay for goods and services, enter competitions or make donations.

22.3 Emerging themes

This section examines the most prominent recurring themes observed in the various distribution channels.

22.3.1 Reorienting the focus of innovation

The experiences highlighted in this chapter illustrate that innovation in the distribution process has mainly focused on the sales and premium collection aspects, rather than servicing and claims processing. This is unfortunate, as the claims process is where product value is demonstrated to clients and is therefore an important aspect of cultivating a microinsurance market.

Although some of the innovative channels use detailed client information in designing products, they still have complex documentation requirements for claims, which are generally not processed at the same convenient place where the product is sold, and processing times take more than a few days. Only one of the models reviewed, the partnership between Mapfre and furniture and white goods retailer Casas Bahia, allows for the processing of claims in-store, the place where the policy was purchased.

To offer value to clients, distribution channels may want to consider becoming “one-stop shops”, to sell and renew policies, collect premiums, and process claims from one location. The channels most suited are those where there is a central service point close to the client, where the distribution channel also has electronic access to policy administration systems. The initial sales point could be used for quick claims payment if the distribution channel staff have basic information technology proficiency and are well trained. Given the strengths and weaknesses of distribution channels shown in Table 22.4, the credit-based retailer seems best suited for this full-service approach.

An important step towards providing greater value is the adaptations made by insurers and their distribution channels to their clients’ ability to pay, in both absolute value and payment frequency. South African retailer Shoprite and underwriter Old Mutual offer a product with flexible premium payment periods, between one and six months. In Colombia, Carrefour allows individuals to take out varying levels of cover, determined by their available change when they check out. In addition, Max Vijay’s savings-linked life insurance policy provides individuals with continuous life cover without the need to contribute a monthly premium. After the initial payment at policy inception, the insurance policy will not lapse for the duration of the savings agreement. Max Vijay clients are allowed to top up their savings in small instalments as and when they have funds available.

Despite this sensitivity to the clients’ ability to pay, the lower-income market has not yet been effectively served by these alternative channels. For the products

under consideration, those serving slightly higher-income groups have experienced higher take-up. In South Africa, Take-it-Eezi, which has low take-up rates, targets a slightly poorer market segment than the more successful Pep and Shoprite examples. The geographical location of these outlets and the nature of their respective target markets affects product take-up, as slightly higher-income clients have greater exposure to insurance. Similarly, the successful take-up of insurance through Brazilian telecommunications and Brazilian and Colombian utility companies is partly attributed to their mixed clientele, which includes less-poor households.

The intangible nature of insurance sometimes makes it difficult to communicate its value to the low-income market. To address this issue, some insurers have enhanced the tangibility of the product's benefits. This marketing style takes two major forms:

- 1) **Providing auxiliary benefits**, such as Cover2go's cashback funeral policy which returns premiums after five years in the absence of claims, and access to emergency services assistance (such as plumbing and electrical) with insurance policies bought from the electricity provider AES Electropaulo. In Brazil, *capitalization* is another auxiliary benefit attached to most microinsurance policies, where policyholders have a chance to win a prize in a lottery draw.
- 2) **Tangible (non-cash) payouts** were observed in several examples. AES Electropaulo provides a monthly food basket for the beneficiaries of the deceased for 12 months. Vivo telecoms and Mapfre replace the policyholder's mobile phone with another phone. The Codensa funeral insurance policy pays out in the form of a funeral service, without the option of a cash payout. In South Africa, individuals receive a discount on a funeral with the purchase of a funeral policy at Shoprite stores.

22.3.2 Evolution of products and channels

The nature of the relationship between the distribution partner and insurance company evolves over time as the channel starts to realize the benefits of adding insurance to its existing range of services. Over time, this means that the channel will have an incentive to play a larger role in product development. This is particularly evident in Colombia, where Codensa, after having sold Mapfre-underwritten insurance products for a few years, engaged in the development of new products to better meet the needs of its clients. In addition, distribution partners have an incentive to be more committed because of the potential reputational risk to their brands if they do not provide good products to their clients. Some of the more successful examples are ones where the distribution partners viewed the provision of insurance as an explicit client-retention strategy.

Products offered by the partners tend to evolve in two ways:

- adjustments to the price, cover and exclusions to improve value or manage claims ratios; and
- the introduction of insurance products that are unrelated to the primary product offering of the distribution channel.

Examples of both these cases are found in Brazil where Casas Bahia adjusted its insurance offering eight times over a five-year period and AES Electropaulo moved from selling only financial protection policies (to protect itself from default by clients in the event of disability or unemployment) to household content insurance. An example of the product adjustment process is provided by the Pep funeral insurance product underwritten by Hollard. The product was changed and re-launched after an unexpectedly high mortality rate was experienced in an unfamiliar segment of the low-income market.

The insurer, and in some cases the broker or administrator, will adjust the distribution process once it has accumulated sufficient data on take-up and lapse rates, and the costs associated with a specific channel. This usually involves adding more, or different, distribution channels, while scaling back on others. This assessment period before changes are made typically takes six to 12 months. For example, Old Mutual initially distributed a funeral insurance policy through the Shoprite Money Market Counter and later piloted distribution through other channels, such as rural vendors, using third-party payment providers to collect premiums.

Many of the cases reviewed in this chapter involve large multinationals, creating the potential for an evolution to occur across borders (*see Chapter 19*). In the case of Aon Affinity, a multinational brokerage firm, certain microinsurance lessons were learnt in Brazil and exported to the rest of Latin America. Multinational underwriters, such as Hollard, Mapfre and Allianz trading as ColSeguros in Colombia, have multiple microinsurance products around the world. Lastly, French retailer Carrefour offers insurance products through its stores in many countries, including Colombia and Thailand.

22.3.3 Impact of regulation

A recurring theme in these case studies is the impact of regulation on the distribution process. Regulation affects all aspects of distribution, but particularly product development (e.g. type of cover and development of auxiliary benefits) and sales, including the nature of the distribution partnerships and sales interactions with clients. Regulatory hurdles often make it difficult for insurance companies and their distribution channels to achieve a balanced distribution

approach where both the business and client's needs receive equal emphasis (*see Chapter 25*).

The relationship between the insurance company and the distribution partner is affected by broker regulation, commission-specific regulation, labour legislation and market conduct regulation. For example:

- **Restrictive broker regulation**, as observed in Brazil, where a combination of broker power and labour law has led to distribution of insurance without the involvement of a broker being discouraged, thereby increasing intermediation costs.
- **Minimum education levels for brokers and agents** (market conduct regulation) preclude potential agents from getting involved in insurance distribution and, consequently, increase sales costs. This impact is particularly evident in the South African cases. In South Africa, minimum education requirements for brokers and agents were set at a high level and have catalysed the introduction of passive distribution models that do not provide any face-to-face disclosure or explanation of the product.
- **Non-insurance-specific regulation** can also reduce the willingness of insurance companies to serve the low-income market. For example, in Brazil labour legislation causes insurers to place employment relationships at arm's length. Though insurers are technically allowed to use tied agents, by conducting direct rather than broker sales, they are reluctant to do so due to the collective bargaining conditions in the financial sector, which makes it expensive to use employees as sales people.

22.3.4 Sales practices

While most passive distribution models in South Africa have no face-to-face explanation of the insurance products due to restrictive intermediation regulation, the examples that are mostly passive in the other countries rely on some form of verbal interaction at the point of sale. This includes an insurance counter in a supermarket staffed by someone who can provide information on the products or an in-store insurance agent at Carrefour. In the case of purely passive models, clients rely on the underwriter's call centre for the provision of product information post-purchase and also have to contact the call centre for any service or claims assistance. In these models, the servicing and claims interaction is removed from the point of purchase.

Some client aggregators, such as Codensa, use multiple distribution strategies, and passive distribution could be one approach. For example, the company provides information on insurance products with its utility bill. People who are interested can telephone the call centre or complete a form requesting that someone contact them. In addition, Codensa actively sells insurance to its client base through an out-bound call centre and an active sales force.

Some distribution models use available client information to effectively and efficiently target sales efforts to improve take-up. This innovative use of information takes place in at least two ways:

- **Using distribution partners' client databases to tailor products.** An example of this is Aon Affinity's use of its utility and telecommunications distribution partners' client information databases in Brazil. The information is used to assess clients' insurance needs, and to develop policies that are appropriate for the needs of the specific target market.
- **Focusing sales efforts.** Mapfre in Colombia and QBE in Brazil use the distribution partners' client information to inform and efficiently target sales strategies, such as out-bound call centres, direct mail, door-to-door sales agents, or a combination of these, at clients whose needs most closely match the benefits offered by the insurance product.

Experimentation with multiple sales channels allows insurance companies to identify the most effective channel. For example, Max New York Life found that traditional "push" (or active sales) channels experienced higher take-up levels, but had the drawback of higher policy initiation costs as more time is spent interacting with the client. "Pull" (or non-active/passive sales) channels achieved some success as premium collection channels, but had significantly lower take-up rates for initial sales than push channels. In terms of net benefit, their experience indicated that "push" channels offer the better option for initial product sales, while "pull" channels are the more efficient approach for top-up payments after the initial product purchase.⁴

Incentives for sales staff are critical to the successful take-up of microinsurance products. This is demonstrated by the low level of funeral insurance sales through the rural vendor network Wiredloop, where sales staff are often not directly remunerated, compared to the success of Casas Bahia, where reliable and significant sales commissions contribute a substantial portion of the staff's overall remuneration.

The high degree of trust that the market has in the distribution channel and its sales staff, however, could mask poor value insurance products. In Brazil and Colombia, for example, personal accident insurance tends to have low claims ratios, often below 15 per cent of gross premiums. Yet the market is buying it because they trust the distribution partner.

⁴ As described in Chapter 8, the Max Vijay product is a savings product that allows policyholders to add to their savings policy when they have funds available. These additional contributions are referred to as "top-ups".

The question of trust relative to value is also highlighted by experience in South Africa, where funeral insurance sold by different channels has different levels of success. The rural vendor Take-it-Eezi has had considerably less take-up than the well-trusted, low-cost clothing and small appliance store Pep. Whilst Pep has managed to accumulate a high level of trust in the low-income market, Take-it-Eezi is a less well-known brand used to network a number of informal rural vendors around a third-party payment system.⁵ This may also be a direct consequence of the differing nature of the target markets of the two distribution partners – Pep tends to serve a slightly higher-income market than Take-it-Eezi.

22.3.5 Partnership management

“Microinsurance belongs to the distribution channel” has proved true in many of the cases where retailers and utility and telecommunications companies assert their dominance and power in all aspects of the distribution process. The increased bargaining power of distribution channels relative to the insurance company enables channels to negotiate a higher proportion of the premium as remuneration than traditional insurance distributors would be able to do.

A critical theme emerging in the distribution story is the necessity to align the incentives of the distribution channel with those of the insurance company. Aon Affinity in Brazil was able to do this by creating products that cover the liability (e.g. electricity or telephone bill or finance repayment) of the distribution partner should its client be affected by an insured event (e.g. unemployment, personal accident or disability). Furthermore, it remunerated the distribution channel for providing client information and collecting premiums.

The remuneration relationship between the insurer and distribution partner can take different forms. In some cases, as with Hollard’s relationship with Pep, the remuneration comes in the form of profit-sharing through a joint venture, in addition to the commission received by Pep. In other cases, the distribution partner receives only a fixed commission. The remuneration model is affected by the level of equity attached to the distribution partners’ brand – the higher the level of trust and recognition attached to the brand, the greater the bargaining power of the distribution channel.

Well-trusted distribution channels face the greatest reputational risk and therefore also choose to be involved in the product development and revision process because they know their clients and want to ensure that they provide them with value. Furthermore, distribution partners who have greater levels of

⁵ It should, however, be noted that the funeral insurance policies underwritten by Hollard and distributed through Take-it-Eezi and Pep do not suffer from the same low claims ratios as noted in Brazil and Colombia.

existing client information, such as utility companies and credit retailers, want to use this information in an optimal way and therefore also get involved in the product-development and administration process.

Building a successful distribution channel requires significant investment, by both the insurer and distribution partner, in human capital and insurance-specific information technology (IT) platforms. For example, Mapfre had to train Casas Bahia sales staff to sell insurance, and it improved the IT system to facilitate sales. Casas Bahia manages the client database, and only passes data on to Mapfre for reporting purposes and to facilitate claims management. Other examples of high investment can be found in Colombia, India and South Africa, where utilities, retailers and telecommunications companies sold insurance, often for the first time, so that the insurers also had to train staff and put in place improved IT systems.

22.4

Moving forward

The current wave of microinsurance innovation is characterized by insurance companies working in partnership with non-traditional distribution channels to reach their unserved or under-insured client bases. Distribution innovation has occurred mainly in product development, sales and premium collection, with less emphasis on the servicing, administration and claims aspects.

Given the number of entities involved in these partnerships, the distribution process has become more complex. Where traditionally insurance is distributed by an agent or broker who deals directly with the insurer, many of the examples reviewed in this chapter include a broker that facilitated the relationship between the insurer and distribution partner, third-party administrators and, in some cases, a payment platform. All these entities have to be remunerated. The fact that many entities are involved has, in some cases, led to an increase in distribution costs. The problem is exacerbated if the distribution channels have a high degree of client trust and are able to negotiate higher commission levels.

What does this wave of innovation mean for insurers and their distribution partners?

- **Greater efficiency is required in distribution.** Going forward, the achievement of efficiency in microinsurance is likely to require more focus on lowering distribution costs. This cost control may require concerted effort to limit the number of entities in the value chain, which is likely to have interesting implications for the way insurance companies structure their partnerships with distribution entities. Insurers and their distribution partners will have to carefully consider their commission levels and profit-sharing arrangements.

- **Partners’ commitment to client value matters.** Distribution partners are increasingly becoming involved in product development. In most cases, this is in the interest of the client where the distribution partner is trying to limit its exposure to reputation risk by ensuring it provides good value. Rather than simply increasing the prices of its funeral products, retailer Pep and Hollard Insurance, for example, developed and re-launched a new product when they realized they had significantly underestimated mortality rates. This was done to ensure that Pep’s brand did not suffer damage. However, there are also cases where the distribution partner does not have a strong interest in protecting its brand and its closer involvement in the insurance process may simply be to maximize its income. Insurers need to think carefully about whom they choose as partners and whether these entities have the interests of clients at heart.
- **Imagine distributors as “one-stop shops”.** To continue offering clients value, alternative distribution models will have to turn the servicing and claims processing components of distribution on their heads. Insurers will have to start to use distribution partners as “one-stop shops” that not only sell policies and collect premiums, but also allow clients to make changes to their policies and become the point where claims are paid out. Not all distribution channels reviewed in this chapter will be able to do so, and it is likely that channels that can more comprehensively serve clients will be more successful than others.

What can we expect of the next wave of microinsurance innovation? Given the experiences with the current wave, it can be expected that regulators will start to scrutinize the issue of value offered to clients. While low claims rates may be a fact of life in the early stages of product and business model development, this should improve over time. An improvement in claims rates may require interesting and innovative approaches to informing clients about product features and exclusions, continuous communication with clients to ensure they are aware that they own a microinsurance product and, lastly, simple and efficient claims processes. The last word rests with the client, and if insurance companies are unable to offer value where and when it is most needed, the success of microinsurance will be threatened. The initial success associated with acquiring new microinsurance clients through alternative distribution channels will not be sustained if insurers and their distribution channels are unable to innovate on claims processing and servicing. Such innovations from microinsurance can provide lessons across all market segments of the insurance business.

Microinsurance intermediaries

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The authors appreciate the helpful inputs from the reviewers, who include Sabrina Regent (PlaNet Guarantee), John Pott (formerly with AKAM), Richard Lefley (MicroEnsure) and Jose Luis Contreras (Aon Bolivia).

Insurers face a multitude of challenges as they move down-market (*see Chapter 19*). Among them is the lack of insurance expertise amongst a growing diversity of potential delivery channels (*Chapter 22*). Microinsurance intermediaries have emerged to bring together these two integral groups.

For the purposes of this chapter, microinsurance intermediaries are any organization that facilitates, in exchange for a fee, the transfer of microinsurance risk from an original low-income client – usually a group of poor persons, often represented by a delivery channel such as a microfinance institution (MFI), cooperative or other purchasing group – to an insurance company. The microinsurance landscape is increasingly being occupied by such organizations fulfilling vital functions in the development of microinsurance. Microinsurance intermediaries can take a range of institutional forms, from commercial multinational corporations to small non-governmental organizations (NGOs). Not only do these intermediaries serve as “market makers”, using their networks and expertise to develop products and risk transfer value chains from scratch, but they also provide a variety of administrative services to supplement and improve the unique aspects of the risk transfer process in low-income markets.

This chapter begins by defining the role of insurance intermediaries and compares and contrasts traditional approaches with intermediaries acting in the low-income market. The second section describes the results achieved by three specialized microinsurance intermediaries – MicroEnsure, the First MicroInsurance Agency (FMiA) Pakistan and PlaNet Guarantee. The chapter then considers the preliminary experiences of commercial intermediaries venturing into microinsurance, including Aon, Marsh and Guy Carpenter. The chapter concludes with an analysis of the value proposition of intermediaries and insights into the challenges that lie ahead.

23.1 Insurance intermediation: Conventional vs. micro

23.1.1 Conventional intermediaries

In insurance markets, there are two types of intermediaries: brokers and agents. The key difference between the two is representation. Brokers represent policyholders and purchase insurance on their behalf. They often negotiate with a variety of insurers to take advantage of favourable market conditions and underwriter competition. Agents, on the other hand, represent insurers. Depending on the regulations in the country, they can represent one or several insurers. In the Philippines, for example, agents can represent one life insurer but up to seven general insurers. Agents commonly focus on a single geographical area or line of business. Agents and brokers can be individuals, small firms or large companies, again depending on local regulations.

In some jurisdictions, notably India, regulatory allowances enable aggregators, such as MFIs and similar institutions, which have direct contact with the poor, to distribute policies via their field staff without obtaining licences for every employee who sells insurance. Regulatory allowances such as these are essential for microinsurance in jurisdictions where the direct “partner-agent model” prevails. It would be impractical for MFIs to require all of their staff to obtain individual insurance licences. In Viet Nam, where each seller of microinsurance must be licensed, the Agriculture Bank Insurance Company spent over US\$1 million and several months training thousands of local agents.

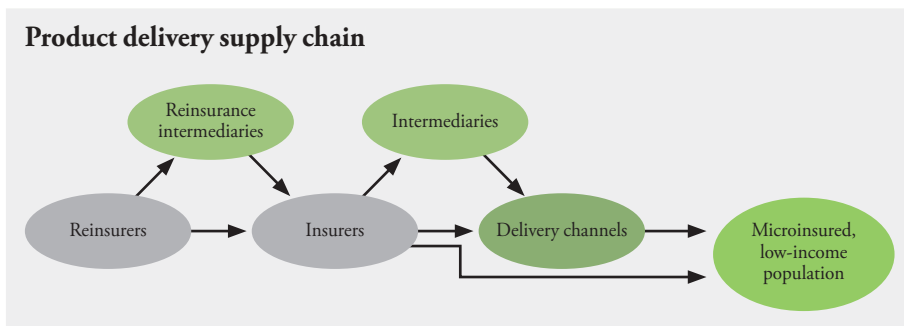
In developed insurance markets, intermediaries are distinguishable by their position in the supply chain. Many focus on retail distribution, delivering policies directly to consumers (individuals or businesses). Other intermediaries work at the wholesale level, distributing policies through retail production sources. Such wholesalers, referred to as managing general agents (MGAs¹), serve as crucial market aggregators and often fulfil essential policy-servicing functions as well. MGAs act as an extension of an insurance company fulfilling vital programme administration functions such as underwriting, loss adjustment and risk control. MGAs are often able to command higher commissions than other agents due to their higher degree of integration in the process, although they are usually subject to supervision and approval by their insurance company partners for underwriting and claims processes.

MGAs often specialize in niche or special classes of insurance. These wholesale intermediaries provide consumers with useful information on and access to products that would otherwise be difficult to offer. They enable insurers to benefit

¹ These wholesale agents are also known by a variety of other names, including managing general underwriters, underwriting management agencies, programme administrators and general agents.

from economies of scale, mitigate underwriting difficulties and help in risk management. Microinsurance intermediaries covered in this chapter share many characteristics of MGAs in developed markets because of their specific focus, their ability to serve as aggregators of policies from many underlying sources and their positioning in the microinsurance supply chain, which is one step removed from the ultimate consumer (*see Figure 23.1*). Unlike wholesalers however, microinsurance intermediaries do not distribute their products through traditional retail agents that have been formed for the explicit and exclusive function of insurance distribution.

Figure 23.1



23.1.2 Delivery channels

Microinsurance largely depends on the efforts of delivery channels. Delivery channels typically have direct and regular access to poor consumers and work with insurers to distribute microinsurance products to them. While some insurance companies work with their own captive agents to reach the poor directly, such arrangements are uncommon. A more frequent approach is the partner-agent model, whereby insurers work with delivery channels to sell products to their clients. Products are thus delivered by the field staff of an NGO, credit officers of an MFI, cashiers at a retail outlet, or church officials where microinsurance is offered. It is expected that the delivery channel will act as an intermediary, representing its clients, identifying appropriate products, sourcing the insurer and servicing the client.

In practice, however, many delivery channels have not fulfilled this broader function effectively. Their insurance skills are often limited and their motivation confused. Their aim is either to provide value for their clients or to maximize the growth of their balance sheets. Thus, there could be a place for broker intervention in microinsurance to bring together insurers and delivery channels, if the broker:

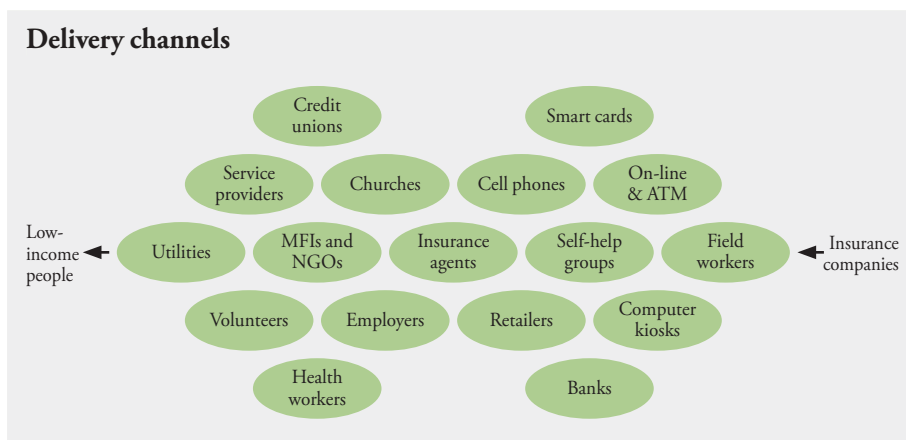
- has a greater interest in providing quality and value to low-income markets than current delivery channels;
- is skilled at working with the low-income market;
- can provide comprehensive back-office services; and
- can do all this at a more competitive price than insurers selling directly.

For insurers using the partner-agent model, MFIs are the “low-hanging fruit” in the microinsurance delivery channel landscape and could thus be characterized as the most obvious direct avenue of microinsurance product distribution. However, MFIs are limited in scope. Collectively, MFIs reach only 190 million borrowers worldwide (Reed, 2011). This is less than half of the current microinsurance outreach (*see Chapter 1*) and a fraction of the global potential microinsurance market.

Discovering, unlocking or building alternative avenues of direct access to the poor is crucial to the expansion of the microinsurance market. As illustrated in Figure 23.2, a host of organizations and methods could be used to access the low-income market, but the development of these channels can be arduous and complicated work. With the exception of MFIs, few potential delivery channels have existing financial relationships with the poor, and the financial literacy of the management of potential delivery channels can be limited. Intermediaries can therefore play an important role in facilitating the delivery channel development process.

Insurers and delivery channels often have trouble with communication. The two parties have very different motivations, systems, understanding of client needs, and knowledge of insurance concepts. However, they agree that neither wants to do much work beyond what is necessary to sell the product in a straightforward way. Here, an intermediary’s knowledge of the low-income market and attendant resources can play an important role by bridging the knowledge and capacity gap between microinsurance clients and insurers. While microinsurance intermediaries have additional capabilities, this bridging function is a significant component of their value proposition.

Figure 23.2



23.1.3 Microinsurance intermediation

Selling and managing microinsurance can require a significantly different approach for intermediaries. In traditional markets, products are well defined, clients understand insurance concepts, policy volumes are limited and operational processes are well established. The peculiarities of microinsurance obscure otherwise comfortable aspects of insurance product delivery behind a fog of ambiguity.

To serve the low-income market, a new paradigm is needed because empirical understanding of potential clients and their demands is limited. Addressing this experience vacuum often requires extensive research, product development, market education and delivery channel staff training to prepare for managing huge volumes of transactions arising from new products with different and limited controls. This all takes time, requires personnel and can be costly. Even if the intermediary does this additional work, its fee or commission on a per-policy basis is tiny. More work and less income per policy makes the business case questionable and certainly requires a very skilled manager. Once these issues are considered, it is not surprising that only a few traditional brokers have entered this market.

Table 23.1 identifies some of the key differences between traditional and microinsurance intermediation. Traditional intermediaries are fundamentally matchmakers, matching demand with existing supply. Microinsurance intermediaries, however, must often be market makers, identifying unmet needs, developing products and overseeing their delivery through hands-on training of delivery channel staff, and adapting or building systems to manage policy and claims administration. The role of a market maker in microinsurance is much more significant than that of simply a matchmaker.

To make a market, every component of a microinsurance value chain, including identification of the target client base and delivery partner, product development, client education and motivating insurers to engage in this new business segment, has to be built. To do so effectively, market makers must have a deep understanding of poor households and the related constraints and demands. Hence, microinsurance intermediaries are commonly not mandated by a customer collective, a delivery channel or by an insurer, but act on their own to build a market and economic base to subsist upon.

Table 23.1

Key differences between insurance and microinsurance intermediation

<i>Key activity</i>	<i>Traditional intermediary</i>	<i>Microinsurance intermediary</i>
Sales knowledge required	Strong understanding of traditional insurance products and the needs and demands of the middle- and upper-income markets.	Clear understanding of the needs and demands of the low-income market as well as an understanding of what is required to get them to buy insurance.
Market demand study	Demand is generally gauged passively in response to clients' direct requests.	Market research of varying intensities performed to understand demand, which is often latent.
Marketing and education	Typically, brochures and basic presentations are sufficient for a market that already understands insurance.	Typically requires innovative approaches such as comic books, microinsurance "classes", role playing/acting and generally marketing with a focus on consumer education.
Product development	Since most basic products are well known and understood, product development from scratch rarely takes place; even new products tend to benefit from a wealth of underlying data, which can be used for pricing and policy design.	Since the products are typically completely new to a market and underlying data are scarce, there is a need for product reformulation, pilot testing and significant monitoring to ensure product success.
Training delivery channel staff	Direct sales are common; when retail "delivery channels" (typically licensed agents or brokers) are used, very little training is required.	Significant training and supervision of typically unlicensed and inexperienced delivery channel staff.
Back-office management	Managing moderate volumes with traditional systems; gathering a significant depth of information for each policy.	Managing large volumes of very small transactions; gathering limited information for each policy.
Claims	Follow process with significant controls, generally slow claims payment; limited volumes.	High transaction volumes, rapid processing and payment required; limited controls.
Cash handling	Traditionally managing and aggregating cash transactions between insured and insurer through payroll deduction or other simple transactions from corporate entities.	Managing premium collection and claim disbursement through organizations that may require individual transactions with their clients and may not commonly aggregate financial transactions.

23.1.4 Conventional intermediaries and microinsurance

Despite these significant differences between conventional and microinsurance intermediation, some traditional brokers and agents have made forays into the low-income market. In fact, the World Federation of Insurance Intermediaries (WFII), which represents agents and brokers from over 100 national associations, had expressed concern that those promoting microinsurance wanted restrictions lifted to legally allow unlicensed agents to sell microinsurance, so in 2010 the WFII produced a policy paper on microinsurance (*see Box 23.1*). The Federation criticized the lack of regulatory control over microinsurance intermediaries and looked to promote the importance of a professional, regulated market. The paper suggested that there is no reason to treat microinsurance any differently from insurance.

In many countries, however, when intermediaries dig a bit deeper into microinsurance, they often conclude that there is no business case for them in the field. This general stance may now be beginning to change as intermediary success stories become more common. For example, as discussed in more detail later in the chapter, some local branches of major commercial brokers, such as Aon in Bolivia have taken a marked interest in microinsurance and have identified functional roles for themselves. Aon's success in Bolivia gave rise to broader interest in microinsurance at Aon globally.

Box 23.1

WFII policy position on microinsurance

The position paper of the World Federation of Insurance Intermediaries (WFII) calls upon policymakers to consider key areas of concern for the Federation's members:

- “1. There is confusion in some markets with respect to the difference between microinsurance and mass marketing or small premium insurance products.
2. Commercialization of microinsurance is going faster than the implementation of adequate regulation and supervision.
3. Where microinsurance is regulated, the effects on the intermediation market and the principles on regulation of intermediation are often overlooked or not sufficiently considered.”

To address these issues, the WFII concludes “that its current Principles on Regulation on Insurance Intermediation should apply equally to Microinsurance. WFII calls upon supervisors and regulators, where microinsurance regulation is considered, to engage in a dialogue with the national associations of insurance intermediaries in their respective countries to find suitable solutions.”

The Federation encourages its members to “1) Promote WFII Principles on Regulation of Insurance Intermediation; 2) Participate in the debate on regulatory and supervisory proposals and their implementation of regulation for microinsurance intermediation; and 3) Stimulate the growth of microinsurance by providing pertinent information and references to members that would incentivize their participation in this market segment.”

Source: WFII, 2010.

23.2 Microinsurance-only intermediaries

To be successful in microinsurance intermediation, brokers and agents must have the capacity to bridge the gap between the low-income markets and the insurance community. Understanding the insurance side of the equation should not be an issue for most licensed intermediaries, though recognizing and appreciating the needs of low-income markets is very much an acquired skill, which existing intermediaries commonly lack.

To fill the void created by this knowledge gap, at least three organizations were established between 2002 and 2007 with a specific focus on microinsurance intermediation: FMiA, MicroEnsure and PlaNet Guarantee. This section provides a short overview of the three institutions, their business strategies, and their similarities and differences. The section closes with a synthesis of some key lessons learned so far regarding the business model of stand-alone microinsurance intermediaries.

23.2.1 Aga Khan Agency for Microfinance (AKAM)

In 2005, the Aga Khan Development Network (AKDN) set up AKAM as a non-profit development agency under Swiss law to provide microfinance services to low-income families. This resulted in the consolidation of a number of smaller in-country AKDN microcredit and microsavings initiatives mainly based in the Middle East and Asia.

AKAM's microinsurance activities started in 2006 when it launched FMiA in Pakistan² to act as the insurance agent dedicated to serving low-income families for the New Jubilee Insurance Group, which is a member of the AKDN family of companies. A stop-loss reinsurance arrangement was put in place to protect the insurer from anticipated initial adverse claims experience associated with the types of experimental products that FMiA was anxious to pursue. A similar set of arrangements was established in the United Republic of Tanzania in 2009, but without any stop-loss facility. By the end of 2010, FMiA had active microinsurance business in these two countries, with roughly 400 000 lives covered under a number of group schemes.

In launching the programme, AKAM received a US\$5.5 million grant from the Bill & Melinda Gates Foundation. At that time, the business plan was to cover 1.75 million low-income Pakistanis by 2010 and to break even within three years, as well as to expand operations into six countries where the Aga Khan Network had significant operations.

² AKAM was joined as a shareholder of FMiA Pakistan by the Acumen Fund, a US-based social enterprise venture capital fund.

FMiA's microinsurance intermediation was designed to complement already existing and related activities and institutions belonging to the Aga Khan Development Network. Pakistan was an obvious and promising country in which to start operations, given that developed MFIs, health clinics and hospitals, an insurance company and a major commercial bank were all already connected to the AKDN in Pakistan.

AKAM set up a dedicated microinsurance agency instead of developing microinsurance within New Jubilee, with the objective of bringing in new ideas and dedicated energy which, when successful, would facilitate their replication in additional countries. From the perspective of FMiA, the rationale for an exclusive partnership with one insurance company, beyond the alignment of ownership interests in this instance, lay in potentially better synergy in jointly developing complex products: higher-premium products with a value proposition for the end-user superior to the credit life products already established in the market. The concept of working with a single insurance group seemed like a promising way to replicate microinsurance in different countries.

The prospect of successfully tendering comprehensive health products, which was a key goal of FMiA, looked promising given New Jubilee's respectable market share in the corporate market for group health insurance and AKAM's experience in providing savings and microcredit services to low-income families. FMiA started operations in Pakistan with two products: credit life and hospitalization. Offering hospitalization cover through an affiliated network of local health facilities promised to benefit all partners since the clinics had been running below capacity.

In fact, hospital occupancy did rise substantially. However, the health service providers refused to offer more generous rebates on service charges in return for increased client numbers. Such rebates were necessary to maintain the premium rate, which proved to be insufficient to cover the costs of FMiA and Jubilee. This deficiency was also related to the premium being initially set too low for a comprehensive health insurance package, serious adverse selection, particularly for the maternity benefit, and the absence of low-cost day surgery protocols at the AKDN clinics. In short, what seemed to be an optimal basis for starting a promising new service to the low-income population encountered significant difficulties in practice. By 2010, FMiA was still making a loss and required additional equity funding to continue to serve its established client base.

In 2009, AKAM/FMiA entered the Tanzanian market. For a variety of reasons, operations never really took off. Negotiations with local health service providers were unsuccessful and larger MFIs were either not interested or already tied up with insurance providers. Some internal challenges surfaced, too; developing new products with the insurance partner involved heavy bureaucratic processes. AKAM was unable to secure a stop-loss facility and local employees showed only moderate commitment and business drive. Drawing on the experi-

ence with the relationship with New Jubilee Life in Pakistan did not prove a significant benefit in the United Republic of Tanzania. Additionally, it took nearly a year for FMiA Tanzania to be granted an agency licence.

Given the limited results and various challenges encountered, during a profound strategic review of all AKAM's operations it was decided to merge FMiA Pakistan's operations and client base into New Jubilee. This measure was viewed as less costly than recapitalizing FMiA as an independent intermediary. The process of integrating FMiA into New Jubilee and establishing a microinsurance department began in May 2011. FMiA Tanzania was closed down and the limited microinsurance activities in the country were phased out. The AKAM/FMiA experience provides many valuable insights, but also highlights the difficulties on the ground for a microinsurance intermediary striving to build up a sustainable business, particularly with regard to introducing higher-value microinsurance products with a strong social impact to the market.

23.2.2 MicroEnsure

Opportunity International, a non-profit microfinance support organization, started laying the foundations for microinsurance operations in 2002. Three years later it set up a dedicated, for-profit microinsurance intermediary, which sold its first policy in early 2006. The rationale behind creating a separate, dedicated microinsurance intermediary was to better serve Opportunity International's existing microfinance clients and to drive innovation and outreach on a larger scale. Initially named the Micro Insurance Agency, this company has operated since 2009 under the name MicroEnsure. In 2007, the Bill & Melinda Gates Foundation awarded Opportunity International a US\$24.2 million grant on the premise that its MicroEnsure platform would trigger rapid geographical expansion and the development of new products, thus leading to massively increased numbers of microinsurance customers. In its press release relating to the grant, Opportunity International stated that this would allow its subsidiary to enter 11 new countries, leading to 21 million poor people being insured by 2012.

At the end of 2010, MicroEnsure had active microinsurance subsidiaries in five countries: Ghana, India, Kenya, Philippines and the United Republic of Tanzania, serving 2.1 million end-clients (half of them in the Philippines alone). Legally, MicroEnsure is registered in four of these countries as an insurance broker and as a corporate agent in the fifth. In each of these countries, MicroEnsure works with at least two insurance companies. Additionally, MicroEnsure began experimenting with a franchise model³ in Mozambique and Rwanda, which

³ In this case, the franchise model reflects the use of systems and processes by local companies without requiring MicroEnsure direct management.

allows the company to conduct business in these countries while avoiding many of the potential pitfalls associated with legal registration.

MicroEnsure maintains a special business relationship with Hollard Insurance (South Africa), which offers MicroEnsure a facility that operates like a cell captive. This arrangement allows MicroEnsure to use Hollard's insurance licence and write specific classes of business on Hollard's books without having to solicit new capacity or to put up risk capital itself. Hollard benefits from increased insurance volume, while MicroEnsure enjoys a 50-per-cent profit share on underwriting gains.

In addition, Hollard serves in some cases as a reinsurer, which makes the franchise model look attractive. MicroEnsure works at the local level through registered insurers that serve as fronting companies channelling the business sourced by MicroEnsure into Hollard's books and maintaining full control over underwriting and claims data. In this arrangement, MicroEnsure receives a commission for its work and an underwriting profit share.

Though MicroEnsure operates in most cases under the legal structure of a broker, it does much more than a traditional insurance broker would do. It actively works to create markets from capacity building of delivery partners and product development, to underwriting, claims administration and market education. Hence, an outsider looking at MicroEnsure's range of services would conclude that it behaved rather like an insurer, except that it is not exposed to underwriting losses.

Starting with standard credit life products for MFIs, MicroEnsure moved into more complex products and beyond MFIs as delivery channels. The changes arose from both a corporate social conviction (in part due to the company's non-profit ownership) and a business necessity. MicroEnsure management believes that client value is much higher in products such as health or crop insurance and at the same time realizes that credit life microinsurance is quickly becoming a commodity business that will eventually squeeze out brokers unless they add value to the composition, processing or administration of such policies.

MicroEnsure has been involved in the development of index-based insurance (*see Chapter 11*), but it has learned that this area poses many challenges for brokers. Product development is costly and time-consuming, and reaching scale has proved to be difficult – the combination of complex product designs, comparatively high premium levels and incomplete protection has hampered take-up. These realities have motivated MicroEnsure to move away from developing index insurance products as an up-front investment to a model where it offers its expertise as a consulting company for others developing index products. While this move clearly improves MicroEnsure's financial situation, it does not solve the practical problems the product faces on the ground.

In just a few years of operation, MicroEnsure has been confronted with several challenges, which have led to radical changes in strategy. For example, credit life products were too easily copied and administered, rendering them unsuitable as an economic base upon which to build the business. Some adjustments have included reassessing country programmes. In Uganda, for example, one non-functional relationship with an insurance company culminated in the abandonment of the whole market as the reputational damage incurred there was beyond repair.

Undoubtedly, MicroEnsure has contributed significantly to the advancement of the field in several ways, including a demonstration of what should be done in microinsurance. However, the financial aspects of brokering microinsurance have led it to seek alternative sources of income to cover development and ongoing operational costs, as well as to implement a drastic revision of its plans and strategies. While growth in the number of policies has improved in 2011, largely due to mobile phone linker cover (*see Box 24.7*), overall growth has been far below expectations, which were clearly optimistic.

For the near future, MicroEnsure is focusing on the development of valuable and financially sustainable health microinsurance, while developing microinsurance sales through mobile phone networks. With credit life products not providing substantial cash-flow and profitability, mobile phone insurance has the potential to take on this role. With a strong profit generator, MicroEnsure can focus more on products that might provide better value for clients but need more time to reach success.

23.2.3 **PlaNet Guarantee**

In 2007, the French microfinance organization PlaNet Finance added a specialized microinsurance broker to its various microfinance activities. The organization, PlaNet Guarantee, developed microinsurance projects in collaboration with MFIs affiliated with the PlaNet Finance group. The company initially offered only credit life products, but it has since developed a range of other products.

Originally set up as a wholly owned subsidiary with strategic links to the European reinsurance sector, PlaNet Guarantee gradually opened up its capital base to four strategic shareholders, each of which now holds 23.6 per cent of the company: BNP Paribas Assurance, Hannover Re, Malakoff Médéric and Finaréa. As a result of this change in ownership, PlaNet Finance now owns only a minority stake in the broker.

At the end of 2010, PlaNet Guarantee had an active microinsurance broker business with 24 MFIs in 12 countries.⁴ It is noteworthy, though, that Senegal

⁴ Burkina Faso, Colombia, Cote d'Ivoire, Egypt, Gabon, Guatemala, Madagascar, Mali, Mexico, Senegal, Sri Lanka and territory under the Palestinian Authority.

alone accounts for seven MFI partners. At the end of 2010, PlaNet Guarantee was covering roughly 240 000 lives, largely under credit life products.

Further activities include the creation of a system of health mutuals in Benin and Madagascar, the development of complementary health cover for low-income people in French suburbs (*the banlieux*) and increasingly, reinsurance broker activities predominantly in India. In addition, PlaNet Guarantee has established a research department, which regularly conducts microinsurance studies.

So far, PlaNet Guarantee has found it difficult to cover its primary microinsurance broking costs through related fees. The intermediary's breakeven point in this business segment is projected at two million low-income clients in credit life alone. Yet its main activities are made possible mainly by its equity fund and ad hoc research contracts, as well as micro-reinsurance broking. In 2010, the latter activity generated roughly four times as much income as the company's direct broking operations.

In the beginning, PlaNet Guarantee's strategy was to expand rapidly into many countries. This was done on the premise of reinforcing its image as a socially oriented business bringing innovative products and ideas to undeveloped markets. At the same time, maintaining a widespread network of country operations required substantial investment. In many instances, PlaNet Guarantee was not able to meet each country's operating capital requirements.

In terms of products, PlaNet Guarantee will focus on three categories: crop insurance, credit insurance and health insurance. With the support of the International Finance Corporation's Global Index Insurance Facility (GIIF), PlaNet Guarantee is able to innovate by setting up the first regional management platform dedicated to index insurance in West Africa. The project is based in Senegal with satellite branches in several other countries including Burkina Faso, Cote d'Ivoire and Mali.

23.2.4 Comparison and conclusion

Comparing the three examples of specialized microinsurance intermediaries discussed above may seem slightly unfair as all three of them started from very different initial conditions. However, from a global microinsurance market perspective, some important observations emerge. While generous grants (MicroEnsure and AKAM) or socially focused investments (PlaNet Guarantee) have allowed the three companies to set up large projects, none has so far built a sound commercial foundation for direct primary microinsurance intermediation from which to operate over the long term. Although it has become obvious that the breakeven point in microinsurance tends to take longer to reach than for traditional insurance operations, the limited evidence thus far calls into question the long-term sustainability of current primary broking models. Of the three companies:

- one has abandoned its external agent model, merging these operations into the insurance company and discontinuing its support from international headquarters;
- another has had to make substantial changes to its business model twice in three years; and
- the third does not see profitability other than through cross-subsidies from its micro-reinsurance broking results.

For the two companies with significant donor support, impatience and initial overselling of business prospects or unrealistic expectations may have contributed to these sobering results and triggered partial mission drift in the quest for quicker financial returns. It is clear that achieving profitability in microinsurance takes time, but for intermediaries it is far from clear yet how much time, or in what institutional configuration.

The three organizations also followed different geographic and product line strategies in the start-up phase, ranging from concentrating on one or two countries with a fairly complex product (FMiA) to working in over six countries with a mix of easy, off-the-shelf credit life policies and other more demanding products (MicroEnsure), and working in more than ten countries offering primarily credit life with the intention of adding more valuable products in the future (PlaNet Guarantee). In terms of the number of clients covered, MicroEnsure appears to have produced the best results. At the same time, it also has the generous donor support as well as institutional links to the largest microfinance network among the three. However, none of these organizations has produced convincing results enabling a business case to be made for microinsurance intermediation.

These organizations have not yet shown that microinsurance intermediation pays enough to sustain a specialized company. It remains uncertain whether there is enough money in microinsurance administration for them to earn a commercial living while still providing a low-cost, high-quality service. The history of microinsurance intermediation is still young, so it is premature to draw firm conclusions. Over time, these institutions should help us to better understand what is needed to build a profitable business from microinsurance brokering.

23.3

Traditional intermediaries with some microinsurance activities

Commercial brokers typically run lean operations and do not have the capacity to do the work necessary to make microinsurance profitable, especially given the additional market-making requirements, but perhaps the tide is beginning to turn. As described below, a few conventional insurance and reinsurance brokers have tested the microinsurance waters and begun to make a name for themselves.

23.3.1**Aon Bolivia**

In 2008, Aon Bolivia started to become involved in microinsurance intermediation. This came out of a conviction that there was a business opportunity, which was based on the belief that without an intermediary the microinsurance market in Bolivia would not really take off (Contreras, 2009). Aon Bolivia's approach to microinsurance is typical for a market maker; it did most of the product development work and identified delivery channels willing to provide access to their client bases and an insurer ready to take on the underwriting risk. Aon Bolivia also stays heavily involved in day-to-day transactions, from sales to premium collection and claims servicing. Often the insurer will allow Aon to settle claims on its behalf. In many cases, an employee of Aon Bolivia is physically placed at the partner MFI doing the entire client interaction work.

Aon Bolivia started with credit-linked policies, moved into endowment policies and is currently launching a health insurance product targeting female customers of an MFI. In the last quarter of 2010, Aon Bolivia worked with nine MFIs for delivery, covering 390 000 lives and generating gross premium of US\$170 000 (or an average monthly premium of US\$0.14 per policy). Mandatory credit life type policies and voluntary credit-linked policies (including mandatory product riders and endowments) each account for 45 per cent of the portfolio and non-credit-linked health policies for about 10 per cent. Interestingly, this new health insurance product is not underwritten by an insurance company, but directly by a network of health clinics and hospitals. The premium is approximately US\$10 per month per family.

The cumulative loss ratio for Aon Bolivia's microinsurance business over the last three years stands at 46 per cent and the MFIs' commission as a delivery channel at 20 per cent. In Bolivia, Aon's entry into the microinsurance market has not yet led to significantly decreased premium rates for end-customers. However, the market does benefit from increased product choice and presumably higher service standards. According to Aon Bolivia, the question of evaluating an intermediary's value proposition is misplaced, especially when the intermediary is involved in new and innovative market-making behaviour. The broader issue at stake is whether the intermediary has helped to develop a microinsurance market at all, not whether a market is more efficient thanks to the involvement of an intermediary. Therefore, the intermediary's value lies in its ability to create a market through innovation, and to change the mentality of underwriters so that they treat microinsurance as a stand-alone business line that has its own unique characteristics rather than as a mere extension of traditional insurance.

23.3.2**Marsh India**

In the same vein, Marsh India has developed a significant presence and portfolio of microinsurance business by acting as a market maker. In this capacity, Marsh

India is able to provide both insurance companies, which are keen to capitalize upon microinsurance business, and distribution channels, which often do not have the human resources or financial capability to implement new programmes, with services that enable them to start or expand their microinsurance activities. In particular, Marsh India has developed a business model providing advisory and consultancy services supporting the management and implementation of many of the government-sponsored health microinsurance programmes proliferating in India, such as RSBY (*see Chapter 20*).

In the case of RSBY, Marsh India's role is varied, but begins during the periodic tender process for each state or district. Marsh India will work in partnership with selected insurers interested in bidding for an RSBY tender and act in an advisory capacity. Assuming the insurer is selected as the carrier for the tendered programme, Marsh India will then act as an intermediary and advise the insurance company on the management and implementation of the scheme, including policyholder enrolment, claim administrator selection, auditing and evaluation of scheme performance, and reinsurance purchasing as necessary. In fulfilling the last function, Marsh India, along with its sister concern Guy Carpenter, has developed a reinsurance market to support such schemes. In some cases, Marsh India has worked with its clients and reinsurers to arrive at a price to be quoted for a tender, and if the company were successful the reinsurer would provide quota share protection of up to 70 per cent.

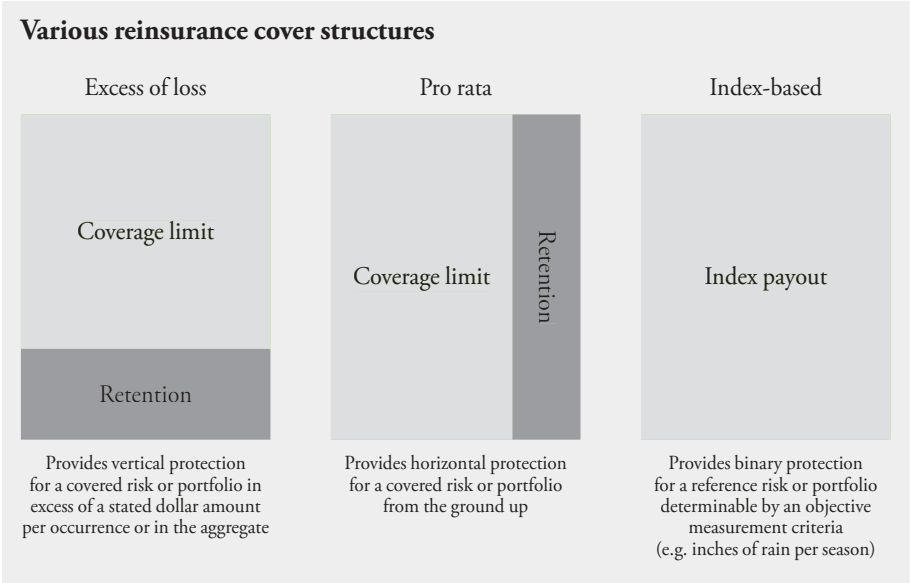
To date, Marsh India is working with seven government programmes representing over 85 million policyholders. In addition, Marsh India is working with partner insurers and key distribution channels in the country on the development of a handful of private-sector microinsurance programmes, which span a wide variety of products such as agriculture, natural catastrophes and life.

23.3.3 Reinsurance brokers and microinsurance

Reinsurance, insurance for insurance companies, involves the transfer of risk from insurers, or cedants, to reinsurers, which are a specialized type of insurance company set up to underwrite and protect the portfolios of insurers. Reinsurance transactions can take many forms, including excess of loss, pro rata and index-based (*see Figure 23.3*), but they are generally used by cedants to gain one of the following core financial and non-financial benefits: surplus relief, large line or aggregate capacity, results stability, catastrophe protection or access to expertise. In the context of low-income markets, microinsurers tend to seek micro-reinsurance support to improve in-house underwriting expertise (Garand and Wipf, 2006), to bolster limited risk tolerance or capital, to manage covariant risk or to minimize new-product pricing risk.

Similarly to traditional business, a microinsurer may call in a broker to structure a reinsurance deal and effectively bridge the knowledge gap between insurers and reinsurers. One such intermediary, Guy Carpenter, set up a special unit in 2008, GC Micro Risk Solutions, to facilitate the transfer of various types of microinsurance risk to the international reinsurance market on a commercial basis. The unit’s commercial micro-reinsurance transactions to date include aggregate stop-loss (a type of excess-of-loss cover) and quota share (a form of pro rata reinsurance) for several coinsurers involved in a large government-sponsored critical illness programme in India, a life quota share for a start-up microinsurer in Southern Africa and an index-based catastrophe programme ultimately benefiting an MFI based in Haiti (*see Box 4.5*).

Figure 23.3



As with primary intermediaries, Guy Carpenter is often required to develop a market. This means supporting microinsurance projects before they can be reinsured with product development services, or setting up partnerships with primary insurers. GC Micro Risk Solutions believes that delivery channels, broadly defined as any organization with an existing or potential financial relationship with the poor, will increasingly require such services if they are to move into more complex and risky lines of microinsurance such as agriculture, health and property. Simultaneously, many primary insurers will quickly reach their limits in respect of product know-how and risk management, making access to reinsurance capital and expertise increasingly important for expansion.

On the other hand, the role of reinsurance in the microinsurance market will undoubtedly change over time. In the short term, reinsurance may have a relatively broad appeal since the risk associated with microinsurance business remains too great for many local or inexperienced primary insurers to carry. However, as the market matures, primary insurers will grow more experienced and comfortable with microinsurance risk. When this happens, the distinction between microinsurance and traditional insurance will begin to blur as a natural consequence of economic development. While the timeframe for this maturing process is currently unclear, it is certain that now is the time for reinsurance companies to assert and maintain value in the development of microinsurance.

The limited evidence so far suggests that it is possible to charge commissions for intermediating reinsurance protection for microinsurance schemes that are high enough to consider it as the basis for a commercial business, although it is not known whether Guy Carpenter has already broken even. This question becomes more interesting considering that the bulk of Guy Carpenter's micro-reinsurance premiums brokered originate from the Indian-government-sponsored health insurance programme for the poor, which is also the most important deal for PlaNet Guarantee. In short, the number of commercial micro-reinsurance deals is currently limited.

The value proposition of a micro-reinsurance intermediary, like that of a microinsurance intermediary, cannot be accurately measured only by efficiency gains because a direct micro-reinsurance market has yet to develop an adequate basis for comparison. A broader view needs to be taken. It is important to consider what contributions a reinsurance intermediary alone can provide better than other market makers working to develop innovations in the field.

23.4

The value of microinsurance intermediation

The question of the value of insurance intermediation should be approached from both a client's and an insurer's perspective, taking into account the level of market development and the reason for the intermediary's creation. During the market development stage, however, most of these considerations are largely theoretical because there is too little information and few comparable markets are available, which limits possibilities for statistical analysis.

In traditional insurance markets, most of the value created by intermediation relates to the matchmaking services, i.e. finding the best existing insurance product to respond to a client's needs. The intermediary's value proposition is market intelligence and efficiency in finding the right product, though intermediaries may also provide value by advising the client on risk management strategies and pushing insurers to innovate at the margin where they detect unmet client demand. The intermediary's neutrality is important, especially for

the client, because neutrality will ensure that clients get the best deal. However, complete neutrality is difficult to achieve because intermediaries are often paid by commissions on the premiums brokered. From a client perspective, value tends to be higher when the intermediary market is competitive. Insurers, on the other hand, benefit when intermediaries bring new clients to them; intermediaries screen clients and will only present those to which the insurer is interested in offering a product. This is likely to be cheaper for insurers than contacting and screening new clients directly. From a market development perspective, intermediaries can increase efficiency in a competitive, developed market environment, compile and publish data, and offer a “second opinion” on issues such as natural-hazard modelling.

Unlike the traditional insurance market, in microinsurance most markets are not developed enough to allow for pure matchmaking services. Instead, intermediaries have to create a market. Market-making requires a different skill set from that needed by traditional intermediaries and the value proposition is also decidedly different for microinsurance. Answering the value question from a microinsurance client perspective has to be nuanced; clients often have to learn about microinsurance before contemplating buying such a product. Once the demand is generated, in contrast to traditional insurance markets, clients will not necessarily find a wide array of products to choose from. As a result, the value of microinsurance intermediary activity, from a client perspective, lies in building a formal market that caters to their needs. This is different from identifying the best product and reducing overall costs as is done by traditional intermediaries. In more developed microinsurance markets, intermediaries may offer a combination of market-making and matchmaking services, which includes efficiency gains through economies of scale on the back-office side, driving innovation by exploiting their multiple relationships with larger insurance companies and increasing competition among insurers.

From an insurer's perspective, the microinsurance intermediary may provide valuable information on a potential market. This information indicates market size, demand structure and client typology, specific risk data and intelligence on how to best reach clients. For example, Weather Risk Management Services (WRMS), an exclusive weather insurance broker, helped to launch the index insurance market in India, not just by facilitating contracts between insurers and delivery channels, but also by digitizing data from non-automated weather stations and developing the risk models necessary for product design (*see Chapter 20*). A microinsurance intermediary may also offer various front- and back-office services, since many insurance companies lack the technical capacity to handle large additional volumes of low-margin products.

Information on the market collected by intermediaries and their various risk transfer resources can be exceedingly helpful to representatives of microinsurers.

Of the intermediaries canvassed in this chapter, both MicroEnsure and PlaNet Guarantee have gathered proprietary and public datasets and produced information based on them that is important to the industry.

The market development view may be the most important one in micro-insurance intermediation; creating demand and supply, driving innovation on all sides and setting up efficient service structures are extremely important for market development (*see Box 23.2*). Microinsurance intermediaries play a unique role in accomplishing these tasks because intermediaries possess knowledge about the specific needs and requirements of the low-income market and the workings of commercial insurance companies. Market development is a necessity for intermediaries, since it allows them to establish their own economic base.

Box 23.2

Intermediaries as market makers: MicroEnsure in the Philippines

The Philippines has seen dramatic improvements in its approach to microinsurance resulting from a major coordinated effort between government agencies, donors, some private sector insurers and their associations, mutual benefit associations (MBAs), and delivery channels like the rural bankers' association. This effort has led to a paradigm shift that is still in process. As an intermediary facilitating relationships between MFIs and insurers in this market, MicroEnsure played a helpful role in pushing the frontier and promoting good value microinsurance.

Based initially on its relationship with one large MFI, MicroEnsure has found financial success in the Philippines, which is thus far its flagship country of operation. MicroEnsure has done so by offering local insurers back-office services to administer policies for their existing client bases. Building on an initial client base of roughly 240 000 covered lives, as well as on positive demonstration effects, operations quickly expanded. At the end of 2010, MicroEnsure Philippines had worked with over 20 MFIs, serving more than one million clients.

In its first phase of market entry, new partnerships with MFIs added to growth. Over time cross-selling of different products to existing clients gained in importance. Both factors may be beginning to flatten out, so that future growth will only be possible if MicroEnsure can tap into new delivery channels besides MFIs.

MicroEnsure's approach involving simple products, easy underwriting requirements, demand-driven benefits at fair premiums, and simple claims procedures has served as a strong example and a reinforcement of the efforts of others. Despite its success, MicroEnsure faces challenges from MBAs and some insurers as they strive to enhance their value proposition by providing simpler, better and faster service to the low-income market. The potential erosion of market share for MicroEnsure shows that even though it contributed to improving the microinsurance market in the Philippines, the market is moving quickly and it is easy for a broker to lose its competitive advantage.

Moving forward, if intermediaries are successful with their market-making activities, the value proposition is likely to change. If microinsurance intermediaries continue to have a role, three challenges will need to be addressed to ensure that the brokers' and clients' interests are well aligned:

- 1) **Increasing completion:** The absence of direct competition in the primary intermediary arena means that clients may not be able to make more informed and empowered choices when deciding between different risk management service providers. However, given the limited number of actors in most current markets, it might be difficult for a second intermediary to enter and compete head-on with an established one. The incumbent intermediary, if successful, will have already established relationships with most high-potential delivery channel partners, thus restricting the delivery channel partner options available to the second intermediary. The foray of conventional brokers into microinsurance may stimulate such competition if the experiences of Aon Boliva and Marsh India are replicable.
- 2) **Lock-in of delivery channels:** In addition to linking delivery channels with insurance providers, microinsurance intermediaries also offer portfolio administration services. In most cases where an intermediary administers the portfolio, clients were not truly free to choose these services because they typically come bundled with the overall risk management package, sold as an integral piece of the total value proposition. With specialized software solutions and cost-benefits gained from economies of scale and a streamlined production-focused business model, microinsurance intermediaries should be able to administer the portfolio much more cost-effectively than insurers. This is convenient for all involved, especially as many players in microinsurance struggle with the selection and implementation of efficient software solutions.

However, the possible downside is the potential challenge of migrating the portfolio to a competing intermediary or going direct at a future date. This holds true for delivery channels and microinsurers alike. For both, the crucial question is whether they want to invest in their own microinsurance businesses, building up knowledge and expertise internally and ultimately driving the market themselves, or they want to rely on a third party to do most of this work. For those who want to test the waters and make long-term decisions later, working through an intermediary is often a good idea. However, delivery channels and microinsurers should make sure they still have room to make strategic decisions later, including moving the business to another carrier or service provider.

- 3) **No incentive to reduce premiums:** Broadly speaking, a microinsurance intermediary's value proposition is threefold: first, gathering market intelligence and educating potential clients about the value of risk transfer; second, driving innovation through communication, education and negotiation with insurance companies; and third, administering portfolios efficiently. The first two services are

particularly interesting for new microinsurance market entrants, especially those with a desire to take part in pushing the microfinance frontier forward. The last one, portfolio administration, is of particular value for small players or in markets where the intermediary has significant advantages in terms of economies of scale, which would justify outsourcing portfolio administration even for large insurance companies. While this portfolio administration may remain valuable over time, the first two may be less so. Market intelligence is of vital importance in the development phase of an insurance market, but not all clients are always willing to switch providers once they are happy with the products and services received. Similarly, delivery channels, the intermediary's direct clients, are not constantly interested in product innovation.

Most intermediaries charge a volume-based commission for their services. This can be a fixed amount per transaction or policy administered, or a percentage of overall premiums generated by the intermediated business. In both cases, the intermediary has a clear interest in expanding business, but not necessarily in driving costs further down once a premium flow has been established, especially if the commission is positively correlated with the premium generated. This implies that intermediaries only have an interest in negotiating the most cost-effective deal for a client when in danger of losing business. As there is little competition, clients of microinsurance intermediaries might consider building assurances into their contracts such as performance-based commissions to protect against any possible lackadaisical behaviour.

Moreover, price is only one aspect of determining a good deal; post-production service, promptness of claims payment and value-added analytical services are important factors in deciding the value of inputs received. Intermediaries typically spend significant time and effort when entering into a new deal, often free of charge. Most of the value added through market intelligence and product innovation entails up-front costs, while portfolio administration is linked to a steady stream of service. Intermediaries have to recover these up-front costs but have typically not been explicitly paid for them, i.e.: they have to factor these costs into their volume-based pricing structure. Consequently, coming up with a sensible remuneration structure that motivates intermediaries to continually seek the best deal for its clients is important. It is also necessary to ensure that service and premium rates are renegotiated, especially after a given period during which no favourable change or innovation has been implemented.

23.5

Conclusions

Microinsurance is a nascent industry and is a relatively minor portion of the business of most commercial insurers and delivery channels. The limited focus of these crucial parties in the microinsurance supply chain may explain the slow

development of microinsurance in some markets. In specific cases, insurers or delivery channels can drive innovation independently and develop effective working models, though in most cases, they do not have sufficient motivation to push the boundaries of microinsurance products, services and processes. This is not surprising considering that the focus and origin of such organizations is in other areas, such as traditional insurance, microcredit and retail.

It may be too much to expect any more from insurers and delivery channels. Given this reality, intermediaries may be needed as market makers to develop, promote and innovate so that microinsurance can realize its full potential. However, a different approach to insurance intermediation is required. Given the unique hands-on requirements of serving the low-income market and of fostering a paradigm shift in the insurance industry, microinsurance intermediaries may require full vertical solutions to market creation from product development, grassroots distribution and claims administration to portfolio micro-reinsurance placement. Many of the intermediaries profiled in this chapter appear well poised to integrate and implement such solutions.

The challenges of microinsurance are exemplified by the conflicting needs of value chain participants: insurers, intermediaries and delivery channels need to cover their costs and earn a fair margin, while simultaneously offering consumers a low-premium, high-value product. The microinsurance-focused intermediaries have all experienced financial difficulties and less business volume than originally anticipated, and have had to make substantial adjustments to their strategies to find a way to break even. Developing sustainable microinsurance businesses takes time. However, the business case for microinsurance intermediaries is not yet proven.

The commercial intermediaries profiled with mixed product offerings are possibly better positioned for profitability because of the economies generated by offering business across the insurance market continuum.

Despite the uncertain business case, it is clear that there is a potentially important role for intermediaries. If managed effectively and efficiently, the role of the intermediary could be a significant driving force for up-scaling microinsurance. We need to watch the efforts going on now to transform these entities as they work to find the right fit for the microinsurance market-maker role with a structure that can be profitable. It is quite possible that the emerging solution will lie with insurers establishing somewhat independent microinsurance departments. The initial operating results and teething troubles could be “ring-fenced” from the insurer’s mainstream operations. The insurer’s shareholders and Board would need to extend to this department the vision and patience that the microinsurance market now so evidently requires for long-term success.

VIII Infrastructure and environment for microinsurance

24 The technology revolution in microinsurance

Anja Smith, Eric Gerelle, Michiel Berende and Grieve Chelwa

This chapter reflects the input and comments of Doubell Chamberlain (Cenfri). The authors also appreciate the input and guidance received from Pranav Prashad (ILO) and Rupalee Ruchismita (CIRM).

The technology landscape in developing countries is changing at an incredible pace. This provides a myriad of opportunities for financial-sector players wanting to expand into previously unreached markets in these countries. This chapter considers the role of technology in delivering microinsurance to low-income clients across the world. While technology can be defined as any tool that assists in delivering better services than available alternatives, this chapter specifically reviews the role of information and communication technologies (ICT), mainly electronic devices and associated software.

The first section takes a brief look at the benefits associated with technology, while also paying attention to some of the risks that it entails. The next three sections describe how technology can support different facets of microinsurance processes: 1) client interfacing functions; 2) transaction processing; and 3) data analysis. The last section takes a current and prospective look at mobile phones as a unique category of technology in microinsurance.

24.1 Benefits and risks of technology in microinsurance

Technology has the potential to help meet several major challenges in microinsurance provision, namely enhancing affordability, reaching clients, especially in remote areas, collecting small premiums and paying valid claims. While addressing these specific challenges, technology could potentially provide a range of benefits along the microinsurance value chain, such as:

Lowering administration costs: Historically, insurance has been a paper-based sector, with marketing brochures, application and claims forms, and policy documents. To streamline systems and lower costs, microinsurance needs to move beyond paper, and technology can make that possible. Increasingly, ICT can be used for efficient, paperless administrative processes, thereby decreasing costs per client. Over time, the efficiency gain could be reflected in lower premiums, leading to higher product sales and thus offsetting some of the technology costs incurred.

Reaching new markets: Low-income households are often unbanked, which has been a barrier to accessing insurance. That is beginning to change. Through mobile phones, smart cards and new payment systems it is becoming possible to collect premiums from clients who do not have a bank account. Microinsurers can also use technology to communicate with clients through voice or text messages where regular communication was previously unviable, reducing travel costs for insured and insurer alike.

Linking to different operations: ICT can provide significant support for microinsurers in expanding their business, mostly by connecting with existing client groups of other operations, such as banks (bancassurance), retailers or microfinance institutions (MFIs). This increases the number and variety of channels that can provide insurance products.

Improving customer service: From the customer's perspective, the process of availing themselves of insurance and its benefits can be daunting. Microinsurance has to bring down the barriers and enhance access. It must be easy to understand the coverage, enrol, pay premiums and submit claims. In this regard, technology can provide a big boost, lowering customers' transaction costs and making it easier for them to receive answers to their questions and have their claims paid more quickly. In turn, this will foster trust in insurance.

Reducing fraud: The identification of insured people and property, particularly in countries without national ID systems or functional addresses, has impeded the development of microinsurance. However, technology is stepping in to help solve that problem, reducing fraud through more effective means to identify customers and their insured assets.

Better understanding of the market: A number of the technologies considered in this chapter enable microinsurers to better assess and manage risk. Furthermore, many of these technologies retain client data, allowing microinsurers and their distribution partners to form a detailed understanding of potential and current clients and their product needs. Being able to access client details, product utilization, costs of services and other essential data supports the development, management and pricing of value-for-money insurance products.

However, there are a number of caveats associated with these benefits. Perhaps most importantly, technology can only deliver these various benefits if appropriate business processes and systems are in place. Other cautions include the following:

- There is a tendency to be overly excited about the next digital solution, but it is important to first understand what the problems are that need to be solved, and then see if technology is a good fit.
- Technology applications have to be tailored to meet the needs of distribution partners operating in specific sectors (e.g. banks and MFIs), and they also need

to be linked to clear performance measures to enable technology users to monitor whether it does indeed add value.

- Technology needs to be deployed in a sequence that allows for learning and the building of capabilities before implementation of the next level of technology.
- Better use of data analysis tools will require greater standardization in the formatting of data and in data collection procedures.
- Sometimes high-technology solutions cannot stand up to the challenging environments with temperature and rainfall extremes in which microinsurance customers often live and work. Poor connectivity can also undermine investment in technology.
- The unreliability of technology providers is another challenge often faced by microinsurance providers who need on-going service to support the technology.
- Technology investments need to be accompanied by complementary investments in human capital to ensure that staff can derive full value from the newly implemented technology.

To help microinsurance providers avoid the risks and take advantage of the opportunities, in 2008 the Microinsurance Network's Technology Working Group reviewed the microinsurance technology landscape (*see Box 24.1* for information on the Working Group's activities). The review identified three main categories of technology relevant for microinsurance: 1) customer interfacing mechanisms; 2) transaction processing including management information systems (MIS); and 3) data analysis, as summarized in Table 24.1. The scope and nature of these three categories of technology are considered in greater depth in the remainder of this chapter.

Table 24.1

Main categories of technology in microinsurance

<i>Client interface</i>		<i>Transaction processing</i>	<i>Data analysis</i>
<i>Enrolment and premium payment</i>	<i>Loss verification</i>		
<ul style="list-style-type: none"> – Mobile phone with a global positioning system (GPS) – Short message service (SMS) – Smart card – Point-of-sale (PoS) terminal – Subscriber identity module (SIM) – Mobile payments platform – Wireless access service provider (WASP) – General packet radio services (GPRS) 	<ul style="list-style-type: none"> – Radio frequency identification device (RFID) – Biometrics – Weather indices – Spatial mapping technology – Remote diagnosis 	<ul style="list-style-type: none"> – Software as a service (SaaS) – Call centre – Management information system (MIS) – Voice over Internet protocol (VOIP) – Data standardization 	<ul style="list-style-type: none"> – Database analysis – Weather stations data – Satellite imaging data

Source: Adapted from Gerelle and Berende, 2008.

Box 24.1

Microinsurance Network's Technology Working Group

The Technology Working Group focuses on data collection, communication, management information systems and services to support microinsurance practitioners and trainers working with these organizations. In 2008, the Working Group and the ILO's Microinsurance Innovation Facility compiled an inventory of information technologies that could be applicable to the extension of insurance services to low-income households (see Gerelle and Berende, 2008). The objectives of the study were to catalogue and illustrate the technologies used or potentially useable in microinsurance.

In 2010, the Working Group launched an online inventory that reviews software systems specifically designed for microinsurance. The first systems in this inventory fall into the transaction-processing layer of microinsurance technology. The website allows users to search, filter and examine each of the software products listed in the inventory by type, language, institution size, features and location of the provider.

Within the coming years, it is expected that the inventory will extend to include the customer interface and data analysis levels by reviewing technologies such as mobile phones, smart cards, PoS terminals, and biometric and RFID devices.

Source: Adapted from www.microinsurancenetwork.org.

24.2 Client-interfacing technology

The success of microinsurance products relies greatly on the extent to which low-income persons can interact seamlessly with the insurer or its intermediaries, and technology can facilitate this. This section reviews two dimensions of client interfacing technology: 1) enrolment and premium collection; and 2) loss verification and the claims payment.

24.2.1 Enrolment and premium collection

Technology can make a major contribution to the process of client enrolment and premium collection. Different technologies can support these processes, including GPS-enabled mobile phones for client enrolment, and using smart cards, airtime and a mobile payment system for premium payments, as summarized in Table 24.2 and described below.

Table 24.2

Technology in client enrolment and premium payment

	<i>Mobile phone for enrolment</i>	<i>Smart card</i>	<i>Airtime</i>	<i>Mobile payment system</i>
Characteristics	Vendor uses GPS-enabled mobile phone to register customers and collect first premium payment (in cash, but receipt communicated to insurer via mobile phone)	Value stored on SIM cards can be used to make premium payments	Premium payments take place through direct deduction of airtime; airtime then has to be converted to currency	Premium deducted from customer's m-wallet; payment thus made in form of mobile money
Advantages	Vendors (e.g. small-scale grocery store owners, farm input suppliers) connected through technology offer a network of convenient distribution points	Payments can happen while systems are offline; card can serve as an ID; has storage capacity (e.g. medical records)	Clients do not need bank account to make premium payments	No need for bank account. M-wallet can be used for both premium payments and claims settlement
Disadvantages	Requires vendor to be online or connected to network; not ideal for rural areas without network coverage	Expensive to distribute; smart card readers can be costly	Cost of WASP technology required to convert airtime into real currency can be prohibitive	Mobile payments platform often costly to maintain; if a wrong number is typed and money gets credited to that account, it is very difficult to recover
Example	Take-it-Eezi and Hollard (South Africa), Max Vijay (India)	HDFC Ergo Revive (India)	Cover2go (South Africa), Safari Bima (Kenya) and AKSIttext (Philippines)	M-PESA (Kenya)

Source: Authors.

The partnership between the South African insurance company Hollard Insurance and the rural vendor network Take-it-Eezi provides an example of **mobile phones used in client enrolment** (Smith and Smit, 2010a). Take-it-Eezi is a branding initiative that enables a network of 18 000 independent agents to sell prepaid airtime, electricity and insurance in areas that did not have access to these products before. Each vendor has a GPS-enabled mobile phone. For insurance sales, once the vendor has collected the client's first premium payment and provided the client with an insurance starter pack, the vendor uploads the policy number and the client's national ID number to a central server using Take-it-Eezi's payment platform operated through the mobile phone. Call centres are also involved in collecting more detailed client information during the enrolment process. In the case of Take-It-Eezi, following the receipt of the policyholder's identity and telephone numbers, a call centre operated by an insurance administrator, the Best Funeral Society, phones the client to collect detailed beneficiary information and/or provide more information on the product.

Similarly in Brazil, the technology company Vayon has developed a simple mobile phone enrolment system that enables the agent to send an SMS with the new customer's ID number to a national database, which then automatically populates the application form with the relevant data, including date of birth, employment and marital status and address. Not only does this streamline the enrolment process, but it also reduces data entry errors.

The advent of **smart card** technology means that clients can pay premiums without having a bank account. Smart card technology enables money to be stored on an integrated circuit chip, and payments can take place without the client having to be online or connected to a network. This is particularly important if microinsurance is to function effectively in areas with limited connectivity. For example, in India, customers of HDFC Ergo's Revive personal accident policy can pay their premiums using smart card technology provided by FINO.¹

Ordinary airtime is also being used to facilitate premium payments. Unlike smart cards, an airtime payment requires the client to be connected to the mobile phone network, so the client's phone can communicate with the payment intermediary (mobile network operator) or insurance company. A number of personal accident products have emerged using this approach, including by Metropolitan in South Africa (Cover2go), Kenya Orient (Safari Bima), and Philam Life in the Philippines (AKSItext – see Box 24.2). These policies can be initiated via text message, with the premium payment taking place through a deduction from airtime.

For both the Cover2go and Safari Bima products, a wireless access service provider (WASP) is responsible for converting the **airtime** into real currency. The experience of these two products indicates that the WASP takes a big bite out of the premium, as the commission can cost up to 40 per cent. While technology makes distribution of the product possible by enabling premiums to be paid, in this case it has a significant impact on the actual risk premium available to provide cover for the client (Smith and Smit, 2010c).

Box 24.2

Premium payments through airtime deduction: The case of AKSItext

Philam Life's AKSItext accident insurance product is purchased by sending a text message containing the individual's name, birthday and physical address to a specified number. Cover commences 24 hours after receipt of the confirmation message containing the individual's policy number. Premiums of US\$0.25 provide cover worth approximately US\$250 for 15 days, and are automatically subtracted from available airtime if airtime billing is prepaid, or added to the policyholder's postpaid bill. Claims are paid out directly from Philam Life offices by cheque that can be cashed at any bank.

Source: Adapted from Smith et al., 2009.

¹ Financial Information Network and Operations Ltd (FINO) is an India-based technology payments platform provider (see Box 25.6).

The fourth arrangement uses a mobile wallet or **mobile money platform** to facilitate premium payments via mobile phones. A mobile money platform, like M-PESA in Kenya (*see Box 24.4*), leapfrogs traditional banking and money transfer technology, and is particularly relevant in regions with little or no infrastructure where the population is largely unbanked. For insurance, it provides a convenient mechanism for premium collection, as illustrated by Syngenta Foundation's Kilimo Salama weather-index insurance product in Kenya (*Box 24.3*).

Box 24.3

Role of technology in sales and premium collection: The case of Kilimo Salama

The experience of Kilimo Salama clearly illustrates how technology can be used for different functions in making a microinsurance product viable. Kilimo Salama is an index-based agriculture insurance product that was piloted in March 2009, initially covering only 200 maize farmers and drawing on data collected by two weather stations. The project has since grown and now uses 30 weather stations and covers 22 000 farmers who grow maize, sorghum, cotton, beans and coffee.

Kilimo Salama (which means "Safe Agriculture" in Kiswahili) is a partnership between the Syngenta Foundation, Safaricom, the largest mobile network operator in Kenya, and UAP, a large general insurance company. The product covers farmers' agricultural inputs (e.g. fertilizer, seed and pesticides) in the event of drought or excessive rainfall. The product is index-based, meaning that payouts are triggered by rainfall amounts. During the planting season, actual rainfall is measured using a solar-powered weather station in each area. If rainfall is below or above predetermined thresholds, a payout is made. The value of the payout is a function of how much the recorded rainfall deviates from the threshold.

Kilimo Salama is sold through two channels: key accounts and retailers. For key accounts, the product is sold through corporate entities, including seed companies, cotton millers, banks and microfinance institutions, which have an interest in the insurability of agriculture yields and/or inputs. Through the retail channel, the product is sold on a voluntary basis through 110 agro-dealerships, which rely on technology to support the enrolment and premium collection process.

The administrative backbone of Kilimo Salama is a fully automated, paperless technology developed by the Syngenta Foundation, which uses mobile phones with tailor-made Java software as registration devices at the points of sale. The mobile phones transmit customer information to a central server using GPRS technology. The server in turn communicates with the insured farmer via SMS. The "backbone" technology is linked to Safaricom's M-PESA mobile payments platform to facilitate payment of premiums and settlement of claims.

The following steps highlight how technology supports enrolment:

- Farmers visit a local agro-dealer who offers Kilimo Salama for a premium related to their expected harvest or the cost of inputs purchased from the agro-dealer.
- If a farmer decides to buy Kilimo Salama, the dealer scans a bar code on the bag of seeds using a specially-designed mobile phone application.
- The application then informs the dealer of the premium the farmer should pay, which is currently between 5 and 15 per cent of the cost of inputs.
- The agro-dealer captures the farmer's details – name, mobile number and cover amount – on the dealer's mobile phone and transmits this information via GPRS to the insurer through a central communications server.
- The farmer then receives a text message with the policy number and cover details. Provision has been made for farmers who do not have mobile phones: the policy number and cover details are sent instead to the dealer's phone and the dealer then passes them on to the farmer.

Source: Adapted from Goslinga, 2011.

24.2.2 Loss verification and claims payment

Technology can be used to facilitate payments in the other direction as well, from insurers to policyholders in the form of claims. Claims processes are sometimes an afterthought in the development of new products and pilot tests, which tend to be more focused on marketing, sales and enrolment. However, effective claims procedures are absolutely critical to the success of micro-insurance, which must demonstrate to the low-income market that insurers will deliver expediently on their promises.

The actual financial transaction is a piece of the process. For example, the M-PESA e-money system is used to make payouts for various insurance products in Kenya (*see Box 24.4*). In Ghana, the partnership between Hollard and UT Life led to a mobile insurance product, Mi Life (*see Box 24.7*), which uses MTN Ghana's mobile payments platform to collect premiums and pay claims.

Technology also facilitates the claims process by making verification significantly less expensive for livestock, agriculture and property covers, and by improving access to benefits in the case of health insurance.

*Box 24.4***M-PESA mobile money product in Kenya**

M-PESA is the product name of a mobile payments platform operated by Safaricom, Kenya's biggest mobile network operator and a subsidiary of Vodafone. M-PESA, which means mobile money ("M" stands for mobile and "PESA" is Kiswahili for money) was launched in March 2007 by Safaricom with assistance from the UK Department for International Development (DFID).

Every M-PESA customer is required to open an electronic money account at an authorized M-PESA retail outlet. The electronic money account is linked to a mobile phone number and accessible through a SIM card application. Customers can deposit and withdraw money by exchanging cash for electronic value at a network of retail stores. Once customers have money in their accounts, they can use their phones to transfer funds to other M-PESA users, pay bills and purchase mobile airtime credit.

As at May 2011, there were a total of 14 million M-PESA customers served by a network of 28 000 retail outlets.

Source: Adapted from Mas and Radcliffe, 2010; M-PESA Resource Centre, 2011.

Livestock

In July 2009 IFFCO-Tokio, an Indian general insurance company, piloted a cattle insurance project targeting more than 25 000 poor farmers. As described in Box 12.2, the IFFCO-Tokio model uses RFID technology to reduce the occurrence of fraud that frequently occurs in traditional cattle insurance models where animal identification occurs via ear tags, which can easily be lost or removed. The RFID chip, the size of a grain of rice, is injected under the animal's hide. By helping reduce fraudulent claims, the technology can benefit farmers through faster claim settlement and lower premiums. While the project is still in its pilot stages, the claims ratio of 35 per cent is one-fifth of the claim rates experienced with traditional ear tags, suggesting that the new technology is working and may even pay for itself (Microinsurance Innovation Facility, 2011a).

Agriculture

The agriculture weather-index insurance product Kilimo Salama, described in Box 24.3, uses the amount of rainfall as a trigger for claims. During the planting season, rainfall is measured using solar-powered weather stations, which send the precipitation data via a GPRS connection to UAP. The insurer enters it into a weather-index application that outlines the rainfall requirements for each crop. The application calculates the claim percentage, if any, and then UAP transfers the claim amount to the M-PESA account of the farmer or dealer.

While Kilimo Salama's success is mostly attributable to the use of a familiar trusted technology, the mobile payments platform, to sell a less familiar and less-trusted product like agricultural insurance, the use of technology has also posed certain challenges:

- While weather station technology allows for the design of a viable insurance product, it also makes the product more complex to understand. Farmers are on average 20 kilometres away from the nearest station, which could lead to a misunderstanding by farmers as to whether they are entitled to a payout if the rainfall recorded on their farms differs from the local weather station. This basis risk (*see Chapters 4 and 11*) increases the need for appropriate and extensive client education.
- Multiple technologies are required to minimize the error margin in constructing weather indices. Reliance only on weather station data is unlikely to provide an accurate picture of the rainfall patterns experienced in a particular area. This is all the more difficult if weather stations are few and far apart. To overcome this challenge, Kilimo Salama is experimenting with satellite mapping systems, and devising better ways to collect and track yield data. This will allow for the cross-validation of weather data and the selection of more accurate product parameters.

Property

Stand-alone property cover is not a common microinsurance product. It is often added as a rider for other products, such as fire insurance for microenterprises linked to credit life (*see Chapter 9*). In South Africa, Hollard is trying to use technology to make a stand-alone version viable, selling it through call centres and using a network of “pre-assessment runners” that survey the assets covered by a household structure and content insurance product. The runners are equipped with mobile and spatial mapping technology to capture the state and location of the insured house and its contents. The pre-assessment of claims and data collection on policyholders' assets (i.e. confirming that the assets actually exist and recording the quality and nature of the building) helps to reduce fraud and the overall cost of claims management, while also overcoming the challenge of some clients not having formal addresses.

Health

In health insurance, where benefits are provided in kind in the form of healthcare services, technology has a very different role in facilitating claims. One way is to use technology to extend those benefits to remote areas. For example, instead of rural villagers spending time and money to go to a clinic to seek treatment, some schemes include a “dial-a-doc” benefit that provides some initial filtering to prevent unnecessary travel expenditure.

Besides call centres, ICTs can permit a remote diagnosis of clients' conditions, on the basis of which specific health care is then prescribed. CARE Foundation, a non-profit healthcare organization in India, is currently experimenting with hand-held devices for the remote diagnosis of patients with an outpatient insurance product. Village Health Champions (VHCs), staff members recruited from within the local community, are trained to use a hand-held device to collect biometric and symptomatic data of beneficiaries and then to transmit this to a doctor for remote diagnosis (Microinsurance Innovation Facility, 2011b). The use of this technology has the potential to reduce the cost of healthcare delivery dramatically.

Also in India, biometric smart cards are used by some mass health insurance schemes, such as Rashtriya Swasthya Bima Yojana (RSBY), which extend social protection to low-income households. Since the card is preloaded with the insured benefits, it gives policyholders the portability to access "cashless" benefits at all empanelled healthcare providers. Each hospital has an RSBY desk with a smart card reader, which uses the policyholder's fingerprint to verify their identity. Not only does this reduce fraud, but it can also improve health care through competition among providers, enhance customer services through shorter patient waiting times, and facilitate record-keeping and data analysis. These benefits, however, come at a cost. An analysis of RSBY's first-year data shows that 17 per cent of the premium went to cover the cost of the smart cards, whereas 49 per cent was spent on claims (Krishnaswamy and Ruchismita, 2011). Presumably, if the cards can be used for several years, then these costs can be amortized over time.

24.3

Transaction processing

Transaction processing is the middle layer of the information-processing chain, and relevant for all microinsurance products and types of organizations. Although client-interfacing technologies such as mobile phones and smart cards have the ability to fundamentally change insurers' interaction with clients, these potentially game-changing front-end systems will not fulfil their potential without effective back-end systems to manage information.

Software that assists in the collection and management of client and policy information, while linking different business operations (i.e. those of the insurer and the distribution partner), has had a major impact on all back-office business processes. Given the importance of this technology in microinsurance, several providers are selling both standardized and customized software, as illustrated in the Microinsurance Network's online database.

One of the most significant impacts of information technology for microinsurance today is in the area of transaction processing. It provides the analytical

and operations management technologies needed to support a large client base. As illustrated in Box 24.5, the software needs of organizations change over time as companies grow, diversify their offerings and expand capacity.

Box 24.5

Evolution of software systems at the DHAN Foundation

The Development for Human Action (DHAN) Foundation is an Indian grass-roots organization that builds thematic institutions to address key development issues, such as income generation and water management. This is achieved by testing innovative ideas, and scaling up successful ones through associated institutions. One of the goals of the Foundation is to enable poor communities to make positive changes in their livelihoods, with emphasis on member ownership, control and decision-making.

The DHAN Foundation has taken up ICT for the poor as a theme to experiment, develop and implement socially relevant programmes. It has become a cross-cutting theme to complement its microfinance, microinsurance and agricultural activities.

At the beginning of its interaction with technology, the DHAN Foundation intended to use commercially developed software for its microinsurance programme. However, after completing a pilot phase and considering the implications of many user licences, it decided not to use the software package, in part because the licence cost was equal to total premium income. DHAN therefore developed its own insurance system called social security software (SSS). Initially SSS was used only for the management of its life insurance scheme, but in 2005 a health insurance product was also introduced. Plans include the extension of the system to cover livestock and crop insurance. Staff salaries account for the largest portion of the DHAN IT budget. DHAN has an ICT team who maintain and further develop its in-house ICT systems.

DHAN Foundation's next step will be to develop a web-based system for its microfinance and microinsurance programmes. This system will link to mobile phones to streamline data entry, policy renewal and premium payment. It will also include customer service features such as voice and text messages about how much premium to pay and when to renew. It will have a smart card feature as well to link the scheme with empanelled hospitals and clinics.

Source: Adapted from DHAN Foundation, 2009.

The trend for transaction processing is away from local client-server and towards non-localized platforms, Internet-based solutions that are highly suited to integration with mobile devices. For example, Software as a Service (SaaS) is an Internet-based platform that is not managed by the insurance company, but

by a third party. The current SaaS offerings for microinsurance are still customized for each corporate client, which increases total costs; but as these services mature, solutions will be provided through a set of standard selectable modules. SaaS allows organizations to access business functionality at a cost that is typically less than paying for licensed applications, since its pricing is based on a monthly or annual usage fee. This is in contrast to traditional software, which is typically sold as a perpetual licence with a one-off up-front payment and small on-going support fees.

SaaS provides information to all levels of the microinsurance hierarchy, especially to the bottom of the pyramid. For instance, if it is integrated with mobile phones, customers can obtain real-time information on premium rates and cover levels, check policy status and receive premium reminders. SaaS can also be used to deliver online training to microinsurance agents as well as to provide them with information on new products or updates to existing ones.

ICT has also allowed for the emergence of administrators – organizations to which insurance companies can outsource policy administration to reduce costs. A prominent example of an administrator that is trading off the strength and efficiency of its MIS is MicroEnsure (*see Chapter 23*). MicroEnsure works with a range of client groups (e.g. MFIs, faith-based organizations and mobile phone companies) to facilitate product sales, for which it assumes responsibility for administration. Some of the more specific back-office services offered by MicroEnsure include product design, collection of clients' biographical data, data entry, management reports and claims processing. MicroEnsure also offers other services that do not involve transaction processing, such as training the sales staff of its distribution partners and conducting consumer education campaigns.

Probably the most widely used means of capturing or updating client information is call centre technology. Call centres now have the ability to unlock low-income insurance markets, as many poor households have access to a mobile phone and this medium of communication also enables them to use an interactive sales process. Although a call centre is generally viewed as a client-interfacing technology, it is in fact an integral part of the insurer's back-office systems. While many call centres operate via fixed line telephone, they are increasingly relying on voice over Internet protocol (VOIP) to reduce telecommunications costs. Clients can telephone the call centre directly, often via a toll-free number, or request that the call centre phone them by sending a "please call me" message to the company.

As the microinsurance market matures, there will be a greater need for data standardization. International efforts are under way to standardize data for management reporting across the financial services industry, notably the ACORD initiative for insurance (*see Box 24.6*). The most relevant similar initiatives for microinsurance are those based on the open standard eXtensible Business

Reporting Language (XBRL), a coding language developed to improve the efficiency and quality of data for financial and business reporting. The underlying principle of XBRL is to define the structure of financial information to be communicated between organizations. This is a key benefit in areas where there are many diverse organizations trying to share information in a global microinsurance marketplace. Data and workflow standardization efforts will simplify management reporting and allow a more flexible approach to building data analysis and modelling applications. Standardization will allow different players to exchange data with confidence and improve data quality in a cost-efficient manner, which will lead to better understanding of risk that can have a positive impact on better product development.

Box 24.6

Electronic data transmission standards: The case of the ACORD standards

The Association for Cooperative Operations Research and Development (ACORD) is a global, non-profit standards development organization that serves the insurance industry. ACORD facilitates the development of open consensus electronic data standards and standard forms, working closely with its members. ACORD members include insurance and reinsurance companies, agents and brokers, software providers and industry associations. ACORD works with its members to improve data communication across diverse platforms through the implementation of standards.

Common data standards and services improve data quality and transparency, resulting in greater efficiency and expanded market reach. For instance, ACORD standards make it possible for an insurance broker to obtain a price quote from a range of insurers for a personal motor policy at the same time. All the broker does is fill out a request for a quote and send out an eXtensible Markup Language (XML) message to multiple insurance companies (XML is a set of rules for encoding documents or data in machine readable form). The insurers respond by sending the quote back to the broker in XML formatted language.

In some cases, the ACORD standards facilitate compliance with requirements set by regulators. For example, ACORD is currently working with the South African Insurance Association (SAIA) to develop electronic data transmission standards for brokers and insurers to meet the data sharing requirements set by the South African insurance regulator.

It will become increasingly necessary to develop electronic data standards as microinsurance operations gain scale across the globe. The way data is communicated within and between companies will have to be standardized.

Source: Adapted from www.acord.org.

24.4

Data analysis

Data analysis is particularly relevant for microinsurance because one of the obstacles inhibiting insurers from servicing this market, or from providing fairly priced products, is the lack of data to accurately estimate the frequency and magnitude of insured events (*see Chapter 21*). As more data on the loss experience of low-income households is amassed and analysed, it will be possible for insurers to reduce the cost of uncertainty, which they have taken into account in the premium calculation.

Data mining is also useful for customizing products to market segments. The microinsurance partnership between the Spanish insurance conglomerate, Mapfre, and Codensa, a Colombian utility company, demonstrates how client information can be used in product development. Codensa captures extensive information on its electricity customers, e.g. income and regularity of payment, in a database specifically designed for this purpose. Using data analysis tools, Mapfre has developed products that are specifically tailored to the customers' available income. Codensa and Mapfre believe that this has been one of the drivers of the success of their partnership (Zuluaga, 2010).

Data mining to extract client features and behaviour for product design and pricing permits the development of products much more closely tailored to clients' needs, but it can raise privacy and identity theft issues. However, this can be overcome by requesting clients to "opt in" to an analysis of their data (Zurich, 2011).

Data analysis is particularly relevant for index-based insurance, which relies heavily on the collection and analysis of historical weather data to derive product parameters and determine payout triggers (*see Chapters 4 and 11*). Besides analysing historical data from meteorological services or universities, new technology can be used to monitor weather experience, trigger claims where relevant, and adjust products with additional years of weather data. For example:

- **Weather stations:** Weather stations that measure rainfall, temperature and wind speed can be established by public- or private-sector investors. While they were originally in the public-sector domain, private-sector investors are becoming increasingly involved. To complement India's public weather data service, private weather data providers such as Weather Risk Management Services (WRMS) and National Collateral Management Services Limited (NCMSL) are assisting in collecting weather data for a fee. NCMSL has installed 1 000 automated weather stations that produce real-time data used in the development of weather-index products.

The DHAN Foundation has a project that installs rain gauges at a distance of five kilometres from each other to assist in minimizing the basis risk in weather-index insurance products. The solar-powered rain gauges transmit rainfall data

via GPS to a central database at 15-minute intervals. By September 2011, 150 rain gauges had been installed covering about 6 300 farmers (Prashad, 2011).

- **Satellite imaging:** Satellite images can be used to collect different weather-related data. Satellites are able to capture images of cloud density that can be used for generating rainfall predictions (Prashad, 2011).

Another approach is to use normalized differenced vegetation indexes (NDVI), which are derived from data captured by satellite images permitting the measurement of vegetative “greenness” that correlates with photosynthesis levels on the ground. Such an approach is being tested by the International Livestock Research Institute in Kenya to provide cover to nomadic herders (*see Chapter 12*). A drawback of using this type of technology is that cloud cover can limit satellites’ ability to capture clear ground-level images, thereby disrupting the availability of continuous or regulator historical data (Hazell et al., 2010).

24.5

The promise of mobile phones

The use of mobile phones in the various microinsurance models clearly illustrates the powerful potential of this widespread technology. For instance, in 2011 close to 57 per cent of Africa’s adult population had mobile phones, ranging from a high of 84 per cent in South Africa to a low of 21 per cent in Mali (Gallup, 2011). Mobile phones make product purchases possible, permit premium payment through airtime deductions or via a mobile wallet, and facilitate claims assessment and payment.

Another critical feature for microinsurance is that mobile phones permit immediate communication throughout the value chain, cost-effectively bolstering the confidence of a sceptical market. Mobile technology provides the opportunity to communicate and collect data from clients. Through SMS and voice messages, insurance companies and their distribution partners can confirm to clients whether enrolment has been completed and their policy initiated, communicate information such as the need to have sufficient funds in their bank account available for the next premium payment, and advise whether a claim has been received and is being processed.

Both text messaging and voice communication are immediate forms of communication, permitting real-time responses from the insurers. In the case of the Max Vijay in India (*see Chapter 8*), clients were willing to trust confirmation of payment received via text message as much as a printed cash receipt from the merchant where they made their premium top-up. This helps to avoid fraud and, over time, builds trust in electronic communication as a replacement for paper-based and other communication methods.

Going forward, mobile technology may ultimately become more prominent in supporting the collection, validation and packaging of microinsurance

data. It will provide the benefit of turning data collection into a routine, low-cost and complementary activity that can eventually replace traditional market surveys. A dependence on mobile phones, however, involves certain risks, especially where a client's mobile phone is also their wallet and may provide access to private information. They can be easily damaged, lost or stolen, which could break the link between the insured and insurer; but this risk also provides an opportunity for insurers to offer additional coverage, for the mobile phone itself.

In March 2011, Ghana saw the launch of MiLife, the world's first fully mobile phone-based insurance product (*see Box 24.7*). The advent of this product holds a lot of promise for microinsurance delivery across the developing world.

Box 24.7

Mi Life mobile insurance in Ghana

Mi Life, the first fully mobile payments-based insurance product, was launched in Ghana in March 2011 on a pilot basis. The project is a partnership between MTN Ghana (a mobile network operator), MFS Africa (a mobile financial services technology provider), MicroEnsure, UT Life (a Ghanaian life insurer) and Hollard Insurance. Mi Life covers the lives of two beneficiaries, the policyholder and their nominated next-of-kin. An MTN subscriber who chooses to buy the product can expect to pay anything between US\$0.66 and US\$3 in monthly premiums. The associated cover ranges from US\$330 to US\$1 300 for the two lives.

Technology in policy initiation: With Mi Life, MTN subscribers who also have MTN Mobile Money can register for cover either through MTN's mobile money agents or directly through their phones. After initiating the policy, the subscriber receives an SMS confirmation that the policy has been activated. The SMS also contains a unique pin-code that serves as the customer's policy number. Customers use this pin-code to make amendments to or check the status of the policy using an interactive menu on their mobile phones.

Technology in premium collection: Premiums are automatically deducted monthly from the customer's m-wallet. Customers are reminded, via SMS, to keep their m-wallets topped up just before the payment is due. Once premiums have been deducted, the customer receives an SMS notifying them that cover has been renewed for the following month. Cover only lasts for a month, until the next month's premium is deducted.

Technology in claims payment: Claims can be initiated in one of two ways. In the first option, the customer sends an SMS to a specified number and the call centre immediately calls back with further instructions. With the second option,

the customer can walk into an MTN store where dedicated agents offer assistance. In both cases, supporting documents need to be submitted before claims can be processed. Payment is made into the customer's m-wallet and happens within two weeks of receiving supporting documentation (Gross, 2011a).

The mobile platform presents many advantages over traditional models of selling insurance. For instance, insurers can lower the cost of collecting premiums and paying claims. It is, therefore, not surprising that the monthly premiums for Mi Life are 50 to 90 per cent less than for comparable products in the market. In addition, since mobile phones are ubiquitous in Ghana, mobile money presents a massive and efficient distribution platform.

Using mobile phones to market insurance has many advantages besides lowering costs. For instance, the use of SMS reminders improves the communication flow between the insurance company and the policyholder and improves the persistency of premium payments. Secondly, it empowers customers to manage their policies in a cost-effective and easily accessible manner. The fact that customers can use familiar technology like the mobile phone for insurance purposes might help to fill the "gap" in low-income people's trust of insurance.

The Mi Life pilot in Ghana has allowed the insurer and intermediary, in this case Hollard and MicroEnsure, to learn about the impact and limits of technology in the business model:

- Despite technology's ability to lower client interaction costs, clients still prefer face-to-face interaction when given the choice. Subscribers can register for the policy via their mobile phone or through dedicated agents in MTN stores. The majority of subscribers opt for the latter option. Having someone explain the registration process and the workings of the policy seems to provide a degree of comfort, especially in a country where only 5 per cent of the adult population has some insurance cover (FinMark Trust, 2011).
- The success of products like Mi Life relies on having a mobile payments platform that works well. The platform needs to be improved continuously to ensure that it remains user-friendly and also needs regular maintenance, especially as mobile insurance operations expand. The extent to which this can be done is constrained by the resources that a mobile network operator (MNO) can dedicate to this purpose. As long as voice calling remains the primary revenue generator for most MNOs across the developing world, funds to invest in ancillary services will be limited.

Sources: Leach, 2011; MicroEnsure, 2011.

24.6

Conclusion

Technology promises to increase efficiency and enable providers to attain scale by integrating various operations across the value chain, including the insurer and its distribution partner. It promises to lower administration costs, reach remote clients, collect premiums and pay claims, but can also fulfil other functions such as product development or communications.

The spread of mobile phones has had a massive impact on the communication function fulfilled by technology in microinsurance. Insurance companies can communicate instantly with their clients through every step of interaction, from policy initiation to policy adjustment and claims, through text messages as well as voice communication. Furthermore, money transfer in both the premium collection and claims payment processes has been revolutionized by smart card and mobile wallet technology.

It is important, however, to emphasize that technology is no panacea when it comes to microinsurance. The ability of technology to impact positively on microinsurance business is directly dependent on the strength of the business model, the relationship between the risk carrier and its distribution partner (where applicable), and existing internal systems and operations.

In this context, microinsurance can learn valuable lessons from microfinance. For example, some MFIs had been under the impression that technology would assist in solving their problems, but neglected to map and clean up their business processes before installing the systems. This decreases the efficacy of the MIS and its impact on their overall business, and may lead to a view that it has not delivered the benefits it promised. In the absence of strong and efficient back-office systems and processes, interesting or “sexy” customer interfacing technology is unlikely to be successful.

While technology can make the life of a microinsurer easier, it also poses a variety of challenges. Once the investment in certain technology has been made, it is difficult to overturn the decision. It is thus important for the microinsurer or its distribution partner to take a forward-looking perspective when making the investment; otherwise, there will be a risk of technology becoming a business constraint.

Furthermore, while technology has the potential to lower costs throughout the value chain, in certain cases it can actually end up increasing costs, as in the example of insurance premiums paid through mobile phone airtime. In making the technology purchase decision, it is therefore important to seek a balance between the improvement in customer service and overall efficiency on the one hand, and the cost of purchase on the other (Fuller, 2011).

Technological innovation has the potential to revolutionize the delivery of microinsurance. In achieving this goal, it is important to bear in mind that the selected technology does not necessarily have to be complex, but should merely be able to respond flexibly to the needs of the microinsurer, its distribution partner and clients. This will require intelligent diagnosis of areas where technology can best make a contribution, followed by focused implementation.

25 Access to insurance and financial-sector regulation

Arup Chatterjee

The author appreciates the insightful input and guidance provided by numerous reviewers, including Hennie Bester (Cenfri), Rodney Lester (consultant), Dirk Reinhard (Munich Re Foundation), Craig Thorburn (World Bank), Martina Wiedmaier-Pfister (consultant to GIZ) and Henry Yan (Access to Insurance Initiative).

The G-20's call for the promotion of regulatory and policy approaches to enhance financial access, financial literacy and consumer protection in 2010 represented a paradigm shift for the international financial community. It is increasingly acknowledged that any measure to stimulate economic growth and stabilize the financial system must be coupled with greater efforts to tackle the structural problems of extreme poverty and inequality, particularly in developing countries (Matsuura, 2009). The recognition and importance given to financial-sector development and inclusive growth has encouraged the G-20 to task international standard setting bodies with considering how they can further contribute to financial inclusion (G-20 Communiqué, 2010). This heightened visibility of financial inclusion on the global agenda has lent significant backing to national policy and regulatory initiatives in many countries.

The issue before policymakers and regulators is to develop a framework that will enable the financial system to deliver affordable services efficiently to the excluded population without compromising systemic stability. The focus should be on enhancing the scale, quality and sustainability of diverse and relevant financial services for the poor, while offering a high degree of consumer protection through prudential supervision and the right incentives.

This chapter draws on international research and discussions on financial inclusion to explore how sound policies and regulations can pave the way for the development of efficient, sustainable and stable insurance markets for the poor. It further explains why a well-regulated insurance market could offer protection against risk and contribute to poverty reduction beyond the combined impact of public safety nets and existing informal mutual support systems. To present this argument, the chapter answers six questions:

1. Why does financial inclusion include insurance?
2. Is there a trade-off between the prudential role and the developmental role?
3. What have been the various regulatory interventions to facilitate access to insurance?

4. What has been the approach towards the treatment of informal providers and mutuals, cooperatives and community-based organizations in providing insurance?
5. What is the approach to alternative distribution channels and entities providing innovative and low-cost solutions for financial inclusion?
6. What are the important consumer protection issues to be considered when expanding access to insurance?

25.1

Financial inclusion and insurance

While there appears to be consensus on the importance of financial inclusion, the same consensus does not exist around its definition. Financial inclusion should improve the range, quality and availability of services to those currently excluded by the financial system. However, financial inclusion is often perceived as synonymous with giving people access to banking in rural areas. One tends to forget that large segments of the urban population are also excluded from the formal financial system, and access means more than the ability to obtain loans – financial services are needed to smooth consumption across time, diversify risks and secure livelihoods.

Indeed, the evolution from microcredit to financial inclusion has three implications. First, the target market is broader than just micro- and small enterprises; it includes all low-income persons. Second, the demand from low-income households for financial services includes a number of products, such as savings, loans, remittances and insurance. Lastly, a range of organizations, including non-governmental organizations (NGOs), financial cooperatives, commercial and state-owned banks and non-bank financial institutions, could provide efficient and affordable access while generating sufficient revenues to make their distribution networks sustainable.

The International Association of Insurance Supervisors (IAIS) defines micro-insurance as any form of protection against risks that is designed for and accessed by low-income people, provided by different categories of carriers but operating on basic principles of insurance and funded by premiums (IAIS, 2007). This definition leaves the door open to a range of institutional arrangements that should ideally be in the purview of the insurance regulatory authority. Since consumer protection for the low-income segment of the population is particularly critical, an insurance supervisor that can oversee all insurance activities is an important ingredient for maintaining trust in the insurance system (McCord et al., 2008).

Exposure to risk results in households' consumption being highly volatile over time, perpetuating the cycle of poverty (Elbers et al., 2007; Dercon et al., 2009). But how can policymakers address this issue? In 2008, the Committee on

Financial Inclusion in India observed that microcredit without microinsurance is bad financial behaviour. From a policy perspective, financial inclusion must include access to payments, credit, savings and insurance to achieve effective and sustainable results. Adopting an integrated approach is critical to accelerating the delivery of financial services to marginalized and low-income groups through a variety of strong and dynamic institutions, in both the public and the private sector.

25.2 Prudential role and developmental role – is there a trade-off?

Insurance supervisors traditionally perform important social and economic functions and contribute to long-term stability with two objectives:

- 1) **Prudential:** To ensure that the liabilities under insurance contracts can be fulfilled at all times; and
- 2) **Market conduct:** To ensure that the interests of the insured are adequately safeguarded.

Significant importance is attached to prudential supervision (financial soundness) to ensure that insurers remain solvent so that they can honour their contractual agreements over time. In particular, insurers must establish adequate technical provisions, invest their assets safely and profitably, and observe the principles of good business practice.

Recently, a third objective has emerged: the development role of insurance supervisors to increase the availability and affordability of insurance. This new role ranges from developing the necessary institutions and market infrastructure for a modern financial system to strengthening the foundation of the economy. The intention is to expand the insurance market through innovations in distribution and product structure, and the use of new technologies, to reach unserved segments of the population. This new dimension imposes onerous responsibilities on regulators to motivate political and economic agents to participate in a functioning market, and then to supervise that market.

Adding a developmental role to the traditional mandates raises the question of whether there is a trade-off between outreach and sustainability, between the financial inclusion agenda and the regulator's traditional mandate. And, if so, how can it be managed? On the surface, there appears to be an inherent conflict between the two. For example, regulations that are intended to promote stability, such as capital and solvency requirements, can result in high compliance costs that could push smaller and more innovative insurers with a development agenda out of the market.

Prudential supervision is concerned with the effective monitoring and mitigation of risk. Yet development focuses on facilitating business innovation and enterprise, which often entails taking risks. This conflict is healthy if it provides incentives for discussion about the future; it can also be debilitating if interest groups become entrenched in irreconcilable positions. Regulation involves using sets of rules, standards and codes of practice that are generally tried and tested techniques, while development through innovation may require new rules and standards. Schumpeter (1942) used the term “creative destruction” to describe the development process. In creating new knowledge, rules and standards, old ones must be dispensed with or adapted. Herein often lies the conflict between development and regulatory processes.

However, in a deeper sense, regulation and development are not incompatible. In fact, they are complementary. A well-regulated and supervised financial-services sector is not an end in itself. A regulator promotes financial soundness because it is a vital component of economic growth and development. Financial institutions enter the market in large part because the regulatory regime offers a well-regulated, stable and sound financial system. Thus, supervision and development work hand in hand to promote a sound and progressive financial-services sector.

To understand the development role of the insurance regulator, a broader view of the insurance business and its role in economic development is also needed. Effective coordination between the supervisory and development roles is vital, so that rules or regulations can be business-friendly without undermining the basic tenets of good supervision. As illustrated in Box 25.1, the delicate balance between the supervisory and developmental roles is best achieved within one organization with a shared purpose rather than through separate agencies with possibly conflicting goals.

There are several synergies between financial stability and financial inclusion as it pertains to insurance. Zingales (2009) notes that regulation plays a key role in bolstering trust in insurance and is an important factor in the development of a nascent industry. From a prudential perspective, proper access to insurance is not possible if entities that accept insurance premiums are not well regulated. Furthermore, for an insurance industry to experience healthy growth, it needs to have a strong and stable foundation. Huge volumes of small policies can form such a foundation because they do not represent a concentration of risk, and they should have a stable claims experience due to the law of large numbers.

*Box 25.1***Taking active steps to develop a microinsurance market in India**

When India's insurance regulatory body was established in 1999, it was named the Insurance Regulatory and Development Authority (IRDA), reflecting the strong developmental role that the Government envisaged for the regulator to support the orderly growth of the insurance market. This approach resulted in a large and dynamic microinsurance industry through insurance legislation compelling companies to sell insurance to the "rural and social" sectors, which is roughly equivalent to microinsurance.

As described in Chapter 20, the growth of microinsurance in India, and the proliferation of innovation in distribution, product design and product range, has been heavily influenced by the IRDA's development role. Although some insurers perceive the mandates as a cost of doing business, the regulation did send important signals to induce the industry to discover the low-income segment.

However, approaches need to be evaluated carefully to ensure that insurance providers have a genuine business interest and that the Government's policy creates a sound and sustainable market. Critics of the rural and social sector mandates often do not realize that many insurers have regularly exceeded their targets. To assess whether such an approach would be effective in other countries, it is important to consider whether the insurance products are viable and whether they are providing value for money, by analysing the surrender and lapse rates and utilization levels.

Source: Author.

To balance this potential trade-off, policymakers have an important role in creating the right incentives and competitive environment for financial institutions to respond to the opportunities in financial inclusion. If insurers and intermediaries are to take advantage of this prospect, they must achieve economies of scale. This requires markets to grow to an optimal size, which is not possible without capital. Investors and lenders are comfortable providing more funds only if such entities are well regulated. In other words, a sound regulatory and policy framework for insurance also plays a key role in encouraging investment.

As summarized in the introduction to this volume, access to insurance has positive effects on the economy in that it narrows development imbalances, complements social safety nets, reduces high precautionary saving, stimulates domestic demand, increases infrastructure spending and enhances public-sector and corporate governance – all leading to higher overall economic efficiency. With the right reforms, the insurance sector can be an important vehicle for

encouraging enterprise to enhance social well-being. Innovation should continue to be encouraged while ensuring that the complexities are understood, the risks are mitigated and there is reward for those willing to take risks (Mukherjee, 2011).

25.3

Regulatory interventions through enabling policy frameworks

A framework for financial inclusion needs to comply with international standards. The insurance industry follows the IAIS's Insurance Core Principles (ICPs) and the accompanying standards and guidance.¹ The ICPs generally provide sufficient flexibility to be adapted to national circumstances. However, the relationship between international standards and financial inclusion is often not well understood and there is scope for better elaboration and guidance.

To achieve this, in 2005 the IAIS and the Microinsurance Network created a joint working group to provide a platform for policymakers, regulators and development practitioners to share experiences. The active involvement of these players has contributed to the development of a growing body of knowledge in the regulatory, supervisory and policy aspects of microinsurance, including the development of guidance to apply the ICPs in support of financial inclusion.

Also emerging from the labours of this joint working group is the Access to Insurance Initiative (*see Box 1.4*). Launched by IAIS and development partners in 2009, the Initiative facilitates financial inclusion by promoting the effective and proportionate regulation and supervision of insurance markets. Since its inception, the Initiative has carried out a systematic analysis of the microinsurance sector in several countries to provide information in support of constructive policy recommendations. The evidence available so far has helped in outlining the key levers of a prudential regulatory framework that supports the sustainable expansion of microinsurance, as summarized in Figure 25.1 and discussed in detail throughout the rest of this chapter. These levers are also consistent with the G-20 Principles for Innovative Financial Inclusion (*see Table 25.1*) – a reflection of how an enabling policy and regulatory environment can spur innovation for financial inclusion while ensuring financial stability and protecting consumers.

¹ For details on the Insurance Core Principles and related standards and guidance, see www.iaisweb.org.

Table 25.1

G-20 Principles for Innovative Financial Inclusion: Country examples from the insurance sector

1. Leadership: Cultivate a broad-based government commitment to financial inclusion to help alleviate poverty.

China

- All work done by the Government is aimed at enabling the people to “lead a better-off and dignified life”, and making society more impartial and harmonious.
- The China Insurance Regulatory Commission (CIRC) is currently facilitating the market development of microinsurance by encouraging insurers to undertake pilot projects in rural areas.

India

- Innovation in terms of distribution and product range has been heavily influenced by the development role of the IRDA (see Box 25.1).
- “Obligations of Insurers to the Rural and Social Sectors” requires all insurers to satisfy specific targets.

2. Diversity: Implement policies that promote competition and provide market-based incentives for sustainable access to a broad range of affordable financial services provided by a diversity of service providers.

India

- IRDA has relaxed agent regulations for microinsurance products, promoted links between regulated insurers and NGOs and self-help groups, and permitted the sale of composite insurance products.
- Self-help groups are allowed to collect proposal forms, collect and remit premiums, carry out policy administration services and assist in the claims settlement process, and are therefore remunerated at a higher level than conventional insurance agents.

Peru

- Microinsurance regulation broadens the type of organization that could be agents, e.g. microfinance institutions, trade unions and others (see Box 25.3).

3. Innovation: Promote technological and institutional innovation as a means to expand financial system access and usage, including by addressing infrastructure weaknesses

India

- Allowed innovative technology solutions by FINO (see Box 25.6) including biometric-enabled smart cards and a portable point-of-sale terminals.

Kenya

- “Kilimo Salama” utilizes mobile phone technologies and the expertise of farmers and rural business persons to provide reliable, low-cost cover for excess or lack of rain (see Box 24.3).
- Uses a low-cost, mobile phone payment and data system and automated solar-powered weather stations to offer farmers affordable, “pay as you plant” insurance to protect their investment in high-yielding seeds.

4. Protection: Encourage a comprehensive approach to consumer protection that recognizes the roles of government, providers and consumers.

South Africa

- Legislation prescribes minimum standards in respect of business practice, policies and policyholder protection.
- A dedicated Consumer Education Department that has various initiatives in place to educate consumers.
- Media releases to warn against unregistered operators.
- Insurance industry associations have established ombudsman schemes.

India

- Policyholder protection regulation, which takes care of all aspects of policyholder protection in the insurance value chain.
- Insurance ombudsmen in 12 cities to take care of consumer grievances.

5. Empowerment: Develop financial literacy and financial capability.

Ghana

- The National Insurance Commission supports literacy work including a focus on the low-income segment.

India

- IRDA has a comprehensive advertising strategy to promote consumer awareness on insurance in print and electronic media in 13 regional languages.

6. Cooperation: Create an institutional environment with clear lines of accountability and coordination within government; and also encourage partnerships and direct consultation across government, business and other stakeholders.

Philippines

- Insurance Commission has issued a separate set of rules, together with the Securities and Exchange Commission (SEC) and the Cooperative Development Authority (CDA), to stop “informal insurance” or “insurance-like schemes” offered by different organizations (see Box 25.5).

Brazil

- SUSEP has set up an interdisciplinary Microinsurance Commission comprising of government entities, insurance industry and academia (see Box 25.2).

7. Knowledge: Utilize improved data to make evidence-based policy, measure progress and consider an incremental “test and learn” approach acceptable to both regulator and service provider.

IAIS’s global approach

- Since 2006, the IAIS, in cooperation with the Microinsurance Network, has been active in facilitating learning between policymakers from over 40 countries and prepare guidelines for developing microinsurance that are consistent with international standards.

8. *Proportionality: Build a policy and regulatory framework that is proportionate to the risks and benefits involved in such innovative products and services and is based on an understanding of the gaps and barriers in existing regulation.*

Philippines

- The Insurance Commission has adapted its regulation of mutual benefit associations (MBAs), creating a new tier of “Microinsurance (MI) MBAs”.
- Simple products, stipulated requirements to comply with performance standards, and defined eligibility criteria for microinsurance based on the benchmark of the minimum daily wage for non-agricultural labourers.

West Africa (UEMOA)

- The UEMOA legislation has developed a multinational framework that allows mutual social health organizations to underwrite health insurance using simplified accounting requirements.

9. *Framework: Consider the following for the regulatory framework: reflect international standards and national circumstances, and foster a competitive landscape; introduce an appropriate, flexible, risk-based regime to combat money laundering and the financing of terrorism (AML/CFT); lay down conditions for the use of agents as a customer interface; create a clear regulatory regime for electronically stored value; market-based incentives to achieve the long-term goal of broad interoperability and interconnection.*

India

- Regarding “know your customer” (KYC) requirements, norms have been relaxed by the exemption of microinsurance clients from the requirement to submit a recent photograph and proof of residence for life insurance policies held by a single individual up to a total annual premium of INR10 000 (US\$220).

Figure 25.1

Regulatory and supervisory levers to enhance access to insurance

Policy guidelines

- Take active steps to develop a microinsurance market
- Adopt a policy on microinsurance as a part of the broader goal of financial inclusion

Prudential guidelines

- Define a microinsurance product category
- Tailor regulation to the risk character of the microinsurance product category
- Allow microinsurance underwriting by multiple entities
- Provide a path for formalization of informal and unregulated insurance providers

Market conduct guidelines

- Create a flexible regime for distribution of microinsurance
- Facilitate the active selling of microinsurance

Supervision and enforcement

- Monitor market developments and respond with appropriate regulatory adjustments
- Use market capacity to support supervision in low-risk areas

Source: Bester et al., 2009.

Take active steps to develop a microinsurance market

By working with market participants and other cross-sector regulators, insurance supervisors can facilitate the competitive provision of insurance to low-income households and small firms in an efficient and effective manner. This requires research to identify the obstacles inhibiting market development, including supply and demand issues, as well as possible regulatory challenges, and then dialogue among key stakeholders to identify possible solutions.²

² For more details how to conduct such a review, see the Access to Insurance Initiative’s Toolkit No. 2 (Bester et al., 2010).

*Box 25.2***Developing a national microinsurance strategy: The Brazilian experience**

In April 2008, Superintendência de Seguros Privados (SUSEP), the Brazilian insurance authority, constituted a Microinsurance Consultative Commission with representatives from the public sector (SUSEP, Ministry of Finance, Central Bank and Ministry of Social Security) and private sector (Insurers Federation, Brokers Federation and the National School of Insurance). The objective was to develop and implement a suitable regulatory framework for the development of microinsurance. The participation of other government bodies in the process broadened the awareness of those responsible for defining policies that affect the insurance sector. A Working Group on Microinsurance was also constituted within SUSEP comprising technicians from different departments (e.g. actuary, statistics, on-site and off-site supervision) to support the Commission.

The Commission produced reports on the definition of “microinsurance” and “low-income population” in Brazil, identification of regulatory barriers, identification of stakeholders and their roles, and microinsurance products and parameters. The Commission’s proposals were presented and discussed at two workshops with stakeholders in September and December 2009 before finalization.

In parallel, a Microinsurance Bill was also introduced in the Brazilian Congress in April 2008. In line with the Commission’s proposals, SUSEP recommended changes to the Bill, which were duly incorporated. If passed, the Bill will create categories for “microinsurance brokers” and “microinsurance correspondents”, and grant a specific licence to sell microinsurance. The Bill also proposes to create a special tax regime for microinsurance operations and for employers who contract insurance for their employees, which will dramatically reduce the tax burden on microinsurance.

Following the appointment of the new Insurance Superintendent in 2011, most of the provisions of the draft Microinsurance Bill, with the exception of the tax provisions, have been incorporated in a draft Resolution of the National Council of Private Insurance (Conselho Nacional de Seguros Privados).

Source: Adapted from Simões, 2010.

Adopt a policy on microinsurance

For most developing countries, the reform agenda – to develop an institutional and legal basis to underpin the expansion of microinsurance – needs to be outlined as an integral part of financial sector policy. A range of approaches can be chosen to address regulatory, market infrastructure and competitive barriers to expanding insurance markets, including a proactive approach by the government to inclusion issues, openness to innovation, fostering broad-based alliances, stimulating private-sector interest, offering supportive services such as financial edu-

cation and payment system infrastructure, gathering and providing data on the frequency and severity of losses, and paying careful attention to proportionality.

All of these approaches can contribute to the development of a relevant public policy on inclusive insurance, as undertaken by several countries in recent years. For example, as described in Box 25.2, Brazil has made a public commitment to microinsurance. Through stakeholder dialogue, the authorities have demonstrated leadership in pursuit of microinsurance policies to establish and promote fair competition and initiate market development. In doing so, they have attempted to improve their understanding of the existing and potential market for insurance.

Define a microinsurance product category with lower risk

In most microinsurance markets: (1) products tend to entail lower risk than conventional insurance products, as well as lower benefits, with few exclusions; (2) policy terms tend to be short, often one year or less; (3) the risk events covered are relatively predictable and the financial impact of each event relatively small; and (4) the terms of the policy tend to be simple, so they are easy for the market to understand and avoid complex underwriting processes. Microinsurance is often sold on a group basis and does not require individual underwriting. Regulatory burdens that inhibit the growth of microinsurance, but cannot be reduced across the board, can normally be addressed by defining a product category based on these characteristics, which will systematically lower risk, reducing prudential and marketing conduct regulations.

The rationale for defining a product category for microinsurance is to allow differential treatment. As described in Chapter 1, definitions can be related to various factors including the product, the target group and even the provider or distribution channel, and they can be either qualitative or quantitative (*see Table 25.2*). Qualitative definitions are usually appropriate for broader financial sector policy statements. A quantitative definition of the cover, based on premium amount or sum assured, for example, may be necessary to delineate a microinsurance business line. When defining the product category, the scope should be as wide as possible in terms of perils covered as well as maximum benefit levels. However, quantitative definitions can be problematic for insurers and supervisors to administer. If it cannot be avoided, a quantitative definition needs to align the resulting business profiles with the expected proportionate regulation and supervision.

It is also important to consider how the definition will affect insurance providers, as illustrated by the experience in Peru (*see Box 25.3*). The product definition should encourage insurance penetration into the low-income market while maintaining operational integration with the insurance industry. It also needs to provide an easy mechanism to adjust benefit levels in tune with inflation and market changes.

Regulatory definitions of microinsurance products

	India	Philippines	Peru (3/2007–9/2009)	South Africa (proposed)	Brazil (proposed)
Target group	IRDA defines the rural sector as: <ul style="list-style-type: none"> – a population of less than 5 000; – population of less than 400 per square kilometre; and – more than 25 per cent of the male working population engaged in agricultural pursuits RSBY defines its target population as: <ul style="list-style-type: none"> – BPL workers in the unorganized sector and their families 	The disadvantaged who need risk protection and relief against distress of misfortune	1.1 million people, with access to basic financial services, who do not live in extreme poverty but are nevertheless poor	The low-income population, otherwise known as the mass market	The population with per capita monthly income of up to two minimum wages in the formal or informal sectors of the economy
Product definition	Life: <ul style="list-style-type: none"> – Maximum sum assured US\$1 230 – Minimum sum assured US\$123 – Age: >18, <60 – Term: >5, <15 years term life Non-life: <ul style="list-style-type: none"> – Maximum sum assured US\$740 – Minimum sum assured US\$12 	Life: <ul style="list-style-type: none"> – Maximum annual premium: Five per cent daily minimum wage for non-agricultural workers in Manila, currently US\$25.5 	Cover life and asset insurance: <ul style="list-style-type: none"> – Maximum premium US\$3.30 – Maximum sum assured US\$3 300 – Maximum grace period of 30 days Distinguishes between group and individual	Asset insurance: <ul style="list-style-type: none"> – Maximum summed assured US\$12 500 Other micro insurance: <ul style="list-style-type: none"> – Maximum sum assured US\$6 250 – Cover is limited to risk only 	Specific parameters to be set proposed legislation: <ul style="list-style-type: none"> – Need for simplicity – Targeting of microinsurance market – Product parameters
Provider definition	No concessions Composite life and non-life micro-insurance products allowed, but separate insurers must underwrite the risk Progressive rural and social sector obligations for providers (<i>see Box 20.1</i>)	Capital requirements: <ul style="list-style-type: none"> – Commercial insurers: US\$24m – Cooperative insurers: Insurance Commission may reduce this requirement by up to half – Existing MBAs: US\$305 000 – New MBAs: US\$3m – Microinsurance MBAs: US\$122 000 to be phased up over time 	No concessions	Lower capital requirements for a dedicated microinsurance company: <ul style="list-style-type: none"> – Subject to a minimum capital requirement of US\$375 000 – Minimum of US\$187 500 will apply to those institutions to be phased up to US\$375 000 over three years 	– Specialized microinsurance firms – Existing insurance can create separate microinsurance divisions
Distribution channel	Distribution through qualifying microinsurance agents, must be non-profit, e.g. NGOs Commission cap of 10 to 20 per cent, depending on premium payment	Microinsurance agent or broker category created Subject to a special training programme and qualifying exam	Opening up of distribution channel beyond traditional insurer-agent model	– Uncapped commissions – Reduced minimum skills level in favour of training requirements – No advice required – Simplified and clear language disclosure requirements	Microinsurance correspondents and broker category created

Source: Adapted from Hougaard et al., 2011

*Box 25.3***The evolving definition of microinsurance in Peru**

Superintendencia de Banca, Seguros y AFP (SBS) in Peru introduced its first specific regulation on microinsurance in 2007 to promote the provision of affordable insurance to the low-income population.

In terms of product attributes, the regulation was applicable to products that did not exceed US\$3 300 cover limit or US\$3.30 monthly premium. The focus was on simplicity and the insurance needs of the target market. Deductibles and co-payments and any prior assessment of the insured values at the time of underwriting were prohibited. A list of acceptable claims documents was also to be specified in a simplified policy document. To assess compliance with these criteria, all microinsurance products were to be filed and reviewed by the insurance regulator before being marketed to the public.

In the event of a claim, the policyholder was required to notify the agent or the sales clerk, who in turn acted as the interface between the policyholder and insurance company. The insurer had the option to pay the claim through the agent or directly to the policyholder. If the claim was rejected, the policyholder had the option to make a complaint through the agent, and the insurer was required to resolve complaints within 15 days.

To reduce costs, marketing through alternative distribution channels (e.g. sales clerks, MFIs, savings and credit cooperatives, and social organizations) was allowed in a partner-agent relationship. These channels had access to the low-income population and were capable of collecting premiums and quickly handling claims. They were also responsible for explaining the insurance benefits and costs to their clients. Innovative techniques for offering more tangible insurance benefits (e.g. tickets or certificates, regular visits and reports to customers, and payment in goods and services) were also introduced. The insurers were ultimately responsible for the management of risks and regulatory compliance.

When implementing the regulation, the SBS did not see the volume of activity that it expected, and soon realized that regulatory caps on prices and benefits acted as obstacles to developing microinsurance products. Therefore, in consultation with the industry, in 2009 a new regulation removing limits on cover or premiums was introduced to provide a further boost to the market. Microinsurance is now expected to respond to the protection needs of specific groups. Exclusions can be introduced, if necessary, but are to be kept at a minimum and should be commensurate with the cover. Minimum information requirements for the simplified contracts and documents that insurance companies or intermediaries need to provide to the policyholders as proof of cover have also been set out.

The functions which intermediaries can perform have been expanded and they are now permitted to collect premiums, attend to claims and pay benefits on behalf of insurance companies, but they have now also been made accountable

for any deficiency in these operations. Reporting has been simplified and providers now only need to furnish the SBS with a quarterly report detailing the number of policyholders, premium volume and claims. In addition, a “file and use” product approval process is now used and if SBS has no objection the insurer can market the product. The impact of these changes has been significant, as they have facilitated access to insurance for low-income women, farmers and entrepreneurs through NGOs, MFIs and banks.

Sources: Adapted from Gomez, 2007; Burns and Caceres, 2010; Villegas, 2010.

Despite efforts to keep microinsurance products simple, the promotion of financial inclusion has also introduced more complex products, such as index-based insurance (*see Chapters 4 and 11*) to manage risks in rural areas, where farmers are vulnerable to weather risks or other natural events. The complexities of contract design and basis risk are significant constraints for such products. In many countries, the laws and regulations necessary to accommodate index-based products are simply not in place. Such regulation will need to be consistent with international standards to improve insurers’ chances of gaining access to reinsurance and other alternative risk transfer instruments.

Proportionality – Tailor regulation to the risk character of the product

Under a proportional regulatory framework, requirements vary with the benefits and risks associated with the insurer or the intermediary, providing regulators with the flexibility to tailor prudential and market conduct regulations to the characteristics of the market. Regulators should consider developing rules proportionate to the risks incurred for microinsurance that reflect the limited business risk and enable smaller players that cannot comply with one-size-fits-all regimes to participate. Proportionality in regulation can be accomplished, for example, by correlating requirements with the differing levels and types of risk involved.

When revising regulation, policymakers should consider the extent to which current regulations inhibit the underwriting and/or distribution of insurance products for low-income markets. High compliance costs could prevent the entry of new providers, squeeze out those attempting to introduce new business models, products and services, or force customers to use informal providers. A balance needs to be struck between reducing the compliance burden and maintaining sufficient standards to protect clients.

Allow microinsurance underwriting by a number of entities – A tiered approach

In countries where the legislation allows, regulators generally opt to provide regulatory exemptions for a microinsurance line of business. Existing insurers (or

new insurers able to comply with the existing entry requirements) can then offer microinsurance products because of the reduced requirements. This would typically include an adjustment to market conduct regulations, for example by exempting microinsurance product lines from commission caps or allowing alternative distribution channels to be used for sales. This approach, however, generally restricts the universe of providers to companies that are already licensed.

Regulators in some countries have preferred to go for a more extensive intervention by creating a second tier of insurance licence regulatory requirements tailored to microinsurance. Tailored capital, solvency and investment requirements can be stipulated to facilitate the entry of dedicated insurance providers that wish to participate in this niche market (*see Box 25.4*). The supervisor may prescribe less costly risk management and underwriting systems that are within the capacity of smaller operators. Moreover, since life and non-life microinsurance business is often underwritten on a short-term basis, and since single channel distribution reduces cost and promotes positive insurance discovery, a few countries are considering the removal of the demarcation between life and non-life for microinsurance.

Box 25.4

Proposed framework for dedicated microinsurance companies in South Africa

The South African Government plans to introduce a dedicated legislative framework to foster the provision of low-cost, simple and standard insurance. Detailed policy proposals for a microinsurance regulatory regime were mapped out in a paper released by the Treasury in July 2011, with the goal of broadening access to insurance for low-income earners.

Microinsurers would have their own dedicated licence and be subject to lower capital requirements and less onerous regulations. The compliance regime for microinsurance licences will be lighter than for other insurance products because of the lower risks. For a policy to qualify as microinsurance, the benefits payable must be capped at R50 000 (US\$6 200) per individual risk per year for life products and R100 000 (US\$12 400) for asset products; the term of the contract cannot exceed 12 months; and the product is limited to risk only, excluding savings.

Unregistered insurance businesses such as burial societies, funeral parlours and those involved in “assistance business” would be expected to become formalized, while formal insurers could take out a dedicated licence to enter microinsurance. The new regime is expected to combat the abuse of consumers, particularly by funeral parlours.

Source: Adapted from National Treasury, 2011.

Allow microinsurance underwriting by a number of entities – Cell captives

Cell captives are another institutional arrangement that could facilitate the provision of insurance to low-income markets (Aliber, 2003). Cell captives are formed when a client company (e.g. an MFI or other aggregator) either buys shares in an insurance company that have been set aside for this specific purpose, or pays a fee to rent a captive cell. These arrangements allow the client company to rely on the insurer for its expertise and its insurance licence, while the client participates in the underwriting profits and losses. Such an approach would be relevant for large group schemes or if a provider wants to offer niche products that are not available in the market.

Despite these advantages, a cell captive still requires technical expertise, and would only be viable if the client had a large number of policyholders. In the absence of specific cell captive regulation, it can create risks and uncertainties in the market. It is therefore essential to build a better understanding of the realities of the cell captive market and how it is regulated in order to consider the role that it may play in a microinsurance regulatory framework.

25.4

Treatment of MCCOs and informal providers

Low-income households are most vulnerable to risks and it is therefore assumed that they have an unmet demand for insurance. Clearly, they need cover given the limited social protection available to them (*see Chapter 2*) and their exclusion from most formal types of insurance. However, this need does not automatically translate into demand. Institutional rigidities also suppress low-income households' demand for insurance, even for people who could afford to pay the premiums. Consequently, this target group sometimes creates its own risk management tools, which may include informal, mutual risk-pooling mechanisms.

Allow microinsurance underwriting by a number of entities: Role of MCCOs

According to an IAIS Issues Paper (IAIS, 2010), mutuals, cooperatives and community-based organizations (MCCOs) include a diverse range of organizations. These can include institutions that are not: a) registered under any specific law or regulation; b) recognized under a specific law even if the law does not specifically cover insurance; or c) recognized under the insurance law itself. They may be described as mutuals, mutual benefit organizations, cooperatives, friendly societies, burial societies, fraternal societies, community-based organizations or self-insuring schemes. Where this is part of the social structure of the country, member-based mutual-type institutions tend to fare better than traditional insurers in offering microinsurance due to high levels of trust amongst members.

*Box 25.5***Formalizing informal insurance in the Philippines**

In the Philippines, many informal organizations were offering insurance without a licence even though the Insurance Code clearly stipulated that they had to have a certificate of authority from the Insurance Commission (IC). Similarly, the Cooperative Code also required cooperatives undertaking such activities to obtain an IC certificate. There are also entities, including non-profit organizations registered with the Securities and Exchange Commission (SEC), which were extending insurance without authorization.

In January 2010, a Joint IC-CDA-SEC Memorandum Circular No.1 issued by the Insurance Commission, the Cooperative Development Authority (CDA) and the Securities and Exchange Commission, announced termination of “informal insurance” or “insurance-like schemes” within a year. Organizations that offered such schemes were given the option either to become a distribution channel for a commercial insurers or within two years to incorporate themselves into a life or non-life insurer, a cooperative or a mutual benefit association (MBA) licensed by the IC. Entities failing to put their activities on a formal footing will risk revocation of their primary franchise or the filing of criminal charges against the individuals concerned.

Joint IC-CDA-SEC Memorandum Circular No.2, issued in June 2010, stipulated the rules on the use of funds collected under informal microinsurance schemes to protect contributors. According to the circular, funds collected by entities with informal microinsurance schemes that will formalize their activities – either by partnering with licensed companies or setting up their own companies – were to be used to pay the premiums for insurance or insurance-like products. The funds could also be used to pay fees to mutual benefit associations (MBAs) – set up especially by NGOs to provide microinsurance to members – where the contributors become members. For cooperatives, the funds were to be used for members’ share capital contributions to a single-purpose or multi-purpose cooperative that would provide for their insurance needs. Any excess funds were required to be placed in members’ savings accounts in these cooperatives.

The potential role of MCCOs as insurance providers may be restricted if they are not recognized in the legal framework. Alternatively, they may evolve into underground or informal insurers. Efforts to reform the framework to include these organizations would seem to be an important factor in ensuring that all policyholders are afforded the benefits of prudential supervision and consumer protection.

A major weakness of member-based institutions can be attributed to weak corporate governance and inadequate risk management. Corporate governance regulation normally forms part of the institutional regulations, such as a company’s act or cooperatives’ act. All institutions underwriting microinsurance should be sub-

ject to corporate governance, accounting and public disclosure standards that are adequate to ensure compliance with the applicable insurance regulations.

Provide a path for formalization

When a significant informal insurance market has developed, many complex questions arise as to how it can be integrated into the formal sector. Besides informal insurance provided by MCCOs, some countries also have numerous unlicensed insurers, such as funeral parlours, hospitals and MFIs, which provide cover in response to a real need for risk management in low-income communities. Informal providers can meet a social and economic need, but may be the source of consumer abuse and operations may fail due to inadequate risk management. Formalizing these operations is in the public interest. However, the limited resources available to insurance supervisors usually make this objective difficult to achieve. In these circumstances, it is necessary to define a clear path whereby informal providers can gradually and realistically meet regulatory requirements, as illustrated in Box 25.5.

Supervisors will have to approach their involvement with informal schemes as a facilitator to support their transition to the formal sector. This would include the application of the principles of proportionality and materiality to ascertain the extent of informal insurance provision and the obstacles to the formalization of informal providers. For example, where informal schemes do not guarantee benefits, there is no need to bring them under insurance supervision. A process of formalization should be complemented by awareness campaigns, amnesties or grace periods, capacity-building support to train owners and managers, and opportunities for consolidation among informal schemes and/or partnerships between informal operators and formal underwriters.

One practical way forward is a tiered minimum capital and solvency structure, whereby previously informal insurers are also allowed to underwrite microinsurance on a selective basis as they graduate to the minimum capital requirements of a full insurer over time at a prescribed rate. In addition, good coordination for the formalizing of informal providers with other government agencies, for example law enforcement and revenue authorities, is required to ensure compliance with the formal framework.

25.5

Recognizing alternative distribution channels

The market opportunity represented by the uninsured has motivated a diverse assortment of financial and non-financial institutions to increase the availability of insurance services at the bottom of the pyramid in a competitive manner (*see Chapter 22*). Serving this market requires the management of high volumes of small transactions, and therefore companies with robust technology platforms such as telecommunications are well positioned to play a key role – if the regulatory framework permits.

Table 25.3

Alternative distribution channels and regulatory issues

	<i>Alternative distribution channels</i>	<i>Regulatory checks</i>
Tele- and mobile marketing	<p>Telemarketing is a direct marketing channel for selling, promoting or soliciting a product or service over the telephone, sometimes through pre-recorded messages.</p> <p>Mobile advertising campaigns are used for both life and non-life insurance products. Generally, via a text message, the customer is provided with the option to purchase insurance cover over the phone or send a text message to request more information and special offers.</p> <p>Example: Innovative Filipino entrepreneurs have persuaded telecom companies to bundle sales of mobile phones with life insurance that is easy to understand and has low monthly premiums.</p>	<ul style="list-style-type: none"> – Telemarketing that includes a pre-recorded message must contain a quick and easy method for the recipient to opt out of receiving future calls. – The content for tele- and mobile marketing should accomplish the following: <ul style="list-style-type: none"> · identify the seller · state that the purpose of the call/SMS is to sell insurance · describe the nature of the product offered for sale · state that if a prize promotion is offered, no purchase or payment need be made. – Due to lack of face-to-face interaction, this channel should be restricted to simple products with small premiums.
Virtual marketing	<p>Activities such as an electronic kiosk and the Internet are emerging as alternative distribution channels. In a typical kiosk sale, a customer enters basic information (such as name, gender, type of policy, and amount to be insured) and the system generates a quote. The customer has the option to approve the terms and make a payment.</p> <p>Examples: Insurance solutions offered through kiosks include accident insurance counters in railway and bus stations; kiosks in shopping malls offering multiple products; banks selling insurance through ATMs.</p>	<p>E-kiosks, ATMs:</p> <ul style="list-style-type: none"> – Security issues related to identity theft and credit card fraud need to be addressed. <p>M-advertising:</p> <ul style="list-style-type: none"> – Only permission-based advertising should be regarded as an appropriate approach. – Privacy risks have to be considered and appropriate data protection and privacy safeguards must be guaranteed. – A combination of a legal framework, privacy-enhancing technologies and consumer education may be important components of consumer protection. <p>Internet:</p> <ul style="list-style-type: none"> – The sale, purchase and delivery of insurance over the Internet should be conducted in a secure environment. – Supervisors should require companies to have sufficient controls in place (including security, confidentiality, control of personal data, back-up and record-keeping systems) to transact business in a proper manner. – Supervisors should look closely at any outsourcing arrangements to ensure that appropriate contracts are in place and that risks are addressed effectively.
Bank-assurance	<p>This channel offers insurers a ready-made customer base of bank customers, brand awareness and established credibility</p>	<ul style="list-style-type: none"> – Risks in structuring insurance distribution through banks should be clearly identified, as insurers ultimately do not control the access to the customer. – Protocols for sharing confidential information and disclosure of commission should be transparent. – Regulators in some countries allow partnerships with a number of banks. This not only broadens distribution but also eliminates the risk to insurers of losing an entire channel. – The issue of training staff to sell insurance and their registration or not as insurance intermediaries must be addressed.
Retailers	<p>The distribution of insurance through supermarkets and retail chains is expected to become an emerging channel due to its ability to reach a vast customer base.</p> <p>Example: Future Generali in India has introduced <i>mallassurance</i> to sell cover in shopping malls, modelled on its successful operation in the Philippines. This channel offers convenience, reach, and personal advice. Financial advisers are available for consultation and finalizing the contract.</p>	<ul style="list-style-type: none"> – Retailers do not currently provide financial advice in connection with life insurance, and their marketing material is purely factual, although some do offer help in finding an independent financial adviser. – The risk of mis-selling is a concern. – Providers of life insurance in supermarkets need to find methods to prevent sales of unsuited products. – Training staff to sell insurance and their registration as insurance intermediaries must be addressed.

	<i>Alternative distribution channels</i>	<i>Regulatory checks</i>
Direct response TV	DRTV is used to create immediate consumer response to a company's products and to provide a convenient channel for potential customers to obtain more information on insurance plans, as well as to buy the plans through telephone orders. Example: CIGNA's growth strategy for the near future in Asia-Pacific includes expanding the DRTV distribution channel.	<ul style="list-style-type: none"> – Regulations should specify that the product being marketed is simple and its benefits can be reliably and easily demonstrated on TV. – The product should have proven retail or direct sales. – The premium, benefits and other charges and fees are transparent.

Create a flexible regime for distribution

Microinsurance is in the process of building on alternative distribution channels and new technology (*see Chapter 24*) to significantly expand outreach without investing in bricks-and-mortar branches. Without clear regulatory frameworks, however, reputable technology and solutions providers are unlikely to commit the resources to launch and sustain deployments (Porteous, 2006). The channel-mix described in Table 25.3 highlights possible innovations that need to be considered when designing the regulatory environment. Regulations need to permit the use of alternative channels while providing adequate safeguards for consumers' interests, without which large-scale adoption is unlikely (Porteous et al., 2008).

New technologies such as mobile telephones, point-of-sale networks and the Internet are increasingly being used for client communication, data collection, premium collection, and even for the payment of claims. Technology can also play a critical role in building a financial identity for the previously unserved by transforming their transaction history into an asset that they can use to access financial services. Examples of innovative technologies to reach the underserved segments are provided in Chapter 24 and Box 25.6.

Box 25.6

Creating a flexible regime for distribution: Technology and financial inclusion

Financial Information Network and Operations (FINO), an Indian technology solutions company, provides sourcing and servicing solutions for more than 50 banks, MFIs, insurance companies and government agencies. FINO operates through 12 400 transaction points to reach millions of underserved people. One of FINO's key solutions is a biometric-enabled smart card and a portable point-of-sale terminal, combined with back-end software. For example, the smart card forms the basis for ICICI Bank's micro-savings product.

The general insurance company ICICI Lombard uses FINO's biometric cards to lower the costs of enrolment and claims processing in its health microinsurance scheme. In partnership with Manipal Group of hospitals (*see Chapter 18*), smart cards have been piloted in locations equipped with laptops for online enrolment. The card will also be used for premium collection. Through this tech-

nology, customers transact using a personalized e-passbook, which facilitates biometric authentication.

As a key enabler and facilitator of financial inclusion, FINO has unlocked a US\$ one billion potential microinsurance market for health insurance companies, triggering a sea change in their delivery system by providing them with the geographical coverage, a scalable technology platform and the required processing capabilities. FINO facilitated the standardization of the delivery platform, back-end database management system and data maintenance format, effectively solving the problems faced by earlier government schemes that were plagued by design and implementation problems.

Source: Adapted from www.fino.co.in.

Infrastructure weaknesses, such as interbank and wholesale payment systems, can inhibit the introduction of microinsurance innovations. Porteous (2006) notes that additional barriers, including the fast-evolving fields of m-payments, m-banking and microinsurance, typically cross the distinct regulatory domains of banking, insurance, telecommunications, payment systems and anti-money-laundering. The overlap raises the risk of coordination failure between regulators with potential legislation or supervisory inconsistencies or contradictions that can constrain the growth of innovative services and create unforeseen problems.

The growth of mobile financial services has raised basic policy questions for supervisors such as how to distinguish a “payment” (mobile or not) from a “deposit”, and what differentiates the business of providing payments from deposit taking. It is noticeable that most developing countries do not allow e-contracts, and therefore a human interface for paper-based proof of sales is still required, significantly raising costs and minimizing the benefit of the mobile phone. Furthermore, there is a need to simplify disclosure requirements to ensure that clients understand them as well as to respect the confines of the limited space available on a mobile phone. Additionally, with growing concerns over privacy and the advent of consumer protection rules, it could be more difficult for service providers to market to clients. Intelligent ways of obtaining a client’s permission would therefore be needed.

To pave the way for new financial service models, regulators need to find the right balance between openness to innovation and sufficient certainty regarding the legal framework that protects users and clearly assigns liability. It is important for regulators, supervisors and policymakers to understand the risks and practical concerns around the emergence of alternative distribution channels, new technologies, flexible payment mechanisms and innovations in product design.

Not all innovation is detrimental to financial stability, and regulations can encourage players to do things in a better way. To promote financial stability,

supervisors must initiate steps to improve their understanding of the complexities that underpin new financial products and distribution systems, including the underlying assumptions, their functioning, the best practices and the supervision issues. A comprehensive vision for market development based on dialogue and policy coordination between policymakers, supervisors and industry players is the key to identifying the risks associated with new products and delivery channels, and producing proportionate responses.

Facilitate active selling of microinsurance

One-on-one sales processes provide clients with access to good information, but are expensive and can easily make low-premium products unsustainable. Some countries have set a maximum commission payable to agents and brokers for services rendered in the intermediation of insurance policies. A capped commission on a small premium will lead to a miniscule actual payout to the intermediary and will not increase their incentive to sell insurance. To avoid regulations limiting the cost of intermediation, supervisors could instead make it mandatory for providers to disclose commission levels.

The objective is to avoid market conduct regulation that can make the sales process too costly. In many environments, the traditional agent/broker model that relies on dedicated sales professionals will be too expensive for microinsurance. Regulators therefore need to stipulate the minimum levels of market conduct regulation for microinsurance without compromising on consumer protection.

25.6

Access to insurance and consumer protection

Consumer protection regulation is a cornerstone of any financial regulatory architecture and aims to monitor insurers' dealings with their customers. Besides investment in consumer education and raising awareness, consumer protection involves putting in place supervision mechanisms to promote market transparency, restrict specific behaviour, and enforce compliance with rules (*see Chapter 26*). This typically involves the monitoring of advertising, marketing, pricing and underwriting, policy cancellation and non-renewal, and the settlement of claims.

The primary motivation for consumer protection regulation in insurance is the idea that consumers are imperfectly informed about a product's characteristics.³ Asymmetrical information gives rise to the potential for insurers or their agents to misrepresent or manipulate information. Failure to properly under-

³ For example, premium depends upon individual/group risk characteristics, which may include previous loss experience, demographics, and financial history or lifestyle choices. Cover features include investment strategies and calculation of returns, the definition of insured events or cover amounts for specific events.

stand different aspects of insurance benefits can lead to improper choice of contracts. A related concern is that insurers, recognizing consumers' limitations, may be tempted to design products or disclosure in ways that take advantage of customers (Hansen and Kysar, 1999).

The mantra "treating customers fairly" (TCF) is reflected in the statutes of most financial market regulations and should be a key strand of the consumer protection agenda for microinsurance. TCF is aimed at helping customers understand the features, benefits, risks and costs of financial products. It is designed to minimize the sale of unsuitable products by encouraging best practice before, during and after a sale. The Financial Services Authority (FSA) in the United Kingdom has outlined six TCF outcomes that it intends to achieve (*see Box 25.7*), which are relevant to other jurisdictions as well.

Policymakers and regulators should consider establishing consumer protection regulation that requires transparency in pricing and services; identifies the parties ultimately responsible for upholding the protection (including protection against fraud relating to funds entrusted to the service provider or its agent); identifies the supervisory authority; and ensures that effective means of dispute resolution and redress are in place. The key difficulty in designing these regulations is in achieving the appropriate balance of costs and benefits.

Box 25.7

The six TCF consumer outcomes

The UK Financial Services Authority (FSA) has outlined six core consumer outcomes that it wishes to see as a result of the TCF initiative. These are:

- Outcome 1 – Consumers can be confident that they are dealing with firms where the fair treatment of customers is central to the corporate culture.
- Outcome 2 – Products and services marketed and sold in the retail market are designed to meet the needs of identified consumer groups and are targeted accordingly.
- Outcome 3 – Consumers are provided with clear information and kept appropriately informed before, during and after the point of sale.
- Outcome 4 – Where consumers receive advice, the advice is suitable and takes account of their circumstances.
- Outcome 5 – Consumers are provided with products that perform as firms have led them to expect, and the associated service is of an acceptable standard and as they have been led to expect.
- Outcome 6 – Consumers do not face unreasonable post-sale barriers imposed by firms to change product, switch provider, submit a claim or make a complaint.

Source: FSA UK, 2007.

The remit of consumer protection varies significantly across countries. Microinsurance pioneers such as Colombia, India and Mexico provide relevant examples. They have mitigated the risk posed by the use of agents by placing liability on financial service providers for agents' violations of regulation applicable to outsourced services.

When crafting regulation for microinsurance, the following aspects should be noted:

- The bar for consumer protection should not be set so high that responsible providers are dissuaded from entering the market. It would make sense to involve financial services providers in the monitoring process, since they have an incentive to build trust and long-term relationships with their clients.
- Although the information-based rationale for consumer protection in insurance markets suggests disclosure regulation as the preferred regulatory tool, in practice product regulation may lead to better outcomes. Insurance product regulation is intended to foster market transparency by ensuring that contracts are clear and do not contain hidden clauses that may be used to mislead consumers (Grace and Scott, 2009).
- A particular microinsurance challenge is to overcome the lack of consumer understanding of their rights (such as recourse mechanisms) and responsibilities (such as paying on time). The target group often lacks knowledge of basic insurance concepts and products. One way to overcome this problem is by standardizing products with simple terms and conditions (*see Box. 25.8*).
- Regulatory enforcement that imposes penalties for misleading, unclear or unfair product features may provide insurers with incentives to create simple and transparent contracts, while allowing product innovation and consumer choice.

Box 25.8

Microinsurance standards and products: Philippines

In January 2011, an inter-agency committee in the Philippines approved a set of standards for the marketing and selling of microinsurance products as well as a draft for a standard product structure. The standards, known as “SEGURO” – for Solvency/Stability, Efficiency, Governance, Understanding of the product, Risk-based capital and Outreach – will help ensure that microinsurers can meet their claims obligations and are solvent.

A three-in-one microinsurance product has also been approved, which would pay beneficiaries a set amount in the event of a death, a destroyed house, or if a business is damaged by weather or natural catastrophes. Standardizing microinsurance will help to broaden its reach and ensure that the people it is designed to help actually understand it. It will also level the playing field and allow insurers to compete effectively.

Source: Adapted from Artemis, 5 January 2011.

The most common consumer complaints involve claims settlements, notably about claim rejections, delays or disputes over the amount of payments. Ideally, the underwriter/intermediary must provide an easy and acceptable consumer recourse option. However, at the very least the customer must be able to lodge a complaint or enquiry via the point of sale. In most countries, insurance supervisors have no authority to require an insurer to settle a claim, relying on conciliation, mediation and explanation in their dispute resolution (Schwarcz, 2010). In some countries, an ombudsman, usually separate from the regulator, is empowered to adjudicate consumer disputes with insurance companies. Besides resolving problems, a complaint resolution mechanism may also provide insurers with an incentive to create better internal systems and standards.

Another avenue for improving consumers' decisions and their use of insurance is to promote better understanding of insurance among consumers (*see Chapter 14*). Enhancing the financial capability of the poor is a necessary complement to consumer protection. It enables microinsurance clients to: understand the information that insurers are required to disclose; make use of the available recourse mechanisms; understand basic financial concepts; appreciate how insurance can meet the needs currently filled via informal financial arrangements; help make informed choices to suit their circumstances; and demand products that improve their financial well-being. All major stakeholders in the financial markets – providers, consumers and government – need to work together to create a fair financial framework that protects customers.

Lastly, consumer protection regulation requires mechanisms to determine whether insurers and intermediaries are complying with requirements, and to uncover practices that regulators view as unfair. Monitoring for traditional insurance includes a market conduct examination of individual insurers, which would be too onerous for microinsurance, and therefore supervisors need to rely on market analysis. Market analysis includes the use of data on industry trends, regulatory data submitted by insurers and intermediaries, consumer complaints, and other information. Specific areas of examination include determining that insurers are consistent with advertising materials, that policies sold and rates charged are consistent with regulations, that claims are paid within a reasonable period and that consumer complaints are addressed.

25.7

Conclusion

Access to insurance is an important component of financial inclusion policy and a key weapon in the fight against poverty. While developing a robust regulatory framework that promotes financial stability, policymakers, regulators and supervisors are realizing that the financial sector plays an important role in meeting the needs of small businesses and low-income households. They are becoming

cognizant of the potential impact that access to insurance can have on economic growth and the eradication of poverty.

Policies for improving access should have clear and measurable objectives and their effectiveness should be monitored through transparent public reporting. In particular, the effectiveness of regulation in facilitating and expanding access should be assessed. Whilst appropriate and reliable data are a useful support to designing an appropriate policy, the absence of data does the opposite, which can diminish consumer confidence and deter potential consumers from buying insurance. In addition, a lack of effective supervision can discourage foreign and domestic investors from supplying capital, retard insurance market efficiency and dampen industry development.

Achieving the appropriate balance between safety and soundness on one hand, and facilitating growth and development on the other, is particularly difficult in cases where innovative approaches, new services and untested business models figure prominently. Unanticipated risks can emerge down the road while perceived risks can generate overly cautious regulatory approaches. Since a deeper knowledge of the actual risks will emerge as markets mature, regulations need to evolve over time and allow for incremental adjustments to help achieve regulatory balance.

Regulatory initiatives emanating from the IAIS are attempting to address the challenges of compliance with global insurance standards in specific circumstances. Based on country studies facilitated by the Access to Insurance Initiative, and in close dialogue with insurance supervisors, work is under way to understand how proportionality principles can be used in crafting a regulatory and supervisory framework, which in turn can create the right incentives to promote access in different economic and socio-cultural settings.

Designing and implementing such a framework will require concomitant steps to strengthen the capacity of policymakers, regulators and supervisors so that they can make greater use of regulatory judgment to identify opportunities and problems early. It will also require a new supervisory approach, moving away from the one-size-fits-all strategy. In doing so, they would need to dialogue with stakeholders and examine the structure of their domestic insurance industry and current and prospective microinsurance delivery channels.

26 **Protecting consumers while promoting microinsurance**

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Ultimately, microinsurance markets will not develop unless they demonstrably meet the particular needs of the economically active poor.¹ Recent empirical research from China, India and Kenya also suggests that trust and the perceived credibility of the product and the institution(s) involved in building long-term demand are important (for example Dercon et al., 2011, Cai et al., 2009; Cole et al., 2010). The existence of appropriate consumer protection measures can both help build trust in microinsurance products and providers, and encourage sound market development.

While a considerable amount of work has been done to develop a relatively standardized regulatory framework for consumer protection in mainstream retail insurance markets,² the microinsurance market may have specific characteristics that suggest a need for a more tailored approach. Typical consumers might be less able to assess how well a specific insurance policy fits their needs, or they might be more vulnerable to pressure sales or mis-selling. For example, recent empirical work in India finds that “consumers demonstrating lower levels of sophistication are more likely to be offered the wrong product” (Anagol, 2011).

At the same time, the low-income insurance market is still well below its potential size in many developing countries, and many regulatory authorities now have explicit mandates for financial inclusion as well as prudential supervision. Given the potential benefits of insurance cover for low-income consumers that are currently underserved, policymakers will want to avoid unintentionally “protecting consumers out of the market” by adopting rules that make serving these new markets unviable. In addition, rapid innovation in products, channels and business models is necessary to bring down costs, meet consumer needs better

¹ The primary focus of this chapter is on the interaction between the individual economically active poor consumer and the insurance market, rather than cover for the indigent or other social insurance provided by government to a defined population.

² International Association of Insurance Supervisors (IAIS) has set up a sub-committee to consider this topic, although it is has been addressed at a high level by the IAIS Assessment Methodology since 2000. Both the Organization for Economic Co-operation and Development (OECD) and Financial Stability Board (FSB) have also set up consultative committees under a post-financial-crisis mandate from the G-20, and the World Bank has issued a set of good practices (based on work in Eastern Europe) for public comment

and ensure provider profitability. Thus, policymakers should aim for market conduct³ regulation that is proportionate, well balanced, and tailored to the specific risks that arise, so that it does not unnecessarily stall the development of microinsurance markets.

As with the market itself, regulation of microinsurance is nascent in most countries: there is little precedent for policymakers to draw upon in designing a proportionate consumer protection framework. One policy choice, for example, is whether to add market conduct rules for microinsurance to the existing insurance regulation framework or to develop a tailored regime for the sector. To date the “early movers” include India, Peru and the Philippines, each of which has passed and implemented specific microinsurance rules (*see Chapter 25*). Brazil, Cambodia and South Africa have indicated that they will be making changes in the legal and regulatory framework soon. The Securities and Exchange Commission of Pakistan (SECP), which oversees insurance and other financial services in that country, has announced that it is drawing up a microinsurance framework. Policy development and pilots are also underway in a number of other countries, including China, Mongolia, Nepal and Nigeria.

In practice, the microinsurance consumer protection framework in its early stages will need to draw selectively upon policy approaches in mainstream insurance markets, and then be modified on the basis of evidence of actual experience in microinsurance markets. This chapter adopts such an approach and is organized under four broad headings:

- 1) **Market characteristics and risks:** The chapter describes particular aspects of current microinsurance markets that affect consumer risks and should be considered in policy decisions on whether and when to introduce consumer protection regulation.
- 2) **Consumer protection goals and measures:** The chapter assesses options for achieving three common consumer protection goals: 1) transparency; 2) fair treatment (with a focus on product design, distribution arrangements and the claims payment process); and 3) effective recourse. This includes attention to prioritization and sequencing of new consumer protection rules, as well as the benefits and drawbacks of separate microinsurance regulation and supervisory bodies from a market conduct standpoint.
- 3) **Special consumer protection regimes specific to microinsurance:** When jurisdictions are creating specialized regulations and supervisory requirements for microinsurance, it creates particular sets of consumer protection issues that need to be considered.

³ Market conduct regulation sets rules specific to the insurer’s activities, practices and product features. Consumer protection comprises a broader set of tools that may also include mechanisms to protect consumers that are extraneous to the insurer (e.g. independent ombudsman schemes).

- 4) **Complementary non-legislated and non-regulatory measures:** The chapter also briefly explores the role that approaches – such as codes of conduct or initiatives to improve consumer awareness and financial literacy can play in improving the effectiveness of consumer protection regulatory regimes and the healthy development of microinsurance markets.

The chapter concludes with a summary of emerging good practices that could be useful for policymakers seeking to craft a proportionate regulation and supervision regime that promotes market development while protecting lower-income and less experienced consumers.

26.1

Microinsurance market characteristics relevant for consumer protection

Emerging microinsurance markets have some specific features that policymakers should take into account in designing and implementing a proportionate consumer protection regime.

Clientele: Typical microinsurance customers – the economically active poor – have limited and fluctuating discretionary income, lack assets, and are unfamiliar with or mistrustful of formal providers and products. Furthermore, their levels of financial literacy tend to be low. Thus, even where low-income consumers have been involved in rather sophisticated family- or community-based risk-sharing arrangements, their initial purchase of formal insurance (a contract-based rather than a relationship-based transaction) requires learning a new set of rules. These client characteristics raise the policy question of how to ensure an adequate standard of care for customers who could be particularly vulnerable to consumer protection problems.

Products: A significant proportion of microinsurance policies are currently being generated through credit-related transactions with microfinance institutions (MFIs) and other providers of small loans to low-income borrowers. Credit life insurance (or “loan repayment” insurance) is a short-term policy designed to pay off the outstanding loan balance should the borrower die or become permanently disabled (*see Chapter 9*). As described elsewhere in this volume, other increasingly common products include life insurance (*Chapter 8*), personal accident, restricted forms of health insurance (*Chapter 5*), and index-based agricultural insurance (*Chapter 11*). Rapid innovation is leading to the development of new covers such as pharmaceutical, property, and livestock insurance (*Chapter 12*). Each product raises distinct consumer protection concerns.

To reduce transaction costs, products are often kept simple and standard, and are delivered to groups with limited or no underwriting of individual risks (*see Chapter 21*). Experimentation is under way to find cost-effective ways to tailor products to consumers’ liquidity constraints and price elasticity (i.e. typically

very small weekly or monthly instalments and possibly premium subsidies and payment grace periods). Products are often presented through a trusted intermediary and incorporate specialized client outreach and education efforts. Each of these aspects of product design and delivery may call for adaptations of conventional approaches to consumer protection rules and supervision.

As noted, the drive towards simplicity and low cost may also mean that products are bundled and that there is a commensurate level of non-disclosure (i.e. passive selling). Consumer protection mechanisms need to ensure that policyholders are fully aware of what they have purchased and of their rights; the chapter addresses various approaches to achieving this.

Providers and business models: While microinsurance markets are underdeveloped relative to their potential, they exhibit a wide range of business models and underlying marketing mixes.⁴ These innovations offer the promise of making risk management services more widely available. However, they can also raise consumer protection concerns.

One key concern involves distribution arrangements. The search for cost-effective ways to reach lower-income, less educated and more remote consumers has led to distribution systems that include a range of players carrying out different functions depending on their skills, technology, resources and influence. The role of aggregators is prominent. The common “partner-agent model” typically involves a conventional insurance company teaming up with an MFI. Other major aggregators to date have been agricultural banks, non-governmental organizations (NGOs), postal systems, and various forms of mutual or cooperative institutions, sometimes in combination. The aggregator may have its own captive insurer, place some or all risk with one or more commercial insurers, or even carry the risk on its own balance sheet.

Recent innovations that could improve the value proposition of microinsurance include the use of pre-paid cards and non-traditional distribution networks such as pharmacies (Venezuela), mobile phone operators (Ghana), utilities (Colombia), or retailers that service the low-income populations in the Philippines and South Africa (*see Chapter 22*). Another innovation that could help poorer people manage risks involves bundling. For example, when a borrower takes a loan for an asset such as livestock, asset insurance may be offered on attractive terms. In other cases, the purchase of agriculture supplies, such as seed and fertilizer, triggers the automatic purchase of crop insurance.

⁴ Business model refers to the broad approach adopted, e.g. partner-agent, direct sales. Marketing mix is more granular and defines the detailed combination of pricing, product, distribution and promotion to be adopted.

Each of these features of the rapidly evolving microinsurance market – client segments, products and product mixes, distribution systems, technology and business models – may raise consumer protection questions, with answers somewhat different from those appropriate for conventional markets.

Market conduct concerns tend to focus on challenges faced by consumers specific to prevalent product features and practices at key points in the value chain. Policymaking and rules-writing will benefit from consumer research into the actual nature, incidence and consequences of consumer protection problems experienced by microinsurance policyholders (*see Box 26.1*).

Box 26.1

What can go wrong? Kenya consumer research findings

What consumer protection issues arise for microinsurance policyholders? A recent consumer protection diagnostic study in Kenya drew upon focus group discussions and a national survey of mass-market consumers, including insurance users. While penetration rates are very low and many respondents did not have formal, private insurance, the research revealed that those who did were often dissatisfied. Many complaints centred on salespeople not explaining products clearly and the lack of understandable documents. As one man explained, “It is like they have used anyone to sell insurance and they don’t know the products so you sign for a product then when the policy comes you find that it is totally different.”

Thirteen per cent of insurance users said the details were not explained in writing and 11 per cent said they did not understand such details as the policy cost, what was and was not covered, and how much they would receive in the event of a claim. Respondents also described problems with claims processing and disputes; 26 per cent of policyholders in the survey who had made a claim reported that it was not processed quickly.

Insurance policymakers in developing countries typically face significant capacity constraints. Research of this type can help them focus consumer protection regulation and supervision on the most important concerns and test whether proposed rules and other measures are likely to work as intended.

Source: Adapted from Flaming et al., 2011.

One risk that can undermine consumer protection is microinsurance policies that are overly complex, or with prices and key terms that are difficult to understand or are even deceptive. The relatively common practice of “bundling” or “tying,” often in combination with compulsion (as can be the case with credit life insurance), can raise consumer protection con-

cerns.⁵ The consumer may have no choice but to purchase the policy or may not be able to choose the provider. Yet bundled or tied products can also extend access and yield benefits such as cost reductions as a result of marketing synergies, the larger risk pool, avoidance of anti-selection, and simplified administration. From a regulatory standpoint, it might be appropriate to permit bundling and compulsory purchase, as long as safeguards are in place to ensure adequate disclosure and value for money. Rather than prohibiting practices such as tying, “no advice” sales or narrow cover, proportionate regulation would thus aim to balance protection of consumers with the economic realities of providers trying to reach these new markets.

Additional consumer protection challenges can arise at the sales, premium collection and claims stages of the value chain. Aggressive sales techniques are a common complaint, including but not limited to door-to-door sales models. Intermediaries such as agents or brokers can play a critical role in reaching and servicing new microinsurance policyholders (*see Chapter 23*). Yet they do not always receive adequate training or supervision from the insurer, and indeed, it can be unclear whom the intermediaries are working for and what incentive they have to serve the policyholder well once the policy has been issued. Sometimes the person who sold the policy disappears altogether (Collins et al., 2009), with no guarantee that the premiums were ever forwarded, that collections will continue and that the policy will be honoured.

Claims handling and the lack of effective complaints and recourse mechanisms can also undermine new consumers’ trust in formal microinsurance. Sometimes the claims process is neither timely nor fair, as when claims are rejected on the basis of exclusions that were not made clear at the time of sale. Sometimes there is no formal process for lodging and resolving complaints. When it does exist, it is sometimes cumbersome or the complaint is unlikely to be resolved in the policyholder’s favour.

In summary, policymakers must balance the goals of financial inclusion, innovation and consumer protection in setting market conduct rules for microinsurance. In doing so, regulation may need to accommodate a more flexible approach to permissible product design, packaging and distribution, while requiring high standards of disclosure and service provision combined with strong recourse mechanisms.

⁵ Bundling occurs when several distinct products are sold at the same time in a linked transaction. The concept of adhesion may apply in these situations whereby a single contract is deemed to exist. Tying occurs when the organization selling the primary product (e.g. credit) also sells complementary but separate products in a non-competitive manner. Bundling may be voluntary (as in the option to take out supplementary funeral insurance) or compulsory (e.g. where insurance is sold as part of a credit product).

26.2 Towards a consumer protection framework for microinsurance

This section explores in greater depth the options for workable regulation to improve transparency, fair treatment and recourse in microinsurance markets.

26.2.1 Transparency

Disclosure of key prices, terms and conditions to policyholders is the foundation of transparency and a bedrock principle of consumer protection, whether in developed or less developed markets.

The wording, language and format of disclosures need to be in a form that consumers with limited formal financial experience and literacy can readily comprehend. It is becoming more common in developed markets to require that a “Key Facts” document, following a prescribed format and summarizing the most critical information pertaining to the policy, be attached to the contract. This approach could also be valuable in early-stage microinsurance markets, with the basic parameters of the insurance contract (i.e. type of contract, term, sum insured, premium and premium frequency, renewal conditions, how to make a claim) being set out in large print and simple terms on the front page. Indeed, although they reduce flexibility and the potential to tailor policies to the specific risk profile of individual clients, for the most part simplicity and standardization themselves contribute to protecting less experienced consumers. For example, one page could be sufficient to describe and satisfy the contractual requirements of a simplified product with standard terms. Other forms of communication – such as the interactive games developed for health product options and prices (*see Chapter 14*) – could also prove effective with these client segments in addition.

Consumers also need to receive disclosures at the right points in the process. At a minimum, they should receive complete pre-sale information on the significant product features, their own rights and responsibilities, and the obligations of the provider, including aggregator, agent and others as relevant. At the point of purchase, they should also receive a written copy of the contract or policy, although there may be cases where verbal disclosure would offer sufficient transparency for simple products. China has recently gone further by introducing requirements for certain product/distribution combinations, with new policyholders acknowledging in writing that they understand the contract provisions; the insurer must then contact the policyholder soon after purchase to verify this.

As illustrated by the Kenya example, supervisors can benefit from up-front consumer research (either directly commissioned or carried out by independent third parties) to identify common areas of confusion and potential deceptiveness, and test proposed wordings and formats with low-income consumers. Insurers or

their partners also could be required to explain how they intend to use such studies in developing products.

Disclosure has its limitations, however, due to factors such as inherent product complexity and consumer behavioural biases.

26.2.2 Fair treatment

The fair treatment component of consumer protection can be considered separately for three aspects of insurance operations: product design, distribution and claims handling.

Product design

Many consumer protection problems can be avoided by ensuring that microinsurance products are appropriate for the intended clientele. The key tests are relevance of product benefits and services, the fairness of contract provisions, and value for money. Does the product address key risks for the policyholders? Are contract clauses reasonable and straightforward? Is the policy's cost proportionate to the benefits received if the insured event occurs? Are the obligations to make payments and the mechanisms for securing benefits aligned with the client's circumstances? And is it affordable for the targeted client segment?

Common approaches to overcoming the information and power asymmetry between providers and consumers in mainstream markets include both product regulation and an affirmative requirement for distributors to consider the specific circumstances of the individual in selling specific policies.⁶ Many developed countries are concerned about how bundling can introduce or reinforce asymmetry; to improve suitability and reduce mis-selling, some have attempted to promote choice in tied selling situations by requiring that customers have an opportunity to compare products offered by alternative insurers. However, such measures may be neither effective nor practical in the microinsurance markets of developing countries.

⁶ For more complex products, generally long-term contracts involving life-cycle planning such as universal life and pension contracts, developed-country regulation increasingly has restricted the category of intermediary that may be involved in such transactions to relatively highly-qualified and fully-registered financial planners, many of whom now operate on a fee basis. Rules may also require that sufficient documentation is retained to prove that the intermediary obtained adequate information on the client's needs to select the appropriate products and contract characteristics.

Instead of banning product-bundling or regulating advice, other approaches could be employed to improve the suitability of microinsurance sold to the economically active poor. Sometimes the legal definition of microinsurance specifies mandatory or prohibited product characteristics that reduce product risk and complexity. For example, specific rules might be put in place that make clear the expectation that contract wordings need to be far simpler and have fewer exclusions than are acceptable in a more developed legal environment. Examples of exclusions include non-coverage of certain conditions or pre-conditions (e.g. HIV/AIDS).⁷ The obligations on the policyholder to disclose changes of risk will need to be less onerous as well. Consumer input can be useful in determining product design.

For basic life and accident policies, it should be possible to develop standard wordings, with variations being possible subject to regulatory clearance. The ultimate contract will ideally be in certificate form and contain no more than a single page and a schedule. By contrast, for policies covering more complex risks, such as agricultural and health, insurers may need greater latitude for design and pricing to make such products attractive to consumers and commercially viable. If they are granted this leeway, these products could be subject to enhanced regulatory disclosure requirements, including an explicit statement of underlying assumptions and how they were arrived at.⁸ In addition, as most developing-country supervisors have limited technical resources available to them, it might be appropriate to require that the pricing be carried out by a suitably qualified individual, who could be an actuary employed by the insurer or individuals working with a third-party distributor. This could help to ensure that the intermediary, underwriter and any facilitator have the capacity needed to take on such a product.

Sometimes regulation addresses price, either directly (e.g. by prohibiting or limiting certain fees and commissions) or indirectly (e.g. by requiring prior approval of new microinsurance products and including analysis of value for money in the assessment process). Insurers, their association or the insurance supervisor could also be required to publish performance indicators that identify pricing, expense or commission levels beyond the established ranges.⁹ In either case, care must be taken to support pricing that makes it viable for responsible providers to serve new markets.

⁷ After Madison Insurance (Zambia) removed an HIV/AIDS exclusion from its health insurance policy, profitability was maintained due to lower claims adjustment costs and increased portfolio size.

⁸ This is akin to a write and file system where prior supervisory approval is not required to launch a product.

⁹ In India, for the past five years insurers have provided extensive reporting to the Insurance Regulatory and Development Authority (IRDA). IRDA publishes 41 tables of data on all aspects of insurers' operations including claims ratios and claims ageing by class of business, and complaints processing ("grievance disposal") performance.

Performance metrics can be used more broadly as “fairness” or value-for-money monitors. The Microinsurance Network has published a set of recommended performance indicators (Wipf and Garand, 2010), and has proposed social performance indicators (Simanowitz and Sandmark, 2011), several of which are relevant to the consumer protection agenda (*Box 26.2*).

Box 26.2

Social performance indicators especially relevant to consumer protection

Indicator 1 – Incurred claims ratio

Indicator 2 – Claims rejection ratio

Indicator 3 – Renewal ratio

Indicator 4 – Promptness of claim settlement

Indicator 9 – Complaints ratio

Indicator 10 – Transparent sales ratio

Source: Simanowitz and Sandmark, 2010.

The key performance indicator that is especially relevant to value for money is the loss (or claims) ratio. This helps to determine whether the marketing mix of the microinsurance provider makes sense from both an underwriter’s and a consumer’s viewpoint. Cases where loss ratios are planned to be very low to cover excessive expense levels are not desirable in the longer run.¹⁰ Regulation might specify maximum expense loadings, possibly scaling down over time. Whilst the provision of financial services to the poor is typically relatively expensive, appropriate benchmarks could be developed. For example, is it reasonable for the expense ratios of an established life insurer to exceed 30 per cent? Similarly, a consistent net claims ratio of significantly less than 50 per cent for basic products should be a red flag for mature non-life insurers. A high lapse rate might also indicate poor value for money or unfair practices and contract terms. Consultation among regulators, industry and consumer representatives could contribute to development of such benchmarks.

¹⁰ Non-insurance services bundled into an insurance product should be costed before carrying out such an analysis.

Distribution

A globalized and linked insurance supervisory community is adopting increasingly standardized approaches to the regulation and supervision of intermediaries. Special situations that arise in the mainstream markets (e.g. bancassurance, distribution of high-volume mandatory insurance through retailers, direct distribution, tied selling of warranty insurance) tend to be covered by separate laws or regulations. Special microinsurance regulations issued to have usually place significant emphasis on intermediaries. Mainstream approaches to regulating distribution and intermediaries are unlikely to be universally appropriate for microinsurance given the smaller monetary values, the need to minimize costs, the need to capitalize on consumers' trust of the intermediary, and the still evolving set of marketing mixes. It is likely that regulators will want to leave the door open to considering a range of potential intermediaries and the laws governing those intermediaries should allow them to be treated as insurance agents.

Currently, a central topic in insurance consumer protection discussions is the role and remuneration of agents, brokers and financial advisors.¹¹ While aggregators are prevalent, some regulators also allow for tied (i.e., exclusive) agents to sell and service microinsurance. In some cases, these agents are approved under the main insurance law. In other cases (e.g. India, the Philippines), the law provides for microinsurance agents with lower formal qualifications requirements; they may nevertheless have a wider range of responsibilities than conventional agents, including premium collection.¹² Many fail after a period.¹³

This is another difficult trade-off in the access-protection balancing act. Agent failure can severely damage confidence, as policyholders typically lose all premiums paid up to the time the agent ceases to operate due to heavy early-termination penalties (Collins et al., 2009). The likelihood of failure may be higher if microinsurance commission levels are restricted, as is sometimes the case as part of the consumer protection regime (see Anagol (2011) for the distorting effect of commissions). To address this problem, any entity offering microinsurance through tied agents should demonstrate as part of its licensing that it has systems that will ensure that another agent will immediately take over a collection/servicing book if an agent withdraws, or alternatively have means to develop a direct link with the policyholder, including the use of SMS and call centres. This would also need to be monitored by the supervisor, for example, through a simple statutory return and on-site inspections.¹³ In addition, insurers

¹¹ A number of countries including Australia, Denmark, Finland, The Netherlands and the United Kingdom and either have, or are planning to banned some or all commissions for independent financial advisors and brokers.

¹² A strong analogy can be drawn with the old-style industrial insurance "collectors".

¹³ As a rule of thumb, in mainstream markets approximately 15 per cent of initial agency recruits survive to their fourth year as full-time operators.

using tied agents should be responsible under law for any mis-selling or malfeasance on the part of its agents.

Where intermediaries jointly brand a product with an insurer, there could be two options. Either the intermediary could be required to stand behind the product, or regulation could require that the ultimate insurer meet a minimum prudential standard and retain responsibility for the actions of its intermediary.

To compensate for these applications of regulatory proportionality, all microinsurance intermediaries should be formally licensed or registered by the supervisor. Furthermore, relevant staff of an intermediary specializing in microinsurance should be subject to simplified agent training and certification. The supervisor should also have the power to transfer a portfolio of insurance policies to another intermediary and/or insurer if necessary, so as to ensure that the policyholders continue to benefit from cover.

In all cases, where the intermediary handles premiums and claims management, it should be able to demonstrate that policyholder moneys are de facto held separately from its own funds, that adequate systems are in place (computerized or paper-based) to identify and ensure the policyholder's rights, and that the underwriter's records are updated regularly (at least weekly).

Claims management

Claims payment systems can be critical to build trust and enhance the success of a microinsurance arrangement, due to the powerful demonstration effect of good or poor performance. Findings from the Kenya consumer research suggest that it is important for regulators to monitor this issue and intervene if substantial problems are evident, for example, by setting standards on timeliness and fairness of claims processes. Surveys carried out in India indicate that a settlement period of up to four weeks may be acceptable for the economically active poor, although given their low and variable incomes, sooner would certainly be better. In the Philippines, the Microinsurance Framework sets a 10-day limit. A number of microinsurance initiatives involving broker facilitators or other aggregators such as self-help groups permit the payment of valid claims immediately, without prior assessment by the underwriter or its adjusters. For example, a large microinsurance pilot in the Vizianagaram District of Andhra Pradesh uses a call centre and direct electronic transfer to ATMs to speed up the claims process. Weather-insurance products have also been designed in part to facilitate more timely claims settlement.

As a standard practice, any well-run microinsurer or its value chain associates should be recording and analysing its claims performance regardless of supervisory requirements. The supervisor or consumer protection authority should monitor claims performance, both for purposes of consumer welfare and in its development and prudential roles. To this end, microinsurers or their associated intermediaries should be required to report on a periodic basis on the number of

claims received by contract type and the average time taken to settle after the claim is notified. In practice, a strong insurance association could carry out much of the microinsurance data-gathering and analysis on behalf of the relevant consumer protection authority as part of a self-regulatory exercise.

26.2.3 Complaints handling and recourse

The ability to seek redress is also an important element of any consumer protection regime. It is only now being developed in an organized and formal manner in many industrial and transition countries and is effectively non-existent in most developing countries.

Internal dispute resolution

The first line of policyholder recourse when they have a concern or dispute should be with the company. This ensures that there is an opportunity for the insurer to resolve the matter efficiently through an in-house mechanism. Where aggregators or other distributors are involved, it must be clear to the consumer, and disclosed prominently in plain language at the point of sale, how and with whom to file a complaint. Good practice holds that a suitably senior officer should be appointed to deal with policyholder inquiries and complaints. Microinsurance policyholders are likely to be better served by simpler complaints processes that permit the filing of complaints through multiple channels (e.g. in person where the policy was purchased, via mobile phone). This is a requirement in a number of industrial countries, and is incorporated into Peru's special microinsurance regulation. As noted, supervisors can set standards for internal dispute resolution, such as rules on disclosure of recourse options, timeliness and process, and require insurers to report on the nature and frequency of complaints and the resolution success rate.

Third-party recourse

Some countries have third-party recourse options to deal with cases where the consumer is not satisfied with the outcome of the internal dispute resolution process. Countries are increasingly appointing independent Ombudsmen to deal with all forms of complaint in the financial sector.¹⁴ Alternatively, this function could be located in a sufficiently broad industry association, a lead supervisor's office or an appropriate consumer protection body. Under this latter approach, the insurance industry would need to agree to abide by the decisions of this office (typically up to a capped claim amount), which could be determined by a suitably qualified committee.

¹⁴ The International Network of Financial Ombudsman Schemes has more than 30 members, a number of which are from developing or transition markets: <http://www.networkfso.org/Links.html>.

Free look periods

Recourse options can be reinforced by regulation requiring “free look” periods for longer-term or more complex products (particularly if they contain exclusions) where, once a policy is purchased, consumers have a defined period in which to change their mind, cancel the policy for any reason whatsoever and receive an equitable refund. This approach is gaining ground,¹⁵ and in some countries the free look is being built into the policy wording, which also helps to advance the fairness objective.

26.3 Designing and implementing special consumer protection regimes for microinsurance

The previous section discussed typical consumer protection issues in microinsurance and regulatory options to address them, including some reference to how these differ from those in more conventional insurance markets. The mandate, authority and structure of the insurance authority or other entity responsible for designing and implementing such rules is likely to vary from country to country. This has implications for implementation of a consumer protection regime for microinsurance. Where policymakers decide to create an alternative regulatory regime for microinsurance, a number of legal and practical issues need to be considered.

26.3.1 Consumer protection implications of microinsurance definitions and regulation

Once the policy decision for adapted or specialized rules has been taken, there are a number of options for embodying this in law and regulation and achieving the appropriate access/protection balance in market conduct rules. One is to explicitly exempt microinsurance from certain requirements of the mainstream law and regulations. Another is to promulgate a special law or regulation, as in India and Peru. The special treatment of microinsurance may then be framed as broad principles or specific rules. Though a principles-based approach allows for maximum flexibility, in practice a rules-based approach is probably preferable while the microinsurance sector is in its development stage. Specific rules are likely to be applied more effectively by developing country supervisors facing capacity constraints, particularly where their actions may be challenged by politically connected special interests or the judicial system is still developing.

¹⁵ The requirement in South Africa is 30 days and this appears to be workable.

Peru's special regulation (Resolution 14283-2009) addresses consumer protection concerns by specifying qualitative product characteristics, recourse mechanisms and reporting requirements. However, the consumer protection rules cover only registered insurers.

India and the Philippines have issued tailored regulations. In the case of India, the Insurance Regulatory and Development Authority (IRDA) issued the "MicroInsurance regulations" in 2009 entirely concerned with insurance market conduct rather than prudential matters, which rely on the main insurance law. As in Peru, it covered only registered insurers. In the Philippines, the rules introduced in early 2010 are part of a national effort to strengthen supervision and market conduct of a range of microinsurance institutions, including formally licensed insurers, mutual benefit associations and cooperatives. Informal insurance schemes have been given the choice of working through a licensed insurer or converting to one of three approved structures (*see Box 25.5*). In both India and the Philippines, microinsurance agents have to be licensed through the insurance supervisor.

In India, a code of conduct also applies to all agents, including microinsurance agents, and insurers are required to ensure that it is observed. The code has the force of law (being included in the agency regulations) and any breaches result in termination of the agency licence. As long as a code's market conduct requirements are reasonable and a capable institution is in a position to oversee the agents, this "delegated self-regulation" approach to codes of conduct is more likely to succeed than purely voluntary codes in the case of microinsurance. Purely voluntary codes tend to be found more often in industrialized countries (e.g. Canada), where strong supervisors and industry associations are in a position to apply moral suasion; it should be noted, however, that they do not always work perfectly, even in those settings.

26.3.2 Regulatory scope, coverage and arbitrage

A related policy issue is whether consumer protection regulation effectively covers all formal entities that provide risk products to the economically active poor. If special regulation is developed under the powers of the insurance law only, the coverage is likely to be limited and there will be scope for regulatory arbitrage between licensed and unlicensed entities. For this reason, it is desirable for microinsurance consumer protection regulation to be supported by law that applies to all relevant institutions under a single supervisor, as in the Philippines and Australia.¹⁶ As a rule, if an institution is considered to be important enough

¹⁶ In Australia, for historical reasons, a separate law exists for Friendly Societies, but they were brought under the same Federal supervisors as insurance companies when the Australian Prudential Regulatory Authority (APRA) was established.

to be subject to prudential supervision, then it should also be subject to consumer protection rules that ensure a level playing field with other providers of generically similar financial services. Informal insurance arrangements that cover a large number of members and do not come under the consumer protection law rules could be subject to registration or some other form of lighter supervision, or forced to work through licensed entities.

One complication is that the actual beneficiary is sometimes not the individual paying the premium. Typically, when an MFI is the aggregator, the product sold is credit insurance (personal accident, life or life plus disability) for the amount of the loan only. The MFI will often take a commission and the consumer may not know that the cost has been added to the interest rate.¹⁷ It could be argued that, in this case, the appropriate regulator is the banking authority rather than the insurance supervisor. However, the banking regulator may be more concerned with the financial soundness of the lender and in particular its ability to maintain its fee- and commission-based income stream, which creates a potential conflict position regarding consumer welfare. Or banking authorities may limit interest rates to protect consumers, thereby inadvertently encouraging operators to increase prices for tied insurance products. Furthermore, many credit life products pay a sum to the family of the borrower in addition to paying off the outstanding loan, which clearly comes under the insurance heading. For these reasons, credit life is included in the definition of microinsurance for the purposes of this chapter.

Any policy decision to introduce tailored regulation (and an attendant supervisory approach) for microinsurance raises the possibility of mainstream insurance contracts being sold under this alternative regime, which is almost certain to have a lighter regulatory burden and to allow formulations that would not be possible under the IAIS insurance core principles (ICPs). Regulators will want to take steps to avoid creating opportunities for regulatory arbitrage around market conduct, where insurance providers could define themselves as “microinsurers” or products as “microinsurance” in order to take advantage of lighter regulation.¹⁸ This is important on both stability and efficiency grounds, as well as for consumer protection.

A number of countries that have introduced specific microinsurance legislation, including Peru and the Philippines, appear to have charted a sensible path between limiting the scope for arbitrage while allowing for innovative approaches. In some other countries, the rules may be constraining flexibility and limiting the development of microinsurance, for example, by requiring high minimum capital for all underwriters,¹⁹ or imposing developed-country standards on the provision

¹⁷ Typically, the insurance component costs are of the order of 1.5 per cent or more of the loan amount and loss ratios of less than 20 per cent are not uncommon.

¹⁸ This consideration has been one reason for the delay in the launch of the Cambodian microinsurance sector – the proposed legislation will impose lighter capital requirements than for mainstream insurers.

¹⁹ Crecana, a viable insurer for the low-income group, had to cease operations in Bolivia for this reason.

of advice, including comprehensive “fact finds”.²⁰ Some markets have found ways to work around such limitations, but it would be preferable for the regulation to recognize the differing needs of different market segments (*see Box 26.3*).

Box 26.3

South African rules on advice

In South Africa, the Financial Advisory and Intermediary Services Act (FAIS Act) requires the intermediary to provide enough information to enable the consumer to make an informed decision. Where advice is provided, there are specific and relatively onerous rules as to how this is to be done and by whom. In particular, the intermediary must be a registered financial adviser, carry out a financial needs analysis of the prospective buyer, and ensure that the consumer understands the advice given.

This requirement could have limited the development of low-cost microinsurance. In practice, insurers have been able to develop a “tick a box” no-advice category of tied agency (e.g. for simple, standard products sold through retail stores), employing an interpretation of a provision of the Act that was intended for a different purpose. Ideally, such adaptive strategies would not be required.

Source: Adapted from Bester et al., 2006.

It is noteworthy that the India and Philippines laws explicitly provide for a defined category of tied microinsurance agent that is subject to less onerous requirements than a normal broker or tied agent. Microinsurance agents are typically required to have specified experience in dealing with the economically active poor and to have received a minimum amount of training, and in the case of aggregators, to be not-for-profit organizations. They may be expected to carry out a wider range of functions than a mainstream agent, and be remunerated accordingly. However, they may be exempted from the need to pass examinations and have extensive formal educational qualifications. This seems a practical solution.

26.4 Non-legislative and non-regulatory consumer protection

26.4.1 Complementary role of industry codes of conduct and standards

Poor market conduct by insurers and intermediaries can result in overly intrusive and expensive consumer protection regulation. Such a regime can be problem-

²⁰ A “fact find” is a questionnaire that demonstrates that the intermediary has made sufficient enquiries to be able to recommend an appropriate product and sum insured/premium level (i.e. a financial needs analysis).

atic and even counterproductive from a market development and financial inclusion perspective, and result in a lower level of consumer welfare, e.g. if consumers' informal options are inferior to those available in the market. This argues for careful balancing of regulatory responses with the actual risks observed in the market and perhaps a more incremental and "learning-by-doing" approach to the design of a regime. It also suggests that there can be a role for well-designed responses that address the root causes of consumer protection problems by other than purely regulatory means.

Enlightened supervisors and industry associations in a number of countries have recognized this by putting in place industry codes of conduct designed to rein in short-term profit-maximizing business strategies and ensure that consumers receive appropriate products and fair treatment, so they can develop trust in formal products and providers. To this end, the microfinance industry has carried out various initiatives to develop codes and standards for responsible behaviour, including the Smart Campaign, which is organized around seven client protection principles that roughly correspond to the principles proposed in this chapter.²¹ The Campaign is now developing more detailed guidance for different microfinance services including microinsurance. The Microinsurance Network has also formed a consumer protection task force to perform more in-depth work of this type.

One key challenge with self-regulatory approaches is whether rewards and sanctions will be sufficient to motivate operators to achieve high levels of compliance. In the microfinance sector, the Campaign works on the premise that the combination of the development core values of most players in the sector, moral suasion and reinforcement by funders such as social investors will produce acceptable levels of behaviour and continuing improvement. Experience from other self-regulatory initiatives suggests that commitment and supervision on the part of the relevant regulatory authorities can also be a powerful success factor.

26.4.2 Complementary role of consumer awareness and education initiatives

While low levels of formal education and familiarity with formal finance can also be a barrier to effective implementation of consumer protection in the microinsurance sector, the economically active poor are very aware of risk. Events such as the temporary sickness of a wage earner or loss of a cow can be

²¹ See description of the principles and tools for providers, associations and other stakeholders at www.smartcampaign.org. The Campaign benefited from efforts by MFIs and networks to develop codes of conduct and work such as that carried out by the SEEP Network, which earlier articulated the goal of ensuring service provision that is ethical, dignified, transparent and equitable (see SEEP, 2010).

catastrophic for a poor family. However, it can be difficult to grasp the value of a product that can meet their needs, but which is entirely unfamiliar and possibly somewhat counterintuitive. While consumer characteristics do not prevent their understanding the contract or their rights once they have been explained, doing so well takes some careful thought and the mis-selling and malfeasance risks may be greater.

Taken together, these factors reinforce the need for consumer awareness and basic financial education measures to complement a consumer protection regime. Such measures are facilitated by regulatory requirements such as plain-language disclosure and accessible recourse mechanisms. Furthermore, an educated market is much easier to develop.²² Thus, while trust in the intermediary is a main driver of the purchase decision, there is early evidence that some basic financial education can raise consumers' awareness of their risk management options and their contractual and general legal rights once they have entered into an insurance contract.

In the course of testing its Consumer Protection Curriculum in various low-income markets, the Global Financial Education Program (GFEP) noted that the economically active poor often do not realize that they have general legal rights outside the insurance contract wording. Furthermore, GFEP found that only 16 per cent of the poor consumers they worked with trusted insurers prior to participating in the pilot tests of their Risk Management and Insurance Curriculum; after the training, 71 per cent were prepared to concede that some insurers were acceptable (GFEP).

The consumer awareness-raising and education process is likely to require a joint effort by supervisors, industry and other resources such as education ministries or specialized NGOs. While face-to-face involvement to build financial capability would have certain advantages (assuming the potential policyholders can afford the time), the GFEP data and authors' own experience suggests that other channels and popular media such as radio or television soap operas might offer broad outreach potential for insurance awareness and education in most developing countries. Secondary schools may also offer a fruitful channel for long-term knowledge and behaviour change, and have been a method of introducing the insurance concept for many years in developed countries. Not to be forgotten is the fact that the need for consumer education and financial capability is greatly reduced when products are suitable, delivered in a fair and transparent manner and subject to recourse when problems arise.

²² Three Nobel prize-winners (Akerlof, Spence and Stiglitz) have demonstrated that well-informed markets develop more quickly and along a healthier track.

26.5 Emerging good practices

A number of emerging good practices have been identified that might form the core of a proportionate consumer protection regime for microinsurance. Before they could form the basis of any normative regulatory recommendations, however, they would need to be tested on the ground and tailored to context. The practices are categorized under the three broad consumer-protection goals of transparency, fair treatment and effective recourse.

1) *Transparency:*

- Require that the client knows who the ultimate insurer is, e.g. when the insurer's name is clearly stated in the sales documents, the policy and any “Key Facts” documents.
- Require adequate and comprehensible disclosure of the price of the policy, what it does (and does not) provide, the premium payment obligations, when and how a claim can be made under the contract, and for how much, including any exclusions or limitations on cover arising out of explicit or implied warranties.
- Require adequate and comprehensible disclosure of claims procedures and how to access recourse mechanisms if things do not go as expected.
- Given the profile of microinsurance consumers, such disclosures will need to be as simple, comprehensible and accessible as possible to those with lower levels of income, experience and formal education. Standardization of disclosure formats and wordings can help facilitate consumer understanding and comparison of the different products available.

2) *Fair treatment:*

- Require mechanisms to be in place that will mitigate the impact of high-pressure sales practices by ensuring that potential consumers have time to consider the suitability and value for money of the product(s) on offer. Examples of such mechanisms include post-sale call-back by the insurer (using electronic means where possible) and free look periods (*see section 26.3*).
- Give attention to the effect of overly obtuse wording, especially if it limits the delivery of insurance services when customers might otherwise expect that they would be delivered, and consider encouraging operators to offer relatively simple products (e.g. those with standard wordings or restrictions on arcane exclusions and warranties).
- Allow product bundling when it affords benefits (e.g. cost savings or convenience) to customers as well as the provider, subject to suitability and disclosure requirements being met.²³

²³ While bundling may occur at point of sale, the different products may still be effectively provided by different institutions.

- Require that all intermediaries be formally licensed or registered,²⁴ and that they comply with appropriate and proportionate regulation adapted from mainstream markets.
- Make insurers responsible for the actions of their tied agents in delivering and servicing the product(s).
- Ensure client moneys are secured and properly recorded.
- Monitor claims settlement performance through such measures as loss ratios and time between claim notification and payment.

3) *Recourse:*

- Require insurers or affiliation groups that intermediate for them²⁵ (i.e. aggregators) to establish internal complaints-handling procedures that are timely and easily accessed by microinsurance consumers. For example, complaints procedures that are timely, free and convenient, and can be accessed in person and without onerous paperwork. To the extent feasible, the supervisor should oversee the effectiveness of internal dispute resolution systems and have insurers or affiliation groups report data on the outcomes of complaints and dispute resolution.
- If economic considerations permit, appoint an independent consumer representative such as an ombudsman. Alternatively, ensure that consumers have access to a consumer protection unit within the relevant supervisor's office or an independent industry body.
- Require "free look periods" (post-sale periods during which the new policyholder may terminate the contract and receive an equitable refund) for long-term or complex products – particularly if they contain significant exclusions or warranty wordings.²⁶

Research shows that the policy environment can have a major impact on insurance sector development at all levels. Regulators can draw upon these emerging good practices selectively, according to product type, consumer context, level of market development and supervisory capacity. If applied appropriately, these good practices should significantly contribute to financial inclusion through the development of value-adding and sustainable microinsurance markets.

²⁴ Subject to supervision by the regulator, this could be done through approved insurers for individual tied agents.

²⁵ For example, MFIs or self-help groups.

²⁶ If included in policy wordings, this could also be categorized under fair treatment.

Appendix

About the authors

Janice Angove is a qualified actuary and lecturer at the University of the Witwatersrand, South Africa. Working for the School of Statistics and Actuarial Science, she is involved in teaching in Actuarial Science and research into microinsurance and regulation for developing insurance markets. Prior to this, Janice was a manager at Quindiem Consulting, focusing on microinsurance and insurance and pension regulation in developing markets. Her main areas of interest are business case development for new microinsurance ventures and assessment of the business case for microinsurance from the perspective of commercial insurers. Janice also advises insurance and pension regulators in Southern Africa, assisting regulators in developing markets to foster stable insurance and pensions industries.

Anjali Banthia manages Women's World Banking's research in Asia and Africa. Through research, Anjali aims to bring the voice of women customers to the design and delivery of microfinance product and marketing strategies. Her research supports WWB's programmes in microinsurance, savings, credit, financial literacy and remittances. She is the author of *Microinsurance that works for women*, published in 2009 by Women's World Banking and Zurich Insurance Company in the ILO's Microinsurance Innovation Facility Publication Series. The publication analysed the critical gender issues involved in the provision of microinsurance.

Anjali has worked in more than ten markets in Africa Asia and Eastern Europe to recommend and launch practical, innovative financial solutions for women. Before joining WWB, Anjali worked as a Product Manager at Ujjivan Financial Services, a high-growth start-up microfinance institution in Bangalore, India, where she designed and implemented a micro-enterprise loan programme generating a loan portfolio of US\$3m and reaching over 10 000 women entrepreneurs in its first year. She began her career in consumer products brand management at the Clorox Company in Oakland, California and has also worked as a gender strategy consultant for the First Microfinance Bank and International Finance Corporation in Dushanbe, Tajikistan. She has a Master's degree in International Relations from the London School of Economics and a Bachelor's degree in Business Administration from the University of California at Berkeley's Haas School of Business.

Michiel Berende started his career as an underwriter and process manager for a Dutch insurer called Interpolis. He became involved in microinsurance when he visited India in 2004 as a consultant for Interpolis and the Micro Insurance Association Netherlands. In India he supported the DHAN Foundation in finding and developing the right software solution for its microinsurance programme. Working at the grass roots inspired Michiel to resign from his corporate job to live and work in India. There he worked at the Tata-Dhan Academy where he established a knowledge centre for microinsurance. In 2006 Michiel became a member of the CGAP Working Group on Microinsurance, nowadays called the Microinsurance Network. Since 2008 he has continued his work on microinsurance as a freelance consultant for the Microinsurance Network, ILO, GIZ, IADB, Eureko and others with experience in Brazil, India, Mozambique, Senegal and other countries.

Michiel is also the facilitator of the Microinsurance Network Technology Working Group. The focus areas for the Working Group include data collection, communication, management information systems and services to support microinsurance practitioners and trainers working with these organizations.

Alex Bernhardt founded and manages Guy Carpenter's GC Micro Risk SolutionsSM group. He spearheaded Guy Carpenter's grant-writing initiative in 2008, which culminated in the receipt of funding from the ILO's Microinsurance Innovation Facility. He subsequently led the global placement team responsible for GC Micro's first micro-reinsurance transaction – a first for Guy Carpenter and the industry at large. Under Alex's direction, GC Micro has since received additional project-specific grant funding and now manages commercial accounts in Africa, Asia and Latin America covering many lines of microinsurance business, including life, health and parametric catastrophe. Alex regularly contributes content to industry publications, speaks at international events and has received several industry accolades, for example being included in the 2011 *Reactions* magazine "Rising Stars" list and the 2011 *Risk & Insurance* magazine Power Broker® list. He has obtained several AICPCU designations and is an Honours graduate of the University of Puget Sound.

Michael R. Carter is professor of Agricultural and Resource Economics at the University of California, Davis and directs the BASIS Collaborative Research Support Program which studies rural poverty alleviation strategies in Africa, Asia and Latin America. Carter's research focuses on small-farm development strategies, including asset transfer and financial market deepening programmes. His current projects include analysis of poverty dynamics and productive social safety nets, and feature a suite of projects that design, pilot and evaluate index insurance contracts as mechanisms to alleviate chronic poverty and deepen agricultural and rural financial markets. This latter work is being carried out under the I4 Index Insurance Innovation Initiative, a joint venture of BASIS, USAID, Oxfam, the FAO and the ILO's Microinsurance Innovation Facility. An elected fellow of the American Agricultural Economics Association, Carter is a co-editor of the leading development journal *World Development*.

Doubell Chamberlain is the founder and Managing Director of Cenfri and theme manager to the FinMark Trust, responsible for their work in microinsurance and retail payment systems. He is a development economist by training, specializing in financial inclusion innovation, financial sector policy and regulatory strategy for development, access to financial services and supporting governments on making markets work for the poor. Doubell has extensive experience in microinsurance, AML/CFT, distribution of financial services and regulation for market development, and has worked across the developing world including Africa (Botswana, Ethiopia, Kenya, Lesotho, Mozambique, Namibia, South Africa, Swaziland, Uganda and Zambia), Latin America (Brazil, Colombia and Mexico) and South and South-east Asia (India, Indonesia and Pakistan).

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Grieve Chelwa is a Researcher at the Centre for Financial Regulation and Inclusion (Cenfri). After assisting Cenfri part time for nearly two years, Grieve joined the Cenfri team on a full-time basis in early 2011. His work has focused primarily on the delivery of microinsurance in Africa with a keen interest in developments in Southern Africa. Before joining Cenfri, Grieve worked as a Management Associate for Citi Africa based in Johannesburg, South Africa. Whilst at Citi, Grieve completed various assignments in the Democratic Republic of the Congo, Kenya, Nigeria and South Africa, covering systems integration, credit analysis and new business development. Before Citi, Grieve worked as an Operations Assistant for Standard Chartered Bank Zambia and before that interned with the Central Bank of Zambia. Grieve holds a Masters in Economics (University of Cape Town, South Africa), a BCom Honours specializing in Economics (University of Cape Town) and a BA specializing in Economics and Statistics (University of Zambia).

Craig Churchill has 20 years of microfinance experience, in both developed and developing countries. In his current position in the ILO's Social Finance Programme, he focuses primarily on the role of financial services that the poor can use to manage risks and reduce their vulnerability, including savings, insurance and emergency loans. He serves as Chair of the Microinsurance Network, is on the governing board of the Access to Insurance Initiative and teaches at the Boulder Microfinance Training Programme in Turin, Italy. Craig has authored and edited over 40 articles, papers, monographs and training manuals on various microfinance topics, including microinsurance, customer loyalty, organizational development, governance, lending methodologies, regulation and supervision, and financial services for the poorest of the poor. In 2008, he launched the ILO's Microinsurance Innovation Facility, with support from the Bill & Melinda Gates Foundation, to stimulate the development of insurance to help promote decent work for tens of millions of low-income people in the developing world.

Aparna Dalal supports the research, communication and knowledge management efforts of the ILO's Microinsurance Innovation Facility. Prior to this, she was the Director of Special Projects at the Financial Access Initiative, where she launched and led its microinsurance research projects related to consumer education, behavioural economics, and impact assessments. Aparna has broad and diverse management and technology consulting experience gained in the private and public sectors. She has a MPA in International Development from New York University and a BBA from the University of Texas.

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David Dror is an acclaimed international expert in microinsurance. The Asia Insurance Industry named him "Personality of the Year" in 2009 for "groundbreaking research and study which has helped boost understanding of how the world's poorest communities can benefit from microinsurance". In 2011 he received the "Global Citizen Lifetime Achievement 'Karmaveer Puraskar' Award for Social Justice and Citizen Action from the Indian Confederation of NGOs. His seminal book *Social re insurance: A new approach to sustainable community health financing* (with A. Preker; published by World Bank and ILO) is considered a fundamental text on linking grass roots communities with reinsurance ("Social Re"). He has published more than 40 peer-reviewed articles, several book chapters and three books on different aspects of micro health insurance (publications: <http://ssrn.com/author=183410>).

David Dror holds a PhD (summa cum laude) and a DBA (magna cum laude), is honorary professor at Erasmus University Rotterdam (Netherlands) and was the founding Chairman of the Micro Insurance Academy (www.microinsuranceacademy.org) in New Delhi in 2007, and in Germany in 2011. MIA is considered the leading technical service provider in microinsurance. It received the "Educational Service Provider of the Year" Award in 2010 and again in 2011 for "the MIA's innovative training methods, customized to the needs of low-income groups".

Iddo Dror has more than a decade's experience in various sectors (international development, the United Nations, academia, and business) in assignments spanning five continents. His professional interests are development (particularly the role of financial services therein), international business and management, and graduate-level teaching. He holds a PhD in Economic and Social Sciences and a Master's in Business Administration from the University of Geneva, Switzerland. Iddo has been active in the microinsurance sector since 2005, when he started his doctoral work in this area, and relocated to India in 2007 to help launch the Micro Insurance Academy, the first and only institution dedicated to providing technical assistance to grass roots communities and organizations in insurance domain knowledge. He facilitated the Insurance Education working group of the Microinsurance Network from its inception until 2011, and has been teaching graduate-level courses on microinsurance since 2009. A more detailed overview of current activities and links to publications can be found at <http://in.linkedin.com/in/iddodror>

Denis Garand graduated from the University of Manitoba in 1981 and obtained FCIA and FSA in 1987. From 1981 to 2000, he worked for a Canadian cooperative insurance company as Group Actuary, Director of Marketing and Vice-President of group insurance as well as being an adviser to developing cooperative insurers and an active participant in industry associations. Since 2000, Denis has been an independent consultant, focusing on the Canadian group and creditor insurance industry and international microinsurance programmes.

Eric Gerelle is an international consultant to microfinance and microinsurance organizations, multi-national corporations, universities and UN agencies. During his career, he has worked both in academia and the private sector in development and marketing, organizing international conferences and workshops on sustainable development, knowledge management and project financing. He is currently developing mathematical models for the Millennium Development Goals and applying them to scenario planning in health, insurance, employment and education.

Eric has designed and developed ICT systems for data acquisition, workflow management, systems integration and knowledge management. Through cooperation with providers of mobile solutions, he has created solutions for microinsurance, microfinance, health, nutrition and education in developing countries. He has set up several European Community-funded projects in manufacturing, health and knowledge management. His published works include papers in the areas of industrial automation, production management and a book on computer-integrated manufacturing. Eric has a BA in Physics from Oxford University and a PhD from Kansas State University in Mathematics and was awarded the Distinguished Alumnus Award by the Mathematics Department of Kansas State University.

Martin Herndorf is an associate at the Endeavor Institute in Berlin, a staff writer for NextBillion.net and a doctoral student at the University of St.Gallen, where he studies strategy processes in companies addressing microinsurance markets. He mainly publishes on market-based solutions to poverty, with a focus on microinsurance, and has taught seminars on these topics at the University of St.Gallen (2009), the University of Cologne's Summer School (2009) and at the Uganda Insurance Association (2010). He has in-depth experience in microinsurance in various company-specific and geographical contexts, including portfolio analysis, partnership due diligence and design, and management models. His key interests include financial inclusion and digital technologies. Through his involvement in microinsurance, he has gained insight into strategy and partnership processes for market-based solutions to poverty that are relevant across sector boundaries.

Jeanna Holtz joined the Microinsurance Innovation Facility in 2008, when it was launched with funding from the Bill & Melinda Gates Foundation to promote the development of valuable insurance services to large numbers of low-income households. Jeanna started the Facility's innovation grants programme; she is currently responsible for the overall operations of the Facility. Jeanna's background is in health insurance and consultancy. Prior to joining the Facility, she worked for five years for the Allianz Group, based in Munich, Germany, in the International Department of Health, where she led a team to support worldwide health insurance initiatives within Allianz. Previously, Jeanna had worked for the US health insurer Aetna. She holds a Master's degree in Business Administration (MBA) from Northwestern University, Chicago.

Christine Hougaard is an Engagement Manager at the South African-based Centre for Financial Regulation and Inclusion (Cenfri), where she specialises in microinsurance, retail payments and, more broadly, financial inclusion. In microinsurance, she has co-authored various studies, including microinsurance diagnostic studies in Brazil, South Africa, Swaziland and Zambia. Before joining Cenfri, Christine worked as an Associate at the consulting firm Genesis Analytics, where she worked predominantly on access to finance. Christine holds a Master's in Economics from the University of Stellenbosch, South Africa.

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Eamon Kelly is an Actuarial Associate with more than 15 years' experience in the private insurance sector in Ireland and Australia. Since early 2008, he has applied this experience to the development sector, working as a programme manager and consultant in various microinsurance initiatives in South Asia and the Middle East. Eamon has extensive field and programme implementation experience, directly managing MI programmes in both India and Jordan for over three years. He has also co-authored various research papers and publications, and collaborated in capacity building for microinsurance providers. He is currently working as a consultant with the World Bank in developing a microinsurance framework and regulations in Pakistan.

Ruth Koren obtained her BSc. (1966), MSc. (1968) and PhD (1973) degrees from the faculty of exact sciences at the Hebrew University in Jerusalem, Israel. Following a two-year scholarship at Cornell University, and a one-year research appointment at the Fox Chase Cancer Center in Philadelphia, she returned to the Hebrew university and spent three years as a senior scientist at the Faculty of Life Sciences and an additional three years as a lecturer in the Faculty of Medicine. In 1983 she moved to Tel Aviv University, Israel. There she started as a senior scientist affiliated with the Rabin Medical Center and for the last ten years has been a professor of Medical Sciences in the Sackler Faculty of Medicine and head of a research team at the Felsenstein Medical Research Center at the University.

Sheila Leatherman is a Research Professor at Gillings School of Global Public Health, University of North Carolina. She conducts research into healthcare quality, health systems reform and microfinance as a strategy for improved health outcomes. She was elected to the US National Academy of Sciences in 2002. In 2007, she was awarded the honour of Commander of the British Empire (CBE) by Queen Elizabeth II for her work over a decade as an independent evaluator of the impact of government reforms on quality of care in the National Health Services. She is active in research and practice in the emerging field of integrating microfinance with health interventions, working in many countries, including Benin, Bolivia, Burkina Faso, Cambodia, India, Nigeria, Peru, Philippines, Uganda and United Republic of Tanzania. She led a two-year project to assess the global evidence of the impact of systematically integrating microfinance and health access intervention, published in 2011.

Rodney Lester until his retirement in 1998 was a Senior Adviser at the World Bank and the Programme Director responsible for non-bank financial institutions. He came to the World Bank after 32 years in the private sector insurance and fund management industries. He is an actuary and has an MBA from Harvard Business School. World Bank operational activities have included insurance industry reform and resolution, natural disasters funding, private pension reform, corporate governance, consumer protection policy development and microinsurance. He has participated in two awards for innovative and effective operational work since joining the World Bank and was elected Australian Actuary of the Year in 2005. Before joining the Bank he was a divisional Managing Director at AMP, Australia's largest insurer and fund manager. During this time he served as President of the Insurance Council of Australia and was President of the Harvard Club of Australia.

Pascale Le Roy is an economist specializing in health policy and financing. She has worked in the health microinsurance sector since 1999, designing and managing the SKY health insurance scheme in Cambodia from 1999 to 2003 for the French NGO GRET (Groupe de Recherches et d'Echanges Technologiques). She then became a consultant for the ILO's STEP programme and for GRET, performing feasibility studies for the design of health insurance schemes (Haiti, Senegal), developing technical manuals and training modules. In 2006, Pascale joined WHO to become the technical adviser for the development of the Community-based Health Insurance scheme under the responsibility of the Ministry of Health in the Lao People's Democratic Republic. Back in France, she became a consultant again for GRET, the ILO's Microinsurance Innovation Facility and the Aga Khan Microinsurance Agency (Pakistan). In May 2011, Pascale joined GRET's head office in Paris as the microinsurance programme manager (www.gret.org).

Markus Loewe is senior economist at the German Development Institute (Deutsches Institut für Entwicklungspolitik) in Bonn, where he has been working since 1999. He studied Economics, Political Science and Arabic in Tübingen, Erlangen and Damascus, and received his PhD from the University of Heidelberg for a thesis on microinsurance schemes. His main areas of interest are social protection, poverty reduction/MDGs and investment promotion in developing countries. He has also published on demographic development, pro-poor growth, anti-corruption policies, economic governance, private sector development and the impact of the recent global financial and economic crisis. His most recent publications include "The global financial crisis and the Arab world: Impact, reactions and consequences" (2010, in: *Mediterranean Politics* 15, 1, 45–71, with Juliane Brach); *Pension schemes and pension reforms in the Middle East and North Africa* and "How favoritism affects the business climate: Empirical evidence from Jordan" (2008, in: *The Middle East Journal* 62, 2, 259–276, with Jonas Blume and Johanna Speer).

Thomas Loster, a geographer, was a member of the GeoRisk Research Group at Munich Reinsurance Company, Geneva, UNRISD, 2009, the world's leading reinsurance company, for 16 years. He was in charge of issues relating to weather perils, climate change and climate policy. His responsibilities also included the statistical analyses of worldwide natural catastrophes and trends. He was appointed Chairman of the Munich Re Foundation in July 2004. The Foundation addresses major global challenges including environmental and climate change as well as disaster prevention. True to its motto "From Knowledge to Action", the Foundation aims to prepare people to deal with risks and to improve their living conditions – with a special focus on developing countries. Providing knowledge in the field of

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Barbara Magnoni is President of EA Consultants and an international development adviser with over 15 years' experience in international finance and development. Since 2000, she has been working in economic development programmes with a strong focus on Latin America. Much of her recent work has centred on understanding clients' needs and preferences and linking these into the development of products and programmes to improve access to finance, markets and social protection for low-income segments. She has designed microinsurance programmes for various institutions, networks and government agencies, including REDCAMIF (the Central American Microfinance Network), INISER (Nicaragua's largest insurer) and FOSIS (A Chilean Government social protection programme). She is currently managing the collection and analysis of lessons around understanding the value for clients of microinsurance for the MicroInsurance Centre's MILK Project. She has a Master's degree in International Affairs from Columbia University and speaks Spanish, English and Italian fluently.

Brandon Mathews started his professional life with General Motors in Germany. In 1998, he joined the American International Group in New York to establish service operations in Asia, Europe and Latin America. He accepted P&L accountability for the resulting start-ups in Latin America in 2002 and first achieved regional sales to "emerging consumers" of more than 15 million annual policies by 2006. In 2007, he moved to Zurich Financial Services to assume global responsibility for its efforts to better serve and more sustainably expand its business in the emerging-consumer segment.

Brandon's technical insurance background is in operations and systems management and market-facing product underwriting. His present role includes sponsoring research and development to open up new markets with, for example, newer technology such as mobile phones or newer product types such as parametric insurance. Additionally, Brandon serves on the Steering Committee of the ILO's Microinsurance Innovation Facility, the Executive Committee of the Microinsurance Network and the Advisory Board of Catalyst Europe.

Michal Matul is in charge of the research programme of the ILO's Microinsurance Innovation Facility. For the last 12 years, his work has focused on understanding financial behaviour and improving risk management options for low-income households in developing countries. He holds an MSc in Economics and Statistics from the Warsaw School of Economics, a postgraduate certificate (DEA) from Sciences Po (Paris) in Economic Demography in Developing Countries and a PhD in Economics from the University of Warsaw.

Michael J. McCord has over 17 years' microinsurance experience and is a highly respected leader of, and a strong advocate for, microinsurance. He is the president and founder of the MicroInsurance Centre, LLC, a growing consulting firm specializing in research, advocacy and development of microinsurance products and processes that meet the unique needs of people on low-incomes. He is a founding member of the Microinsurance Network, where he currently sits on the Executive Committee, and has been a member of each Steering Committee for the Munich Re Foundation/Microinsurance Network Annual Microinsurance Conferences.

Michael has written extensively on microinsurance – authoring numerous microinsurance case studies, documents and manuals. He has held microinsurance training for over 1 600 people across the globe. Michael is also the Director of the MicroInsurance Centre's Microinsurance Learning and Knowledge (MILK) project, which aims to help answer questions of client value and the business case in microinsurance.

Heidi McGowan was an ILO Fellow with the Microinsurance Network's Impact Working Group, where she undertook projects which included designing and preparing a practical guide to microinsurance impact evaluation for practitioners without formal econometrics training. Previously, she assessed a Tanzanian microfinance provider's social impact for the International Finance Corporation, designed and fund-raised for microlending programmes at ACCION-USA's New York affiliate, and spent several years managing USAID-funded projects for the emerging markets practice of a management consulting firm. She has a Master's degree in Applied Economics from the University of Michigan.

Katharine McKee joined CGAP (the global microfinance resource centre) in 2006 as Senior Policy Advisor. She leads CGAP's policy analysis and advisory work on consumer protection, including policy/regulatory/supervision options for lower-access markets. She also leads CGAP work on responsible finance, including the Smart Campaign initiative to develop consensus industry standards for improved client protection, as well as an initiative to ensure integration of responsible finance considerations into investor processes. Other CGAP work has focused on savings and the role of government in financial inclusion. From 1998 to 2006 Kate directed the Microenterprise Development office at the US Agency for International Development, leading support to USAID programmes that invest over US\$200 million annually in more than 70 countries. From 1986 to 1998, she was a senior manager with Self-Help in North Carolina, the largest community development financial institution (CDFI) in the United States. She led the start-up of a government fund to invest in CDFIs and provide incentives for mainstream financial institutions to boost community development lending. She has also worked for the Ford Foundation in New York and West Africa. She is a development economist, with a Master's degree from Princeton University. She chaired the Consumer Advisory Council of the US Board of Governors of the Federal Reserve (Central Bank).

Jonathan Morduch has taught at New York University since 2000, where he is a Professor of Public Policy and Economics. He specializes in finance and development. He is also the Managing Director of the Financial Access Initiative, a consortium of leading development economists focused on substantially expanding access to quality financial services for low-income individuals. His co-authored 2005 book, *The economics of microfinance* (MIT Press), develops a policy-oriented research agenda, and was described by Thomas Easton of *The Economist* as "The single best book on the eco-

nomics of banking and finance, period ...” Morduch’s on-going work on social investment, financed by the Ford Foundation, applies insights from the modern theory of corporate finance to develop new understandings of the limits and possibilities of markets and philanthropy. Morduch is currently Chair of the United Nations Committee on Poverty Statistics, advises Pro Mujer, and is a member of SafeSave in Dhaka. He is a member of the Editorial Board of the *World Bank Economic Review* and of the UN Advisors Group on Inclusive Financial Sectors. His views on finance and development have been reported by the *New York Times*, *The New Yorker*, CNN, *Wall Street Journal*, *Los Angeles Times*, *Washington Post*, Associated Press and other organizations. He holds a BA from Brown and a PhD from Harvard, both in economics. In January 2009, Morduch was awarded a Doctorate Honoris Causa by the Université Libre de Bruxelles. His new co-authored book *Portfolios of the poor: How the world’s poor live on \$2 a day* is published by Princeton University Press.

Andrew Mude, a Kenyan national, obtained his undergraduate degree at Gettysburg College. In 1999, he graduated Summa Cum Laude with a major in economics and a minor in mathematics and French. In 2000, he joined Cornell University in pursuit of his doctoral degree in economics specializing in development economics and applied econometrics. He received his PhD in June 2006. As part of his dissertation research, he spent six months in the field studying coffee producers and their cooperatives in Murang’a district, Kenya. For this effort he won the silver medal at the 2007 Global Development Network. Upon completion of his doctoral degree in Economics from Cornell University, he joined the International Livestock Research Institute (ILRI) in August 2006 as an economist at ILRI’s Targeting and Innovations Programme. His current portfolio deals largely with researching and designing risk management and development interventions to help increase resilience and reduce vulnerability amongst poor livestock-dependent households, particularly in pastoral areas. He leads ILRI’s Index-Based Livestock Insurance programme.

Jennifer Powers is the Access to Finance Practice Manager for EA Consultants and has ten years’ experience in micro-finance, microinsurance, investment banking and financial sector development. She has worked on assignments in Africa, Asia, Eastern Europe and Latin America. Since joining EA, she has worked on a number of technical assistance programmes for MFIs in Africa, Eastern Europe and Latin America authored several reports for the Inter-American Development Bank and USAID on constraints on growth in women’s small businesses, the effects of the 2008 financial crisis on the microfinance sector, the domestic and international person-to-person lending market and risk management for MFIs.

She was previously an Investment Officer with Deutsche Bank Social Investments, where she conducted due diligence, made investment recommendations and managed client relationships in 15 countries. Her work in development finance has built upon her experience as an investment banker at Merrill Lynch, where she advised insurance companies and other financial institutions. She holds a Master’s degree in International Affairs and Economic Development from Columbia University’s School of International and Public Affairs and a Bachelor’s degree in Economics from Duke University.

Ralf Radermacher is Deputy Chairman of the Micro Insurance Academy e.V. (MIA International) and Director of Research and Training at MIA India. He was instrumental in setting up MIA both in India and Bonn, Germany and positioning it as one of the world’s leading institutions for microinsurance technical assistance and research. Before joining MIA, he worked at the University of Cologne, where he was involved in teaching and research on cooperatives. He coordinated the EU-funded project “Strengthening Micro Health Insurance Units for the Poor in India” and undertook several consultancies for development organizations. Prior to this, he worked with one of the largest German development NGOs (Welthungerhilfe) and gained insight into the work of other public (Federal Ministry of Economic Cooperation & Development) and private (GFA Umwelt) players in the development domain. He holds a postgraduate degree in Economics from the University of Cologne and spent a term abroad at Birmingham University.

Dirk Reinhard graduated in Industrial Engineering and Management and has more than ten years’ experience in the sustainability and finance industry sector. From 2001 to 2004, he was responsible for sustainable investment in the Environmental Management Unit of Munich Reinsurance Company and has published numerous articles on this subject.

Prior to joining Munich Re, he worked for oekom research AG as a sustainability analyst in the period from 1995 to 2000. In April 2004, Dirk Reinhard was appointed Vice-Chairman of the Munich Re Foundation. He is a member of the Executive Committee of the Microinsurance Network (2008–2013) and Chairman of the Steering Committee of the annual International Microinsurance Conference, which is jointly hosted by the Munich Re Foundation and the Microinsurance Network.

Rupalee Ruchishmita is the founding head of the Centre for Insurance and Risk Management (CIRM) at the Institute of Financial Management and Research, Chennai, India. CIRM’s mandate is to undertake product design and action research to facilitate the provision of formal risk management solutions to vulnerable households to protect them from economic shocks and increase their resilience. Rupalee leads the Centre’s activities via several pioneering projects (see <http://www.cirm.in/projects> for details). In her current role, she steers the Centre’s strategy, oversees implementation of current projects, develops new initiatives and manages policy partnerships.

She serves as a Steering Committee member of the ILO’s Microinsurance Innovation Facility. She graduated in 2003 with a Master’s in Social Work from the Tata Institute of Social Sciences. She has authored several papers on innovative financial solutions in the area of health and livelihoods and has been invited to present her work at various international conferences and forums, such as UN, IFC and the Munich Re International Microinsurance Conference.

Rob Rusconi is a Johannesburg-based actuary with working experience in insurance, investments, healthcare and pensions, working for long-term insurers, assets managers and, in London, for FT.com, the internet business of the *Financial Times* newspaper.

For five years he worked as an independent adviser mainly on issues of social security design, with a focus on savings. He has advised Southern African pension funds and the FinMark Trust, a foundation with the objective of making markets work for the poor, and has provided advice to governments in the region on their social security systems. More recently, Rob accepted the challenge of managing a young long-term insurer which meets the needs of customers through partners.

Anupama Sharma is a veterinary graduate with post-graduate qualification in rural management. She has worked as a consultant with the Centre for Insurance and Risk Management (CIRM) where she helped in developing risk management tools for dairy and agriculture sector. She studied livestock-related insurance products, problems and prospects in detail. She has also participated in the monitoring and evaluating of livestock insurance projects on the use of new technology and documenting the learnings from project sites in India. She initiated a project for designing innovative productivity cover for dairy cattle. She has also evaluated various models for microinsurance delivery, including community-based livestock insurance.

Herman Smit is a Research Associate at the Centre for Financial Regulation and Inclusion (Cenfri). His research has related primarily to the broader area of financial inclusion and more specific areas of retail payments systems, Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT) and microinsurance. His research work in Africa, East Asia and Latin America focuses on innovation in the delivery of financial services to low-income people. Before joining Cenfri, he lectured on economics at London Varsity in Cape Town, South Africa. During his studies in the Netherlands, he also interned at PricewaterhouseCoopers in Amsterdam. Herman holds a Master's degree in Economics (Tilburg University, Netherlands), specializing in Competition and Regulation, a BCom Honours in Econometrics and a Bachelor's degree in Statistics (University of Pretoria, South Africa).

Anja Smith is a Director at the Centre for Financial Regulation and Inclusion (Cenfri). She is a development economist by training, with experience in financial sector policy and regulatory strategy for development, access to financial services, and supporting governments in making markets work for the poor. Anja has extensive experience in the areas of consumer protection, financial literacy, regulation for market development and distribution of financial services gained from her work across Africa and Latin America. She has conducted various studies on microinsurance, most recently focusing on alternative distribution of microinsurance. Before joining Cenfri in 2008, Anja spent three years working in the access to financial services practice area of Genesis Analytics. She holds a Master's degree in Economics (Cum Laude), BA Honours in Economics (Cum Laude) and a BA in Value and Policy Studies (University of Stellenbosch, South Africa).

Roland Steinmann is a consultant for the MicroInsurance Centre. He holds an MSc in Environmental Sciences (ETH Zurich, 1997) and an MRes in International Economics (IEP/Sciences Po, Paris, 2007). His recent microinsurance work has taken him to Armenia, Bangladesh, Bosnia, Ghana, Jordan, Kenya, Philippines, Viet Nam and the West Bank. As an active member of the Microinsurance Network since its creation he co-steers the working group on agricultural microinsurance. He has also authored a manual for efficient process design in microinsurance. Before focusing on microinsurance, he acquired extensive insurance expertise during eight years as an underwriter with Swiss Re. In 2008 he co-founded the Fair Trade Insurance Initiative, which promotes innovative insurance solutions for smallholders in developing countries.

Donna Swiderek worked as an actuarial associate for a cooperative life insurer in Canada where she specialized in over-seeing reserve calculations, financial reporting and dynamic solvency testing from 1990 to 2000. She obtained her ASA in 1993. After taking a break and running a health retreat, she returned to the actuarial world as an independent consultant with Denis Garand & Associates (DGA). She has participated in numerous pricing projects and studies, mainly involving disability products.

Donna has worked internationally since 2008. She has spoken at microinsurance conferences in India and Kazakhstan and has developed numerous microinsurance workshops and training courses held in countries such as Kenya, the Netherlands and the Philippines. As a consultant for microinsurance, she has performed evaluations for organizations in South Africa, Sri Lanka and three NGOs in Bangladesh. This has included examination of pricing, business planning, marketing, management, financial and actuarial analysis and product development for micro health and life insurance.

Nashelo Tande began her actuarial career at Quindiem Consulting working in the short-term insurance and development finance areas, the latter of which included involvement in the microinsurance field and the development of insurance regulation for developing markets. Following the acquisition of Quindiem by Ernst & Young, Nashelo now holds an Assistant Manager role in Ernst & Young's Africa Actuarial Services division. Her role is mainly in the short-term insurance area, where she specializes in the valuation of short-term insurance liabilities.

Clémence Tatin-Jaleran is an independent consultant currently working with several organizations including the MicroInsurance Centre and Denis Garand & Associates. An actuary by training, she has spent ten years working in the field of general insurance, including three years on microinsurance. She has worked with microfinance institutions (MFIs), insurers, rural banks and other non-profit organizations in Bangladesh, Bolivia, Egypt, India, Indonesia, Mali, Peru, the Philippines and Viet Nam. During these assignments, she has undertaken evaluation of schemes, market research, product design (health, weather index, life), training design and delivery, pricing and financial projections for microinsurance schemes. Clémence holds a Master's degree in Financial and Actuarial Sciences from the Financial and Insurance Sciences Institute in Lyon, France. She is a Fellow of the Institute of Actuaries in France, and served as an ILO Technical Assistance Fellow for the Microinsurance Innovation Facility in India in 2009 and 2010.

John Wipf is a microinsurance development consultant. He worked part-time in microinsurance from 1992 and has worked full-time since 1998. He joined Denis Garand & Associates (DGA) in 2005. Before moving to the Philippines

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Mary Yang practised as an actuary and a global retirement benefits consultant at Towers Perrin and Hewitt Associates for 12 years prior to joining the ILO's Microinsurance Innovation Facility. She is experienced in addressing international human resources issues and has carried out multi-country projects on a range of human resources topics including benefits policy, design, valuation and risk management. She is a Fellow of the Society of Actuaries in the United States and holds an MBA from INSEAD (France) as well as a BS in Actuarial Science from the University of Illinois.

Emily Zimmerman is a research associate at EA Consultants and the MicroInsurance Centre. She contributes to the Microinsurance Learning and Knowledge (MILK) project, an initiative to understand the value to clients of microinsurance products and the business case for microinsurance. She also performs research on various topics surrounding the development and sale of microinsurance and other financial products. Previously, she was a corporate lawyer for two large multinational firms, where her practice focused on equity and debt financing, mergers and acquisitions, and investment management.

Bibliography

- Access to Insurance Initiative.** 2011. *Inside the Initiative: Enhancing regulatory and supervisory capacity, growing financial inclusion and advancing insurance markets* (Eschborn, Germany).
- Acharya, A.** 2011. *Do social health insurance schemes in developing country settings improve health outcomes and reduce the impoverishing effect of healthcare payments for the poorest people? A systematic review* (London School of Hygiene and Tropical Medicine).
- ACORD.** Insurance Data Standards, at: <http://www.acord.org/Pages/default.aspx>.
- Adelhardt, M.** 2009. Partners for Health. Personal communication, Aug.
- Aggarwal, A.** 2010. "Impact evaluation of India's 'Yeshasvini' community-based health insurance programme", in *Health Economics*, Vol. 19, Supplement No. 1, pp. 5–35.
- . 2011. *The viability of microinsurance*, ILO Microinsurance Innovation Facility Webinar Series 3, at: <http://www.youtube.com/watch?v=ObIJr4Vl18> [24 Nov 2011].
- Agricultural Insurance Company of India (AIC).** 2010. *Annual Report 2009–2010*, at: http://www.aicofindia.com/AICEng/General_Documents/Statutory_Info/Stat_Archive/annual9-10/AR%202009-2010.pdf.
- Agricultural Insurance Portal,** at: www.agroinsurance.com.
- ; Malawi Index Linked Crop Insurance Project, at: http://www.agroinsurance.com/en/products/weather_index/?pid=4755.
- AGROASEMEX Mexico National Insurance Organisation (SHCP), Mexico,** at: <http://www.agroasemex.gob.mx/index.php/en>.
- Ahmed, M. U.; Islam, S.K.; Quashem, M.D.; Ahmed, N.** 2005. *Health microinsurance: A comparative study of three examples in Bangladesh*, Consultative Group to Assist the Poorest (CGAP), Good and Bad Practices in Microinsurance, Case Study No. 13 (Geneva, ILO).
- ; **Ramm, G.** 2006. "Meeting the special needs of women and children", in C. Churchill (ed.): *Protecting the poor: A microinsurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 130–144.
- Ahmed, S.; Mbaisi, J.; Moko, D.; Ngonzi, A.** 2005. "Health is wealth: How low-income people finance health care", in *Journal of International Development*, Vol. 17, No. 3, pp. 383–396.
- Ahuja, R.; Narang, A.** 2005. "Emerging trends in health insurance for low-income groups", in *Economic and Political Weekly*, Vol. 40, No. 38, pp. 4151–4157.
- Akhilandeswari, J.; Patankar, M.** 2010. *Innovative microinsurance distribution: The case of pioneer seeds in India* (CIRM, Chennai, India).
- Alemyda, G.; de Paula Jaramillo, F.** 2005. *La Equidad Seguros Colombia*, CGAP Working Group on Good and Bad Practices Case Study No. 12 (CGAP, Washington, D.C.).
- Aliber, M.** 2003. *South African microinsurance case-study*, ILO Social Finance Working Paper No. 33 (Geneva, ILO).
- Allianz Group.** 2011. "Microinsurance", at: https://www.allianz.com/en/about_allianz/sustainability/microinsurance/index.html
- Alvarez Tinajero, S.P.** 2009. *Angola: A study of the impact of remittances from Portugal and South Africa*, IOM Migration Research Series No. 39 (Geneva, International Organization for Migration).
- Amuedo-Dorantes, C.; Sainz, T.; Pozo, S.** 2007. *Remittances and healthcare expenditure patterns of populations in origin communities: Evidence from Mexico*, Working Paper 25 (Buenos Aires, Institute for the Integration of Latin America and the Caribbean).
- Anagol, S.; Cole, S.A.; Sarkar, S.** 2011. *Bad advice: Explaining the persistence of whole life insurance*, at: <http://ssrn.com/abstract=1786624>.
- Angove, J.; Tande, N.** 2011. *A business case for microinsurance: An analysis of the profitability of microinsurance for five companies*, Microinsurance Paper Series No. 11 (Geneva, ILO).
- Arena, M.** 2006. *Does insurance market activity promote economic growth? A cross-country study for industrialized and developing countries*, World Bank Policy Research Working Paper 4098 (Washington, D.C., World Bank).
- Ariely, D.** 2009. *Predictably irrational: The hidden forces that shape our decisions* (London, HarperCollins).
- Armendáriz, B.; Morduch, J.** 2010. *Economics of micro-finance* (Cambridge, Massachusetts, MIT Press).
- ARTEMIS.** 2011. *Draft microinsurance standards and products approved in Philippines*, at: <http://www.artemis.bml/blog/2011/01/05/draft-microinsurance-standards-product-approved-in-philippines/>

- Arun, T.G.; Steiner, S.** 2008. *Microinsurance in the context of social protection*, Working Paper No. 55 (Brooks World Poverty Institute).
- Asenso-Okyere, W.K.; Osei-Akoto, I.; Anum, A.; Appiah, E.N.** 1997. "Willingness to pay for health insurance in a developing economy: A pilot study of the informal sector of Ghana using contingent valuation", in *Health Policy*, Vol. 42, No. 3, pp. 223–237.
- Asfar, R.** 2003. *Internal migration and the development nexus: The case of Bangladesh* (Dhaka, Bangladesh Institute of Development Studies).
- Asfaw, A.** 2003. *Cost of illness, demand for medical care, and the prospect of community health insurance programs in the rural areas of Ethiopia* (Frankfurt).
- ; **Von Braun, J.** 2005. "Innovations in health care financing: New evidence on the prospect of community health insurance schemes in the rural areas of Ethiopia", in *International Journal of Health Care Finance and Economics*, Vol. 5, No. 3, pp. 241–253.
- ; **Jütting, J.P.** 2007. "The role of health insurance in poverty reduction: Empirical evidence from Senegal", in *International Journal of Public Administration*, Vol. 30, No. 8, pp. 835–858.
- Asgary, A.; Willis, K.; Taghvaei, A.; Rafeian, M.** 2004. "Estimating rural house-holds' willingness to pay for health insurance", in *European Journal of Health Economics*, Vol. 5, No. 3, pp. 209–215.
- Ashraf, N.; Gons, N.; Karlan, D.; Wesley, Y.** 2003. *A review of commitment savings products in developing countries*, Economic and Research Department Working Paper No. 45 (Manila, Philippines, Asian Development Bank).
- ; **Karlan, D.; Yin, W.** 2006. "Tying Odysseus to the mast: Evidence from a commitment to savings product in the Philippines", in *Quarterly Journal of Economics*, Vol. 121, No. 2, pp. 673–697.
- ; **Aycinena, D.; Martinez, C.A.; Yang, D.** 2010. *Remittances and the problem of control: A field experiment among migrants from El Salvador*, Working Paper (Harvard Business School, Francisco Marroquin University, University of Chile, University of Michigan).
- Baidya, A.; Ruchismita, R.** 2011. *Salt case study*, draft paper (Chennai, India, CIRM).
- Balkenhol, B.** 2010. *Microfinance in crisis, and the implications for microinsurance*, Innovation Flash No. 8 (Geneva, ILO), at: <http://www.microinsurancefacility.org/sites/default/files/news8-en.pdf>
- Banerjee, A.; Deaton, A.; Duflo, E.** 2004. "Health care delivery in rural Rajasthan", in *Economic and Political Weekly*, Vol. 39, No. 9, pp. 944–949.
- Baptistini, E.** 2011. *The experience of a large insurance broker in selling and distributing mass insurance products across Brazil and Latin America*, paper presented at the 7th International Microinsurance Conference Rio de Janeiro, Brazil, 8–10 Nov.
- Bärnighausen, T.; Liu, Y.; Zhang, X.; Sauerborn, R.** 2007. "Willingness to pay for social health insurance among informal sector workers in Wuhan, China: A contingent valuation study", in *BMC Health Services Research*, Vol. 7, pp. 114–130.
- Barrett, C.; Carter, M.; Little, P.** 2006. "Understanding and reducing persistent poverty in Africa", in *Journal of Development Studies*, Vol. 42, No. 2, pp. 167–177.
- Barrientos, A.; Holmes, R.** 2007. *Social Assistance in Developing Countries Database Version 3.0* (Manchester and London, Brooks World Poverty Institute, Overseas Development Institute).
- Barros, R.** 2008. *Wealthier but not much healthier: Effects of a health insurance program for the poor in Mexico* (Palo Alto, CA, Stanford University Department of Economics).
- Basu, P.** 2006. *Improving access to finance for India's rural poor*, Directions in Development No. 36448 (Washington, D.C., The World Bank).
- Bauchet, B.; Dalal, A.; Mayasudakar, P.; Morduch, J.; Radermacher, R.** Forthcoming. *Can insurers improve healthcare quality? Evidence from a community microinsurance scheme in India* (New York, New York University, Robert F. Wagner School of Public Service).
- Bayoumi, A.** 2004. "The measurement of contingent valuation for health economics", in *Pharmacoeconomics*, Vol. 22, No. 11, pp. 691–700.
- Begg, C.B.; Mazumdar, M.** 1994. "Operating characteristics of a rank correlation test for publication bias", in *Biometrics*, Vol. 50, pp. 1088–1101.
- Begg, D.; Fischer, S.; Dornbusch, R.** 2000. *Economics* (London, The McGraw-Hill Companies).
- Bertrand, M.; Karlan, D.; Mullainathan, S.; Shafir, E.; Zinman, J.** 2010. "What's advertising content worth? Evidence from a consumer credit marketing field experiment", in *Quarterly Journal of Economics*, Vol. 125, No. 1, pp. 263–305.
- Bester, H.J.; Chamberlain, D.; Hawthorne, R.; Malherbe, S.; Walker, R.** 2003. *Making insurance markets work for the poor in South Africa, Botswana, Namibia, Lesotho and Swaziland: Scoping study* (Bellville, South Africa, FinMark Trust), at: www.cenfri.org.
- ; **Chamberlain, D.; Short, R.; Walker, R.; Smith, A.** 2006. *Brokering change in the low-income insurance market: Threats and opportunities to the intermediation of microinsurance in South Africa*, A document prepared for FinMark (Bellville, South Africa, FinMark Trust), at: www.cenfri.org.
- ; **Chamberlain, D.; Hougaard, C.** 2008a. *Making insurance markets work for the poor: Microinsurance policy, regulation and supervision. Synthesis report of the five country studies for Colombia, India, the Philippines, South Africa and Uganda* (IAIS/CGAP Joint Working Group on Microinsurance), at: www.cenfri.org.
- ; **Smith, A.; Hendrie, S.; Rukondo, M.** 2008b. *Making insurance markets work for the poor: Microinsurance policy, regulation and supervision: South Africa study* (Bellville, South Africa, FinMark Trust), at: www.cenfri.org.
- ; **Chamberlain, D.; Hougaard, C.** 2009. *Making insurance markets work for the poor: Microinsurance policy, regulation and supervision* (Bellville, South Africa, Cenfri), at: www.cenfri.org.

- ; Chamberlain, D.; Hougaard, C.; Smit, H. 2010. *Microinsurance in Brazil: Towards a strategy for market development* (Bellville, South Africa, Cenfri), at: www.cenfri.org.
- Bhatia, M. R. 2005. "From evidence to calibration for starting point bias: willingness to pay for treated mosquito nets in Gujarat, India", in *Journal of Applied Economics*, Vol. 37, No. 1, pp. 1–7.
- Binam, J.; Nkama, A.; Nkenda, R. 2004. *Estimating the willingness to pay for community health prepayment schemes in rural area: A case study of the use of contingent valuation surveys in central Cameroon* (Yaounde, Institute of Agricultural Research for Development).
- Bird, E. 2001. "Does the welfare state induce risk-taking?", in *Journal of Public Economics*, Vol. 80, pp. 357–383.
- Biswas, S.; Devi, R. 2008. "Making health insurance work", in *ICFAI Journal of Risk and Insurance*, Vol. 5, No. 1, pp. 50–59.
- Blanchard-Horan, C. 2007. "Health microinsurance in Uganda: Affecting malaria treatment seeking behavior", in *International Journal of Public Administration*, Vol. 30, No. 8, pp. 765–789.
- Bonnevay, S.; Dror, D.; Duru, G.; and Lamure, M. 2002. "A model of microinsurance and reinsurance", in D. Dror, D. and A. Preker (eds): *A new approach to sustainable community health financing* (Washington, D.C. and Geneva, World Bank and ILO), pp. 153–186.
- Boucher, S.; Carter, M.; Guirking, C. 2008. "Risk rationing and wealth effects in credit markets: Theory and implications for agricultural development", in *American Journal of Agricultural Economics* Vol. 90, No. 2, pp. 409–423.
- Brainard, L. 2008. *What is the role of insurance in economic development?*, Zürich Government and Industry Affairs Thought Leadership Series (Zürich).
- Braine, T. 2006. "Countries test new ways to finance health care", in *Bulletin of the World Health Organization*, Vol. 84, No. 11, pp. 844–845.
- Brown, W.; Churchill, C. 2000. *Insurance provision in low-income communities, Part II: Initial lessons from micro-insurance experiments for the poor*, Micro-Enterprise Best Practices Series (Bethesda, Maryland, Development Alternatives Inc.).
- Brugiavini, A.; Pace, N. 2010. *Extending health insurance: Effects of the National Health Insurance Scheme in Ghana*, Background Paper to the European Report on Development 2010, presented in Dakar, 27–30 June, 2010.
- Bureau of Meteorology (BOM), Australia, at: <http://www.bom.gov.au/>.
- Burks, R. 2009. *A harsh reality for Mongolia's herders*, at: <http://www.mercycorps.org/rogerburks/blog/16302> [8 Sept. 2009].
- Burns, C.; Caceres, A. 2010. *Product and delivery regulation in Peru*, paper presented at the International Conference on Enabling Microinsurance Markets: Overcoming the challenges for the insurance industry, regulators and supervisors, Berlin, May.
- ; Dalal, A. 2010. *Explaining insurance: Implementing consumer education in CARE-India's Insure Lives and Livelihoods Program* (New York, Financial Access Initiative Case Study).
- Caceres M.; Zuluaga, S. 2008. *Making insurance markets work for the poor: Microinsurance policy, regulation and supervision: Colombia study* (PrimAmerica).
- Cai, H.; Chen, Y.; Fang, H.; Zhou, L. 2009. *Microinsurance, trust and economic development: Evidence from a randomized natural field experiment*, Penn Institute for Economic Research (PIER) Working Paper No. 09–34 (Philadelphia, PA, University of Pennsylvania Department of Economics).
- Callan, M. 2010. *Motion for a resolution on the outcome of the Copenhagen Conference on Climate Change (COP 15)*, at: <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+MOTION+B7-2010-0070+0+DOC+XML+Vo//EN> [3 Feb. 2010].
- Caribbean Catastrophe Risk Insurance Facility (CCRIF), Jamaica, at: <http://www.ccrif.org/>
- Carrera, S.; Merlino, M. 2009. *Undocumented immigrants and rights in the EU: Addressing the gap between social science research and policy-making in the Stockholm Programme?* (Centre for European Policy Studies).
- Carter, M. 1997. "Environment, technology and the social articulation of risk in West African agriculture", in *Economic Development and Cultural Change*, Vol. 45, No. 2, pp. 557–590.
- ; Barrett, C.B. 2006. "The economics of poverty traps and persistent poverty: An asset-based approach", in *Journal of Development Studies*, Vol. 42, No. 2, pp. 178–199.
- ; Cheng, L.; Sarris, A. 2010. *The impact of interlinked index insurance and credit contracts on financial market deepening and small farm productivity*, Working Paper (University of Montana).
- Centre for Research on the Epidemiology of Disasters (CRED), Belgium, at: <http://cred.be/>
- Centre for Insurance and Risk Management (CIRM). 2011. *Baseline report. Smallholder access to weather securities: Demand and impact on consumption and product decision* (Chennai, India), at: <http://www.cirm.in/images/baseline-report.pdf>
- Chamberlain, D.; Ncube, S.; Chelwa, G.; Smit, H. 2011. *Insurance products standards to reach low-income consumers in South Africa: Help or hindrance? A review of the experience of Mzansi and Zimele insurance product standards* (Bellville, South Africa, Cenfri), at: www.cenfri.org.
- Chankova, S.; Sulzbach, S.; Diop, S. 2008. "Impact of mutual health organizations: Evidence from West Africa", in *Health Policy and Planning*, Vol. 23, No. 4, pp. 264–276.
- Chatterjee, M. 2005. *Microinsurance: A note on the state of the art* (SEWA, India).
- Chee, G.; Smith, K.; Kapinga, A. 2002. *Assessment of the Community Health Fund in Hanang district, Tanzania*, Partners for Health Reformplus Project (Bethesda, MD, Abt Associates, Inc.).

- Chen, T.; Comfort, A.; Bau, N.** 2008. *Implementing health insurance through micro-credit: A case study of SKS Microfinance, India* (Chennai, India, IFMR).
- Chizari, M.; Yaghoubi, A.; Lindner, J.** 2003. "Perceptions of rural livestock insurance among livestock producers and insurance specialists in Isfahan Province, Iran", in *Journal of International Agricultural and Extension Education*, Vol. 10, No. 1, pp. 37–42.
- Choi, J.; Laibson, D.; Madrian, B.** 2009. "Reducing the complexity costs of 401(k) Participation Through Quick Enrollment™", in D. A. Wise (ed.): in *Developments in the Economics of Aging*, (University of Chicago Press), pp. 57–82.
- Christensen, C.M.** 2003. *The innovator's dilemma: The revolutionary book that will change the way you do business* (Collins Business Essentials).
- Chuma, J.; Gibson, L.; Molyneux, C.** 2007. "Treatment-seeking behavior, cost burdens and coping strategies among rural and urban households in coastal Kenya: An equity analysis", in *Tropical Medicine and International Health*, Vol. 12, No. 5, pp. 673–686.
- Churchill C.; Liber, D.; McCord, M.J.; Roth, J.** 2003. *Making insurance work for microfinance institutions: A technical guide to developing and delivering microinsurance* (Geneva, ILO).
- Churchill, C.** 2006. "What is insurance for the poor?", in C. Churchill (ed.): *Protecting the poor: A microinsurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 12–24.
- ; **de Grandchant, H.** Zurich Bolivia: *Partnerships for success*, at: <http://www.zurich.com/NR/rdonlyres/5EC70636-CBA9-4C3A-8161-365B1C9E86AA/o/ZurichBoliviacaase.pdf>.
- ; **Cohen, M.** 2006. "Marketing microinsurance", in C. Churchill (ed.): *Protecting the poor: A microinsurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 12–24.
- ; **Leftley, R.** 2006. "Organization development in microinsurance", in C. Churchill (ed.): *Protecting the poor: A microinsurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 270–287.
- . 2007. "Insuring the low-income market: Challenges and solutions for commercial insurers", in *Geneva Papers on Risk and Insurance – Issues and Practice*, Vol. 32, No. 3, pp. 401–412.
- Cichon, M.; Scholz, W.** 2009. "Social security, social impact and economic performance: A farewell to three famous myths", in P. Townsend (ed.): *Building decent societies: Rethinking the role of social security in development* (Geneva and Basingstoke, ILO and Palgrave Macmillan), pp. 80–98.
- Ciriacy-Wantrup, S.V.** 1947. "Capital returns from soil conservation practices", in *Journal of Farm Economics*, Vol. 29, No. 4, pp. 494.
- Clarke, D. J.** 2011. *A theory of rational demand for index insurance*, Economics Series Working Papers 572 (University of Oxford, Department of Economics).
- Cohen, M.; McCord, M.J.; Sebstad, J.** 2003. *Reducing vulnerability: Demand for and supply of microinsurance in East Africa* (Nairobi, Microsave).
- Cohen, M.; Sebstad, J.** 2005. "Reducing vulnerability: The demand for microinsurance", in *Journal of International Development*, Vol. 17, No. 3, pp. 397–474.
- . 2006. "The demand for microinsurance", in C. Churchill (ed.): *Protecting the poor: A microinsurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 25–44.
- . 2009. *Making microinsurance work for clients*, Microinsurance Centre Briefing Note No. 3, at: www.microinsurance.org. [13 Jul. 2009].
- Cole, S.; Gine, X.; Tobacman, J.; Topalova, P.; Townsend, R.; J. Vickery.** 2010. *Barriers to household risk management: Evidence from India*, Harvard Business School Working Paper, No. 09-116 (Harvard, MA, Harvard Business School).
- Collins, D.; Morduch, J.; Rutherford, S.; Ruthven, O.** 2009. *Portfolios of the poor: How the world's poor live on \$2 a day* (Princeton, N.J., Princeton University Press).
- Consultative Group to Assist the Poor (CGAP).** 2000. *Microfinance and risk management: A client perspective*, Focus Note No. 17 (Washington, D.C., World Bank).
- . 2010. *Andhra Pradesh 2010: Global implications of the crisis in Indian microinsurance*, Focus Note No. 67 (Washington, D.C., World Bank).
- Contreras, J.L.** 2009. *Microinsurance: Breaking the paradigm* (Munich, Munich Re Foundation).
- Corbett, J.D.** 2006. *Making climate-related insurance work in Africa: Targeting and monitoring micro-insurance programmes* (Nairobi, Kenya, Mudsprings/COP12).
- Cowley, A.; Ehrbeck, T.** 2007. "Health insurance for the poor: Leveraging India's unique strengths", in *Sustainable Health Insurance: Global perspectives for India* (McKinsey and Company), pp. 30–42.
- Coydon, M.; Molitor, V.** 2011. *Commercial insurers in microinsurance*, Microinsurance Network Study No. 1 (Luxembourg, Microinsurance Network).
- Crayen, D.; Hainz, C.; Ströh de Martinez, C.** 2010. *Remittances, banking status and the usage of insurance schemes* (University of Tuebingen, Ifo Institute for Economic Research, CESifo and WDI, Free University of Berlin).
- Criel, B.; Kegels, G.** 1997. "A health insurance scheme for hospital care in Bwamanda District, Zaire: lessons and questions after 10 years of functioning", in *Tropical Medicine and International Health*, Vol. 2, No. 7, pp. 654–672.
- . 1998. *District-based health insurance in sub-Saharan Africa (Part II: Case studies)*, Studies in Health Services Organization and Policy, No. 10 (Antwerp, Institute of Tropical Medicine).
- ; **Van der Stuyft, P.; Van Lerberghe, W.** 1999. "The Bwamanda hospital insurance scheme: Effective for whom? A study of its impact on hospital utilization patterns", in *Social Science and Medicine*, Vol. 48, No. 7, pp. 897–911.

- De Allegri, M.; Sanon, M.; Bridges, J.; Sauerborn, R. 2006. "Understanding consumers' preferences and decision to enrol in community-based health insurance in rural West Africa", in *Health Policy*, Vol. 76, No. 1, pp. 58–71.
- De Bruyn, T.; Wets, J. 2006. *Remittances in the Great Lakes Region*, IOM Migration Research Series No. 2 (Geneva, International Organization of Migration).
- de Neubourg, C. 2009. "Social protection and nation-building: an essay on why and how universalist social policy contributes to stable nation-states", in P. Townsend (ed.): *Building decent societies: Rethinking the role of social security in development* (Geneva and Basingstoke, ILO and Palgrave Macmillan), pp. 63–79.
- Dekker, M.; Wilms, A. 2009a. *Can health insurance be the magic bullet? The case of Microcare in Uganda* (Netherlands, African Studies Center Info Sheet).
- . 2009b. "Health insurance and other risk-coping strategies in Uganda: The case of Microcare insurance", in *World Development*, Vol. 38, No. 3, pp. 369–378.
- Delgado, C.; Rosegrant, M.; Steinfeld, H.; Ehui, S.; Courbois, C. 1999. "Livestock to 2020: The next food revolution", in *A 2020 Vision for Food, Agriculture, and the Environment*, No. 61.
- Department of India Post, at: <http://www.postallife-insurance.gov.in/>
- Department of Information Technology, India. 2011. <http://www.mit.gov.in/>.
- Dercon, S.; Bold, T.; De Weerd, J.; Pankhurst, A. 2004. *Extending insurance? Funeral associations in Ethiopia and Tanzania*, OECD Development Centre Working paper No. 240 (Paris, OECD).
- . Hoddinott, J.; Woldehanna, T. 2005. "Consumption and shocks in 15 Ethiopian Villages, 1999–2004", in *Journal of African Economies* Vol. 14, No. 4, pp. 559–585.
- . (ed.). 2005. *Insurance against poverty* (Oxford, Oxford University Press).
- . 2006. "Group-based funeral insurance in Ethiopia and Tanzania", in *World Development*, Vol. 34, No. 4, pp. 685–703.
- . Hoddinott J.; Krishan, P.; Woldehanna, T. 2008. *Collective action and vulnerability: Burial societies in rural Ethiopia*, CAPRI Working Paper No. 83 (International Food Policy Research Institute (IFPRI)).
- . Kirchberger, M. 2008. *Literature review on micro-insurance*, Microinsurance Paper Series No. 1 (Geneva, ILO).
- . Gilligan, D.O.; Hoddinott, J.; Woldehanna, T. 2009. "The impact of agricultural extension and roads on poverty and consumption growth in fifteen Ethiopian villages", in *American Journal of Agricultural Economics*, Vol. 91, No. 4, pp. 1007–1021.
- . 2011. *Social protection, efficiency, and growth*, CSAE Working Paper 2011–17 (Centre for the Study of African Economics, University of Oxford).
- . Gunning, J.W.; Zeitlin, A. 2011. *The demand for insurance under limited credibility: Evidence from Kenya*, at: http://www.aae.wisc.edu/mwiedc/papers/2011/Zeitlin_Andrew.pdf
- Derriennic, Y.; Wolf, K.; Kiwanuka-Mukiibi, P. 2005. *An assessment of community-based health financing activities in Uganda*, The Partners for Health Reformplus Project (Bethesda, MD, Abt Associates).
- Desvousges, W.; Smith, V.; Fisher, A. 1987. "Option price estimates for water quality improvements: a contingent valuation study for the Monongahela River", in *Journal of Environmental Economics and Management*, Vol. 14, No. 3, pp. 248–267.
- Devadasan, N.; MaNoharan, S.; McNON, N.; McNON, S.; Thekaekara, M.; Thekaekara, S. 2004. "ACCORD community health insurance: Increasing access to hospital care", in *Economic and Political Weekly*, Vol. 39, No. 28, pp. 3189–3914.
- . Ranson, K.; Van Damme, W.; Criel, B. 2004. "Community Health Insurance in India. An overview", in *Economic and Political Weekly*, July 10.
- . Criel, B.; Van Damme, W.; Ranson, K.; Van der Stuyft, P. 2007. *Indian community health insurance schemes provide partial protection against catastrophic health expenditure*, BMC Health Services Research, Vol. 7, No. 43, at: <http://www.biomedcentral.com/1472-6963/7/43> [25 Apr. 2011].
- Development of Human Action (DHAN) Foundation. 2009. *DHAN Foundation Annual Report*, at: http://www.dhan.org/Downloads/annual_report_2009.pdf.
- Dickersin, K. 1990. "The existence of publication bias and risk factors for its occurrence", in *Journal of the American Medical Association*, Vol. 263, No. 10, pp. 1385–1389.
- Dimitrijevs, A. 2007. *Mainstreaming gender into disaster recovery and reconstruction* (Washington, D.C., World Bank).
- Diop, F.P.; Sulzbach, S.; Chankova, S. 2006. *The impact of mutual health organizations on social inclusion, access to health care and household income protection: Evidence from Ghana, Senegal and Mali*, Partners for Health Reformplus project (Bethesda, MD, Abt Associates).
- Dodd, R.; Munck, L. 2002. *Dying for change: Poor people's experience of health and ill health* (Geneva, World Health Organization, World Bank, Voices of the Poor).
- Dong, H.; Kouyate, B.; Cairns, J.; Mugisha, F.; Sauerborn, R. 2003. "Willingness-to-pay for community-based insurance in Burkina Faso", in *Journal of Health Economics*, Vol. 12, No. 10, pp. 849–862.
- . 2004. "The feasibility of community-based health insurance in Burkina Faso", in *Health Policy*, Vol. 69, No. 1, pp. 45–53.
- . 2005. "Inequality in willingness-to-pay for community-based health insurance", in *Health Policy*, Vol. 72, No. 2, pp. 149–15.
- Drechsler, D.; Jütting, J. 2005. *Is there a role for private health insurance in developing countries?* Discussion Paper 517 (Berlin, German Institute for Economic Research).

- Dror, D.; Jacquier, C.** 1999. "Micro-insurance: Extending health insurance to the excluded", in *International Social Security Review*, Vol. 52, No. 1, pp. 71.
- . 2001. "Reinsurance of health insurance for the informal sector", in *Bulletin of the World Health Organization*, Vol. 79, No. 7, pp. 672–678.
- ; **Preker, A.** 2002. "Social reinsurance: A new approach to sustainable community health financing", in D. Dror and A. Preker (eds): *A new approach to sustainable community health financing* (World Bank and ILO, Washington, D.C., and Geneva) pp. 153–186.
- ; **Soriano, E.; Lorenzo, M.; Sarol, J.; Azcuna, R.; Koren, R.** 2005. "Field-based evidence of enhanced healthcare utilization among persons insured by micro health insurance units in the Philippines", in *Health Policy*, Vol. 73, No. 3, pp. 263–271.
- ; **Armstrong, J.** 2006. "Do micro health insurance units need capital or reinsurance? A simulated exercise to examine different alternatives", in *The Geneva Papers on Risk and Insurance – Issues and Practice*, Vol. 31, No. 4, pp. 739–761.
- ; **Koren, R.; Steinberg, D.M.** 2006. "The impact of Filipino micro health insurance units on income-related equality of access to healthcare", in *Health Policy*, Vol. 77, No. 3, pp. 304–317.
- ; **Wiechers, T.** 2006. "The role of insurers and reinsurers in supporting insurance to the poor", in C. Churchill (ed.): *Protecting the poor: A microinsurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 524–544.
- . 2007. "Why 'one size fits all' health insurance products are unsuitable for low-income persons in the informal economy in India", in *Asian Economic Review*, Vol. 49, No. 1, pp. 1–11.
- ; **Radermacher, R.; Koren, R.** 2007. "Willingness to pay for health insurance among rural and poor persons: Field evidence from seven micro health insurance units in India", in *Health Policy*, Vol. 82, No. 1, pp. 12–27.
- ; **Radermacher, R.; R.; Khadilkar, S.; Schout, P.; Hay, F.; Sing, A.** 2009. "Microinsurance: Innovations in low-cost health insurance", in *Health Affairs*, Vol. 28, No. 6, pp. 1788–1798.
- Dror, I.** 2007. "Demystifying micro health insurance package design. Choosing health plans all together (CHAT)", in *Microfinance Insights*, Vol. 4, pp. 17–19.
- . 2008. "Community-based micro health insurance as an enabler of solidarity and self-help amongst poor communities", in *Microfinance Focus*, Vol. 2, No. 8.
- ; **Jenkins, K.; Motege, K.; Siltanen, J.** 2010. *A landscape study of microinsurance education* (Microinsurance Academy).
- Dufhues, T.; Lemke, U.; Fischer, I.** 2004. *Constraints and potential of livestock insurance schemes: A case study from Vietnam*, Discussion Paper No. 05 (Stuttgart, Germany, University of Hohenheim).
- Duflo, E.; Kremer, M.; Robinson, J.** 2009. *Nudging farmers to use fertilizer: Theory and experimental evidence from Kenya*, NBER Working Paper Series 15131 (National Bureau of Economic Research, Cambridge, MA).
- Duong, P.B.; Izumida, Y.** 2002. "Rural development finance in Vietnam: A microeconomic analysis of household surveys", in *World Development*, Vol. 30, No. 2, pp. 319–335.
- The Economist.** 2009. "Medical goes digital: Special report on health care and technology", 18 April, at: <http://economist.com>.
- Edenhofer, O.; Wallacher, J.; Reder, M.; Lotze-Campen, H.** 2010. *Global yet equitable: Combating climate change, enabling development* (Munich, Germany, Munich Re Foundation).
- Elbers, C.; Gunning, J.W.; Kinsey, B.** 2007. "Growth and risk: Methodology and micro evidence", in *The World Bank Economic Review*, Vol. 21, No. 1, pp. 1–20.
- Enarsson, S.; Wiren, K.** 2006. *ALMAO and Yasiru*, Consultative Group to Assist the Poorest (CGAP) Good and Bad Practices in Microinsurance Case Study No. 21 (Geneva, ILO).
- Ezemenari, K.; Chaudhury, N.; Owens, J.** 2002. *Gender and risk in the design of social protection interventions*, Social Safety Net Primers Series (Washington, D.C., World Bank).
- Fafchamps, M.; Minten, B.** 2008. "Insecurity and welfare: Evidence from county data", in *Journal of Development Studies*, Vol. 46, No. 6, pp. 831–863.
- FinMark Trust.** 2009. *FinScope South Africa 2009 survey*, Consultative Group to Assist the Poorest (CGAP), at: www.finscope.co.za.
- . 2011. *Ghana 2011 FinScope results*, at: www.finscope.co.za [Sept. 2011].
- Financial Sector Deepening Kenya (FSD Kenya).** 2009. *FinAccess National Survey 2009: Dynamics of Kenya's changing financial landscape* (Nairobi, Kenya).
- Financial Services Authority (FSA) UK.** 2007. *Treating customers fairly: Measuring outcomes* (UK, Financial Services Authority).
- Fitzpatrick, A.; Magnoni, B.; Thornton, R.** 2011. *Microinsurance utilization in Nicaragua: A report on effects on children, retention and health claims*, Microinsurance Innovation Facility Research Paper No. 5 (Geneva, ILO).
- Flaming, M.; Owino, A.; McKee, K.; Jentsch, N.; di Castri, S.; Maina, B.; Ochleung, M.; Collins, D.; Ahem, B.** 2011. *Consumer protection diagnostic study: Kenya* (Consultative Group to Assist the Poorest (CGAP), FSD Kenya, and Ministry of Finance Kenya).
- Fonteneau, B.; Galland, B.** 2006. "The community-based model: Mutual health organizations in Africa", in C. Churchill (ed.): *Protecting the poor: A microinsurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 378–400.
- Food and Agriculture Organization of the United Nations (FAO).** 2009. *The state of food and agriculture: Livestock in the balance* (Rome), at: <http://www.fao.org/docrep/012/i0680e/i0680e.pdf>.

- Franco, L.M.; Diop, F.P.; Burgert, C.; Kelley, A.G.; Makinen, M.; Siampara, C.H.T. 2008. "Effects of mutual health organizations on use of priority health care services in urban and rural Mali: A case-control study", in *Bulletin of the World Health Organization*, Vol. 86, No. 11, pp. 830–838.
- Frenk, J. 2006. "Bridging the divide: Global lessons from evidence-based health policy in Mexico", in *The Lancet*, Vol. 368, No. 9539, pp. 954–961.
- Fuller, M. 2011. *Utilising technology to improve customer service and efficiency in microinsurance programmes*, presented at 7th International Microinsurance Conference, 10 Nov., 2011, at: http://www.munichre-foundation.org/NR/rdonlyres/6AE7F64A-EBE2-4DA4-B754-F4740279601E/0/S5_MIC2011_Presentation_Fuller_New.pdf
- G-20 Communiqué. 2010. "Meeting of the Finance Ministers and Central Bank Governors, Busan, Republic of Korea, June 5, 2010", at: <http://media.ft.com/cms/422d6406-7093-11df-96ab-00144feabdc0.pdf>.
- Gakidou, E.; Lozano, R.; Gonzalez-Pier, E.; Abbot-Klafter, J.; Barofsky, J. T.; Bryson-Cahn, C.; Feehan, D. M.; Lee, D. K.; Hernandez-Llamas, H.; Murray, C. J. L. 2006. "Assessing the effect of the 2001–2006 Mexican health reform: An interim report card", in *The Lancet*, Vol. 368, pp. 1920–1935.
- Galarra, O.; Sosa-Rubi, S. G.; Salinas, A.; Sesma, S. 2008. *The impact of universal health insurance on catastrophic and out-of-pocket health expenditures in Mexico: A model with an endogenous treatment variable*, Health Econometrics and Data Group Working Paper 08/12 (York, UK, University of York).
- Gallup. 2011. *Mobile phone access varies widely in Sub-Saharan Africa*. Available at <http://www.gallup.com/poll/149519/Mobile-Phone-Access-Varies-Widely-Sub-Saharan-Africa.aspx> [Nov. 2011].
- Ganzach, Y.; Karsahi, N. 1995. "Message framing and buyer behavior: A field experiment", in *Journal of Business Research*, Vol. 32, No.1, pp. 11–17.
- Garand, D.; Wipf, J. 2006. "Risk and financial management", in C. Churchill (ed.): *Protecting the poor: A micro-insurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 254–269.
- Garcia, B.A.; Gruat, J.V. 2003. *Social protection: A life-cycle continuum investment for social justice, poverty reduction and sustainable development* (Geneva, ILO).
- Gaurav, S.; Cole, S.; Tobacman, J. 2011. *Marketing complex financial products in emerging markets: Evidence from rainfall insurance in India*, Microinsurance Innovation Facility Working paper 1-2011 (Geneva, ILO).
- Gehrke, E. 2009. *Sozialpolitik und Mikroversicherung: Das Fallbeispiel Ghana* (Cologne University).
- . 2011. *Can micro-insurance cover natural risks?* (Bonn, German Development Institute).
- The Geneva Association. 2009. *The insurance industry and climate change – Contribution to the global debate*, The Geneva Reports – Risk and Insurance Research No. 2 (Geneva).
- Gerelle, E.; Berende, M. 2008. *Technology for microinsurance*, Microinsurance Paper Series No. 4 (Geneva, ILO).
- Gertler, P.; Levine, D.; Moretti, E. 2009. "Do micro-finance programs help families insure consumption against illness?", in *Health Economics*, Vol. 18, No. 3, pp. 257–273.
- Gesellschaft für Technische Zusammenarbeit (GTZ). 2009. *Remittances and social protection* (Eschborn, Germany).
- Gine, X.; Townsend, R.; Vickery, J. 2008. "Patterns of rainfall participation in rural India", in *The World Bank Economic Review*, Vol. 22, No. 3, pp. 539–566.
- . 2007. *Insurance, credit and technology adoption: Field experimental evidence from Malawi*, World Bank Policy Research Working Paper No. 4425 (Washington, D.C.).
- . 2009. "Insurance, credit, and technology adoption: Field experimental evidence from Malawi", in *Journal of Development Economics*, Vol. 89, No. 1, pp. 1–11.
- GlobalAgRisk. 2009. <http://www.globalagrisk.com/>.
- Global Facility for Disasters Reduction and Recovery (GFDRR). 2011. *Enhancing crop insurance in India* (Washington, D.C., GFDRR and World Bank).
- Global Partnership for Financial Inclusion (GPFI) and CGAP. 2011. *Global standard-setting bodies and financial inclusion for the poor: Toward proportionate standards and guidance*, White Paper prepared by CGAP on behalf of the G-20's Global Partnership for Financial Inclusion (CGAP, Washington, D.C.).
- Gnawali, D. P.; Pokhrel, S.; Sic, A.; Sanon, M.; de Allegri, M.; Soares, A.; Dong, H.; Sauerborn, R. 2009. "The effect of community-based health insurance on the utilization of modern health care services: Evidence from Burkina Faso", in *Health Policy*, Vol. 90, No. 2, pp. 214–222.
- Gomez, J.C. 2007. *Microinsurance regulatory and supervisory framework – The Peruvian case*, paper presented at the 3rd International Microinsurance Conference, Mumbai, Nov. 2007.
- Goslinga, R. 2011. Syngenta Foundation. Telephone interview, 19 Sep.
- Govindarajan, V.; Trimble, C. 2005. *Ten rules for strategic innovators: From idea to execution* (Harvard Business Press).
- Grace, M.E.; Scott, H. 2009. "An optional federal charter for insurance: Rationale and design", in M.E. Grace and R.W. Klein (eds): *The future of insurance regulation in the United States* (Washington, D.C., Brookings Institution Press).
- Gradi, C.; Herrndorf, M.; Knobloch, C.; Sengupta R. 2010. *Learning to insure the poor* (Zürich, Allianz).
- Greifeneder, R. 2008. *The effect of having too much choice, unpublished dissertation* (Berlin, Germany, Humboldt University).
- Gross, P. 2011a. *New frontiers in microinsurance distribution*, ILO Microinsurance Innovation Facility Webinar Series 2, at: <http://www.youtube.com/watch?v=tgDoan5kWFI> [13 July 2011].
- . 2011b. *Reaching the poor at scale through mobile phones*, presented at the 7th Annual International Microinsurance Conference, Rio de Janeiro, Brazil, 9 Nov., 2011.

- Gruber, J.** 2007. *Public finance and public policy* (New York, Worth Publishers).
- Gumber, A.** 2001. *Hedging the health of the poor: The case for community health financing in India*, Health, Nutrition and Population Discussion Paper No. 28875 (Washington, D.C., World Bank).
- Gustafsson-Wright, E.; Asfaw, A.; van der Gaag, J.** 2009. "Willingness to pay for health insurance: An analysis of the potential market for new low-cost health insurance products in Namibia", in *Social Science & Medicine*, Vol. 69, No. 9, pp. 1351–1359.
- Güth, W.** 2007. *(Non-) Behavioural Economics – A programmatic assessment*, Jena Economic Research Paper No. 2007-099 (Max Planck Institute of Economics, Center for Economic Studies and Ifo Institute for Economic Research).
- Hadi, A.** 2001. "Promoting health knowledge through micro-credit programmes: Experience of BRAC in Bangladesh", in *Health Promotion International*, Vol. 16, No. 3, pp. 219–227.
- Haiss, P.; Sumegi, K.** 2008. "The relationship between insurance and economic growth in Europe: A theoretical and empirical analysis", in *Empirica*, Vol. 35, No. 4, pp. 405–431.
- Hamid, S.A.; Roberts, J.; Mosley, P.** 2010. *Can micro health insurance reduce poverty? Evidence from Bangladesh*, Sheffield Economic Research Paper Series 2010001 (Sheffield University).
- Hansen, J.D.; Kyser, D.A.** 1999. "Taking behavioralism seriously: The problem of market manipulation", in *New York University Law Review* Vol. 74 pp. 630–749.
- Harmeling, S.** 2010a. Zurich Bolivia-Bancosol case study, ILO Microinsurance Facility (Geneva, ILO).
- . 2010b. *Case study: Max Vijay insurance product*, International Case Method Institution (Geneva, ILO).
- Hazell, P.** 1992. "The appropriate role of agricultural insurance in developing countries", in *Journal of International Development*, Vol. 4, pp. 567–581.
- ; **Anderson, J.; Balzer, N.; Hastrup Clemmensen, A.; Hess, U.; Rispoli, F.** 2010. *The potential for scale and sustainability in weather index insurance for agriculture and rural livelihoods* (Rome, International Fund for Agricultural Development, World Food Programme).
- Heckman, J. J.; Smith, J.; Clements, N.** 1997. "Making the most out of programme evaluations and social experiments: Accounting for heterogeneity in programme impacts", in *Review of Economic Studies*, Vol. 64, No. 4, pp. 487–535.
- Heffernan, C.; Misturelli, F.; Pilling, D.** 2003. *Livestock and the poor: Findings from Kenya, India and Bolivia* (London, Animal Health Programme, Department for International Development).
- Hellmuth, M.E.; Moorhead, A.; Thomson, M.C.; Williams, J.** (eds). 2007. *Climate risk management in Africa: Learning from practice*, Climate and Society No. 1 (New York, International Research Institute for Climate and Society).
- . 2009. *Index insurance and climate risk: Prospects for development and disaster management*, Climate and Society No. 2 (New York, International Research Institute for Climate and Society).
- Herbas, J. C.** 2009. "BancoSol's Microinsurance Programs", Microfinance Network: Microinsurance Working Group Conference Call.
- Herbold, J.** 1999. *New approaches to agricultural insurance in developing economies*, Finance for food (Frankfurt am Main, KFW).
- . 2010. "Crop insurance in developing economies: The insurers' and reinsurers' perspective", in *The International Journal for Rural Development*, Vol. 4, pp. 14–18.
- . 2011. *Climate change and agriculture insurance: Industry vulnerability and implications for scaling up innovations: The (re)insurer's perspective*, presented at FARMD annual Conference, Zürich, 9–10 June, 2011.
- Hintz, M.** 2010a. "Understanding the context is understanding the impact: Evidence from a qualitative microinsurance impact survey in Indonesia", in E. Morelli et al. (eds): *Microinsurance – An innovative tool for risk and disaster management* (Davos, Global Risk Forum).
- . 2010b. *Micro-impact: Deconstructing the complex impact process of a simple microinsurance product in Indonesia* (Passau, University of Passau).
- Holzmann, R.; Jørgensen, S.** 2000. *Social risk management: A new conceptual framework for social protection and beyond* (Washington, D.C., World Bank).
- Hougaard, C.; Chamberlain, D.; Aseffa, Y.** 2009. *Towards a strategy for microinsurance development in Zambia: A market and regulatory analysis* (Bellville, South Africa, Cenfri), at: www.cenfri.org
- ; **Chelwa, G.; Swanepoel, A.** 2011. *Swaziland micro-insurance diagnostic* (Access to Insurance Initiative and FinMark Trust).
- Impact Working Group of the Microinsurance Network.** 2011a. *The practical guide to impact assessments of microinsurance*, at: http://microinsurancenetwotk.org/publication/fichier/MIN_Publication_Impact_Practical_Guide_V1_2010.pdf [2 Apr. 2011].
- . 2011b. *Stocktaking initiative: Ongoing impact assessments of microinsurance*, at: <http://www.microinsurancenetwotk.org/workinggroup/impact/stocktaking.php> [2 Oct. 2011].
- Institute of Development Studies.** 2009. *Accounts of crisis: Poor people's experience of the food, fuel and financial crises in five countries* (Brighton, UK).
- Insurance Regulatory and Development Authority (IRDA), India.** 2008. At: <http://www.irda.gov.in/>
- Intergovernmental Panel on Climate Change (IPCC).** 2007. *Climate Change 2007: The physical science basis*, IPCC WGI Fourth Assessment Report (Geneva).
- . 2011. *Special report on managing the risks of extreme events and disasters to advance climate change adaptation* (Stanford, CA, WMO, UNEP).

International Association of Insurance Supervisors (IAIS). 2007. *Issues in regulation and supervision of micro-insurance* (Basel, Switzerland).

—. 2010. *Issues paper on the role, regulation and supervision of mutuals, cooperatives and other community-based organizations in increasing access to insurance markets* (unpublished) (Basel, Switzerland).

International Fund for Agriculture Development (IFAD). 2004. *Livestock services and the poor. A global initiative: Collecting, coordinating and sharing experiences* (Rome).

International Labour Organization (ILO). 2008. *Social health protection. An ILO strategy towards universal access to healthcare*, Social Security Policy Briefings, Paper 1 (Geneva).

—. 2010. *World Social Security Report 2010/11: Providing coverage in times of crisis and beyond* (Geneva).

ILO Microinsurance Innovation Facility. 2011. *Annual Report 2010* (Geneva, ILO), at: http://www.ilo.org/public/english/employment/mifacility/download/annual/annualreport2010_en.pdf

International Monetary Fund (IMF). 2010. *World Economic Outlook Database*, at: <http://www.imf.org/external/pubs/ft/weo/2010/01/weodata/weorept.aspx?pr.x=31&pr.y=11&sy=2009&ey=2009&scsm=1&ssd=1&sort=country&ds=.&br=1&c=369&cs=LP&grp=0&a=>

Ito, S.; Kono, H. 2010. "Why is take-up of microinsurance so low? Evidence from a health insurance scheme in India", in *The Developing Economies*, Vol. 48, No. 1, pp. 74–101.

Iturrioz, R. 2009. *Agricultural insurance*, Primer Series on Insurance Issue 12 (Washington, D.C., International Bank for Reconstruction and Development, World Bank).

Iyengar, S.S.; Lepper, M.R. 2000. "When choice is demotivating: Can one desire too much of good thing?", in *Journal of Personality and Social Psychology*, Vol. 79, No. 6, pp. 995–1006.

Jianakoplos, N.A.; Bernasek, A. 1998. "Are women more risk averse?", in *Economic Inquiry*, Vol. 36, pp. 620–630.

Johnson S. 2004. "Milking the elephant: Financial markets as real markets in Kenya", in *Development and Change*, Vol. 35, No. 2, pp. 247–274.

Joseph, C.; Ruchishmita, R. 2010. *Livestock case study, draft paper* (Chennai, India, CIRM).

Jowett, M.; Deolalikar, A.; Martinsson, P. 2004. "Health insurance and treatment seeking behavior: evidence from a low-income country", in *Health Economics*, Vol. 13, pp. 845–857.

Jütting, J. 2002. *Social risk management in rural areas of low-income countries: An economic analysis of community-based health insurance schemes* (Bonn, University of Bonn, Faculty of Agriculture).

—. 2004. "Do community-based health insurance schemes improve poor people's access to health care? Evidence from Rural Senegal", in *World Development*, Vol. 32, No. 2, pp. 273–288.

Kahneman, D.; Tversky, A. 1979. "Prospect theory: An analysis of decision under risk", in *Econometrica*, Vol. 47, No. 2, pp. 263–292.

Karlan, D.; McConnell, M.; Mullainathan, S.; Zinman, J. 2010. *Getting to the top of mind: How reminders increase savings*, Working Paper (Yale University, Harvard University, and Dartmouth).

—; **Kutsoati, E.; McMillan, M.; Udry, C.** 2011. "Crop price indemnified loans for farmers: A pilot experiment in rural Ghana", in *Journal of Risk and Insurance*, Vol. 78, No. 1, p. 37–55.

Karnani, A. 2009. "Romanticizing the poor", in *Stanford Social Innovation Review*, Vol. 7, No. 1, at: http://www.ssireview.org/articles/entry/romanticizing_the_poor.

Kern, A.; Ritzen, J. 2002. *Dying for change: Poor people's experience with health and ill health* (Geneva and Washington, D.C., World Health Organization and World Bank).

King, G.; Gakidou, E.; Imai, K.; Lakin, J.; Moore, R. T.; Nall, C.; Ravishankar, N.; Vargas, M.; Tellez-Rojas, M. M.; Hernandez Avila, J. E.; Hernandez Avila, M.; Hernandez Llamas, H. 2009. "Public policy for the poor? A randomized assessment of the Mexican universal health insurance programme", in *The Lancet*, Vol. 373, pp. 1447–1454.

Kiwaru, A. 2007. "Group premiums in micro health insurance experiences from Tanzania", in *East African Journal of Public Health*, Vol. 4, No. 1, pp. 28–32.

Knaul, E.; Arreola-Ornelas, H.; Méndez-Carniado, O.; Bryson-Cahn, C.; Barofsky, J.; Maguire, R.; Miranda, M.; Sesma, S. 2006. "Evidence is good for your health system: Policy reform to remedy catastrophic and impoverishing health spending in Mexico", in *The Lancet*, Vol. 368, No. 9549, pp. 1828–1841.

Kogan, F.N. 1990. "Remote sensing of weather impacts on vegetation in non-homogeneous areas", in *International Journal of Remote Sensing*, Vol. 11, pp. 1405–1419.

Kotler, P. 1994. *Marketing management: Analysis, planning, implementation, and control* (New Jersey, Simon & Schuster).

Krishnan, S. 2010. *ACE progress report: Beyond 'non-admitted'. A closer look at trends affecting today's multinational insurance programs* (ACE Group).

Krishnaswamy, K.; Ruchishmita, R. 2011. *Rashitriya Swasthya Bima Yojana – Performance trends and policy recommendations: An evaluation of a government mass health insurance scheme* (Chennai, India, IMFR CIRM).

Kruk, M.; Goldmann, E.; Galea, S. 2009. "Borrowing and selling to pay for health care in low- and middle-income countries", in *Health Affairs*, Vol. 28, No. 4, pp. 1056–1066.

Kumar, S. 2011. *Experiences and challenges in implementation of crop insurance programme in India* (India Ministry of Agriculture).

Kundra, S.; Lagomarsino. 2008. *Implementing health insurance: Overcoming the challenges of scaling voluntary risk pools in low income settings* (The Rockefeller Foundation, Result for Development Institute).

- Kunzemann, T.** 2010. *Microinsurance tested: Cyclone Nisha batters India*, at: http://knowledge.allianz.com/microfinance/alternative_finance/?424/allianz-bajaj-care-cyclone-nisha-microinsurance [27 May 2010].
- Laajaj, R.; Carter, M.** 2009. *Using satellite imagery as the basis for index insurance contracts in West Africa*, at: <http://i4.ucdavis.edu/projects/contracts/files/laajaj-using-satellite-imagery.pdf>.
- Lacey, D.** 2011. *A business case for microinsurance: Case study analysis of the profitability of microinsurance products* (Johannesburg, South Africa, Quindiem Consulting).
- Lai, I.** 2010. *As demand grows for microinsurance in Asia, Swiss Re launches first agricultural product in Vietnam*, at: <http://www3.ambest.com/ambv/bestnews/newscontent.aspx?altsrc=23&refnum=142823>
- Langenbrunner, J.; Cashin, C.; O'Dougherty, S. (eds).** 2009. *Designing and implementing health care provider payment systems*, How-to Manuals (Washington, D.C., World Bank and USAid).
- Lashley, K.** 2008. "Health-care provision meets micro-credit finance in Argentina", in *Bulletin of the World Health Organization*, Vol. 86, No.1, pp. 9–10.
- Latorue, A.** 2006. "The role of donors", in C. Churchill (ed.): *Protecting the poor: A microinsurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 470–487.
- : **de Montesquious, A.; Ward, V.** 2008. "Microinsurance: What can donors do?", CGAP Working Group on Microinsurance (Washington, D.C., World Bank).
- Leach, J.** 2005. *The regulator's dilemma*, presentation to the Microinsurance Conference, Munich Re Foundation and CGAP Working Group on Microinsurance, Schloss Hohenkammer, Germany, Oct.
- : 2011. Hollard Insurance. Telephone interview, Sep. 2011.
- Leatherman, S.; Dunford, C.** 2010. "Linking health to microfinance to reach the poor", in *World Health Organization Bulletin*, Vol. 88, No. 6, pp. 401–480.
- Leftley, R.** 2009. "Microinsurance for health and agricultural risk innovations in insuring the poor", in *A 2020 Vision for Food, Agriculture, and the Environment*, Foc. 17, Br. 4.
- : 2010. *Credit Life: It's supposed to be simple*, Field Notes (MicoEnsure).
- Lei, X.; Lin, W.** 2009. "The new cooperative medical scheme in rural China: Does more coverage mean more service and better health?", in *Health Economics*, Vol. 18, No. S2, pp. 25–46.
- Lethourmy, A.** 2010. *How to implement health insurance in Sub-Saharan Africa?*, Background Paper to the European Report on Development 2010, presented in Dakar, 27–30 June 2010.
- Leventhal, H.; Singer, R.; Jones, S.** 1965. "Effects of fear and specificity of recommendation upon attitudes and behavior", in *Journal of Personality and Social Psychology*, Vol. 2, pp. 20–29.
- Levin, T.; Reinhard, D.** 2007. *Microinsurance aspects in agriculture*, Discussion Paper (Munich, Munich Re).
- Lichand, G.** 2010. *Decomposing the effects of CCTs on entrepreneurship*, World Bank Policy Research Working Paper 5457 (Washington, D.C., World Bank).
- Lim, Y.; Townsend, R.** 1998. "General equilibrium models of financial systems: Theory and measurement in village economies", in *Review of Economic Dynamics*, Vol. 1, No. 1, pp. 59–118.
- List, J.A.** 2003. "Does market experience eliminate market anomalies?", in *Quarterly Journal of Economics*, No. 188, pp. 1–47.
- Llanto, G.M.; Geron, M. P.; Almarino, J.** 2008. *Making insurance markets work for the poor: Microinsurance policy, regulation and supervision: Philippines study*, CGAP Working Group on Microinsurance (Washington, D.C., World Bank).
- Lloyd's.** 2009. *Insurance in developing countries: Exploring opportunities in microinsurance* (London, UK).
- Loewe, M.** 2001. *Improving the social protection of the urban poor and near-poor in Jordan: The potential of micro-insurance*, Reports and Working Papers 12 (Bonn, German Development Institute).
- : 2005a. "Maßnahmen zur Verbesserung der sozialen Sicherheit im informellen Sektor: Das Beispiel der arabischen Welt", in D. Messner and I. Scholz (eds): *Zukunftsfragen der Entwicklungspolitik* (Nomos, Baden-Baden).
- : 2005b. *Social security and the informal sector: the state of theoretical discussion and critical analysis of the situation in Arab countries with special emphasis on micro-insurance approach* (Heidelberg University).
- : 2006. "Downscaling, upgrading or linking? Ways to realize microinsurance", in *International Social Security Review*, Vol. 59, No. 2, pp. 37–59.
- : 2009a. *Soziale Sicherung, informeller Sektor und das Potenzial des Kleinstversicherungsansatzes* (Baden-Baden, Nomos).
- : 2009b. "The third way to social protection: promoting group-based micro-insurance", in *Journal of Insurance and Risk Management*, Vol. 4, No. 1, pp. 86f.
- Lofgren, C.; Thanh, N.X.; Chuc, N.T.; Emmelin, A.; Lindholm, L.** 2008. "People's willingness to pay for health insurance in rural Vietnam", in *Cost Effectiveness and Resource Allocation*, Vol. 6, No. 16.
- Lomas, P.** 2009. *Third party administration in the provision of in-patient health insurance: An Indian case study* (MicroEnsure), at: http://www.microinsurancenetw.org/file/TPA_PAPER_March_09_Final.pdf.
- Lybbert, T.J.; Galarza, F.; McPeak, J.; Barrett, C.B.; Boucher, S.; Carter, M.R.; Chantarat, S.; Fadlaoui, A.; Mude, A.** 2010. "Dynamic field experiments in development economics: Risk valuation in Morocco, Kenya and Peru", in *Agricultural and Resource Economics Review*, Vol. 39, No. 2, pp. 176–192.
- Magnoni, B.; Lovoi, A.; Brown, J.; Thornton, R.** 2010. *Risk across borders: A study of the potential of microinsurance products to help migrants cope with cross border risks* (Washington, D.C., Inter-American Development Bank).

- Magnoni, B.; Zimmerman, E.** 2011. *Do clients get value from microinsurance? A systematic review of recent and current research* (Micro Insurance Centre, MILK Project).
- Manje, L.** 2005. *Madison Insurance*, Zambia, CGAP Working Group on Microinsurance, Good and Bank Practices Case Study, No. 11 (Geneva, ILO).
- . 2007. *Microinsurance client satisfaction study: Zambia* (Microfinance Opportunities), at: http://www.microfinanceopportunities.org/docs/Zambia_clientsatisfactionstudy_Final%20Report_November%202007.pdf.
- Manning, W.G.; Marquis, S.M.** 1996. "Health insurance: The trade-off between risk pooling and moral hazard", in *Journal of Health Economics* Vol. 15, No. 5, pp. 609–639.
- Mapfumo, S.** 2009. *Weather index insurance in Malawi*, presented in Kampala, Uganda, 3 March (Microensure).
- Marek, T.; Yamamoto, C.; Ruster, J.** 2003. *Private health: Policy and regulatory options for private participation*, Public Policy for the Private Sector Note Number 265 (Washington, D.C., World Bank).
- ; **O'Farrell, C.; Yamamoto, C.; Zable, I.** 2005. *Trends and opportunities in public-private partnerships to improve health service delivery in Africa*, Africa Region Human Development Working Paper 33646 (Washington, D.C., World Bank).
- Marquez, P.; Chassin, L.** 2012. *Donors in microinsurance*, Microinsurance Network Study No. 4 (Luxembourg, Microinsurance Network), unpublished.
- Mas, I.; Radcliffe, D.** 2010. *Mobile payments go viral: M-PESA in Kenya*, at <http://pymnts.com/mobile-payments-go-viral-m-pesa-in-kenya/> [Nov. 2011].
- Masud, T.I.; Farooq, N.; Ghaffar, A.** 2003. "Equity shortfalls and failure of the welfare state: Community willingness to pay for health care at government facilities in Jehlum (Pakistan)", in *Journal of Ayub Medical College Abbottabad*, Vol. 15, No. 4, pp. 43–49.
- Mathews, B.** 2008. *Microinsurance: Delivering the core value of insurance to new customers* (Zürich, Switzerland, Zurich Insurance).
- Mathiyazhagan, K.** 1998. "Willingness to pay for rural health insurance through community participation in India", in *International Journal of Health Planning and Management*, Vol. 13, No. 1, pp. 47–67.
- Matsuura, K.** 2009. "Address by Mr. Koichiro Matsuura, Director General of UNESCO, to welcome the United Nations Secretary-General, Mr. Ban Ki Moon on his first visit at UNESCO Headquarters", at: <http://unesdoc.unesco.org/images/0018/001816/181647e.pdf>
- Matul, M.; McCord, M.; Phily, C.; Harms, J.** 2010. *The landscape of microinsurance in Africa*, Microinsurance Working Paper No. 4 (Geneva, ILO).
- ; **Tatin-Jaleran, C.; Kelly, E.** 2011. *Improving client value from microinsurance: Insights from India, Kenya, and the Philippines*, Microinsurance Paper Series No. 12 (Geneva, ILO).
- Mayoux, L.** 2002. *Gender dimensions of microinsurance: Questioning the new bootstraps*, Microinsurance: Improving Risk Management for the Poor No. 7 (Luxembourg, ADA).
- McNamee, P.; Ternent, L.; Gbangou, A.; Newlands, D.** 2010. "A game of two halves? Incentive incompatibility, starting point bias and the bidding game contingent valuation method", in *Health Economics*, Vol. 19, No. 1, pp. 75–87.
- McCord, M.J.** 2001. "Health care microinsurance – Case studies from Uganda, Tanzania, India and Cambodia", in *Small Enterprise Development*, Vol. 12, No. 1, pp. 25–38.
- ; **Buczkowski, G.** 2004. *CARD MBA: The Philippines*, Good and Bad Practices Case Study No. 4, CGAP Working Group on Microinsurance (Geneva, Switzerland).
- ; **Botero, F.; McCord, J.S.** 2005a. *AIG: Uganda*, Good and Bad Practices Case Study No. 9, CGAP Working Group on Microinsurance (Geneva, Switzerland).
- ; **Ram, G.; McGuinness, L.** 2005b. *Microinsurance demand and market prospects: Indonesia* (Allianz AG, UNDR, GTZ).
- ; **Osinde, S.** 2005. "Reducing vulnerability: The supply of health microinsurance in East Africa", in *Journal of International Development*, Vol. 17, No. 3, pp. 327–381.
- ; **Buczkowski, G.; Saksena, P.** 2006. "Premium collection: Minimizing transactions costs and maximizing customer service", in C. Churchill (ed.): *Protecting the poor: A microinsurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 197–215.
- . 2007a. *Partnerships: Microfinance institutions and commercial insurers*, Microinsurance Note 3 (USAID).
- . 2007b. "Supplying health microinsurance: Lessons from East Africa", in *International Journal of Public Administration*, Vol. 30, No. 8, pp. 737–764.
- ; **Wiedmaier-Pfister, M.; Chatterjee A.** 2008. *Facilitating an appropriate regulatory and supervisory environment for microinsurance*, Microinsurance Note 8 (USAID).
- McPeak, J.; Chantarat, S.; Mude, A.** 2010. "Explaining index-based livestock insurance to pastoralists", in *Agricultural Finance Review*, Vol. 70, No. 3, pp. 333–352.
- Medicall Home.** 2010. Medicall Home Page, at: <http://www.medicallhome.com/Indexaspx> [29 Apr. 2010].
- Meessen, B.; Criel, B.; Kegels, G.** 2002. "Formal pooling of health risks in sub-Saharan Africa: reflections on the obstacles encountered", in *International Social Security Review*, Vol. 55, No. 2, pp. 80–84.
- Micro Insurance Academy.** 2009. *Implementing micro health insurance in Nepal: Executive summary* (New Delhi, India).
- MicroEnsure.** 2011. *M-Insurance goes live in Ghana*, at: www.microensure.com/news [Sept. 2011].
- Micro Insurance Map.** 2011. <http://microinsurancemap.com>
- Microinsurance Centre.** 2009. *India's report on health micro-insurance schemes: Diversity, innovations and trends* (New Delhi, ILO Subregional Office for Southeast Asia).
- . 2011. *Microinsurance Bollywood movie*, at: <http://www.microinsuranceacademy.org/content/%E2%80%99Csab-tujhse-hai%E2%80%99D-bollywood-style-movie-insurance-education-tool> [24 Apr. 2011].

Microinsurance Innovation Facility Knowledge Centre. 2010a. *Evolving climatic adaptation through crop insurance*, at: <http://www.microinsurancefacility.org/en/learning-journey/evolving-climatic-adaptation-through-crop-insurance> (accessed Oct. 2011).

—. 2010b. *Max Vijay case study*, at: http://www.munichre-foundation.org/NR/rdonlyres/ACA0BEA6-2F22-43EA-9B77-8256B26DA65C/o/S8_MIC2010_MaxVijayStudy.pdf [Sept. 2011].

—. 2011a. *Cattle insurance through electronic identification chip technology*, at: <http://www.microinsurancefacility.org/learning-journey/cattle-insurance-through-electronic-identification-chip-technology> [Oct. 2011].

—. 2011b. *Care Foundation: Project summary*, at: <http://www.microinsurancefacility.org/en/learning-journey/insuring-primary-care-sustainable-financing-solution-rural-primary-health> [Oct. 2011].

Mills, E. 2008. "The role of U.S. insurance regulators in responding to climate change", in *Journal of Environmental Law and Policy*, Vol. 26.

Mobaie, T. 2002. Personal communication, Asmara, Eritrea, National Insurance Corporation of Eritrea.

Moens, F. 1990. "Design, implementation, and evaluation of a community financing scheme for hospital care in developing countries: A pre-paid health plan in the Bwamanda health zone, Zaïre", in *Social Science and Medicine*, Vol. 30, No. 12, pp. 131–1327.

Mohammed, M.A.; Ortmann, G.F. 2005. "Factors influencing adoption of livestock insurance by commercial dairy farmers in three zobatat of Eritrea", in *Agrekon*, Vol. 44, No. 2, pp. 172–186.

Morduch, J. 1995. "Income smoothing and consumption smoothing", in *Journal of Economic Perspectives*, Vol. 9, No. 3, pp. 103–114.

—. 1999. "Between the market and state: Can informal insurance patch the safety net?", in *World Bank Research Observer*, Vol. 14, No. 2, pp. 187–207.

—. 2006. "Microinsurance: The next revolution", in A. Banerjee, R. Bénabou and D. Moherjee (eds): *Understanding poverty* (Oxford University Press, UK).

Morrah, D. 1955. *A history of industrial life assurance* (University of Michigan, Allen and Unwin).

Morris, S.; Carletto, C.; Hoddinott, J.; Christiaensen, L. 2000. *Validity of rapid estimates of household wealth and income for health surveys in rural Africa*, FCND Discussion Paper No. 72 (International Food Policy Research Institute).

Morsink, K.; Geurts, P. 2011. *Research design for measuring the client value of microinsurance*, MILK Brief No. 6 (Appleton, Wisconsin, Microinsurance Centre).

—; **Wenner, M.; et al.** 2011. *Value for farmers from meso-level index insurance?*, paper presented at the 7th International Microinsurance Conference Rio de Janeiro, Brazil, 8–10 Nov.

—; **Geurts, P.; Kooijman-van Dijk, A.** 2012. *Impact of micro insurance on vulnerability of low income households in the Philippines: The case of typhoon re-housing insurance* (Netherlands, Institute of Governance Studies (IGS) University of Twente).

M-PESA Resource Centre. 2011. *M-PESA customers and agent numbers*, at: http://www.safaricom.co.ke/fileadmin/M-PESA/Documents/statistics/M-PESA_Statistics_-_2.pdf (accessed November 2011).

Msuya, J.M.; Jütting, J.P.; Asfaw, A. 2004. *Impacts of community health insurance programs on health care provision in rural Tanzania*, ZEF-Discussion Papers on Development Policy Number 82 (University of Bonn, Centre for Development Research (ZEF), Germany).

—. 2007. "Impact of community health funds on the access to health care: Empirical evidence from rural Tanzania", in *International Journal of Public Administration*, Vol. 30, No. 8, pp. 813–833.

Mude, A.; Chantarat, S.; Barrett, C.; Carter, M.; Ikegami, M., and McPeak, J. 2010. *Insurance against drought-related livestock mortality: Piloting index based livestock insurance in Northern Kenya* (International Livestock Research Institute Working Paper, Nairobi).

Mukherjee, P. 2011. "Budget 2011–2012: Speech of Pranab Mukherjee, Minister of Finance, Feb. 28, 2011", at: <http://india.gov.in/images/bst11-12.pdf>

Mullainathan, S.; Krishnan, S. 2008. *Psychology and economics: What it means for microfinance* (Financial Access Initiative, Innovations for Poverty Action), at: <http://iamfi.com/documents/psychologyandeconomics.pdf>

—; **Shafir, E.** 2009. "Savings policy and decision-making in low-income households", in M.S. Barr and R.M. Blank (eds): *Insufficient funds: Savings, assets, credit and banking among low-income households* (New York, Financial Access Initiative, New Haven, CT, Innovations for Poverty Action), pp. 121–145.

Munich Climate Insurance Initiative, Munich, at: <http://www.climate-insurance.org/>

Munich Re. 2010. *Topics Geo: Natural catastrophes in 2009: Analyses, assessments, positions* (Munich).

—. 2011. *SystemAgro – The integrated approach to help farmers feed the world through an intelligent crop insurance system*, at: www.munichre.com/systemagro

Munich Re Foundation. 2007. *Munich Re Foundation 2006 Report – From knowledge to action* (Munich).

—. 2009. *Munich Re Foundation 2008 Report – From knowledge to action* (Munich).

—. 2011. *6th International Microinsurance Conference Report 2010* (Munich).

Murray, C.J.L.; Evans, D. 2003. *Health systems performance assessment: Debates, methods and empiricism* (Geneva, World Health Organization).

Murray, I. 2008. *Safe places to save* (Women's World Banking).

Nabeth, N.; Barrau, O. 2010. *AIC: A pioneering insurance company in microinsurance actions after the earthquake on 12 January 2010*, presentation available at: http://www.aic.ht/pdf/AIC_actions_defis_post_seisme_VF2_eng.pdf.

Naemi Nezam Abadi, M. 1999. *An investigation of effective factors in expansion and development of agricultural insurance*, unpublished master's thesis (Tehran, Iran, Tehran University).

- Narayan, D.; Patesh, P. (eds). 2000. *Voices of the poor: From many lands* (Washington, D.C., World Bank).
- National Bank for Agriculture and Rural Development (NABARD). 2011. *Annual Report*, at: [http://www.nabard.org/FileUpload/DataBank/AnnualReports/Nabard_AR_Eng_2011_\(Fianl\)\[1\].pdf](http://www.nabard.org/FileUpload/DataBank/AnnualReports/Nabard_AR_Eng_2011_(Fianl)[1].pdf)
- National Statistical Coordination Board (NSCB). 2011. *2009 official poverty statistics in the Philippines* (Manila, NSCB).
- National Treasury, Republic of South Africa. 2008. *The future of microinsurance regulation in South Africa*, Discussion Paper, at: <http://www.treasury.gov.za/public%20comments/The%20Future%20of%20Microinsurance%20Regulation%20in%20South%20Africa.pdf> [Oct. 2011].
- . 2011. *The South African Microinsurance Regulation Framework*, at: <http://www.fsb.co.za/insurance/Microinsurance/PolicyDocumentMicroInsurance.pdf> [Oct. 2011].
- Nienaber, P.M.; Preiss, J. 2006. *Funeral insurance: A perception from the office of the Ombudsman for Long-term Insurance*, at: www.ombud.co.za/res/pdf/FuneralInsurance.pdf
- Nyman, J.A. 2001. *The demand for insurance: Expected utility theory from a gain perspective*, University of Minnesota Center for Economic Research, Department of Economics Working Paper No. 313 (University of Minnesota), at: <http://hdl.handle.net/10419/23492>.
- Onwujekwe, O.; Okereke, E.; Onoka, C.; Uzo-chukwu, B.; Kirigia, J.; Petu, A. 2010. "Willingness to pay for community-based health insurance in Nigeria: do economic status and place of residence matter?", in *Health Policy and Planning*, Vol. 25, No. 2, pp. 155–161.
- Orozco, M. 2003. *Family Remittances to Nicaragua: Opportunities to Increase the Economic Contributions of Nicaraguans Living Abroad* (Washington, D.C., USAID).
- Qureshi, Y.; Reinhard, D. (eds). 2011. *6th International Microinsurance Conference 2010: Making insurance work for the poor* (Munich Re Foundation).
- Palm, R. 1995. *Earthquake insurance: A longitudinal study of California homeowners* (UCLA, Westview Press).
- Patankar, M. 2011. *Comprehensive risk cover through remote sensing techniques*, CIRM working Paper Series (Chennai, India, CIRM), at: <http://www.cirm.in/library/publications>
- Perry, B.; Randolph, T. 2003. "The economics of foot and mouth disease, its control and its eradication", in B. Bodet and M. Vicari (eds): *Foot and mouth disease control strategies* (Paris, Elsevier).
- Peterson, T.C.; Zhang, X.; Brunet-India, M.; Vázquez-Aguirre, J.L. 2008. "Changes in North American extremes derived from daily weather data", in *Journal of Geophysical Research*, Vol. 7, No. 113, pp. 1–9.
- PhilHealth. 2010. *Extending public insurance schemes to the low income sector*, presented at the International Microinsurance Conference, Manila, Nov. 9–11, 2010.
- Pica, G.; Pica-Ciamarra, U.; Otte, J. 2008. *The livestock sector in the World Development Report 2008: Re-assessing the policy priorities*, PPLPI Research Report No. 08-07 (Rome, Pro-Poor Livestock Policy Initiative, FAO).
- Pica-Ciamarra, U. 2005. *Livestock policies for poverty alleviation: Theory and practical evidence from Africa, Asia and Latin America*, PPLPI Working Paper No. 27 (Rome, Pro-Poor Livestock Policy Initiative, FAO).
- Picard, P. 2008. "Natural disaster insurance and the equity-efficiency trade-off", in *The Journal of Risk and Insurance*, Vol. 75, No. 1.
- Plaster, G.; Alderman, J. 2006. *Beyond Six Sigma: Profitable growth through customer value creation* (New York, John Wiley & Sons).
- Polonsky, J.; D.; McPake, B.; Poletti, T.; Vyas, S.; Ghazaryan, O.; Yanni, M.K. 2009. "Equity in community health insurance schemes: Evidence and lessons from Armenia", in *Health Policy and Planning*, Vol. 24, No. 3, pp. 209–216.
- Porteous, D. 2006. *The enabling environment for mobile banking in Africa* (Boston, MA, Bankable Frontier Associates), at: <http://www.bankablefrontier.com/assets/pdfs/ee.mobil.banking.report.v3.1.pdf>.
- ; Lyman, T.R.; Pickens, M. 2008. *Regulating transformational branchless banking: Mobile phones and other technology to increase access to finance*, Focus Note 43 (Washington, D.C., World Bank).
- Prahalad, C.K. 2005. *The fortune at the bottom of the pyramid: Eradicating poverty through profits* (Upper Saddle River, NJ, Wharton School Publishing).
- Prashad, P. 2011. Technology officer, Microinsurance Innovation Facility. Telephone interview, 19 Sep., 2011.
- Pratt, J.W. 1964. "Risk aversion in the small and in the large", in *Econometrica*, Vol. 32, No. 1/2, pp. 122–136.
- Preker, A.S.; Carrin, G.; Dror, D.; Jakab, M.; Hsiao, W.; Arhin-Tenkorang, D. 2002. "Effectiveness of community health financing in meeting the cost of illness", in *Bulletin of the World Health Organization*, Vol. 80, pp. 143–150.
- Pronyk, P.M.; Hargreaves, J.R.; Morduch, J. 2007. "Microfinance programs and better health: Prospects for Sub-Saharan Africa", in *Journal of American Medical Association*, Vol. 298, No. 16, pp. 1925–1927.
- Public Health Foundation of India (PHFI). 2011. *A critical assessment of the existing health insurance models in India* (New Delhi, India).
- Radermacher, R.; Wig, N.; Van Putten-Rademacher, O.; Müller, V.; Dror, D. 2005a. *Yeshasvini Trust, Karnataka India*, CGAP Working Group on Microinsurance Good and Bad Practices Case Study No. 20 (Geneva, ILO).
- ; van Putten-Rademacher, O.; Müller, V.; Wig, N.; Dror, D. 2005b. *Karuna Trust, Karnataka*, Consultative Group to Assist the Poorest (CGAP) Good and Bad Practices in Microinsurance Case Study No. 19 (Geneva, ILO).
- ; Dror, I. 2006. "Institutional options for delivering health microinsurance", in C. Churchill (ed.): *Protecting the poor: A microinsurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 401–423.
- ; Roberts; Singh, J.; Srivastava, S. 2009. "Integrated risk management in microinsurance", in *Microfinance: An innovative tool for disaster and risk reduction* (IDRC).

- ; Vanderhyden, M.; Meshack, M.; Harting, S.; Stoermer, M. 2011. *Mission report: Health financing situational analysis. Health promotion and system strengthening project in Dodoma, Tanzania* (Basel, Switzerland, Swiss Tropical and Public Health Institute).
- ; van Armanberg, K.; Chen, T. 2012. "Impact analyses of micro health insurance", in H.J. Rösner et al. (eds): *Handbook of micro health insurance in Africa, social protection in health – Challenges, needs and solutions in international health care financing, Vol. 1* (Cologne, Germany, University of Cologne).
- ; van Armanberg, K.; Chen, T. Forthcoming. *What do we know about the impact of microinsurance?* (New Delhi, Micro Insurance Academy).
- Ramm, G. 2011. *Public-private partnerships in micro-insurance* (Luxembourg, Microinsurance Network).
- Ranson, M. K. 2001. *The impact of SEWA's medical insurance fund on hospital utilization and expenditure: A household survey*, Health, Nutrition and Population Discussion Paper No. 28895 (Washington, D.C., World Bank).
- . 2002. "Reduction of catastrophic health care expenditures by a community-based health insurance scheme in Gujarat, India: Current experiences and challenges", in *Bulletin of the World Health Organization*, Vol. 80, No. 8, pp. 613–621.
- ; Sinha, T.; Chatterjee, M.; Acharya, A.; Bhavsar, A.; Morris, S.; Mills, A. 2006. "Making health insurance work for the poor: Learning from the Self-Employed Women's Association's (SEWA) community-based health insurance scheme in India", in *Social Science and Medicine*, Vol. 62, pp.707–720.
- Rao, K. D.; Waters, H.; Steinhardt, L.; Alam, S.; Hansen, P.; Naeem, A.J. 2009. "An experiment with community health funds in Afghanistan", in *Health Policy and Planning*, Vol. 24, No. 4, pp. 301–311.
- Ratha, D.; Mohapatra, S.; Silwal, A. 2010. *Outlook for remittance flows 2010–2011*, Migration and Development Brief (Washington, D.C., World Bank).
- Reed, L. 2011. *State of Microcredit Summit Campaign Report 2011* (Washington, D.C., Microcredit Summit Campaign).
- Rimansi. 2002. *Willingness to pay for life insurance: Market research study* (Manila).
- Robine, J.M.; Cheung, S.L.; Le Roy, S.; Van Oyen et F R Herrmann, F.R. 2007. *Report on excess mortality in Europe during summer 2003* (Brussels, EU Community Action Programme for Public Health).
- Robinson, J.; Yeh, E. 2009. *Transactional sex as a response to risk in Western Kenya*, Policy Research Working Paper (Washington, D.C., World Bank).
- Roth, J. 1999. *Informal micro-finance schemes: The case of funeral insurance in South Africa*, Social Finance Unit Working Paper No. 22 (Geneva, ILO).
- ; Garand, D.; Rutherford, S. 2006. "Long-term savings and insurance", in C. Churchill (ed.): *Protecting the poor: A microinsurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 94–108.
- ; McCord, M.J.; Liber, D. 2007. *The landscape of microinsurance in the world's 100 poorest countries* (Micro-insurance Centre).
- Rubinstein, A. 2006. Discussion of "Behavioural Economics", in *Advances in economics and econometrics: Theory and applications, Ninth World Congress*.
- Ruchismita, R. 2011. Executive Director, IFMR, Centre for Insurance and Risk Management. Telephone interview, May 2011.
- Sabri, B. 2003. "Healthcare financing in the African countries of the Eastern Mediterranean", in *International Social Security Review*, Vol. 56, No. 3, pp. 73–85.
- Samuelson, P. 1938. "A note on the pure theory of consumers' behaviour", in *Economica*, Vol. 5, No. 17, pp. 61–71.
- Sanlman. 2006. *Annual Report*, at: <http://www.sanlam.co.za> (accessed 2 Nov. 2011).
- Sarris, A.; Karfakis P.; Christiaensen, L. 2006. *Producer demand and welfare benefits of rainfall insurance in Tanzania*, FAO Commodity and Trade Policy Research Working Paper No. 18.
- Scheibehenne, B. 2008. *An experimental test of the choice overload hypothesis using chocolate*, unpublished manuscript (Germany, University of Mannheim).
- Schneider, P.; Diop, F. 2001. *Synopsis of results on the impact of community-based health insurance on financial accessibility to health care in Rwanda*, Health, Nutrition and Population Discussion Paper No. 28903 (Washington, D.C., World Bank).
- . 2004. "Why should the poor insure? Theories of decision-making in the context of health insurance", in *Health Policy And Planning*, Vol. 19, No.6, pp. 349–355.
- ; Hanson, K. 2006. "Horizontal equity in utilization of care and fairness of health financing: a comparison of micro-health insurance and user fees in Rwanda", in *Health Economics*, Vol. 15, No. 1, pp. 19–31.
- Schumpeter, J. 1942. "Creative destruction", in *Capitalism, socialism and democracy* (New York, Harper).
- Schwarz, D. 2010. "Regulating insurance sales or selling insurance regulation? Against regulatory competition in insurance", in *Minnesota Law Review*, Vol. 94, pp. 1707.
- Sebstad, J.; Cohen, M. 2000. *Microfinance, risk management and poverty* (Washington, AIMS).
- SegurCaixa Holding. 2008. *Annual Report*, at: www.laCaixa.es.
- Self-Employed Women's Association (SEWA). 2009. "Vimo SEWA's Insurance Products," SEWA Bank, at: <http://www.sewainurance.org/> [4 June, 2009].
- ; Ahmedabad, India, at: <http://www.sewa.org/SpecialEdition.asp>.
- Sepehri, A.; Sarma, S.; Simpson, W. 2006. "Does non-profit health insurance reduce financial burden? Evidence from the Vietnam living standards survey panel", in *Health Economics*, Vol. 15, No. 6, pp. 603–616.

- Setel, P.; Abeyasekera, S.; Ward, P.; Hemed, Y.; Whit- ing, D.; Mswia, R.; Antoninis, M.; Kitange, H. 2003. "Development, validation, and performance of a rapid consumption expenditure proxy for measuring income poverty in Tanzania: Experience from AMMP demographic surveillance sites", in *Population and Health Policies and Programs*, pp. 169–183, at: http://www.reading.ac.uk/ssc/publications/Inc_PovProx.pdf
- Shampanier, K.; Mazar, N.; Ariely, D. 2007. "Zero as a special price: The true value of free products", in *Market- ing Science*, Vol. 26, No. 6, pp. 742–757.
- Shankar, S.; Asher, M.G. 2009. "Micropensions in India: Issues and challenges", in *International Social Security Review*, Vol. 64, No. 2, pp. 1–21.
- Sharma, A.; Gupta, A.; Mohan, J. 2009. *Integrated insurance and risk mitigation solution for dairy farmers* (Chennai, India, CIRM).
- . 2010. *Livestock insurance: Lessons from the Indian experience*, Centre for Insurance and Risk Management Working Paper (Chennai, India, CIRM).
- ; Shukla A. 2010. *An exploration – Community based livestock insurance scheme, Vizianagaram*, Working Paper (Chennai, India, CIRM).
- Shepard, D. S.; Vian, T.; Kleinau, E. F. 1996. "Performance and impact of four health insurance programs in rural and urban areas of Zaire", in R. P. Shaw; M. Ainsworth (eds): *Financing health services through user fees and insurance: Case studies from sub-Saharan Africa*, World Bank Discussion Paper No. 294 (Washington, D.C.).
- Shetty, N.K.; Veerashekharappa, D. 2009. "Institutional innovations and access to micro-health insurance for the poor: Evidence from Karnataka", in *The Icfai University Journal of Risk and Insurance*, Vol. 6, No.1, pp. 50–68.
- Sigma. 2010. *Microinsurance – Risk protection for 4 billion people* (Swiss Re).
- Simanowitz A.; Sandmark, T. 2011. *Social performance indicators for microinsurance*, Workshop Report 5–7 Oct. (Luxembourg, Microinsurance Network).
- Simba, F. 2002. *Assessing the demand for microinsurance in Kenya* (Nairobi, Microsave).
- Simkhada, N.J.; Gautam, S.; Mishra, M.; Acharya, I.; Sharma, N. 2000. *Research on risk and vulnerability of rural women in Nepal* (Nepal, Centre for Micro Finance).
- Simões, R.L.G.; Salles, O.R.; Vieira, J.L.N.; de Faria Zettell, C.; Ramos Wagner Clemenceau Rodrigues, R.O.; Conceição, A.R. 2010. "SUSEP's Microinsurance Working Group Reports Part 1", in *Microinsurance in Brazil: Research Series Volume 1* (Rio de Janeiro, Brazil).
- Sinha, S. 2007. *Agriculture insurance in India*, CIRM Working Paper Series (Chennai, India, CIRM).
- Sinha, T.; Ranson, K.; Patel, F.; Mills, A. 2007. "Why have the members gone? Explanations for dropout from a community-based insurance scheme", in *Journal of International Development*, Vol. 19, pp. 653–665.
- Skees, J.; Enkh-Amgalan, A. 2002. *Examining the feasibility of livestock insurance in Mongolia*, World Bank Policy Research Working paper 2886 (Washington, D.C., World Bank).
- . 2008. "Innovations in index insurance for the poor in lower income countries", in *Agricultural and Resource Economics Review*, Vol. 37, pp. 1–15.
- Skipper, H.D. 1997. *Foreign insurers in emerging markets: Issues and concerns* (Washington, D.C., International Insurance Foundation).
- Small Enterprise Education and Promotion Network (SEEP). 2010. *Consumer protection principles in practice: A framework for developing and implementing a pro-client approach to microfinance*, Progress Note No. 14 (Washington, D.C.).
- Smit, H.; Smith, A.; Chamberlain, D. 2009. *A global survey of passive microinsurance distribution channels* (Bellville, South Africa, Cenfri), at: www.cenfri.org.
- ; Smith, A. 2010a. *Utility and database microinsurance distribution in Brazil: The case of QBE Brazil Seguros, ACE group and Aon Affinity* (Bellville, South Africa, Cenfri), at: www.cenfri.org.
- ; Smith, A. 2010b. *Microinsurance distribution through retail stores in Brazil: Insurer Mapfre Seguros, retailer Casas Bahia and cellular provider Vivo* (Bellville, South Africa, Cenfri), at: www.cenfri.org.
- Smith, A.; Chamberlain, D.; Smit, H.; Ncube, S.; Chelwa, G. 2010a. *Kenya microinsurance landscape: Market and regulatory analysis* (Bellville, South Africa, Cenfri), at: www.cenfri.org.
- ; Matul, M.; Ncube, S.; Bester, H. 2010b. *South African Insurance Association Consumer Education Programme: 2005–2009* (Geneva, ILO, Cenfri).
- ; Smit, H. 2010a. *Case study: Hollard Insurance and Take it Eezi*, at: www.cenfri.org.
- ; —. 2010b. *Case study: Hollard Insurance and Pep*, at: www.cenfri.org.
- ; —. 2010c. *Case study: Metropolitan Cover2Go*, at: www.cenfri.org.
- ; —. 2010d. *Case study: Shoprite*, at: www.cenfri.org.
- Smith, K.; Sulzbach, S. 2008. "Community-based health insurance and access to maternal health services: Evidence from three West African countries", in *Social Science and Medicine*, Vol. 66, pp. 2460–2473.
- Smith, V.; Watts, M. 2009. *Index based agricultural insurance in developing countries: Feasibility, scalability and sustainability* (Bill & Melinda Gates Foundation).
- Solomon, S.; D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller. (eds). 2007. *Contribution of Working Group I to the fourth assessment report of the Intergovernmental Panel on Climate Change* (Cambridge, United Kingdom and New York, NY, USA).
- Srinivasan, N. 2010. *Microfinance India: State of sector report 2010* (New Delhi, India, Sage Publications).
- Stålhammar, N.O. 1996. "An empirical note on willingness to pay and starting-point bias", in *Medical Decision Making*, Vol. 16, No. 3, pp. 242–247.

- Sterling, R.** 2000. *Insurance and private pensions compendium for emerging economies. Book 1, Part 2 (1)b: Insurance regulation and supervision in OECD countries, Asian economies, Latin-American countries and CEEC and NIS countries* (Paris, Organisation for Economic Co-operation and Development).
- Swiss Re.** 2010a. *Natural catastrophes and man-made disasters in 2009: Catastrophes claim fewer victims, insured losses fall*, Sigma Report No. 01 (Zürich).
- . 2010b. *Microinsurance – Risk protection for 4 billion people*, Sigma Report No. 06 (Zürich).
- . 2011. *Swiss Re and partners break new ground with cholera protection for women micro-entrepreneurs in Haiti and weather insurance for farmers in Senegal*, at: http://www.swissre.com/media/news_releases/nr_20110920_CGI_Commitments.html
- Tarazona, A.; Trivelli, C.** 2005. *Situación del financiamiento rural en Piura*, Project report (Lima, Instituto de Estudios Peruanos).
- Tendulkar, S.; Radhakrishna, R.; Sengupta, S.** 2009. *Report of the Expert Group to Review the Methodology for Estimation of Poverty* (India, Government of India Planning Commission).
- Thaler, R.H.** 1990. "Anomalies: Saving, fungibility, and mental accounts", in *Journal of Economic Perspectives*, Vol. 4, No. 1, pp. 193–205.
- ; **Sustein, C.** 2008. *Nudge: Improving decisions about health, wealth, and happiness* (New Haven, CT, Yale University Press).
- Thomas, D.; Frankenberg, E.** 2002. "The measurement and interpretation of health in social surveys", in C. Murray et al. (eds): *Measurement of the global burden of disease* (Geneva, World Health Organization), pp. 387–420.
- Thornton, R. L.** 2008. "Climate change and poverty in Africa: Mapping hotspots of vulnerability", in *Journal of Agricultural and Resource Economics*, Vol. 2, No. 1.
- ; **Hatt, L. E.; Field, E. M.; Islam, M.; Solis Diaz, F.; Azucena Gonzalez, M.** 2010. "Social security health insurance for the informal sector in Nicaragua: A randomized evaluation", in *Health Economics*, Vol. 19, pp. 181–206.
- Trommershäuser, S.; Lindenthal, R.; Krech, R.** 2006. "The promotional role of government", in C. Churchill (ed.): *Protecting the poor: A microinsurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 508–523.
- Trujillo, A.; Portillo, J.; Vernon, J.** 2005. "The impact of subsidized health insurance for the poor: Evaluating the Colombian experience using propensity score matching", in *International Journal of Health Care Finance and Economics*, Vol. 5, No. 3, pp. 211–239.
- Trustco Group Holdings Limited.** 2011. *Financial Results 2011*, Windhoek, 26 May 2011, at: http://www.tgina/downloads/Financial_results_31_March_2011.pdf
- Tversky, A.; Kahneman, D.** 1991. "Loss aversion in riskless choice. A reference-dependent model", in *Quarterly Journal of Economics*, Vol. 106, pp. 1039–1061.
- UNAIDS.** 2008. *2008 Report on the Global AIDS Epidemic: Executive summary* (Geneva).
- United Nations (UN).** 1998. *Kyoto Protocol to the United Nations Framework Convention on Climate Change*.
- United Nations, Department of Economic and Social Affairs (UN DESA), Population Division.** 2009. *International Migration, 2009: Wallchart*, United Nations publication Sales No. E.09.XIII.8 (United Nations).
- United Nations Development Program (UNDP).** 2008. "Fighting climate change: Human solidarity in a divided world", in *Human Development Report* (New York).
- United Nations Entity for Gender Equality and the Empowerment of Women (UNIFEM)**, at: http://unwomen-nc.org.sg/gender_issues_datasheet_1.shtml
- United Nations Framework Convention on Climate Change (UNFCCC).** 2011. *Risk management approaches to address adverse effects of climate change – Insurance*, at: http://unfccc.int/adaptation/adverse_effects_and_response_measures_art_48/items/4971.php
- United States Agency for International Development (USAID).** 2006. *Assessment on how strengthening the insurance industry in developing countries contributes to economic growth* (Washington, D.C.).
- U.S. Climate Change Science Program.** 2008. *Our changing planet* (US Climate Change Science Program, the Subcommittee on Global Change Research).
- Valvekar, H.K.** 2007. *Innovative finance for sustainable development*, presented at UNDESA Expert Group Meeting, at: <http://www.un.org/esa/sustdev/sdissues/finance/egm2007/presentations.htm> [Oct. 2007].
- Vaughan, E.** 1989. *Fundamentals of risk and insurance* (New York, USA, John Wiley and Sons).
- Villegas, C.C.** 2010. *Microinsurance Regulation in Peru*, presented at Microinsurance – Promoting Successful Regulatory and Supervisory Approaches for Increased Access to Insurance, Basle, July 2010.
- Virani, A.** 2009. *Health microinsurance experience of Grameen Koota* (Chennai, India, CIRM).
- Vollbrecht, J.** 2000. *Insurance and private pensions compendium for emerging economies. Book 1, Part 2 (1)a: Insurance regulation and supervision in OECD countries, Asian economies, Latin-American countries and CEEC and NIS countries* (Paris, Organisation for Economic Co-operation and Development).
- Waddington, H.** 2009. *Financing better healthcare for all*, International Initiative for Impact Evaluation Brief Number No. 11 (New Delhi, India, iie).
- Wagstaff, A.; Pradhan, M.** 2005. *Health insurance impacts on health and nonmedical consumption in a developing country*, Policy Research Working Paper 3563 (Washington, D.C., World Bank).
- . 2007. *Health insurance for the poor: Initial impacts of Vietnam's health care fund for the poor*, Policy Research Working Paper Series 4134 (Washington, D.C., World Bank).

- ; Lindelow, M.; Jun, G.; Ling, X.; Juncheng, Q. 2009. "Extending health insurance to the rural population: An impact evaluation of China's New Cooperative Medical Scheme", in *Journal of Health Economics*, Vol. 28, No. 1, pp. 1–19.
- Walravenm, G. 1996. "Willingness to pay for district hospital services in rural Tanzania", in *Health Policy and Planning*, Vol. 11, No. 4, pp. 428–437.
- Walton, D.; Bathurst, J. 1998. "An exploration of the perceptions of the average driver's speed compared to perceived driver safety and driving skill", in *Accident Analysis and Prevention*, Vol. 30, No. 6, pp. 821–830.
- Wall Street Journal*. 2010. "Max New York Life's lesson in insuring a rural foothold", at: <http://online.wsj.com/article/SB127296921636786509.html> [Sep. 2011].
- Warner, D.C.; Schneider, P.G. 2004. *Cross-border health insurance: Options for Texas*, Policy Research Project on Cross-Border Health Insurance (Austin, Lydon B. Johnson School of Public Affairs, University of Texas at Austin).
- Warner, K.; Zissner, M.; Kref, S.; Höppe, P.; Bals, C.; Linnerooth-Bayer, J.; Haas, A.; Gurenko, E.; Loster, T.; Burton, I. 2010. *Solutions for vulnerable countries and people: Designing and implementing disaster risk reduction and insurance for adaptation* (Bonn, Germany, Munich Climate Insurance Initiative).
- Weigand, C.; Grosh, M. 2008. *Levels and patterns of safety net spending in developing and transition countries*, SP Discussion Paper No. 0817 (Washington D.C., World Bank).
- Weinstein, N.D. 1980. "Unrealistic optimism about future life events", in *Journal of Personality and Social Psychology*, Vol. 39, No. 5, pp. 806–870.
- Werner, W.J. 2009. "Micro-insurance in Bangladesh: Risk protection for the poor?", in *Journal of Health Population and Nutrition*, Vol. 27, No. 4, pp. 563–573.
- Wiedmaier-Pfister, M.; Chatterjee, A. 2006. "An enabling environment for microinsurance", in C. Churchill (ed.): *Protecting the poor: A microinsurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 488–507.
- ; Klein, B.; Denker, H.; Wagner, J. (eds). 2009. *BMZ Concepts 176: Small premiums – high level of security. Microinsurance and the development of financial systems* (Bonn, Federal Ministry of Economic Cooperation and Development (BMZ)).
- Wiesmann, D.; Jütting, J. 2000. "The emerging movement of community-based health insurance in sub-Saharan Africa: Experiences and lessons learned", in *Afrika Spektrum*, Vol. 35, No. 2, pp. 193–210.
- Wipf, J.; Liber, D.; Churchill, C. 2006. "Product design and insurance risk management", in C. Churchill (ed.): *Protecting the poor: A microinsurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 146–173.
- ; Garand, D. 2006. "Pricing microinsurance products", in C. Churchill (ed.): *Protecting the poor: A microinsurance compendium* (Geneva and Munich, ILO and Munich Re Foundation), pp. 238–253.
- . 2008. *Performance indicators for microinsurance: A handbook for microinsurance practitioners*, 1st Edition, Appui au Développement Autonome (Luxembourg).
- . 2010. *Performance indicators for microinsurance: A handbook for microinsurance practitioners*, 2nd Edition, Appui au Développement Autonome (Luxembourg).
- Women's World Banking (WWB). 2003. *WWB Savings Report with ADOPEM* (Dominican Republic).
- . 2005. *WWB Gender Report with Al Amana* (Morocco).
- . 2006a. *WWB Savings Report with PADME* (Benin).
- . 2006b. *WWB Savings Report with Mi-Bospo* (Bosnia & Herzegovina).
- . 2006c. *WWB Gender Report with MFW* (Jordan).
- . 2006d. *WWB Gender Report with ADOPEM* (Dominican Republic).
- . 2007a. *WWB Healthcare Financing Report with MFW* (Jordan).
- . 2007b. *WWB Healthcare Strategy with MFW* (Jordan).
- . 2007c. *WWB Savings Report with Kashf Foundation* (Pakistan).
- . 2008a. *WWB Healthcare System Analysis with FMMB* (Colombia).
- . 2008b. *WWB Gender Report with ADOPEM* (Dominican Republic).
- . 2008c. *WWB Gender Report with Kashf Foundation* (Pakistan).
- Woodruff, R. B. 1997. "Customer value: The next source for competitive advantage", in *Journal of the Academy of Marketing Science*, Vol. 25, No. 2, pp. 139–153.
- World Bank. 2005. *Managing agricultural production risk: Innovations in developing countries* (Washington, D.C.).
- . 2007. *Vietnam Development Report 2008: Social protection* (Hanoi, World Bank).
- . 2009. *The global financial crisis: Assessing vulnerability for women and children* (Washington, D.C.).
- . 2011a. *Country and lending groups*, at: <http://data.worldbank.org/about/country-classifications/country-and-lending-groups> (accessed at Sept. 28 2011).
- ; 2011b. *Weather index insurance for agriculture: Guidance for development practitioners* (Washington, D.C.).
- World Federation of Insurance Intermediaries (WFII). 2010. *WFII policy position paper on Microinsurance* (WFII, Washington, D.C.).
- World Health Organization (WHO). 2000. *World Health Report 2000: Health systems improving performance* (Geneva).
- World Meteorological Organization (WMO). 2010. "2010 equals record for world's warmest year", Press Release No. 906, at: http://www.wmo.int/pages/media-centre/press_releases/pr_906_en.html [20 Jan., 2010].

Wright, G.; Mutesasira, L. 2001. *The relative risks to the savings of poor people* (Nairobi, MicroSave).

Xu, K.; Klavus, J.; Kawabata, K.; Evans, D.B.; Hanvoravongchai, P.; Ortiz, J.P.; Zeramdini, R.; Murray, C.J.L. 2003. "Household health system contributions and capacity to pay: Definitional, empirical, and technical challenges", in C.J.L. Murray; D.B. Evans (eds): *Health Systems Performance Assessment: Debates, methods and empiricism* (Geneva, World Health Organization).

Ying, X.H.; Hu, T.W.; Ren, J.; Chen, W.; Xu, K.; Huang, J.H. 2007. "Demand for Private Health Insurance in Chinese Urban Areas", in *Journal of Health Economics*, Vol. 16, No. 10, pp. 1041–1050.

Yip, W.; Wang, H.; Hsiao, W. 2009. *"The impact of Rural Mutual Health Care on access to care: Evaluation of a social experiment in rural China"* (Cambridge, MA, Harvard School of Public Health Program in Health Care Financing).

Young, P.; Mukwana, P.; Kiyaga, E. 2006. *Microinsurance: Exploring ways to assess its impact* (Microfinance Opportunities).

Young, S. 2010. *CCRIF: Demonstrating the utility of risk pooling as a climate change adaptation tool*, presented at MCII side event, COP-16, Cancún, Mexico, 7 Dec. 2010.

Zelege, T. 2011. *Insurance for all*, presented at MFW4A conference, Addis Ababa.

Zingales, L. 2009. "The future of securities regulation", in *Journal of Accounting Research*, Vol. 47, No. 2, pp. 391–425.

Zuluaga, S. 2010. *Case studies on the use of alternative models for the distribution of microinsurance in Colombia* (Bellville, South Africa, Cenfri), at: www.cenfri.org.

Zurich Financial Services Group. 2010. *Insurance and technology to better serve emerging consumers: Learning to improve access and service* (Zurich).

—. 2011. *Insurance and technology to better serve emerging consumers: Learning to improve access and service* (Zurich).

Zweifel, P.; Eisen, R. 2000. *Versicherungsökonomie* (Springer Verlag, Berlin).

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Microinsurance is a critical tool to help poor people manage risks efficiently. The increasing interest for base-of-the-pyramid insurance is fueling the rapid development of innovative products and delivery mechanisms that combine sustainability and value to clients. This volume comes at the right time to pull together key lessons so far and distill the latest innovations from an impressive roster of market leaders.

Tilman Ehrbeck

CEO, Consultative Group to Assist the Poor (CGAP)

This volume reinforces our experience that microinsurance works well when it stands on four strong pillars. First, the product has to deliver tangible value to the bottom of the pyramid at an affordable price point. Second, the business has to make commercial sense to ensure long-term sustainability. Third, the programme has to be aligned with the national policies on social protection and financial inclusion. A good working relationship and shared understanding between the government and the insurance company is a great enabler. Last but not least, microinsurance must leverage technology to enhance outreach, lower distribution costs, simplify processes and improve the quality and consistency of delivery.

Bhargav Dasgupta

CEO, ICICI Lombard

This insightful compendium makes a critical contribution to advancing financial inclusion and the impact of microinsurance around the globe, furthering the understanding and discussions among regulators, supervisors and key stakeholders in improving inclusive insurance markets.

Yoshi Kawai

Secretary General, International Association of Insurance Supervisors (IAIS)

This second volume of *Protecting the poor* is a unique collection of recent practices and emerging ideas in microinsurance. It covers numerous innovations that have emerged in recent years to meet the challenges of providing insurance to low-income people, from new products and delivery channels to consumer education tools, while examining changes in regulations, providers and schemes. As the microinsurance community dramatically evolves and millions more low-income households have access to better insurance cover, this timely second volume will be an invaluable resource for policymakers, insurers, academics and NGOs.

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