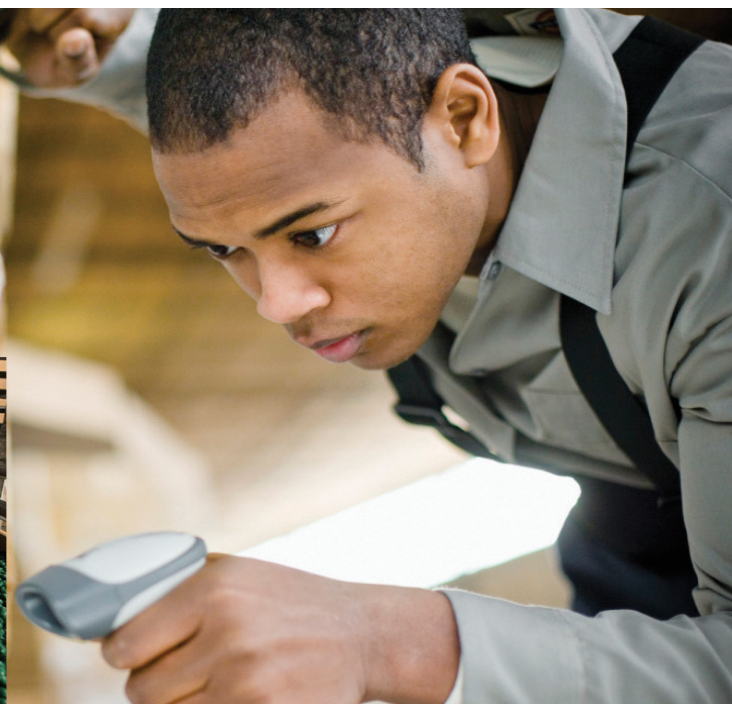
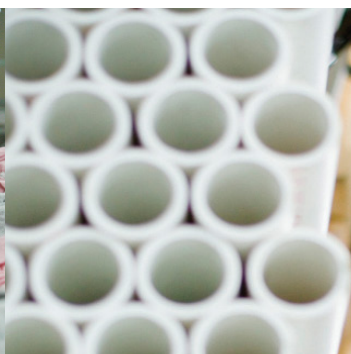


IFC JOBS STUDY

ASSESSING PRIVATE SECTOR CONTRIBUTIONS
TO JOB CREATION AND POVERTY REDUCTION

JANUARY | 2013



Ministry of Foreign Affairs of the
Netherlands



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra



UKaid
from the Department for
International Development



**International
Finance Corporation**
World Bank Group

Preface

This report is the result of an open-source study to assess the direct and indirect effects of private sector activity on job creation. The report examines how and under what conditions the private sector can best contribute to job creation and poverty reduction, drawing on a review of the literature and evaluations; surveys of more than 45,000 businesses in over 100 countries; a website, blog, and essay competition to solicit outside views; macro and micro case studies of IFC clients; and IFC's own operational experience and lessons learned.

The report aims to elicit practical lessons that can be applied to the work of IFC, policy-makers, and other financial institutions focused on the private sector.

IFC, as the largest global development institution focused on the private sector in developing countries, is well placed to lead this study. The study has been closely coordinated with the World Bank's World Development Report (WDR) 2013 on Jobs and draws upon the experience of relevant departments within the World Bank and IFC as well as the expertise of our external consultants, partners, and clients.

The report was prepared by a team led by Roland Michelitsch under the overall guidance of Nigel Twose, director of IFC's Development Impact Department. The core team of authors included Gabriela Armenta, Ferran Casadevall-Massuet, Namita Datta, Anastasiya Denisova, Rijak Grover, Luz Leyva, Junko Oikawa, and Anqing Shi. The report greatly benefited from the inputs of an external technical advisory panel, whose members were Arlete Georgete Jonass Patel Alves (CEO, Supermercados Ka da Terra), Ragui Assaad (University of Minnesota), Major Gen. (Retired) Amjad Khan Chowdhury (CEO, PRAN Group), Mary Hallward-Driemeier (World Bank), Rafael Lalive (University of Lausanne), Martin Rama (World Bank), and Raymond Torres (International Labour Organization). Romina Bandura (ILO) and Kathleen Beegle (World Bank) also actively contributed to the panel's feedback.

IFC and World Bank colleagues helped with several case studies and research that were conducted as part of the report. Ruchira Kumar, Hayat Abdulahi Abdo, and Oxana Miliaeva produced the micro case studies for the manufacturing and

agribusiness sectors. Mahima Khanna and Govinda Timilsina participated in the micro case study for the infrastructure section. Garima Sahai made possible the micro case study for access to finance. The consulting firm Steward Redqueen led the production of the macro case studies. Alla Khodakivska and Jean-Luc Park also produced background documentation relating to the financial sector. Gloria Paniagua and Anastasiya Denisova produced the meta-evaluation, and Miriam Bruhn contributed as peer reviewer. Finally, Federica Saliola and Jon Vierk Bernt conducted the analysis of Enterprise Survey data.

The report also includes the inputs of many operational colleagues in IFC and the World Bank, among them Alejandro Alvarez, Gokhan Akinci, M. Assaid Amlaiky, Belinda Amoah, Clive Armstrong, Victoria Bakhtina, John Barham, Najy Benhassine, Antoine Courcelle-Labrousse, Daniel Crabtree, Daniel Goldblum, Rapti Goonesekere, Douglas Grayson, Neil Gregory, Juliana Guaqueta Ospina, Pierre Guislain, William Haworth, Armando Heilbron, Richard Henry, Zenaida Hernandez Uriz, Syed Estem Dadul Islam, Sebastian James, Alan Johnson, Arthur Karlin, Mohammed Ali Khan, Mary-Jean Lindile Moyo, Liane Asta Lohde, Amy Luinstra, Syed Mahmood, Mouayed Makhoulf, Sumit Manchanda, Martha Martinez Licetti, Andrei Mikhnev, Melina Mirmulstein, Carmen Niethammer, Aminur Rahman, Sreekala Ramanathan, Thomas Rehmann, Carlos Roberto Griffin, Elsa Rodriguez Felipe, Adam Sack, Massimiliano Santini, Katherine Scaife Diaz, Warrick Smith, Mathieu Verhaeghe, and Leanne Viviers.

The production of the report was supported by Thoko Moyo, Gloria Orraca-Atayi and Katherine Hutt Scott, and the initial phase by Rupa Ranganathan.

The team would like to acknowledge the generous support of the governments of the Netherlands (through its Ministry of Foreign Affairs), Switzerland (through the State Secretariat for Economic Affairs) and the United Kingdom (through its Department for International Development).

The full version of this report and detailed version of all associated case studies can be found at www.ifc.org/jobcreation.

MESSAGE FROM JIN-YONG CAI

IFC Executive Vice President and Chief Executive Officer

600 million. The number is so large, it's almost incomprehensible.

Yet that's how many new jobs the world needs by 2020 just to keep up with the globe's surging population.

Getting there won't be easy. It will be impossible without the private sector.

Joblessness, especially among the poor, is a global crisis. And for IFC, the world's largest development institution focused exclusively on the private sector, it's a top priority. Most of the world's 200 million unemployed are women and young people living in developing countries. Without work, they can't care for themselves or their families.

The result: poverty, and social and economic unrest.

The private sector, which provides nine out of 10 jobs in developing countries, offers the best solution to the challenge of unemployment. IFC can play a critical role.

By targeting the private sector, we complement the World Bank's work with governments. In fiscal year 2012, we invested more than \$20 billion, including funds mobilized from other investors, and spent almost \$200 million on more than 630 advisory projects in 105 countries. This investment and advice helps countries address factors that can be the most important obstacles to job growth: investment climate, infrastructure, access to finance, and education and skills.

Our clients create jobs. We know it because we've actively tracked direct employment for the past seven years. But we also know that the impact of our work goes far beyond the jobs created directly by investment clients. In fact, those jobs are only a small portion of the employment generated by IFC's work.

Take our client Orissa Cement in India, for example. A loan from IFC allowed it to set up a plant and expand its capacity, directly creating around 300 jobs in four years and indirectly creating 7,200 more.

To get a better look at how IFC contributes to job creation we commissioned this study. Our team left no stone unturned as it examined how the private sector can best contribute to job creation and poverty reduction. It reviewed reams of literature, evaluated surveys of more than 45,000 businesses in over 100 countries, solicited outside views through a website, blog, and essay competition, conducted case studies of IFC clients, and sought to learn from our own operational experience.

The study focuses on practical lessons, and seeks to find out what types of activities are most likely to have the greatest impact on job creation, and how these activities affect different societal groups. It complements the World Bank's recent World Development Report on Jobs by offering practical lessons and recommendations to help the private sector create more high-quality jobs.

The Jobs Study provides useful insights into how IFC and the World Bank Group can further strengthen the employment-creation effects of our activities and contribute even more to improving the quality of those jobs.

Much more work lies ahead. We will tackle it forcefully—supporting our clients and helping policy makers gain new practical insights into the private sector's role in creating jobs in developing countries.



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CHAPTER 1

SETTING THE STAGE: WHY JOBS MATTER: A CONCEPTUAL FRAMEWORK FOR JOB CREATION

This introductory chapter presents the motivation for producing this report and the conceptual framework that guides its structure. The catalyst is the developmental impact of jobs. Jobs boost living standards, raise productivity, and foster social cohesion. Jobs also are the principal way out of poverty. To take advantage of this potential, the world must act urgently to overcome a double challenge. First, some 200 million people are currently unemployed, many of them young people, and it is estimated that by 2020, some 600 million jobs need to be created, mainly in Africa and Asia, largely due to demographic trends. Second, the new jobs must be good jobs. Almost a third of workers are still poor, and about half—particularly women—are informal workers. In some of the poorest countries, informality and underemployment, rather than unemployment, are the main issues.

The private sector, which provides some 90 percent of jobs in developing countries, must be at the core of any response to this double challenge. Therefore, it is crucial to understand the constraints that private companies face in creating jobs, and the public sector and development finance institutions must help build an environment where these obstacles are removed or minimized. This report aims to help by providing an understanding of how the private sector generates jobs, what constraints limit job creation, and how these problems can be mitigated.

This chapter also introduces a conceptual framework of the theoretical determinants of and constraints on job creation, which will guide the structure of the report.

1. Jobs are much more than monetary income

The World Bank's *World Development Report 2013* identifies three ways that jobs contribute to development: Jobs boost living standards, raise productivity, and foster social cohesion.¹ Indeed, development and job creation are intrinsically linked and interdependent in the economic and social spheres. Within the economic domain, jobs provide the main source of income, thus determining living standards and consumption possibilities at the individual level. Future income is also partly dependent on current labor activity, since human capital is accumulated and skills are maintained and improved through daily work.

Jobs are also the principal way out of poverty for people in developing countries. The associated increase in income allows consumption of basic goods and services above poverty thresholds: as average household incomes rise by 2 percent per year, poverty rates are reduced between 1.2 and 7 percent, depending on country circumstances.² In fact, the top two reasons why 60,000 poor people cited jobs as their best pathway out of poverty were (i) through self-employment, i.e., running their own business, (ii) through income from wages or salaries.³

At the aggregate level, every job can create economic value by reallocating resources to productive uses, by providing new opportunities for exchange of goods and ideas, and by contributing to common goods and services. As long as there are no significant distortions, such as subsidies or environmental externalities, all these factors promote productivity gains and overall economic growth, from which all members of society benefit. But jobs can become even more transformational when they contribute to additional impacts such as augmenting competition, generating demonstration effects, or reducing gender gaps.

**600 million jobs
needed by 2020.**

Source: World Bank's *World Development Report 2013*.

Finally, the labor market is among the prominent channels through which people interact with the rest of society. In turn, this interaction generates a sense of belonging, of social identity, and of self-esteem or personal satisfaction.⁴ This sense of community is an important building block of social cohesion. Every additional job created spreads welfare within society and thus ensures that development is shared and contributed to by all of its members.

1.1 But the picture is more nuanced than it seems

The linkages between jobs and development are in reality more complex, in part because they are bi-directional. Jobs that do not meet environmental and social standards might have a lower development or transformational impact or even a negative impact. Vulnerable employment, often in the form of informal employment, is frequently associated with poor productivity, fewer rights and less protection for workers, and has barely decreased worldwide in the last decade—from 52.8 percent to 49.1 percent.⁵ Low-paid jobs, informal jobs, and vulnerable jobs do not have the same development impact as well-paid and formal ones. Other distortions might also emerge. For example, a job in a protected industry that is artificially sustained through transfers financed with taxes might impose net costs to the overall economy.⁶

Economic growth contributes significantly to poverty reduction and to higher living standards for poor people, but the extent to which this happens differs across countries and circumstances. While jobs are seen as the main way to escape from poverty, factors such as the access to basic services and the geographical and sectoral patterns of growth affect the degree of inclusiveness and poverty reduction. Working poverty is a reality in many countries, a situation in which the development impact of jobs is again unmet. Informal workers overall are much more likely to be poor than workers in the formal sector of an economy, and economies with larger shares of informal sectors also tend to be poorer.⁷ The corollary is that the quantity and quality of jobs are equally important.

1.2 The double jobs challenge

The world is thus facing a double jobs challenge: creating a large number of jobs and creating better jobs. The economic crisis has added 27 million new unemployed, leading to a total of 200 million unemployed worldwide in 2011.⁸ More than 600 million jobs must be created in the next decade to ensure that unemployment does not increase even further as millions of young people enter the workforce.⁹ Unemployment affects young people disproportionately; they are almost three times as likely to be unemployed as adults (these ratios are higher in the Middle East and North Africa region).¹⁰ High youth unemployment rates can deteriorate their long-term labor prospects and social attachment, as well as the prospects for the future of their countries.

In many developing countries the challenge is not unemployment but informality, working poverty or underemployment (working less than desired or below the worker's qualifications). Thus, unemployment figures often do not reveal the true scale and nature of the employment problem. In other words, the quantity challenge is accompanied by the quality challenge. IFC Performance Standard 2 recognizes that the pursuit of employment creation must be balanced with the protection of basic rights for workers. Environmental sustainability also determines the developmental impact of jobs. However, informality and poverty still affect a significant share of workers around the world; although the percentage of workers who are poor has decreased significantly in the last decade, it still stands at 30 percent of the total number of workers.¹¹ Some of the improvements in labor market outcomes after the crisis, where they have occurred, have relied heavily on low-paying jobs, involuntary part-time jobs, and informal jobs.¹² If this trend is not reversed, the job recovery may be contributing poorly to long-term development and may not be sustainable itself. Therefore, the appropriate context must be in place so that job creation and growth are inclusive; protecting the basic rights of workers and leading to poverty reduction in all regions. Chapter 10 addresses quality of jobs more specifically.

1.3 Specific needs in specific regions

The nature of the jobs challenge varies by region, due to different demographic, institutional, and socioeconomic factors, and therefore so does the nature of the best policy responses. For example, unemployment rates are currently the highest in the Middle East and North Africa (MENA) region (about 10 percent), more than double those of East Asia and South Asia,

Table 1.1: Contribution of jobs to socioeconomic development

| | Individual level | Collective level |
|----------------------|--|------------------|
| Economic development | Income and consumption, poverty escape | Economic growth |
| Social development | Self-esteem, sense of community | Social cohesion |

which have the lowest rates (at about 4 percent; see figure 1.1).¹³ Youth unemployment rates in the MENA region are particularly high, because job creation in the last years did not compensate for the even stronger growth of labor supply for this age bracket.¹⁴

However, as mentioned above, unemployment is not the main challenge in many countries. While unemployment rates are comparatively low in South Asia, both vulnerable employment and working poor remain major policy challenges despite recent progress (see figure 1.2). The same is true of Sub-Saharan Africa.¹⁵

East Asia, especially China, enjoys low unemployment rates and a strong decline since 2000 in the number and share of workers below the poverty line, but it faces an aging workforce in coming decades.¹⁶ Aging and migration are also looming threats to the labor market in Eastern Europe and Central Asia.¹⁷ Finally, Latin America and the Caribbean have witnessed progress in recent years in terms of increasing employment and decreasing vulnerable employment, but low levels of productivity remain a challenge.¹⁸

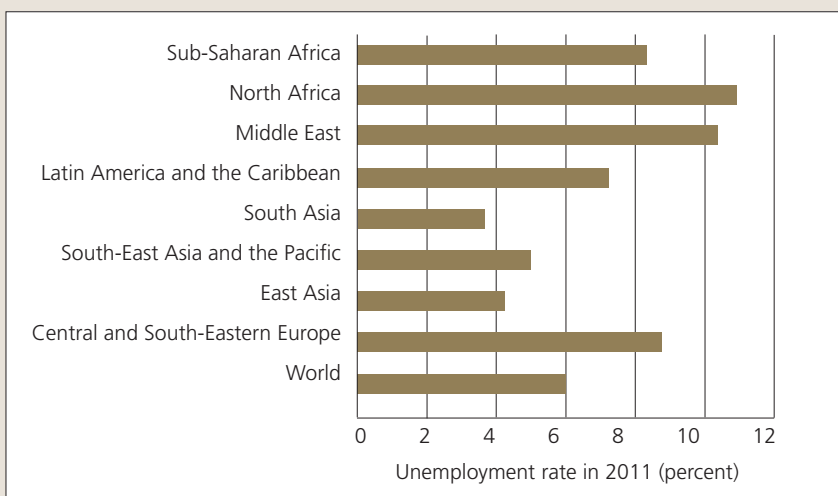
1.4 The role of the private sector, and obstacles to employment creation

The private sector must be at the core of any approach designed to address the jobs challenge, as it provides some 90 percent of the jobs in the world.¹⁹ Private sector job creation is inextricably linked to overall development and poverty reduction, making it crucial to understand how the private sector creates jobs, what obstacles limit job creation, and how those obstacles can be mitigated. This is precisely the supporting role of the public sector: provide the necessary macroeconomic environment and a supportive investment climate. Development finance institutions can support the public sector in that process, in addition to working directly with private companies.

1.5 Conclusion

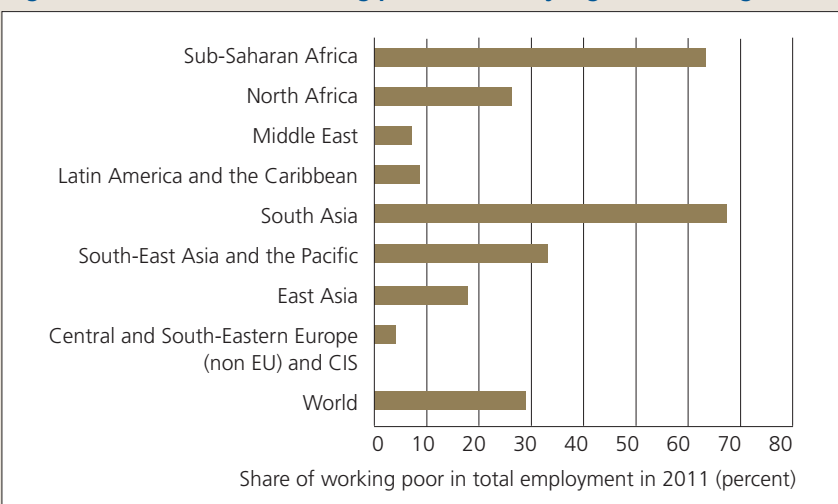
Development cannot take place without jobs. Therefore, the world needs to act now to address the enormous jobs challenge that confronts it. The main message for policymakers is that job creation, socioeconomic development, and poverty reduction are not independent, and thus policies aimed at these should be designed and implemented in an integrated manner.²⁰ In particular, job policies should be a central part of any development policy, and they should tackle the double-sided challenge of generating more jobs and better jobs. The second message is that because the private sector is the main engine of growth

Figure 1.1: Unemployment rates vary by region



Source: ILO (2012). EU: European Union. CIS: Commonwealth of Independent States.

Figure 1.2: The share of working poor is still very high in some regions



Source: ILO (2012). Poverty line at US\$2 per day. EU: European Union. CIS: Commonwealth of Independent States.

and job creation, it is fundamental to understand both what drives job creation and what obstacles prevent the private sector from generating jobs. By facilitating job creation and inclusive private sector-led growth, policymakers can promote social and economic development suitable for the different needs of each region.

This report aims to understand the effects of constraints and of policies removing them on job creation, while identifying the circumstances under which these policies are likely to work. The report also contains some estimates of the magnitude of the employment-generation effects.

2. Constraints to job creation: a conceptual framework

| |
|--|
| Macroeconomic policies |
| Investment climate institutions and infrastructure |
| Labor market regulations and institutions |
| Education and skills |
| Social Protection |

This part of the chapter outlines the structure of the report and the framework upon which it is based. The report builds on the World Bank Group framework known as **MILES**²¹ for thinking about constraints to job creation.

This report approaches job creation from the point of view of the basic framework of labor supply and labor demand. On the demand side, job creation is influenced by policy fundamentals such as **Mac**roeconomic and fiscal stability, **I**nvestment climate and **I**nfrastructure,

while **E**ducation and skills influence both the demand for and supply of labor.²² This report addresses four constraints or obstacles to job creation as identified by private sector firms and that can be addressed by the work of development finance institutions. These four constraints form part of **I**, **L**, **E** and **S**²³ of the MILES framework, and are: access to finance, infrastructure, investment climate, and skills.²⁴ The reasons for choosing these particular constraints and their importance are presented in the chapter on Constraints.

The chapter on Investment Climate addresses the institutions and touches on social protections and labor regulations that cover I, L and S of the MILES framework. The chapter on Access to Infrastructure clearly addresses I. The chapter on Access to Finance falls under the I, and the chapter on Skills and Training covers the E.

The **MILES** framework also covers macroeconomic and social safety net factors that affect job creation. However, these are typically beyond the realm of private sector companies, or of development finance institutions (DFIs) that work with the private sector. This report thus focuses on the four constraints mentioned above as the most relevant to private sector interventions and operations of private sector DFIs.

2.1 Labor market: supply and demand

As does any market, the labor market has a demand side and a supply side:

- *Labor demand* represents the number of workers that firms are willing to hire at any given wage rate.
- *Labor supply* indicates the number of workers willing to work at any given wage rate.

Ideally the economy should be at an equilibrium where for each skill level the wage is such that labor demanded equals to labor supplied and we only observe the “natural” rate of unemployment, which happens due to workers looking for jobs after graduation, switching jobs, or changing their skills in response to structural change. Private sector interventions that shift either supply or demand for labor, moving the equilibrium to one with more or less employment, are addressed in this report. Tools used to estimate the employment effects of private sector interventions and challenges associated with using them are discussed in the chapter on Estimating Economy-wide Job Creation Effects, while the chapter on How the Private Sector Creates Jobs in Developing Economies presents an analysis of current employment trends in the developing world.

However, developing countries are characterized by a relatively large proportion of people being engaged in own-account employment (for example, micro-enterprises that consist of just one person, who is frequently also the owner.) There enterprises do not generate labor demand as we think of it unless they grow, which is conditional on their business model benefiting from growth and obstacles to growth being removed.

2.2 Labor demand

Firms’ hiring decisions shape labor demand. According to classical economic theory, firms are profit maximizers. In this stylized model, firms derive revenues from selling their output, which is produced using capital (physical capital: e.g., machines, factories, etc.), labor, and sometimes land. Firms have to pay wages to each worker, and often benefits as well (such as health insurance, retirement benefits, etc). The compensation (wages and benefits) paid to each worker is a cost to a firm. Firms

will be hiring workers as long as the value an additional worker generates for the firm (in the form of contribution to profit) exceeds the compensation that a firm has to pay her or him. Thus the total number of workers hired will depend on the additional value each worker can generate and on the compensation a firm has to pay.

The extra value that a worker generates depends on technology, access to physical capital, level of skill and relevant training, the firm's access to infrastructure (such as power) and markets, etc. Uncertainty about the future can also significantly affect the demand for labor, in particular when it is difficult to lay off workers in case of negative economic developments (e.g. lower demand and prices for the firm's products, etc.).

Workers tend to be more productive if a firm has a higher level of physical capital. Therefore, financing that supports expansion of a firm, purchases of physical capital, etc., can increase the value each worker generates and therefore can lead to job creation. The chapter on Access to Finance presents the links between job creation and financing.

Similarly, access to infrastructure allows workers to be more productive. For example, having reliable power can allow them to use certain machinery, or to have more productive hours of operation. Alternatively it can allow a firm to save money and invest in new machinery. At the same time, better roads and ports can provide access to new markets. The chapter on Access to Infrastructure analyzes these links in more depth and illustrates how economy-wide employment effects of infrastructure projects can be estimated.

Lastly, reforms that reduce corruption, costs of regulations (for example through more efficient administration), and/or in other ways reduce uncertainty or make it easier to start or run a business have a potential to promote the establishment and growth of firms, which in turn contributes to hiring more workers or attracting workers to more productive jobs. The chapter on Investment Climate presents empirical evidence supporting this positive link.

Above are the factors that influence additional value generated by a worker, but the number of workers hired also depends on how costly they are to a firm. The compensation that has to be paid to a worker will be influenced by taxes and labor regulations, among other things. To the extent this higher compensation benefits the worker, and the worker also sees this as a clear benefit (e.g., health insurance, pension benefits, etc.), this may have little effect on the overall labor market.

The effects of taxes and various labor market regulations can be both positive and negative, frequently depending on how effective the government is. In some cases the extra cost of a worker to a firm does not come as a result of a higher compensation for her/him but rather due to taxes and/or regulations that do not explicitly benefit the worker. In this case workers are more expensive for firms but do not receive higher compensation, creating a disincentive to hire and be hired. Analogously, reforms that make operating a business more costly via wage regulations, formalization, and labor standards, while having a potential to improve the quality of jobs, can also reduce their quantity in the short run and create higher levels of unemployment.

However, one has to keep in mind that some of the connections are not unidirectional. For example, while from the firms' point of view, lower taxes might be positive, as they reduce costs, these same lower taxes might result in less public financing available for infrastructure, or other worthwhile investments that could benefit the firm. Additionally, improvement of working conditions can make employees more productive and thus increase profitability, resulting in job growth. The chapters on Investment Climate and Quality of Jobs address these relationships in more detail.

Lastly, although this observation is beyond the scope of this report, workers are also often the people who purchase the goods produced by the private sector, and thus higher employment and employment at higher wages are likely to increase aggregate demand for the goods, producing a positive cycle of effects on employment.

2.3 Labor supply and constraints affecting both Labor Supply and Labor Demand

In assessing labor supply, economists assume that each worker has his or her reservation wage. If a compensation level is below this reservation wage, then (s)he prefers to not work and enjoy leisure time instead (or, particularly in developing countries, work in the informal labor market). This reservation wage frequently depends on the level of unemployment compensation, perceived wage/compensation growth in the future, alternatives in the informal labor market, etc.

If there is a mismatch between skills sought by the firms and the ones that people have or are acquiring, then there is a problem on both sides. From the firm's point of view, there is a shortage of workers at the skill level that they are looking for and a surplus of those with less desirable skill profile. Thus a firm either has to grow slower because it is unable to find properly qualified employees or it has to invest additional resources in on-the-job training, which makes each employee more expensive for the firm.²⁵ From a worker's point of view, there is a shortage of jobs available at their skill level. Workers then have to invest in retraining or getting additional education, but this is only possible in case such programs are in fact available and workers are able to find the means to afford them. The chapter on **Skills and Training** discusses this issue and possible solutions to the skill mismatch in more depth.

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¹ World Bank (2012).

² Commission on Growth and Development (2008).

³ World Bank (2000): *Voices of the Poor*.

⁴ World Bank (2012).

⁵ ILO (2012).

⁶ World Bank (2012).

⁷ OECD (2006).

⁸ ILO (2012).

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid.

¹² Ibid.

¹³ World Bank and IMF (2011).

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ ILO (2012).

¹⁷ World Bank (2012).

¹⁸ ILO (2012).

¹⁹ World Bank (2012).

²⁰ ILO (2003).

²¹ See MILES Framework for more information.

²² It is important to note that the report covers a wider range of education and training including managerial training which can affect firm's growth and thus job creation on the demand side.

²³ Some of the aspects of social protection are address in the Investment Climate Chapter and the one on Quality of Jobs.

²⁴ This encompasses education, vocational and technical training, as well as managerial and entrepreneurial training.

²⁵ A firm could also "import" workers from other markets, but this is often also difficult and costly, or it could outsource some functions, which is also usually not easy.

CHAPTER 2

HOW THE PRIVATE SECTOR CREATES JOBS IN DEVELOPING ECONOMIES

What kind of firms create the most jobs and where? Does higher productivity hurt employment?

Jobs in small and medium enterprises (SMEs) account for more than half of all formal employment worldwide. As countries become richer, the share of employment provided by larger companies tends to increase. This pattern might indicate that small formal businesses face institutional and financial obstacles that prevent them from growing into larger businesses, which also tend to be more productive. In addition, lower-income countries tend to have more informal enterprises, which like small firms tend to be less productive and often offer even lower wages than the small firms. Both a high degree of informality, which is likely to be associated with low productivity, and this stunted growth of smaller companies impede the growth of per capita income.

Worldwide, the services sector leads in terms of increases in employment share, followed by manufacturing, with the share of employment in agriculture declining.

There is evidence that under certain circumstances, increased labor productivity tends to be positively associated with higher job growth rates in more competitive and open markets. Furthermore, employment growth in innovative companies tends to be inclusive, with a high number of low-skilled people hired.

Job growth coupled with increased productivity is more likely to lead to a reduction in poverty.

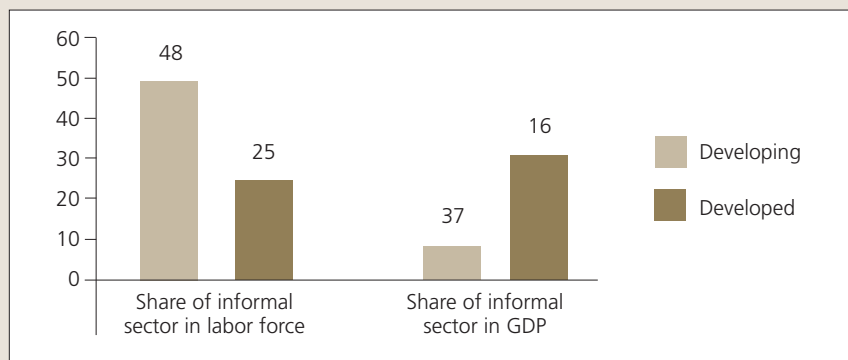
1. Introduction

The solution to the current employment crisis can only come from the private sector. It is thus crucial to understand (i) which types of firms (by size and age) create the most jobs depending on the country and industry context; and (ii) which industries create the most jobs or are the most likely to grow both globally and in a specific country. In order to answer these questions,

this study draws on various information sources: existing research, analysis of enterprise survey data, and analysis of IFC client data tracked in the Development Outcome Tracking System (DOTS).¹

The chapter is structured as follows: section 2 analyzes patterns of job creation by company size and its implications, section 3 addresses job creation by industry/sector, and section 4 provides findings on the link between productivity, technological advances and job creation. The chapter concludes with policy recommendations.

Figure 2.1: The informal sector, typically comprised of very small firms, represents a significant share of employment and GDP in developing countries.



Source: Financial Inclusion Experts Group 2010.

2. Small, medium, and large firms in developed and developing countries

The largest share of employment in developing countries belongs to small and medium enterprises (SMEs). (Please see Box 2.1. for definitions of SMEs employed by different parts of the World Bank Group.) Furthermore, if micro enterprises are included, then in fact the largest share belongs to micro and small enterprises.² This fact is likely driven by institutional and financial constraints that result in a high degree of informality of the economy and prevent the smallest firms from formalizing and growing into larger, formal firms.

Box 2.1: Micro, small and medium enterprises (MSME) classifications

There are multiple classifications of micro, small, and medium enterprises, and they are based on different parameters, such as loan size or number of workers. Thus one has to be attentive to which classification is used to assure that comparisons are possible and correct conclusions are drawn. Through this chapter three main classifications used are by: (i) the World Bank Group; (ii) the World Bank Group's Enterprise Surveys (ES); and (iii) IFC's financial markets. The first two are based on the number of employees, and the third is based on loan size, since financial markets institutions typically do not track the number of employees of their borrowers, but analysis has shown that this proxy is quite closely correlated with the first definition. There is a difference between the definitions used by the World Bank Group and ES. In particular, the World Bank's Group definition has a much wider bracket for what is considered to be a medium-size company, while ES considers all companies with 100 or more employees to be large.

| Firm Size | World Bank Group Definition: Number of Employees | World Bank Group's Enterprise Surveys Definition: Number of Employees | IFC's Financial Market's Definition: Loan Size Bucket in USD |
|-----------|--|---|--|
| Micro | 0-10 | 0-4 | \$1,000-\$10,000 |
| Small | 10-49 | 5-19 | \$10,001-\$100,000 |
| Medium | 50-299 | 20-99 | \$100,001-\$1,000,000* |
| Large | ≥300 | ≥100 | ≥\$1,000,000* |

*\$2,000,000 for some advanced countries

Jobs in SMEs account for more than half of all formal employment worldwide. This is especially true in developing countries, where SMEs³ represent on average about 66 percent of permanent, full-time employment.⁴ For example, more than 80 percent of registered manufacturing establishments in Argentina, Bolivia, El Salvador, and Mexico have fewer than 10 workers,⁵ and about 90 percent of manufacturing establishments employ 5 to 49 workers in China, India, Indonesia, Korea, the Philippines, and Taiwan.⁶ While SMEs account for 45 percent of *formal* employment,⁷ employment in the *informal* sector in developing countries accounts for about half or even more of the total labor force.⁸ The informal sector consists essentially of micro-, small- and medium enterprises (MSMEs) (see Figure 2.1). Thus the share of employment provided by MSMEs is understated when data only on formal enterprises are used.

The variation in job contributions by small, medium, and large firms becomes apparent when analyzed by national income levels. In high-income countries, large⁹ firms have the highest share of employment, followed by medium-size firms, with small firms having the lowest share of employment. However, the opposite is true for low-income countries (see Figure 2.2). Additionally two recent research papers provide support for this pattern. One finds that in the United States, large, mature firms have the largest share of employment, while the other finds that in developing countries it is small and mature firms that have the largest share of employment.¹⁰

Definitions

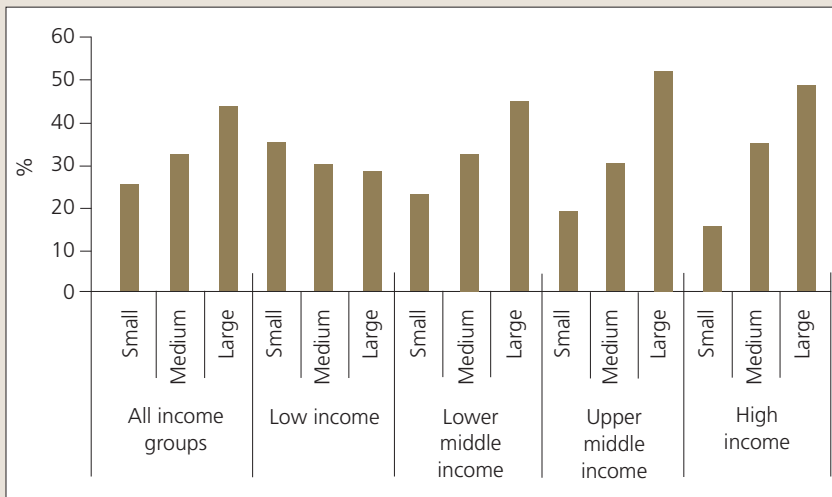
- **Number of jobs created** refers to the number of jobs that have been added within a given period compared to the baseline.
- **Number of jobs provided** at the firm level refers to the total number of jobs/employees in the firm at any given period of time.
- **Number of net jobs created** refers to the number of jobs created minus the number of jobs destroyed either elsewhere in the economy or compared to what would have happened otherwise in the same firm.

Additionally one has to be careful to not confuse **employment, employment share, and employment growth**.

- **Employment** at the firm and economy level refers to total number of people employed.
- **Employment share** identifies the proportion of people out of those working who are employed by a given industry, or company, or type of company.
- **Employment growth** represents the increase in the number of jobs as a percentage of the total number of those employed by a given industry, company, or type of company at the baseline.

Please note that small firms are more likely to have higher growth rates since their baseline employment is lower (e.g., a firm growing from 5 to 10 employees has a 100 percent growth rate, whereas a firm growing from 100 to 150 employees only has a 50 percent growth rate – but adds 10 times as many jobs).

Figure 2.2: Only in low-income countries do small firms have the largest share of employment. For other country income groups, large firms lead.



Source: Enterprise Surveys.

Note: In this graph, small firms are 5-19 workers, medium 20-99, and large ≥ 100 .

SMEs represent on average about 66 percent of permanent, full-time employment in developing countries.

SMEs in this study were defined as firms with 5-250 employees.

Furthermore, according to the World Development Report (WDR) 2013 on jobs, it might be not even small and medium but in fact micro and medium enterprises that have the highest share of employment in the developing countries, even for middle-income developing countries (see Figure 2.3). Their share increases once household and labor force survey data are used, as this is more likely to account for employment in the informal sector, which is usually not captured in firm-level surveys and censuses.

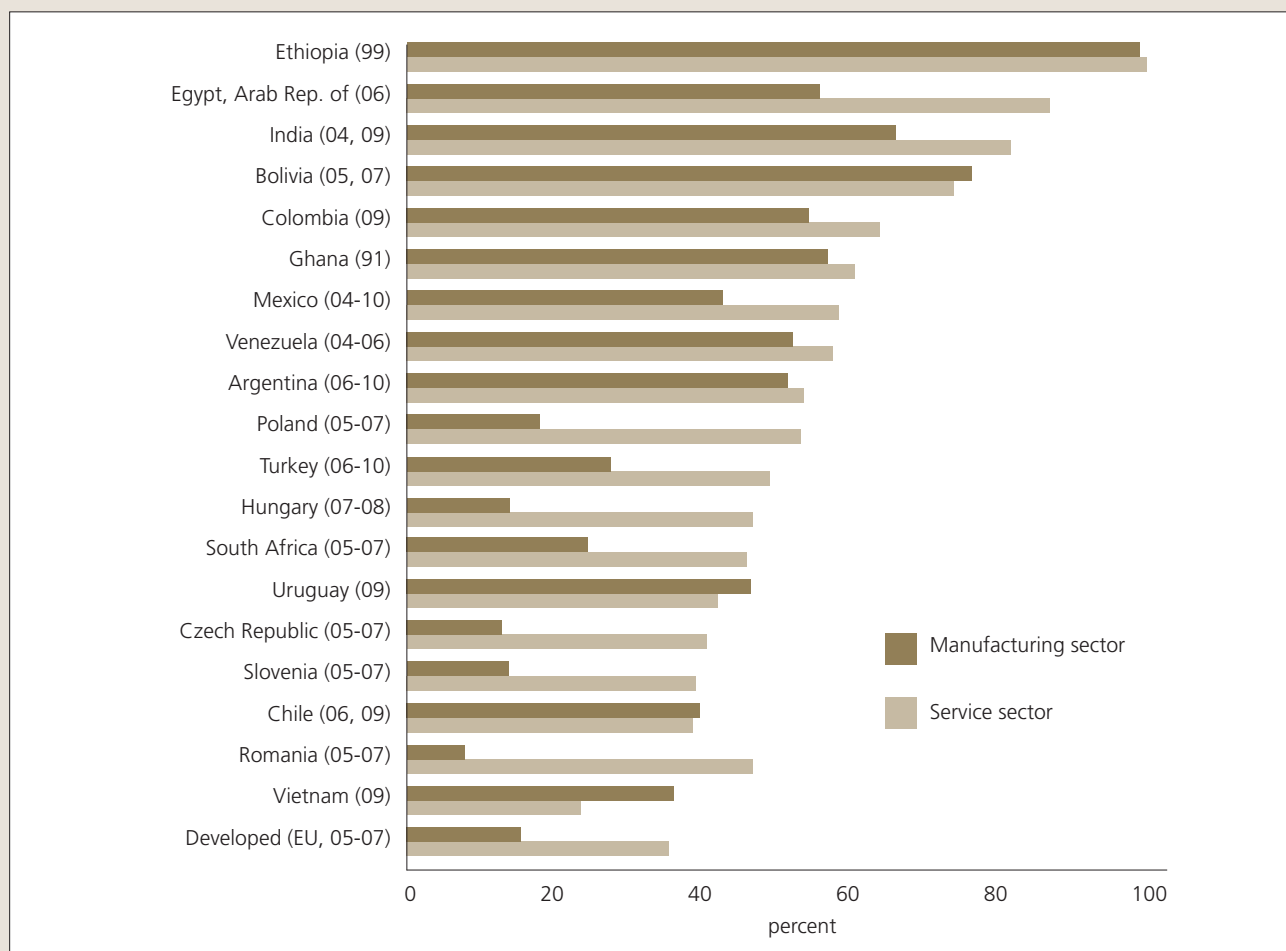
A similar pattern is evident when firms' contribution to job growth is analyzed. Beginning with the work of David Birch in 1979, significant emphasis has been placed on the role of small businesses in job creation. However, the validity of this view for developing countries has recently been challenged by academic research that suggests it is likely the age of the firm and not its size that matters most.¹¹ When US data are analyzed, small firms contributed the most to job growth because many of them were in fact a subset of *surviving young* firms that tended to be the most productive, and thus they grew the most compared to other size/age categories.¹² Thus for the US it is in fact young, but not necessarily small, firms that contributed the most to employment creation.

However, in developing countries small firms are still significant contributors to employment growth, even after controlling for age. In fact, small firms, especially those with less than 100 employees and mature firms (particularly those in operation for more than 10 years) were found to have the largest shares of total employment and job creation.¹³ Furthermore, even when countries experienced net job losses in the economy as a whole, only small firms,¹⁴ especially small and mature firms, had net job gains. However, it is important to point out that this analysis is based only on small firms that have "survived" and, given that small firms have a higher likelihood of going out of business, the results may overstate the net effect at the economy level. Similar patterns are identified through analysis of Enterprise Survey (ES) data and companies financed by IFC private equity funds. According to ES data, small firms (5-19 workers) in developing countries had the highest job growth rates over a two-year period (18.6 percent), about twice the job growth of all firms. Thus, both sources identify small firms in developing countries as having the highest job growth rates conditional on survival.

Furthermore, the growth dynamics of *surviving* firms is very different between developing and developed countries. In developed countries, many surviving firms are born small and then grow into bigger firms. In developing countries this is frequently not the case: surviving firms are either born large and do not grow much, or surviving firms in fact decline in size. To illustrate the former, in Ghana surviving firms are born large and show little growth over 15 years.¹⁵ As an example of the latter, when the size of 35-year-old firms in India, Mexico, and United States is compared to their size at startup, in India the size declines by a fourth, in Mexico the size doubles, and in the United States it is 10 times larger. A similar pattern is observed for the productivity of the firms in these three countries (see Figure 2.4).

These patterns may reflect the fact that small and medium-size firms in low-income economies are faced with constraints that prevent them from growing into large firms. Further support for this hypothesis can be found in recent analysis of World Bank Group ES data, which find that small firms increased their share of total employment, medium-size firms maintained their share, and large firms decreased their share.^{16,17}

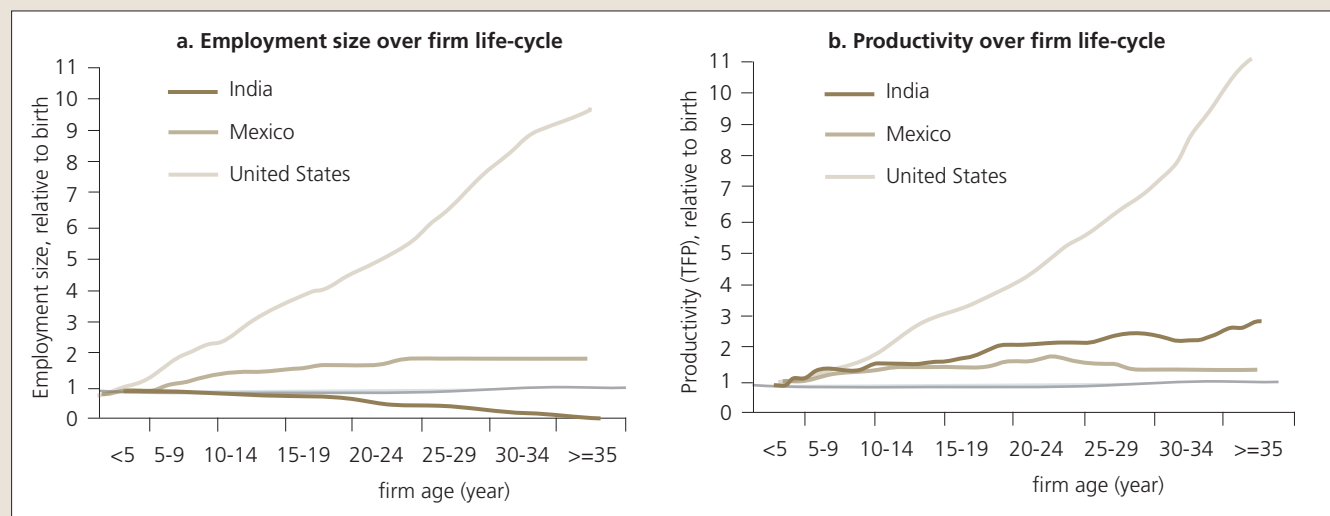
Figure 2.3: Micro enterprises account for a greater share of employment in developing countries.



Source: WDR 2013 team estimates using data from the International Income Distribution Database (I2D2) and EUROSTAT.

Note: Micro enterprises are firms with fewer than 10 workers.

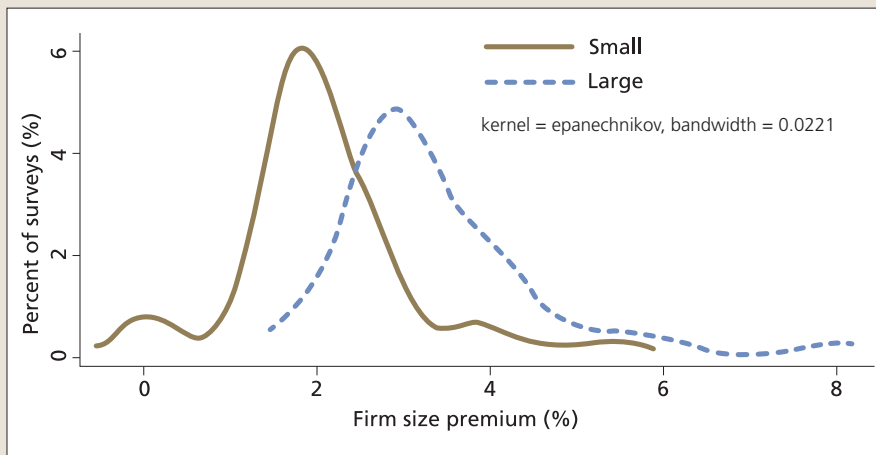
Figure 2.4: Many firms are born small and grow little in India and Mexico



Source: Hsieh and Klenow (2011).

Note: Figures present the average employment (or productivity) of firms in different age groups relative to the average employment (or productivity) at birth. Figures are computed using 1992 and 1997 data for the United States, 1998 and 2003 data for Mexico, and 1989-1990 and 1994-1995 data for India.

Figure 2.5: Larger firms pay higher wages



Source: WDR 2013 team based on Ayyagari, Demircuc-Kunt, and Maksimovic (2007), and on Montenegro and Patrinos (2012) for WDR 2013.

Note: The panel uses 138 household and labor force surveys spanning 33 countries over 1991 - 2010. The figure compares the distribution of estimated wage premium of small (10 to 50 workers) and large firms (more than 50 workers) relative to micro enterprises (less than 10 workers), controlling for worker characteristics.

This “stunted” growth of SMEs in the developing countries is likely to reduce productivity, as well as slow down growth and poverty reduction. There is evidence that larger companies tend to be more productive, more innovative, and pay higher wages.¹⁸ According to the WDR 2013 on jobs, large firms are typically more innovative and productive than smaller firms, since they are more likely to invest in both product and process innovation, outsource, and engage in joint ventures with foreign partners. Additionally there is evidence that large firms tend to pay higher wages. As figure 2.5 shows, compared to micro enterprises, small companies typically offer a wage premium of 10–30 percent, and large companies offer a wage premium of 20–50 percent. However, in particular in developing countries, size is often affected by non-market forces (e.g., protection, restriction of competition), in which case large firms are not necessarily more productive.

2.1 Summary and implications

Small firms drive employment growth in developing countries, but they are also much more likely to enter and go out of business. However, low-income countries stand out in particular due to small firms’ having the highest employment share, compared to all other country income groups. This might be indicative of the fact that, due to various constraints, small firms are unable to grow into larger ones in those countries.

Removing such constraints will disproportionately benefit MSMEs and allow them to grow into larger firms. Additionally, a focus on formalization of the economy is also recommended, particularly considering that informal enterprises tend to have lower productivity and poorer working conditions.

3. Employment trends by sector in developing and developed countries

When direct job creation across industries is examined in over 100 countries, the service sector leads in terms of the changes in employment share, followed by manufacturing, while the agricultural sector shows a steady decline. However, one has to take in account that in many developing countries, agriculture still has the highest share of employment. Additionally, due to skill mismatches, some of the patterns that are currently observed might be altered in the future. The actual number of jobs created by each industry varies somewhat across countries, depending on the availability of natural resources and skills, institutions, and other country and regional characteristics.

Box 2.2: SME’s or micro enterprises?

If one wants to achieve poverty reduction through job creation, is it better to focus on micro enterprises, on SMEs, or on both? There has been an ongoing debate about the effectiveness of micro finance compared to investment in SMEs in terms of employment generation and types of people employed. However, it seems that one has to look at both for job creation, as those who benefit from micro credit and those who benefit from new jobs in SMEs are complementary. In Bangladesh, the profile of an average SME employee is a semiskilled 26-year-old male with almost five years of formal education. Meanwhile, Bangladeshi micro credit borrowers are mostly women, about half of whom have no formal education, and most have few professional skills.

In Bangladesh on average, larger SMEs (as measured by the number of employees) employ a higher proportion of women workers, except in the service sector, where the relationship is the opposite.

Lastly, while SMEs in Bangladesh provide on average higher salaries than micro enterprises, average working hours at SMEs are also longer.

Implication: Micro enterprises and SMEs target different segments of the labor force. Thus a balance of investment in both might be optimal for poverty reduction.

Source: Bauchet, Morduch (2011)

In general the poorest regions of the world tend to have a majority of people employed in agriculture. Once countries become richer, they tend to observe increases in manufacturing/industry employment, while the richest countries experience employment growth in the services sector. These predictions seem to be substantiated by the global labor statistics, with the exception of the services sector, which experienced employment growth across all countries.

The share of employment in agriculture is steadily declining across all regions of the world,¹⁹ but it is still high in some regions such as Sub-Saharan Africa, where it accounted for 62 percent of employment in 2011. At the same time, the share of employment in services is increasing in all regions, with an average increase of 4 percent from 2000 to 2011. The only exception is North Africa, where it is almost stagnant. Lastly, the share of employment in manufacturing is increasing in the Middle East, Asia, Latin America and the Caribbean, and in Africa. It is stagnant or declining in other regions.

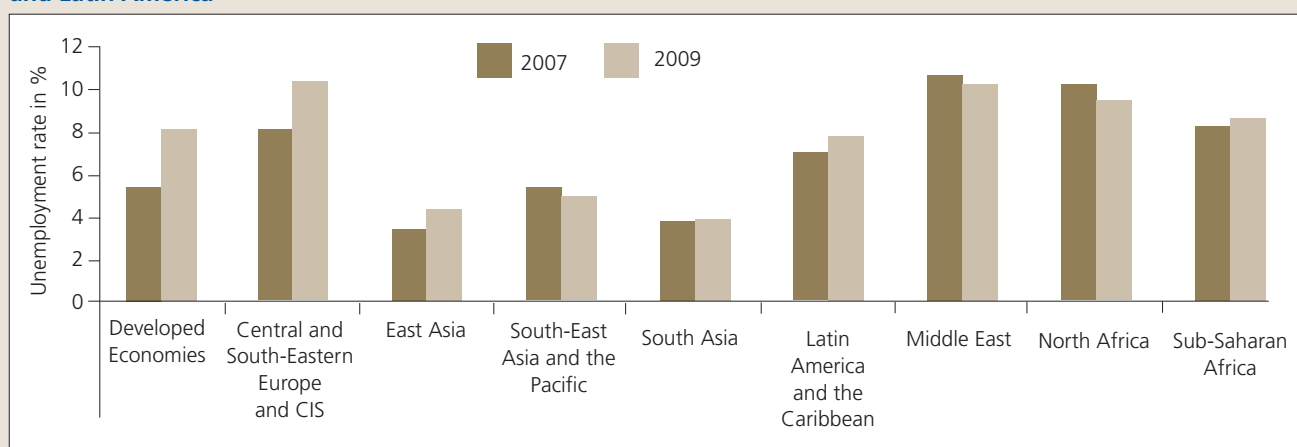
However, these trends require further analysis before drawing firm conclusions. Please see Box 2.3 on how these employment trends were affected by the crisis, and Box 2.4 on role of agricultural employment in poverty reduction.

Box 2.3: Employment Trends and Crisis²⁰

As a result of the crisis, world unemployment increased by almost 16 percent from 170.7 million in 2007 to 197.7 million in 2009.²¹ Labor markets in developing countries tend to be less affected by shocks, as a high share of employees can reallocate to informal markets in the form of self-employment and family work.²² Nevertheless, developing countries accounted for 45 percent of the unemployment rise, and higher vulnerable employment²³ in 2009 was registered in Latin America and the Caribbean, North Africa, and Sub-Saharan Africa.²⁴ Even though Central and Southeastern Europe and the Commonwealth of Independent States (CIS) was the only region that had a contraction in total employment in 2009 (Figure 2.6), other developing regions had higher unemployment rates due to demographic trends of increase in the number of people entering the labor force.

For further discussion on financial crisis, see Chapter 7, Access to Finance.

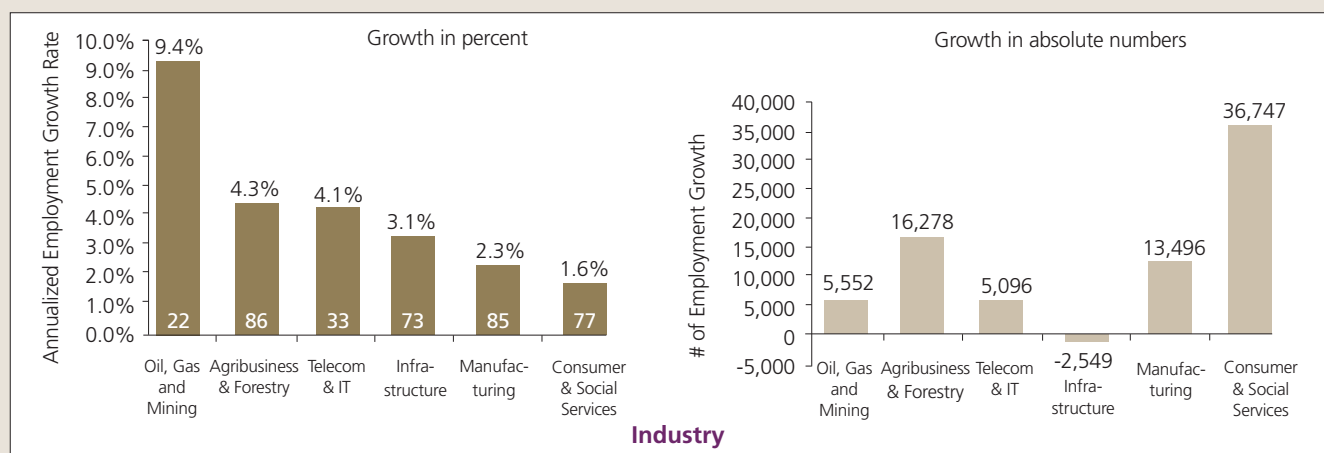
Figure 2.6: Several regions increased unemployment rates following the crisis in particular in Europe, East Asia, and Latin America



Source: International Labour Organization 2012.

The service sector led job creation for developing economies as well. Research that uses Chilean data indicate that the impact on total output is greater per dollar invested in sectors associated with services, which are more labor intensive.²⁵ This is further substantiated by IFC's analysis of Enterprise Survey²⁶ data, analysis of companies tracked by DOTS²⁷ and companies financed by IFC's private equity funds. The former shows that firms in services had higher growth than firms in manufacturing. Analysis of DOTS data identified that when only direct jobs are considered, consumer and social services lead in the number of jobs generated (see Figure 2.7). Lastly, analysis of jobs created by companies financed by IFC private equity funds from 2000 to 2010 shows that the biggest job creators were established businesses in services and in the process of expansion. In fact, the largest job creation occurred in a retail chain for women's shoes in China. It created more than 70,000 jobs in over six years with an annualized job growth rate of 29.5 percent.²⁸

Figure 2.7 The service sector leads in the number of direct jobs created among IFC client companies.



Source: DOTS: Growth between 2008 and 2010. Number of companies in each financial performance category are shown as white numbers inside the left bar chart.

Note: Direct jobs are only a fraction of total employment effects for the economy. Our analysis shows that once total effects are considered other sectors can also become important job creators.

Nevertheless, while the service sector is currently leading worldwide in terms of job creation, prior to outlining policy implications one has to keep in mind the following three facts: Looking at direct jobs alone might be misleading. Furthermore, creating the highest number of jobs might be a tricky objective, as there is a trade-off between the number of jobs created and the value added per job. Lastly, predicted employment growth in various sectors might be hindered due to mismatch between skills demanded and those available if trends stay as they are.²⁹

Box 2.4. Role of agriculture in job creation and poverty alleviation

There is an anticipated increase in demand for food and feed. By 2050 it is predicted that a 70 percent³⁵ increase in food production will be needed. However, this increase in demand will correspond to depletion of freshwater resources, with a forecasted gap of 40 percent between water demand and water supply by 2030, assuming business as usual.³⁶ Furthermore, there is expected negative impact on crops from shifting weather patterns, competition for land due to increase in demand for biofuels, and increased risk of deforestation.

While the employment share has been declining in the agricultural sector, it should not be overlooked in terms of its potential for job creation and poverty reduction. Agriculture plays at least three roles. First of all, agriculture can provide the food supplies to reduce hunger. Secondly, for some types of countries growth in agricultural productivity can stimulate faster economic growth. Lastly, for some countries it tends to make this growth more “pro-poor.”

An IFC macro-case study in Tunisia shows that for some transforming economies, investing in agriculture has the potential to create the highest number of jobs. Furthermore, agriculture has forward linkages to the food processing sector, investing in which creates the largest value added compared to investing the same amount in other sectors. Moreover, investing in agriculture in Tunisia maximizes the salaries/wages earned by workers. However, the same study also cautions that investment in more capital-intensive industries is needed to improve the quality of jobs.

The poverty alleviation and employment generation potential of the agricultural sector can be realized if development finance institutions focus on raising agricultural productivity, linking farmers to markets and strengthening value chains, reducing risk and vulnerability, facilitating agricultural entry and exit and rural nonfarm income, and enhancing environmental services and sustainability.³⁷ Cross-country studies have shown that an increase in agricultural productivity allows labor to move to other sectors and simultaneously creates a demand for products and services from these other sectors, thus leading to off-farm employment creation.

Furthermore, from a meta-evaluation conducted for this report we know that projects that lead to improvements in agricultural infrastructure or provision of access to finance for farmers do tend to have positive job creation effects. For example, the Asian Development Bank’s (ADB) Fujian Soil Conservation and Rural Development project: a kelp processing plant provided employment for about 600 female workers who would otherwise be unemployed. And in Thailand about 20 percent of those interviewed among individuals who benefited from ADB’s rural credit assistance programs reported changing their main occupation from agriculture.³⁸ A review of irrigation rehabilitation projects in Vietnam showed that those farmers who benefited from them were 41 percent more likely to hire agricultural workers.³⁹

Direct jobs provided by the sector often account only for a small fraction of the total employment effects of a given sector at the economy level. Analysis shows that once the total effects are considered, other industries, such as utilities or manufacturing with significant forward or backward linkages, also become important job creators. This will be discussed in more detail in the subsequent chapters. Furthermore, due to linkages, promotion of growth in certain sectors might be more beneficial than in others. For example, cross-country analyses show that agricultural growth is associated with the expansion of nonfarm sectors, particularly in countries where the agricultural sector is large.³⁰

While looking for industries that create the most jobs, one has to keep in mind that the value added of these jobs also matters. There is a potential trade-off between the number of jobs created and the value added per job. For example, studies by Standard Chartered Bank in Ghana and Indonesia indicate that sectors that added more jobs, e.g., agriculture and trade, had the lowest value added per worker. At the same time industries that created fewer jobs, e.g., utilities and extractive industries had the highest value added per worker.³¹

Lastly, if education trends do not change, some of the predicted growth is likely to be hindered due to a mismatch between the skills available in the economy and those demanded³². Universally, there is likely to be an oversupply of low-skilled workers, and a shortage of medium (secondary education and/or vocational training) and high-skilled workers. For example, growth in manufacturing is likely to raise demand for workers with a secondary education and vocational training in developing economies of South Asia and Africa—a demand that is likely to not be met.³³ An inadequate supply of highly educated workers in China could slow down growth in the higher value-added industries,³⁴ while countries like Bangladesh and Nigeria could become better positioned than China to take on the world's labor-intensive work.

Some of these challenges can be mitigated by formalization of the sectors of the economy that use low-skill work combined with more involvement from the private sector in training and educational programs. Some of the possible solutions to the skill mismatch will be analyzed in greater detail in a Chapter on Skills and Training. Lastly, technology can also come to rescue by bridging the gap between educational level of workers and knowledge demanded. This will be addressed in the next section.

3.1 Summary and implications

The service sector leads globally in terms of increasing its employment share worldwide, followed by manufacturing, while the employment share in the agricultural sector is on the decline. In order to make informed decisions, economy-wide job creation should be analyzed. The objective of creating jobs should be coupled with the objective of creating higher value-added jobs (or increasing the productivity of existing jobs), due to the trade-off between the number of jobs and their value added. Skill mismatches could also hinder employment growth in many countries and sectors. However, a higher degree of formalization and marketization of some sectors, greater involvement of the private sector in the design of educational and training programs, and smart use of technology to bridge the knowledge gaps can help mitigate this problem.

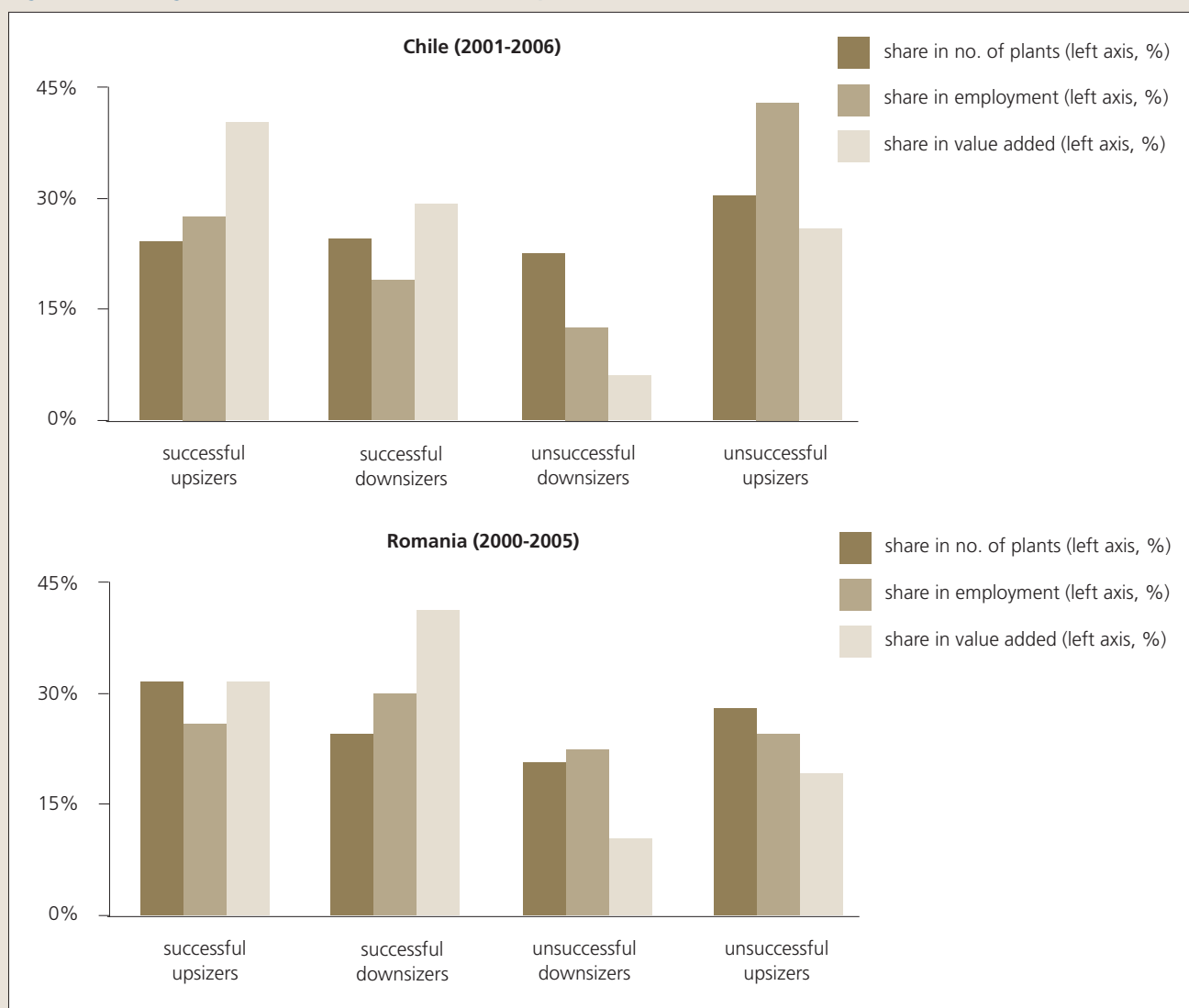
4. Productivity, technology, and employment

The relationship between increased labor productivity and employment is not unidirectional. At the firm level, while there is a substantial amount of research identifying negative correlation between productivity and hiring, there is evidence that innovation, in particular product innovation, can in fact be associated with increases in hiring. This is more likely to happen in competitive and open economies. In the case of process innovation, the effects are more mixed and sector-specific. However, when employment is analyzed at the industry or economy level, there is some evidence of a positive effect on employment. Innovation and advances in technology, in particular information technology (IT), can in fact be one of the solutions if employment growth is being hindered by a lack of properly skilled people in the labor force. Furthermore, there is evidence that it is in fact employment growth coupled with increased productivity that leads to poverty reduction.

In developed countries many surviving firms are born small and then they grow into bigger firms. In developing countries this is frequently not the case: surviving firms are either born large and do not grow much, or surviving firms in fact decline in size. To illustrate the former in Ghana surviving firms are born large and show little growth over 15 years.

WDR 2013 based on Sandefur (2010).

Figure 2.8: A large fraction of firms are successful upsizers



Source: WDR 2013 team estimates based on data of the Annual Industrial Survey of Chile and Amadeus Database.

Note: The figure presents contribution to 5-year growth over the specified period by plants in each country. Plants considered are those with average employment above 10 that exist throughout the five year period. Successful upsizers are plants that increased both labor productivity and employment, successful downsizers are plants that increase productivity but lost jobs, unsuccessful downsizers are plants that reduced employment and productivity, and unsuccessful upsizers are plants that increased employment at the expense of productivity growth.

A well-functioning private sector is characterized by a constant search to increase productivity and efficiency. The associated reallocation of resources—or “churn”—to increase value added can happen by increasing the productivity of workers in any specific firm or by workers moving to firms where they can be more productive, and the most productive firms growing and less productive firms shrinking or going out of business— is what allows economies to grow and incomes to rise. However, the effects of increasing productivity on workers and employment are not unambiguous. While the economy overall and some workers clearly benefit from increases in efficiency, it can also result in some other workers being laid off.

It is very easy to assume that overall technological advances and increases in productivity lead to a decrease in employment as fewer workers are needed to produce the same amount of goods or services. However, an increase in productivity can lead to goods becoming cheaper to produce. Thus prices fall, and demand for the product increases. Additionally, the decrease in the cost of production can motivate the firm itself to produce more, thus resulting in the hiring of more workers. Lastly, if the firm has access to the world market, a per-unit decrease in the cost of production, associated with an increase in labor productivity, makes the firm or industry more competitive at the global level. This effect can more than offset the employment-lowering effect of productivity. One example is the introduction of assembly lines by Henry Ford in the automotive industry. While

automation clearly made the production of any one car less labor-intensive, the lowering of prices for cars made them more affordable and led to significant job growth in the car manufacturing industry.

To shed more light on the link between productivity, innovation, and employment, the following steps were taken by the IFC Jobs Study. Enterprise Survey and DOTS data were used to identify the correlation between labor productivity, a firm's financial performance, and employment. Additionally, the links between technology and job creation identified in the academic and industry research are presented.

4.1 Higher labor productivity and poverty reduction

Despite evidence that productivity increases could result in job losses, there is also evidence of an opposite effect. For example, analyzing data on manufacturing firms in Chile over the period 2001–06 and Romania from 2000 to 2005, the WDR 2013 finds that a significant fraction of manufacturing firms were successful upsizers achieving both productivity and employment growth. Moreover, these successful upsizers contributed more to production, employment, and aggregate growth than the successful downsizers (see Figure 2.8).

Additionally, it has been shown that agricultural growth associated with the green revolution creates jobs both in and outside of farming⁴⁰—for example by helping create jobs in the production and marketing of fertilizer, in the development of food markets, and by reducing the cost of living for those who migrate to the cities.

Furthermore, not all employment growth leads to poverty reduction. To this day there is mixed evidence of this connection, and it varies depending on the country context. For example, according to a study by the World Bank in 2005, in three out of fourteen countries studied, pro-poor growth was associated with more labor-intensive growth.⁴¹ A few studies suggest that in order for employment to lead to sustainable poverty reduction, it has to be accompanied by higher earning possibilities, which in turn are associated with higher labor productivity. For example, in particular for agriculture, pure employment growth can be of little benefit to poverty reduction, as can be seen in the examples of Nicaragua and Madagascar. However, in other circumstances there is evidence that employment growth in agriculture associated with increases in productivity and thus overall higher value added can lead to significant poverty reduction effects.⁴²

4.2 Innovation

There is no consensus in academia about the effects of innovation and higher firm productivity on employment. The answer varies depending on: (i) whether the increase in efficiency came through product or process innovation; (ii) the sector in which innovation takes place; (iii) if the employment at a firm or industry or economy level is analyzed.

There are papers documenting a negative correlation between innovation and employment growth.⁴³ However, recent research shows that firms that innovate in products or processes and have attained higher productivity exhibit higher employment growth than non-innovative firms.⁴⁴ Moreover, contrary to expectations, this employment growth is inclusive: there is a positive correlation between a firm's innovation-driven growth and the share of that firm's workforce that is unskilled.

Additionally, some researchers propose distinguishing between product and process innovation. Process innovation has an ambiguous relationship with employment, while product innovation overall is linked to increases in employment. Effects in this case can be industry specific. For example, process innovations can be associated with employment reduction for manufacturing firms but not for service firms.⁴⁵ Product innovation overall has been shown to be positively correlated with employment growth independent of industry.⁴⁶

Lastly, conclusions depend on the level at which employment effects are measured. While with increased productivity, jobs might be lost in some firms, there are likely gains at the industry/economy level. For example, in manufacturing more rapid productivity growth led to higher rather than lower employment, although this shift occurred at the industry level. According to a paper by Nordhaus (2005) for individual companies or industries, higher productivity growth may lead to loss of jobs. But from the perspective of manufacturing as a whole, or of major manufacturing industries, the employment-lowering effects are more than offset by employment-creating effects of lower prices and the increased competitiveness of the industry at a global level. Before coming to conclusions, it is important to measure jobs also at the industry or economy level. The ways to do so and further reasons are discussed in the next chapter.

Compared to micro enterprises, small companies typically offer a wage premium of 10 – 30 percent, and large companies offer a wage premium of 20 – 50 percent.

4.3 Innovation as a solution

Technology can also serve as a solution. For example, there is evidence that productivity-intensive growth in agriculture is associated with decreases in poverty.⁴⁷

More importantly, technology—and in particular IT—can help bridge the gap between skills needed in the economy and skills acquired by the labor force in at least two ways: First, it can more directly involve the private sector in the educational and vocational training process by making it easier for companies to identify their skill needs, and to design and distribute training. It can also make training and education more accessible for workers. Companies like Coursera and Empowered Careers already implement the latter approach in the United States, with Empowered Careers targeting retraining of baby boomers. Second, in skill-scarce world technologies such as knowledge codification, systems and smart devices can help bridge the skill gap and raise the productivity—and thus the employability—of low-skilled workers.⁴⁸

4.4 Summary and implications

The link between higher productivity and employment is highly dependent on the sector, type of innovation, and level of analysis. Nevertheless, there is evidence in favor of higher productivity and innovation being **positively** linked to employment growth. In particular this is true for product innovation.

Increased productivity is essential in order for employment growth to lead to poverty reduction.

Lastly, technological progress can in itself be a part of the solution to the current unemployment crisis by (i) getting the private sector more involved in training and facilitating the bridging of the current skills gap; (ii) providing knowledge codification devices that make low-skilled workers more productive; and (iii) making the agricultural sector more attractive for investment by creating higher-value-added agriculture and providing increased access to local and global markets.

Think about it:
Technological advancements are making the agricultural sector more attractive for investment by creating new opportunities for economies of scale, allowing for higher value-added agriculture, and allowing even small-holder farmers to be better integrated into local value chains, as well as providing access to local and global markets.

5. Conclusion

The highest share of employment in low-income countries belongs to small companies, followed by medium-size companies. The pattern is opposite in all other countries. This could indicate that small businesses in less developed countries are unable to grow. Furthermore, the share of employment by small firms in developing countries increased recently, while the share of large firms decreased, and the share for medium-size firms barely changed. Some companies in some industries might be better off remaining small. However, larger businesses tend to be more productive, invest more in training, and offer higher wages. Therefore, it is useful for development finance institutions, policymakers, and private sector consulting groups to provide financing and advice to SMEs that will help them grow and create jobs. Also, since micro-enterprises and SMEs target different segments of the labor force, balanced investments in both should be considered.

These measures will be most efficient when combined with steps to address other constraints such as a poorly developed financial infrastructure, business climate unfavorable to growth, or lack of access to basic infrastructure such as electricity and transportation. Development finance institutions and governments should focus on enabling enterprises to become formal.

The link between labor productivity and employment is complex and depends on country conditions (such as openness and competitiveness), the sector, the type of innovation, and the time horizon (short versus long term) and level of analysis (firm, industry, country, etc.). However there is evidence of a positive connection between productivity and job creation, especially in the case of product innovation. Besides, there is some evidence that in more competitive and open economies, innovative and productive businesses tend to exhibit not only higher job growth compared with other businesses, but also more inclusive growth, meaning an increase in the number of low-skilled workers hired. Lastly, investments in innovation might result in gains in employment at the industry level even when there are losses at the company level.

Lastly, there is some evidence that increased productivity is essential for job growth to lead to a reduction in poverty. This is in particularly true for innovation in the agricultural sector in agricultural and transforming economies.

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Endnotes

- ¹ IFC launched the Development Outcome Tracking System (DOTS) in 2005 to measure the development effectiveness of its investment and advisory services. DOTS allows for real-time tracking of development results throughout the project cycle. At the outset of a project, IFC staff members identify standardized indicators with baselines and targets. They track progress throughout supervision, which allows for real-time feedback into operations, until project closure. To learn more, go to: http://www1.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/IDG_Home/Monitoring_Tracking_Results/Tracking_System
- ² World Bank Group Definition of SME is used.
- ³ SMEs in this study were defined as firms with 5-250 employees.
- ⁴ Ayyagari et al. (2011).
- ⁵ WDR 2013, based on Pages (2010).
- ⁶ WDR 2013, based on ADB (Asian Development Bank) (2009) deriving on data from India (2004-2005), Indonesia (2006), the Republic of Korea (2004), the Philippines (2005), and Taiwan, China (2006).
- ⁷ Ayyagari et al. (2007).
- ⁸ The Financial Inclusion Experts Group (2010) puts the number at up to 48 percent.
- ⁹ Please note that: (i) small and medium-size firms are tracked separately, as opposed to being tracked as SMEs in this paragraph; (ii) definition of firm size is the one used by Enterprise Surveys, in which small firms have 5-19 employees, medium-size firms are ones with 10-99, and firms with 100 or more employees are classified as large.
- ¹⁰ Haltiwanger et al. (2010), Ayyagari et al. (2011).
- ¹¹ Haltiwanger et al. (2010).
- ¹² Ibid.
- ¹³ Ayyagari et al. (2011).
- ¹⁴ Firms with less than 100 employees are defined as small in Ayyagari et al. (2011).
- ¹⁵ WDR 2013, based on Sandefur (2010).
- ¹⁶ However, this can also be indicative of an increase in entrepreneurship and thus firm creation in developing countries, or skill pool matching employment in small firms. Thus more research is needed in order to reach a more definitive conclusion.
- ¹⁷ Saliola, Bernt (2012).
- ¹⁸ WDR 2013, based on Ayyagari, Demircuc-Kunt, and Maksimovic (2007) and Montenegro and Patrinos (2012)
- ¹⁹ International Labor Organization (2012).
- ²⁰ See Chapter 7, "Access to Finance."
- ²¹ International Labour Organization (2012).
- ²² International Labour Organization (2011).
- ²³ Characterized, according to the International Labour Organization, by low wages and hard working conditions that can affect employees' rights.
- ²⁴ International Labour Organization (2010).
- ²⁵ Marfan and Meller (1981).
- ²⁶ Analysis of over 45,000 firms in 106 countries shows that firms in services had higher employment growth than manufacturing (8.8 percent and 5.2 percent, respectively).
- ²⁷ Analysis of data from 376 matched companies tracked in DOTS in the period from 2008 to 2010.
- ²⁸ Park and Shi (2012).
- ²⁹ McKinsey Global Institute (2012).
- ³⁰ WDR 2013, based on Christiaensen, Demery, and Kuhl (2011).
- ³¹ Steward Redqueen and Kim (2010a, 2010b)
- ³² Most of this paragraph is based on the findings from McKinsey Global Institute (2012). One of the limitations of this analysis is that it uses educational attainment as proxy for skills due to data availability. However training through apprenticeship, which is not captured, can be more relevant than formal education in many occupations. In addition to the quality and content of formal education not being the same across countries.
- ³³ McKinsey Global Institute (2012).
- ³⁴ Ibid.
- ³⁵ FAO. "How to Feed the World in 2050." FAO issue brief. 2009. Available at: http://www.fao.org/fileadmin/templates/wsfs/docs/expert_paper/How_to_Feed_the_World_in_2050.pdf
- ³⁶ 2030 Water Resources Group. 2009. "Charting our Water Future: Economic frameworks to Inform Decision Making." Available at: http://www.sabmiller.com/files/reports/charting_our_water_future.pdf
- ³⁷ International Finance Corporation (IFC), August 2009. "IFC Agribusiness Strategic Action Plan (ASAP) FY 12-14"
- ³⁸ ADB Rural Credit Assistance (2001).
- ³⁹ Datar, Del Carpio (2009).
- ⁴⁰ WDR 2013 based on Ravallion (2005) and Ravallion and Chen (2007).
- ⁴¹ Gutierrez et al. (2007).
- ⁴² Ibid.
- ⁴³ Dew-Becker (2007).
- ⁴⁴ Dutz et al. (2011).
- ⁴⁵ Peters (2005).
- ⁴⁶ Peters (2005), Mairesse et al. (2009), Harrison et al. (2008), Alvarez et al. (2011).
- ⁴⁷ Gutierrez et al (2007).
- ⁴⁸ McKinsey Global Institute (2012).



ESTIMATING ECONOMY-WIDE JOB CREATION EFFECTS

When development finance institutions, policymakers, and business leaders are estimating the job-creation effects of their activities, they must look beyond direct jobs generated. They also should consider: (a) indirect jobs, (b) induced jobs, (c) second-order “growth” effects, and (d) net job creation. If an analysis fails to consider indirect jobs created in suppliers and distributors, it likely will underestimate the poverty-reduction effects.

IFC found that only about a quarter of evaluations of employment effects specifically addressed job creation. While most of the evaluations found positive effects of private sector programs on job creation, methodologies varied and so did definitions of what counted as employment. Also, proper counterfactual was not always possible to identify and attribution was sometimes difficult. More rigorous evaluations are clearly needed.

Multipliers, such as the total number of jobs in an economy generated per one direct job, are frequently used to assess and benchmark the job-creation effects of private sector activities. However, they are highly context specific, rarely based on a counterfactual, and vary across industries, within industries across countries, and even within one industry in the same country. Depending on country, industry, and client characteristics, a range of multipliers should be used, and different methods for their derivation may need to be applied.

The focus should be on total job creation, not on the employment multiplier alone. An “investment multiplier,” assessing the total number of jobs provided or created per \$1 million invested, also can be informative.

Macro-case studies in Indonesia and Ghana show a trade-off between the number of jobs created and the value-added per job. However, another total study in Tunisia finds that sectors that create the most jobs also provide the highest total value-added per \$1 million invested, with a higher proportion of it going to workers’ wages.

1. Introduction

Many development finance institutions, policymakers, and business leaders are interested in being able to estimate the job creation effects of their activities. While data on direct¹ jobs created may be available, it tells only a small part of the story. Jobs created in the supply and distribution chain of the company, jobs created due to increase in demand associated with higher labor income, and jobs created elsewhere in the economy as a result of firms operations have to be considered.

This chapter presents findings from a meta-evaluation that sought to identify tools, and approaches that can be used to estimate the job creation effects. It then presents findings in regard to the economy-wide employment effects of private sector interventions in different sectors from existing industry and academic research, as well as micro- and macro-case studies conducted as part of the IFC Jobs Study.

Definitions

Indirect jobs: employment changes in suppliers and distributors.

Induced employment: jobs resulting from direct and indirect employees spending more and increasing consumption.

Secondary effects refer to job creation through benefits of improved access to infrastructure, such as access to more reliable power allowing enterprises to produce more, and more efficiently.

Net job creation: effects accounting for job losses in competitors.

Value added refers to wages/salaries plus corporate profits plus taxes.

2.1 Estimation of employment effects: Findings on Methodology from the meta-evaluation

Though there is strong consensus that creating jobs is one of the key contributions of the private sector to poverty reduction, there is limited knowledge about which interventions, and in what country conditions, are most likely to catalyze job creation—and which activities are most beneficial to poor people. To address this knowledge gap, IFC conducted a meta-evaluation or review of evaluations. The objective was to determine the employment effects of private sector interventions and the tools and combination of tools that can be used to estimate their effect on job creation, to help shape the strategies and operations of IFC and other private sector-oriented development financial institutions. Additionally, meta-evaluation has highlighted that there are a few areas where more work needs to be done to estimate job creation effects of private sector interventions: reaching a consensus on which activities and types of employment qualify to be defined as a “job”; using a proper counterfactual to claim that jobs were “created” due to the intervention and not just associated with it; and creating more rigorous evaluations in cases where a few interventions were implemented simultaneously or more than one investor was involved to establish proper attribution.

The meta-evaluation examined 39 evaluations from 2000–11 commissioned by IFC and other organizations to address the job creation effects of private sector interventions in four areas: access to finance, access to infrastructure, the investment climate, and skills development and training. Due to the diverse set of methodologies applied across different areas, it is difficult to determine the best approach to estimate the job creation effects of private sector interventions.

Only about 27 percent of the evaluations (39 of 147 evaluations, with an employment component extracted from databases of the World Bank Group and other relevant organizations) specifically addressed job creation effects. In addition, evaluations were often not comparable due to different types of employment being considered. There is little agreement in the literature on what types of employment to count. Some researchers only include paid work outside the household (as a proxy for formal employment), while others use a more inclusive definition that incorporates all types of employment (self, family—paid or unpaid—and paid work outside the household). Some studies include direct job creation only; others include indirect or induced effects.

Additionally, a proper counterfactual was frequently not established. Ideally, program evaluations would compare the group of program participants with a group of program nonparticipants (control group) that had similar attributes as those that were benefiting from the program. These two groups of individuals/ firms would then be tracked over time to see if there were any differences in performance indicators to be evaluated. Having a control group or constructing a “counterfactual” can help evaluators determine what would have happened in the absence of the program and can best be used to assess attribution to the intervention. Issues of selection bias—that is, the extent to which various subgroups or target population are likely to participate differently in a program—can also be controlled for using these types of methodologies. An evaluation should ideally begin with construction of a baseline to clearly define the starting point of program participants. Attribution to the intervention can best be supported once a comparison between program and non-program participants is carried out over time by qualified evaluators.

Unfortunately, it is not always possible to construct a counterfactual and/or identify a proper comparison group. There may be various reasons that go beyond the control of the evaluators that could limit the scope of an evaluation. For example, the evaluator may come across the following constraints: (i) incomplete/outdated contact information, (ii) refusal to participate in a survey, (iii) firm attrition,² (iv) not being able to identify a similar group to interview as they do not exist, (v) sample size restrictions, (vi) budget restrictions, (vii) low levels of available qualified survey firms, (viii) legal, ethical or practical issues, among many others.

As a result, qualitative evaluations can complement some quantitative approaches by examining some of the subjective aspects of the services received (e.g., satisfaction rates, perceived outcomes and/or impacts from the intervention).

Additionally, evaluations that encompass longer time horizons (in particular in the case of skills and training and investment climate projects) would strengthen the robustness of the effects of private sector interventions on job creation. In the case of investment climate projects, longer evaluation time frames may be needed to estimate the final job creation effects from the reforms. For skills and training programs, evaluations after longer periods of time will allow for: (i) a better assessment of the stability and quality of employment after the program has ended, and (ii) the impact created (in case of managerial and entrepreneurial training.) Regarding the first point, while quality and duration of employment after training may be important metrics, almost no evaluations addressed them. This could be due to relatively short follow-up periods after the training took place. Secondly, there is some evidence that managerial training programs do increase the profitability and productivity of

the affected firms. This could translate into positive employment effects in the long run, but the evaluations typically did not assess those effects. Thus evaluations with only one follow-up within a relatively short period of time may not be capturing the entire employment effects.

2.2. Findings from the meta-evaluation by area of intervention

Access to Finance: Twelve evaluations were reviewed in the Access to Finance area. They focused on the provision of loans and advisory services to micro, small, and medium enterprises as well as the households. The evaluations were conducted in Bosnia and Herzegovina, Bangladesh, China, Ghana, India, Maldives, Mexico, Mongolia, Morocco, Sri Lanka, and Vietnam. Different methods of analysis and data collection ranging from anecdotal evidence to experimental designs were utilized. Overall, it was found that improving access to finance can help firms expand their operations, which can have a positive effect on the quality and number of jobs created. The effects tend to be greatest for smaller firms. Combining access to finance with advisory services also tends to have a more positive effect on employment generation. Moreover, through quantitative approaches, it was found that improving access to finance for micro-enterprises can create jobs both through the establishment of new businesses and through the expansion of already existing ones. The latter effect tends to dominate in rural settings. Investments in the services sector in urban areas and in agriculture in rural areas tend to create the most jobs. Collective loans are likely to have stronger effects on employment than individual ones.

Access to Infrastructure: Seven evaluations and one meta-evaluation were reviewed under Access to Infrastructure. The job creation effects were overall positive across the different sectors reviewed, which were roads, power, water, ports and telecommunication infrastructure. From a methodological point of view, two-thirds of the evaluations were quantitative, but not all were able to construct a proper counterfactual to evaluate the effect of the intervention on job creation. However, in some cases, a quasi-experimental approach matching treated regions with possible controls was successfully implemented to account for a proper counterfactual scenario. This is particularly replicable in cases where projects affect smaller areas/groups and data are available to match them with comparable non-affected areas/groups. The predominant effects on employment tend to be indirect. Furthermore, some evaluations not only managed to capture economy-wide effects in addition to direct job creation but also differentiated between employment generated by construction and maintenance phases. Road rehabilitation projects could negatively affect employment in local manufacturing sectors by making imports cheaper, but overall tend to have positive effect on economic growth and employment. Interestingly, most evaluations focused on jobs created during construction and maintenance of the infrastructure asset but ignored the most crucial development impact of infrastructure- the second order growth effects - or jobs that are created because a crucial constraint is relieved, for example reliable power supply that helps firms expand their output and create more jobs.

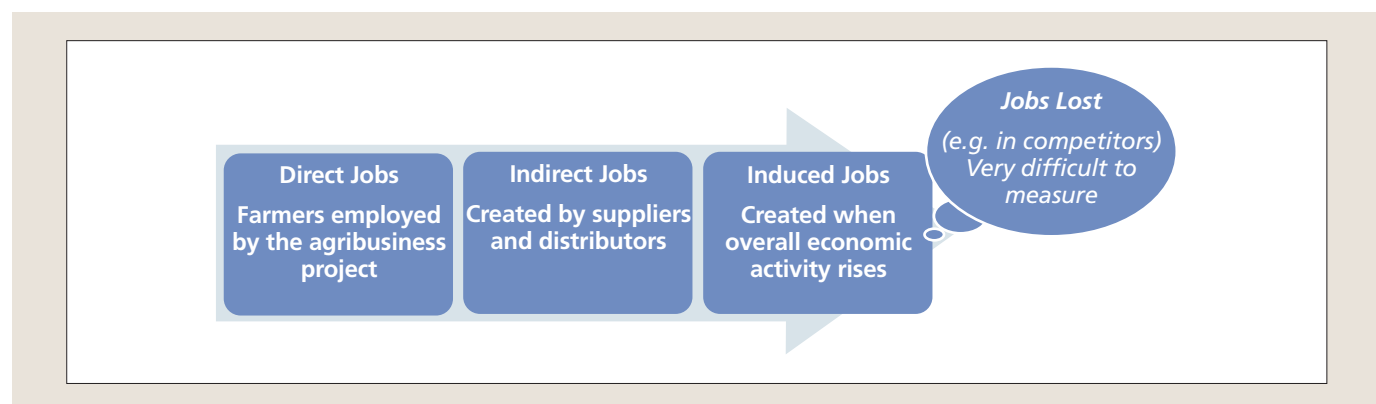
Investment Climate: Eight evaluations were reviewed under investment climate. These evaluations were conducted in Brazil, Burkina Faso, Liberia, Mexico, Peru, Portugal, Rwanda, and Sierra Leone. Seven showed to have had positive economy-wide effects on job creation, while the license simplification reform evaluation showed no effect on any firm performance indicators, including income, credit, or jobs. The seven evaluations that showed positive effects focused primarily on business entry/registration reform, investment promotion, and tax simplification. Overall, it was found that these types of investment climate reforms tend to lead to the creation of new firms, which can have positive employment generation effects. Yet firms that enter after the reform may be less likely to survive their first two years than firms that entered prior to the reforms. So even though new jobs may be created, their duration and quality are not always clear. Additionally, the following caveats also need to be taken into consideration when assessing the economy-wide effects of investment climate reforms that were not able to construct a proper counterfactual: (i) all had issues with attribution and could not account for other factors or interventions that could have influenced the results; (ii) due to the nature of the reform (i.e., legislative and regulatory reforms), it was difficult or impossible to construct a counterfactual; and (iii) the time frame needed to estimate the effects on job creation is long and often would need to be extended beyond the project lifetime.

Skills and Training: Eight evaluations, two meta-evaluations, and one meta-analysis were reviewed under skills training. The interventions included youth training, training for unemployed, retraining, and managerial training. Evaluations were mainly carried out in the Latin American and the Caribbean region and Eastern Europe, with one evaluation in South Asia. Results were mixed. Additionally due to variation in intensity, content, duration, and target population of the training programs, results are not always readily comparable. Managerial training was not found to have an impact on either the survival of the business (linked to the stability of the job) or on the number of employees. However, it was found to have a positive effect on business practices, profitability, and investments by the business. This is consistent with an evaluation that showed that supervisory training programs can have a positive effect on employee and manager work relations and worker productivity.

Together these may be linked to positive employment effects in the long term. Vocational training for youth was deemed successful in some but not all countries in increasing the probability of being employed after the training was received. Wages and future earnings were found to be higher after the training. The probability of being formally employed was found to be affected positively across all the evaluations that tracked this outcome indicator, and job quality also tended to have improved after the training. Combining in-class training with on-the-job training also tended to have positive effects. Vocational training seemed to also be more beneficial for women and disadvantaged youth across all the evaluations reviewed.

3. Data on direct jobs and some caveats

At present, IFC tracks information on direct jobs that are being provided³ in client companies. In 2011, IFC client companies provided some 2.5 million jobs. But direct jobs tell only a small part of the story and can be misleading. For example, judging by the indicator “number of jobs created per million dollar of project costs,” \$1 million invested in some sectors (such as wholesale and retail trade, services, and health care) is associated with adding many more direct jobs than similar investment in others (such as heavy industries or power generation).



While retail is ranked the highest in terms of additional jobs per million dollars of project costs, this number does not take into account job destruction in competing stores. A FAO/EBRD 2011 study on the retail sector in Poland, Bulgaria, and Romania finds both significant job creation in modern retailers and significant job losses in competitors, with the former effect being larger. Additionally, in all three countries, while employment in the retail sector clearly increased, part of it can also be attributed to shift from self-employment to wage employment. Furthermore, the FAO/EBRD study also cites a study from the United States,⁴ which found that for every hundred jobs added by introducing modern retail stores, fifty were lost in competing enterprises over the next five years. So the net job creation effects were still positive, but only half of what direct job numbers would indicate.

At the same time, while oil, gas, and mining is ranked less favorably in terms of direct jobs added in association with \$1 million invested, according to a recent study, this sector can generate jobs through significant indirect and induced employment effects. A study of a gold mining company in Ghana—an IFC client—suggests that about 28 jobs in the economy were associated with one direct job in the mine. This number is significantly higher than what is usually found in extractive industries investments. This can be explained by the fact that in addition to its investment, IFC provided assistance in strengthening a community development program and supply chain linkages, which most likely helped to bring about these strong results.

Lastly in case of some sectors, such as tourism, only accounting for the direct effects of projects misses their potentially high development impact, including the impact on job creation. For example, a large part of economy-wide job creation associated with investment in hotels happens through indirect job creation in hotels’ suppliers and contractors, job creation due to spending by hotel guests outside the hotel,⁵ and hotels attracting business into the area.

4. Economy-wide effects and multipliers: theory, practice, and limitations

While rigorous evaluations are the ultimate way to establish job creation results of private sector interventions, for benchmarking purposes various multipliers are used to assess possible economy-wide employment effects of development projects in the private sector, including: total number of jobs in the economy per number of dollars of project cost, or per number of

dollars of investment, or per number of direct jobs created. Frequently, it is hard to establish causal links while using multipliers unless a counterfactual was employed, and thus they are best suited to be approximation benchmarks and should be used with caution.

Most of this chapter focuses on the multipliers that address the total number of jobs in the economy associated with one direct job in a client company, since this is the metric easiest to track and thus most commonly tracked by development finance institutions (DFIs). However, due to the large variation in such multipliers, another measure that might be particularly relevant for DFIs is the number of jobs created per million US dollars invested.

Two types of employment effects are most commonly estimated with regard to employment: *indirect* and *induced*. *Indirect employment* refers to changes in employment up and down a client’s supply and distribution chain. *Induced employment* captures employment resulting from increased demand associated with extra income, e.g., from wages. Their definitions and relevant multipliers are presented in Box 3.1.

Box 3.1: Employment Effects: Definitions and Relevant Multipliers

| Effect | Definition | Multiplier (number of jobs created in the economy for each direct job) |
|----------------------------|---|---|
| Indirect employment effect | Change in employment in a client's supply and distribution chain | $\text{Type I} = \frac{\# \text{ Direct Jobs} + \# \text{ Indirect Jobs}}{\# \text{ Direct Jobs}}$ |
| Induced employment effect | Change in employment resulting from increased demand associated with extra labor income generated by new jobs | $\text{Type II} = \frac{\# \text{ Direct Jobs} + \# \text{ Indirect Jobs} + \Delta \text{ Induced Jobs}}{\# \text{ Direct Jobs}}$ |

These effects are usually estimated for a given geographic unit (county, state, country, region, etc.) The larger the unit, the bigger are the effects.

However, the magnitude of these effects also depends on various political, economic, and behavioral factors. For example, indirect job creation will reflect the extent to which the content is sourced locally. This might allow interventions such as supply chain linkage strengthening to have positive effects on job creation. Nevertheless, it is important to note that such effects are likely to only be positive from the point of view of the overall economy if domestically procured goods and services are competitive; where they are not, this could actually have negative effects on economic growth and ultimately employment. Induced employment effects depend on the fraction of income spent versus saved, as well as the fraction of income spent locally.

4.1 Limitations on the use of multipliers for the estimation of economy wide effects (theory)

Methodologies used to estimate job creation multipliers range from using input-output (IO) tables to case studies that rely on interviews with key suppliers/distributors.

With the exception of randomized control experiments and quasi-experimental studies, one of the main concerns remains the attribution of the observed, estimated, or predicted job creation effects of a given intervention.

However, besides attribution there are a few more concerns with the use of multipliers for estimation and prediction of the job creation effect of private sector interventions. A few studies point out that multipliers often tend to overstate the employment creation effects of projects. The extent of this problem can be such that if one adds up the effects for the entire economy, the employment created would be larger than the whole population. Furthermore, in sectors in which a significant portion of the employment effect comes from enabling other businesses to grow or be created—e.g., infrastructure—multipliers might not capture the whole story. In such cases, other quantitative impact evaluation techniques, like experimental or quasi-experimental designs (regression discontinuity, difference-in-differences, etc.) might yield more reliable and more accurate results.

Multipliers, independent of the methodology, might overstate the effects for the following reasons: First, it is often assumed that trading patterns are fixed. This means that it is predicted that new firms will buy from local industries in the same proportion as existing firms in the area and that local suppliers are able to increase their output to supply the new firms. Second,

incoming firms are not always a net new source of economic activity; in fact they can take business away from existing firms. Third, due to the often varying relationship between industries, the indirect economic impacts indicated by multipliers may not occur.

Models used to derive the IO tables are linear and do not allow for scale effects, or for the substitution possibility toward cheaper inputs, or for increases in productivity. Additionally, constraints on worker availability are highlighted by many studies as one of the main shortcomings of using multipliers from IO tables. This is particularly relevant in the case of skilled workers. According to a recent study by McKinsey Global Institute, even in the US shortages of appropriately skilled workers are predicted to occur due to a disparity between educational choices and the skills needed in industries likely to grow. Major imbalances are also predicted for developing countries.

Lastly, multipliers represent a snapshot of an economy at a particular point in time. Thus we have little information on the pattern of employment growth depending on the age of companies in the sector, changes in its capital intensity, etc.

4.2 Estimation of multipliers and economy-wide effects (practice)

The study has identified 23 case studies/articles that attempted to estimate indirect and induced job creation effects of various projects and industries. Methodologies ranged from IO tables to case studies that rely on interviews with key suppliers/distributors. Information from five micro-case studies conducted by IFC in agriculture (Ukraine), agro-processing (Bangladesh and Indonesia), manufacturing (South Africa), and cement (India) was also considered. Both sources point to the importance of measuring economy-wide or at least the indirect job creation effects of private sector interventions. At the same time they highlight the difficulty of achieving this goal by showing that multipliers are highly context specific, and therefore replication is cautioned against.

Both the review of external research and all five micro-case studies identify significant indirect job creation associated with investment in a client company/industry. In Chile, for example, a private mining company created twice as many jobs as a state-owned mining company, when direct, indirect, and induced jobs are considered.⁶ However, the state-owned mining company created more direct jobs. Thus it is likely that measuring only direct jobs underestimates the job creation effects of manufacturing, agriculture, and services projects.⁷

The highest number of indirect jobs produced in the supply or distribution chain depends on the sector, on the proportion of operations a company outsources in both supply and demand chains, and on whether the firm is an exporter or is oriented toward the domestic market. For example, four out of five case studies suggest it is useful to think beyond the supply chain to include also the distribution networks when seeking to identify indirect employment effects. Employment in the latter is more localized compared to the former, since global supply chains are increasingly integrated.⁸ However, the case study of Ecogreen, an Indonesian agro-processor is an exception. Most of the indirect jobs in this case are generated in the supply chain. This can be explained by two factors: the main input, which represents 86 percent of the cost of goods, is sourced locally, and Ecogreen is primarily an exporting firm that relies on its own transportation networks.

However, multipliers derived from the case studies are highly context-specific. They depend on the base year (which might be indicative of a particular point in the sector's life cycle), country, region, and firm characteristics.

For example, multipliers for the same firm might change depending on the year when the study is conducted, as illustrated by the Mriya case study, where the multiplier changed from 10.5 to 4.7 depending on which base year was used.⁹

As countries develop, job multipliers are likely to decrease, but the value added per job is likely to be higher. For instance, the multiplier for the Orissa Cement Ltd. (OCL) case is quite high because India has an abundant supply of unskilled labor; and, unlike in the more advanced countries, the cement sector in India is less mechanized. Cross-country variation of multipliers in the global mining sector can be used as another example. Approximately seven jobs are supported in the economy for each direct one in the private sector firm in Chile, while about five are supported in the US, and only about 2.5 in Scotland.

External research also suggests that differences in magnitudes of multipliers might also reflect just differences in management style or firm organization. Companies that tend to outsource more will have higher multipliers, for example. This implies that comparisons or use of multiplier estimates to predict job creation effects of projects should be carefully addressed. Table 3.1 presents a sample of various multipliers identified by the study in order to illustrate the wide variation.

Table 3.1: Multipliers for indirect and induced job creation effects vary widely: Examples from selected sectors/industries*

| Sector / Industry | Total number of jobs (direct, indirect, induced) in the economy for each direct job in a sector | | | |
|--------------------|---|--------------------------------|--------------------------|------------|
| Agriculture | 1.2 (Chile) | 2 (US and Scotland) | 3 (Tanzania) | |
| Mining | 2.5 (Scotland) | 5 (US) | 7 (Chile) | 28 (Ghana) |
| Financial services | 14.9 (Indonesia) | 19 (Ghana) | | |
| Oil and gas | 7.5 (US) | 13.4 (Scotland ¹⁰) | | |
| Hotels | 1.24 (Scotland) | 2.66 (Tanzania) | | |
| Retail | 1.27 (Chile) | 1.31 (Scotland) | 1.89 (US) | |
| Cement | 2.47 (Scotland) | | 4.45 (US ¹¹) | |

Source: Literature Review for IFC Jobs Study, available at www.ifc.org/jobcreation.

*These multipliers are type II, and they measure the number of direct, indirect, and induced jobs for every direct job.

As is evident from Table 3.1, there is significant variation in the magnitude of indirect and induced effects. The magnitude depends on various political, economic, and behavioral factors. For this reason, these effects are usually estimated for a given geographic unit (county, state, country, region, etc.), and the larger the unit, the bigger the effects.¹²

The size of multipliers also depends on: a) the fraction of income that new employees spend versus what they save; b) the fraction of income spent locally vs. abroad; c) whether it is an urban vs. a rural area; and d) whether we are referring to skilled or unskilled labor. These imply that induced effects will be larger if workers are hired locally versus abroad because they will likely induce an increase in local consumption. Multipliers also tend to be higher for industries located in urban areas, because more of the industry's spending is likely to stay within the area.

However, higher multipliers are not always desirable and do not necessarily translate into higher total employment. As illustrated above, differences in magnitude may simply reflect differences in management styles. Some studies point out that private sector companies tend to outsource more, which will result in a higher proportion of indirect jobs relative to direct ones, but not necessarily more jobs in total. Additionally, high multipliers might be indicative of low labor productivity or higher informality in a given country. Less developed countries tend to have larger indirect employment effects than more developed countries due to higher labor intensity of production, as pointed out in one study. Meanwhile, high multipliers might be a reflection of relatively closed economies, which would mean higher consumption of local products and lower imports. However, this may also result in higher prices and lower a country's economic growth potential.

IFC Micro-Case Studies Summary

Ecogreen: Ecogreen, located in Indonesia, is the fourth largest producer and exporter of natural fatty alcohols in the world and the largest from an emerging market. IFC has financed Ecogreen's expansion plan and its working capital needs since the Asian crisis. Based on interviews and financial data, that incremental capacity since 2005 has created about 177 direct jobs, 64 percent of which were high skilled and high value-added. The analysis also estimates about 3,646 indirect jobs in the domestic supply chain, of which an estimated 73 percent are unskilled and low skilled, with workers receiving wages above the minimum wage. The gains in indirect jobs are coming primarily from the supply chain.

Mriya: Mriya, an agricultural group in Ukraine, was granted two loans by IFC in FY10 and FY11, totaling US\$60 million, to assist in expanding its capacity and financing its working capital needs. This incremental capacity created about 7,390 additional indirect jobs over a period of two years, of which more than 80 percent were in distribution. An additional \$1 million of project cost is associated with 28 additional direct jobs and 67 indirect jobs. The estimated multiplier varied between 10.5 and 4.7, depending on the year of estimation. This drastic change in the multiplier was due mainly to the rapid increase of direct jobs at Mriya.

Orissa Cement Limited: IFC granted a loan to partly finance Indian cement manufacturer OCL's capacity expansion and the setting up of a greenfield plant. This incremental capacity created about 300 direct jobs and 7,200 additional indirect jobs over a period of four years, of which 65 percent were in the distribution network. An estimated 1.5 direct jobs and 40 indirect jobs, of which close to 70 percent were unskilled, were associated with \$1 million of project cost.

PRAN Dairy: PRAN is a leading agro-processing firm in Bangladesh. IFC helped finance its capacity expansion in several sectors, including dairy, and to directly expand its dairy operations. Based on interviews with farmers, packagers, and distributors connected with PRAN's dairy operations, its incremental milk-processing capacity of 50,000 liters per day may be associated with about 2,200 indirect jobs over a period of three years, many more than the 300 direct jobs created during this time. Thus every million US dollars in project costs translate to over 40 indirect jobs compared to about six direct jobs. Moreover, almost 80 percent of the incremental direct jobs were in rural areas, and there is anecdotal evidence of increased income for farmers.

Safal: IFC has financed Safal's production expansion in Kenya and Tanzania and a greenfield project in South Africa, and supported the setting up of nine roll forming centers in Africa. Analysis based on interviews and financial data found that this incremental capacity since 2007 created about 2,450 direct jobs, about 50 percent of which are skilled, and 24,000 indirect jobs in its distribution channels across the region, of which an estimated 65 percent are unskilled and lower skilled.

Conclusions:

Significant Indirect Effects

Even though these case studies are likely to underestimate the indirect job creation effects (by focusing only on key suppliers), they already show that these are significant compared to direct job creation. On the other hand, it is important to note that potential job losses in competitors were not considered and attribution remains a problem.

Significant Poverty Reduction Effect via Indirect Jobs

Compared to direct jobs, indirect jobs are frequently more likely to be located in rural areas and to be low-skilled, thus creating income-generating opportunities in some of the poorest areas.

Large Indirect Employment in the Distribution Network

Most indirect employment came from the distribution network as opposed to the supply chain. This could be due to companies outsourcing fewer jobs in the supply chain, or more inputs being imported from global supply chains. The only exception is the case study of Ecogreen, where large indirect effects come from the supply chain. This is likely to be explained by the fact that the main raw material used in the production accounts for about 86 percent of costs of goods and is entirely sourced locally, while most of Ecogreen's products are exported using its own transportation facilities.

Caution in Replication of Multipliers

Studies highlight that multipliers are highly dependent on the regional, local and industry context. Furthermore, they vary with the maturity of the company, the distribution channel model used by a specific client as well as the cost and availability of labor. Also, in the case of volume-driven businesses, one of the questions is whether using a jobs multiplier is the best way to estimate indirect employment effects, or whether estimations based on quantities bought or sold may result in more reliable estimates.

Sources: IFC Job Study micro-case studies.

5. Macro-case studies: Number of jobs created per 1 million US dollars invested.

Due to the high-variation in multipliers assessing total jobs created in the economy per one direct job, another relevant measure that mitigates some of these problems and that could be particularly relevant for the DFIs is the total number of jobs created per 1 million US dollars invested. The tables below present this type of multipliers based on three out of four macro-case studies¹³ conducted as a part of the IFC Jobs Study.

Table 3.2: Value-added and employment associated with financing of \$1 million in Jordan

| Channel | Economy-wide value added related to \$1 million (\$ millions) | | Economy-wide employment related to \$1 million (\$ millions) | |
|------------------|---|----------------|--|----------------|
| | Direct / Indirect | Induced Effect | Direct / Indirect | Induced Effect |
| Agriculture | 3.8 | + 41% | 207 | + 42% |
| Industry | 1.3 | + 32% | 57 | + 41% |
| Services | 0.5 | + 30% | 19 | + 43% |
| Weighted Average | 0.7 | + 32% | 31 | + 42% |

Source: Steward Redqueen. (2012) "Socio-Economic Impact of IFC Financing in Jordan"

Table 3.3: Value-added and employment associated with financing of \$1 million in Ghana

| Client Segment | Economy-wide value added related to \$1 million (\$ millions) | | Economy-wide employment related to \$1 million (number of jobs) | |
|------------------|---|----------------|---|----------------|
| | Direct / Indirect | Induced Effect | Direct / Indirect | Induced Effect |
| Agriculture | 2.57 | + 29% | 1,398 | + 12% |
| Industry | 0.69 | + 27% | 181 | + 22% |
| Services | 0.79 | + 25% | 50 | + 87% |
| Weighted Average | 0.74 | + 26% | 116 | + 36% |

Source: Steward Redqueen. (2012) "Socio-economic Impact of IFC Financing in Ghana."

Table 3.4: Value-added and employment associated with 1 million \$ financing in Tunisia

| Economic Sector | Economy-wide value added associated with USD 1 million | | Economy-wide employment associated with USD 1 million | |
|-------------------|--|-----------|---|-----------|
| | Direct / Indirect | + Induced | Direct / Indirect | + Induced |
| Food Processing | 5.4 | + 26% | 584 | + 0% |
| Construction | 5.3 | + 27% | 613 | + 16% |
| Agriculture | 3.6 | + 31% | 654 | + 12% |
| Manufacturing | 3.0 | + 23% | 213 | + 22% |
| Transport | 2.8 | + 28% | 125 | + 44% |
| Utilities | 2.4 | + 20% | 54 | + 63% |
| Mining | 2.4 | + 18% | 46 | + 66% |
| Public Service | 2.3 | + 41% | 248 | + 27% |
| Business Services | 1.9 | + 25% | 44 | + 176% |
| Communication | 1.5 | + 25% | 37 | + 33% |
| Trade | 1.1 | + 25% | 99 | + 21% |
| Weighted Average | USD 2.9 min | + 26% | 247 | + 18% |

Source: Steward Redqueen. (2012) "Modeling the Socio-Economic Impact of Potential IFC Investments in Tunisia."

Based on these tables, one can notice that this type of multiplier is highly economy-specific. However, it has the advantage of being based on an economy-wide study and thus being less dependent on the specifics of one particular company, as was the case with multipliers from the micro-case studies.

However, this multiplier is also based on many assumptions, and thus has less precision. These multipliers are usually derived using IO models, the limitations of which have already been discussed above. Moreover when the context is economy-wide, another aspect becomes important. One of the critical drawbacks of input-output models is that they are based on historical production functions. They will work well in cases where additional capital is applied to existing sectors and companies. They do not work well for investments that are expected to “transform” an economy, e.g., by introducing much higher labor or total factor productivity, possibly introducing a new sector with subsequent demonstration effects, etc. And these effects can be very “real”: For example, a US study found that total factor productivity increased by 12 percent in counties that were able to attract large manufacturing plants (compared to a control group of counties).¹⁴ Evidence in developing countries of such productivity effects associated with foreign direct investment is more mixed and appears to depend on various factors, for example the technological gap between foreign and domestic companies.¹⁵

However, even with this variation, based on these three case studies in specific countries, the agricultural sector leads in terms of both total value-added and number of jobs supported compared to the other sectors for the same amount of financing. The only exceptions are Tunisia and Sri Lanka, where while still leading in terms of number of jobs created, the agricultural sector creates less value added associated with the same amount of financing compared to either business services in Sri Lanka or to food processing and construction in Tunisia. However, the value added per job in the agricultural sector tends to be very low, and one of the key development challenges is to raise productivity in that sector. These four case studies provide different insights, illustrating that country specifics are clearly important for identifying the best sectors to invest in, and that the choice may differ depending on whether the goal is to maximize jobs, value added, or workers’ incomes.

IFC Macro-Case Studies Summary

As a part of the Job Study, IFC conducted macro-case studies in four countries: Ghana, Jordan, Sri Lanka and Tunisia. The goal of these studies was to assess the socio-economic impact of IFC’s financing in these countries. Employment associated with IFC investments is one of the parameters evaluated.

In Jordan, IFC’s lending activities in 2011 were directly and indirectly associated with supporting at least 9,100 jobs (0.6 percent of the employed labor force). The effects are predominantly direct, with most of the jobs requiring medium skill.

In Ghana, IFC’s lending activities in 2011 were directly and indirectly associated with supporting at least 36,700 jobs (0.4 percent of the labor force). As opposed to Jordan, in Ghana most of the effect comes from indirect jobs.

In both Ghana and Jordan for most of the sectors (excluding transportation), higher employment is associated with investment in financial institutions (FIs).

In Tunisia, investing in agriculture creates the largest quantity of employment, while investment in food processing creates the largest value added compared to investing the same amount in other sectors. At the same time, financing agriculture maximized the salaries/wages earned by workers. The public sector in Tunisia also offered relatively high salaries and wages.

In Sri Lanka, investing in business services creates the highest value added in terms of wages/salaries for workers, while investing in agriculture creates the highest profit for companies, for the same amount invested.

While investments, through financial intermediaries created more jobs, investments in real sector companies tended to be associated with higher value-added per job, and may be more likely to be ‘transformative’ (e.g. through demonstration effects or by strengthening local linkages).

6. Trade-off between value added and number of jobs created

As mentioned earlier, there is some evidence of a possible trade-off between value added per job and the number of jobs created. Value added is defined as corporate profits, household income, and taxes. This information is useful for understanding the connection between the number of jobs in each sector and economic growth. However, from a development and efficiency perspective, the following two facts will also matter: (i) the breakdown of value added between labor and capital,

and (ii) value added per \$1 million invested, preferably broken down between workers, capital owners, and government.

The macro-case studies conducted in Tunisia and Sri Lanka as a part of IFC's Jobs Study do exactly this (see Figures 3.1 and 3.2). The macro-case studies in Tunisia and Sri Lanka find that sectors that have the highest overall value added per \$1 million of investment also tend to create the highest value added for workers per \$1 million of investment. In Tunisia they are roughly the same ones that create the most jobs. Thus this higher value added to workers can be coming from the number of workers benefiting and not necessarily from higher compensation. At the same time in both Tunisia and Sri Lanka sectors that have the highest value added per job tend to have lower overall value added per \$1 million invested, and a smaller proportion of this value added goes to the workers, which basically means they tend to be more capital intensive.

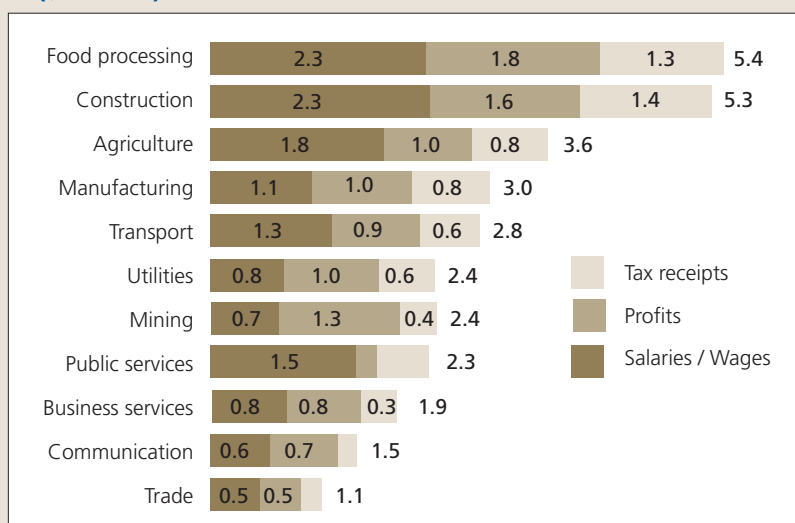
7. Net job creation

"Net" job creation should be kept in mind when total employment effects are estimated. This concept is utilized in two ways, depending on whether the impact on job creation that has already occurred or predictions of future job creation are being measured. In case of estimating creation effects, "net" job creation refers to jobs created minus jobs destroyed as a result of a given project elsewhere in the economy. In case of predictions of job creation impacts, "net" job creation sometimes refers to jobs predicted to be created minus the number of jobs predicted to be created in a valid counterfactual scenario.

New firms can create new jobs, but they can also cause job losses for their competitors, and this can affect overall job creation, as was illustrated in Section 3 in the example of the retail industry.

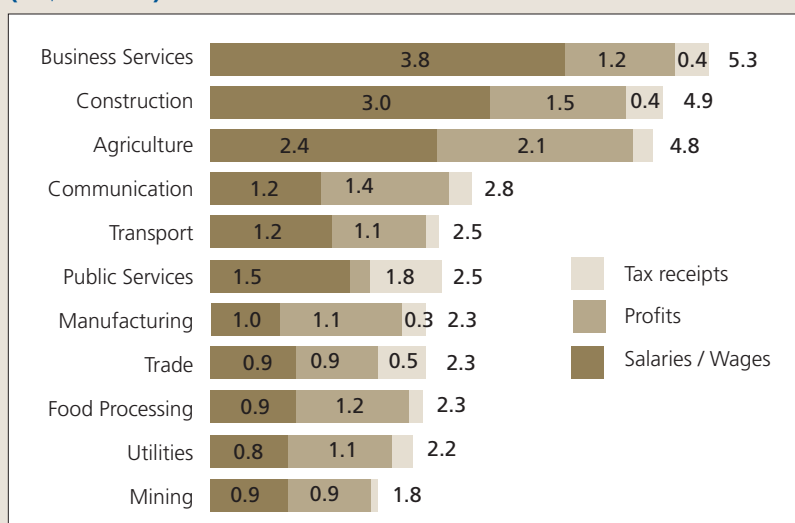
Studies that consider a counterfactual could indicate the number of net jobs created or destroyed compared to specified alternatives. In some cases, while gross impact may look impressive, the net impact—after comparison with an alternative—may be much smaller. This is particularly relevant for energy and infrastructure studies. For example, one study compares targets of Solar America Initiative to the alternative of providing the same amount of electricity generated through new gas-fired plants. The gross impact of solar production was 49,370 direct, indirect, and induced jobs, but the net impact was only 15,580 jobs for the same period, with negative effects on direct net employment.¹⁶ Thus, comparison to an appropriate counterfactual can significantly lower the predicted gains.

Figure 3.1: Economy-wide value added associated with \$1 million investment into a specific sector in Tunisia by type of value-added in (\$ millions)



Source: Steward Redqueen (2012) "Modeling the Socio-Economic Impact of Potential IFC Investments in Tunisia."

Figure 3.2: Economy-wide value added associated with \$1 million investment into a specific sector in Sri Lanka by type of value added (in \$ millions)



Source: Steward Redqueen (2012) "Modeling the Socio-Economic Impact of Potential IFC Investments in Sri Lanka."

However, assessing “net” job creation effects is very difficult: When we assess job creation, it usually refers to jobs that can be linked to a certain investment. However, what the net effects will depend on is the relative elasticity of the job supply. In countries with very high unemployment rates, job creation will usually be in the form of drawing previously under- or unemployed people into the labor force. In countries with large informal sectors, creating formal sector jobs may pull workers from the informal into the formal sector. And in countries that are already close to full employment, job creation will likely come in the form of attracting workers into higher value-added jobs that offer higher wages and benefits.

8. Conclusion

The number of direct jobs created by private sector activities gives an incomplete picture. For sectors such as tourism — in particular, hotels—or heavy industry, looking at direct jobs alone might lead to a severe underestimation of the development impact. Furthermore, micro-case studies suggest that the majority of indirect jobs created tend to be low-skilled and in poor rural areas, which are priority areas for many policymakers.

Thus, development finance institutions and their clients should aim to estimate and benchmark the economy-wide job-creation effects of their projects. IFC reviewed previous evaluations of the effects of private sector activities on job creation conducted by various development finance institutions, think tanks, nonprofit institutions, academia, and governments. We found that for these evaluations are not easily comparable, need to be more rigorous, do not cover longer time horizons, and do not adopt the same definition of “employment.”

Rigorous evaluation to estimate job creation effects, is not always feasible. Thus it is common to use various employment multipliers, such as the total number of jobs in an economy created per one direct job, for approximation and benchmarking. However, these employment multipliers are rarely based on proper counterfactuals, so one has to be cautious with their replication and with using them for causal claims. The employment multipliers also are highly context specific, varying a lot depending on management style, the capital intensity of a particular project, the business cycle, and the regional and country context. Even for benchmarking purposes, development finance institutions should use a range with lower and upper bounds.

It is generally more important to consider the overall employment effects than the multiplier alone. Thus a multiplier assessing the total number of jobs per \$1 million invested can be informative. There is still variation, as this multiplier is highly specific to a particular economy. Additionally, even compared with the other multiplier, it is based on strong assumptions that for example rule out “transformation of the economy.”

When deciding on investments in different sectors, development finance institutions must balance a few, sometimes competing, objectives, such as profitability, development impact, growth, job creation, and income generation. There can be a trade-off between the number of jobs created and the value-added per job (and the proportion of it going to workers), but not necessarily the value-added per \$1 million invested. However, as the macro case studies illustrate, it is evident that these trade-offs are country specific, and thus the prioritization also may differ by country.

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Endnotes

- ¹ Jobs created in the client firm in case of DFIs, or jobs created in the industry in case of industry-level evaluations.
- ² Survival rates for firms are quite low, especially when it comes to micro, small, and medium firms. Firms may exit the market because they are not able to compete in the current business environment; they can also exit because entrepreneurs found better opportunities elsewhere.
- ³ Job "provided" are provided by an IFC client company at a certain point in time. Jobs "created" are changes in the number of jobs provided from one point to another. Job creation cannot be exclusively attributed to IFC's financing.
- ⁴ Basker, E. (2005). "Job Creation or Destruction? Labor-Market Effects of Wal-Mart Expansion," *Review of Economics and Statistics*, Vol. 87, pp.174–183.
- ⁵ Based on micro-case studies of hotels in Ukraine, Peru, Rwanda, and Turkey.
- ⁶ Aroca (2001).
- ⁷ This conclusion most likely can be extended to other sectors such as infrastructure, but the existing case studies only focused on projects in manufacturing, services, and agriculture.
- ⁸ IFC Job Study (2013). Micro-case studies.
- ⁹ Ibid.
- ¹⁰ This number considers only petroleum refineries.
- ¹¹ This number is for California only, not the whole country.
- ¹² California Economic Strategy Panel (2011).
- ¹³ Steward Redqueen (2012a), (2012b), (2012c) and (2012d)
- ¹⁴ Greenstone, M., R. Hornbeck, and E. Moretti. "Identifying Agglomeration Spillovers: Evidence from Winners and Losers of Large Plant Openings (2010).
- ¹⁵ Erdogan, A.: "Productivity Spillovers from Foreign Direct Investment: A Review of the Literature" (2011).
- ¹⁶ Sustainable Energy Department of the World Bank (2011).



CHAPTER 4

MAJOR CONSTRAINTS FACING FIRMS

This chapter finds that, based on responses of more than 45,000 companies in developing countries, the top obstacles to their operations are a poor investment climate, notably red tape, high tax rates, and competition from the informal sector; inadequate infrastructure, especially an insufficient or unreliable power supply; lack of access to finance such as credit lines; and workers who lack sufficient skills and training. Four findings stand out: 1) informality is a major hindrance for small and medium-size enterprises in middle-income countries; 2) an inadequate power supply is the most important issue for companies in low-income countries; 3) access to finance is particularly a constraint for SMEs; and 4) a shortage of skilled workers is a key challenge for larger businesses and businesses in high-income countries. This chapter also examines constraints from regional and sector perspectives, which provides additional useful insights. While there are some caveats to using the companies' perceptions, the problems they identify often are correlated with more objective problems.

1. Constraints according to the Enterprise Surveys

The conceptual framework presented in the previous chapter offered a global picture on the overall determinants of job creation in an economy. The objective of this chapter is to go one step further and present a more disaggregated analysis, allowing us to identify and select the particular constraints that are most important (leaving aside macroeconomic policies). The following chapters will explore these selected constraints in depth, illustrating how addressing them can have significant effects on employment.

What are the most important constraints facing firms in the private sector? To answer this question, we used the World Bank Group's Enterprise Surveys (ES) data, and analyzed responses of over 45,000 enterprises in 106 developing countries. During the survey, the firm's manager has to answer, "Which of the following elements of the business environment, if any, currently represents the biggest obstacle faced by this establishment?" There are 15 obstacles listed, and the manager is only required to choose the one element considered to be the biggest constraint facing the firm. The list of these 15 obstacles, along with its sample distribution, is discussed in the next section.

**45,000 firms of
106 developing
countries.**

World Bank Group Enterprise Surveys.

The advantage of using this set of questions is twofold. First, it results in high response rates from the firms, unlike other more objective measurements that have lower response rates. Second, this set of data has been used by various scholars to assess the investment climate and business environment of firms, and it was found that the firms' perceptions are indeed correlated with more objective measures. Since a manager has to pick one in the context of the other 14 obstacles listed, it captures reasonably well the most prevalent constraint a firm faces in its operations.

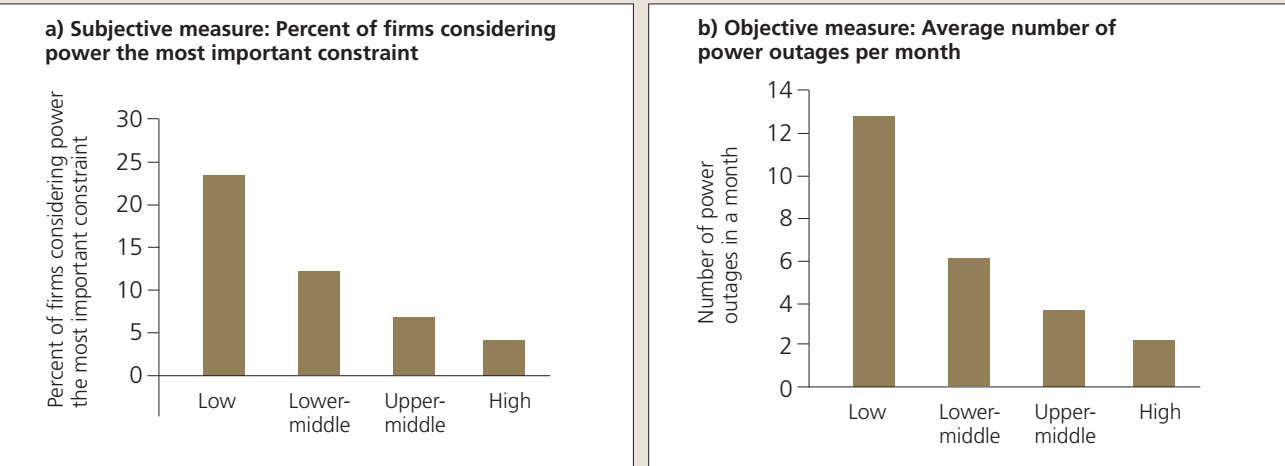
Some researchers are concerned about the validity of using perception-based indicators as they could bring subjective views and errors into these measurements. There is no unified benchmark with which respondents could assess the situation and answer the questions objectively. So, to a large extent, respondents rely on their own condition, experience, and judgment. Another potential problem of using Enterprise Surveys is survivor bias (firms that have terminated operations or that could never start them are not surveyed). The question about the most important constraint is posed to surviving companies, so constraints that prevent companies from operating in the first place (e.g., labor regulations, access to land) may not feature frequently in the list, compared to constraints to continued operation/expansion of existing companies.

Yet the perception-based measurement and ranking are quite popular, and have been used widely among policymakers as well as practitioners in the private sector. Perception-based indicators such as the International Investor Country Credit Rating, the International Country Risk Guide (ICRG), the Heritage Index of Economic Freedom, and the global governance index and many others have also been used widely to assess the country political risks and governance soundness.

Indeed, findings show that the perception-based responses are often closely correlated with more objective measures. Subjectively, fewer firms in high-income countries consider access to power the most important constraint than do firms in low-income countries (Figure 4.1a); using a more objective measure, firms in low-income countries tend to suffer from higher incidence of power outages than firms in high-income countries (Figure 4.1b).

In the same vein, small firms (5 to 20 employees) are more likely to consider access to finance as their biggest constraint than medium (21 to 99 employees) and especially large firms (100 or more employees) (Figure 4.2a); more objective measures of access to various financing instruments provide the same picture. In particular, a much smaller share of small businesses have overdraft facilities, lines of credit, loans from financial institutions, or bank financing for more than 50 percent of investment (Figure 4.2b). Thus, the perception-based indicator captures reasonably well what the objective ones intend to measure.

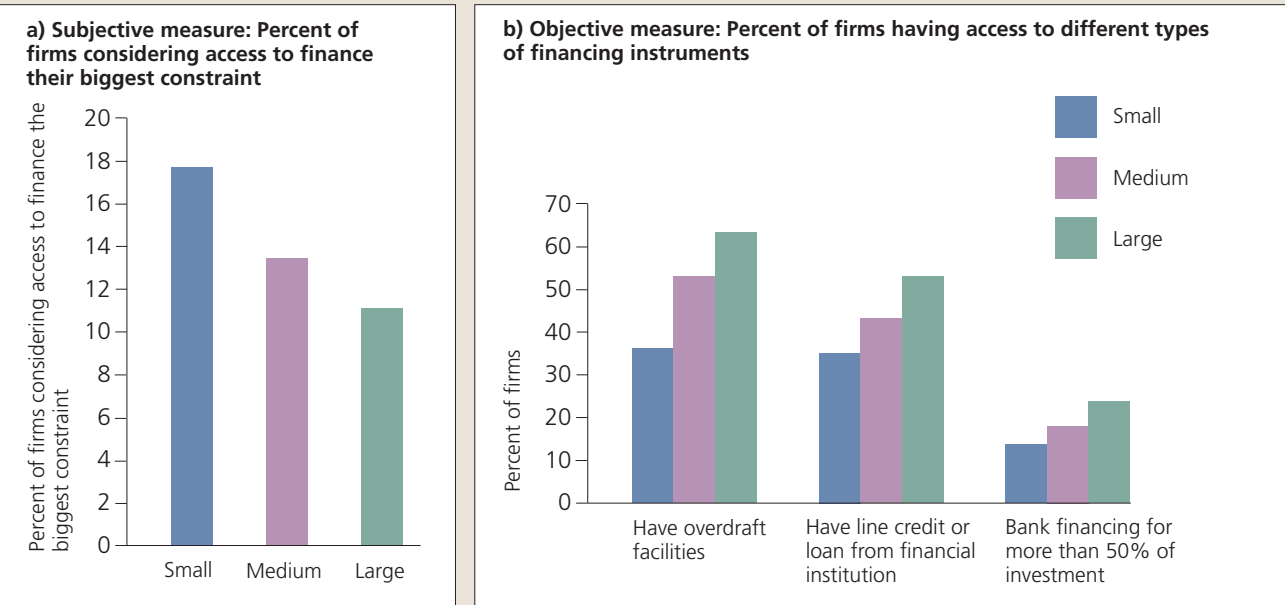
Figure 4.1: Access to power is a severe constraint in low income countries



Source: World Bank Group Enterprise Surveys.

Source: World Bank Group Enterprise Surveys.

Figure 4.2: The smaller the firm, the more difficult it is to have access to finance



Source: World Bank Group Enterprise Surveys.

Source: World Bank Group Enterprise Surveys.

2. Top constraints by firm size, income group, sector and region

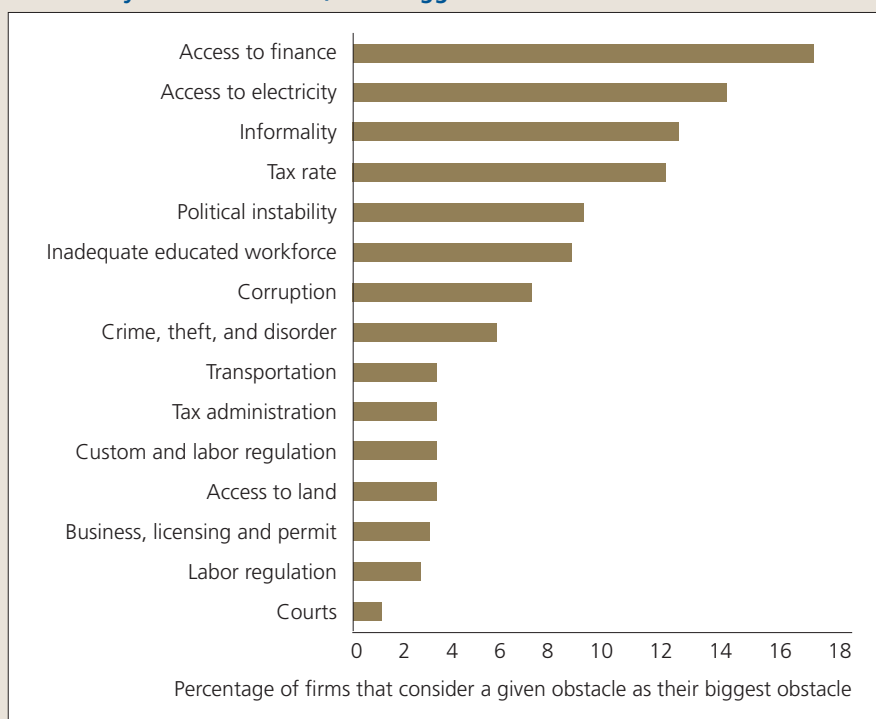
2.1 Overall sample

Taking the sample as a whole, access to finance tops the list of constraints, with 16.5 percent of firms expressing it as their biggest obstacle (Figure 4.3). Access to electricity ranks second, with 13.5 percent of firms expressing it as their biggest obstacle, and informality (competition from the informal sector) ranks third, with nearly 12 percent of firms. About 42 percent of all firms consider these three obstacles the most important ones.

The top three constraints are followed by tax rates, considered by 11.3 percent of firms as the most important constraint, political instability (8.2 percent), inadequately educated workforce (8 percent), corruption (6.5 percent) and crime, theft, and disorder (5.3 percent).

Less concern is expressed about labor regulations, business licensing and permits, transportation, tax administration, custom and labor regulation, and access to land, with only about 3 percent of firms considering any of these six constraints their most important one. Finally, only 1 percent of firms say courts are their biggest obstacle. This indicates that while these may be important for some firms, they are not the biggest priority for most.

Figure 4.3: Most firms consider access to finance and electricity, followed by informality and the tax rate, their biggest obstacle



Source: World Bank Group Enterprise Surveys.

2.2 Constraints by firm's size

Figure 4.4 shows that the top constraint for small and medium enterprises (SMEs) has been access to finance, with 17.7 percent of small firms and 13.7 percent of medium-size firms expressing this concern respectively. Their second-ranked constraint is access to power, with 13 percent of firms expressing this concern. Informality is the third-ranked constraint, with 12 percent of firms expressing this concern. Large firms encounter slightly different constraints, with access to power topping their list (15 percent), followed by lack of skills of their labor force (12 percent) and finance (11.4 percent).

Figure 4.4: First, second, and third ranked constraint by firm size and country income group

| Constraint (Top 3) | Firm size* | | | Country income group | | | | All firms |
|--------------------|------------|--------|-------|----------------------|--------------|--------------|------|-----------|
| | Small | Medium | Large | Low-income | Lower-Middle | Upper-middle | High | |
| Access to Finance | 1 | 1 | 3 | 2 | 1 | 1 | 3 | 1 |
| Electricity | 2 | 2 | 1 | 1 | 3 | | | 2 |
| Informality | 3 | 3 | | | 2 | 3 | | 3 |
| Tax rate | | | | 3 | | 2 | 2 | |
| Skills | | | 2 | | | | 1 | |

*For this analysis: Small = 5-20 employees, medium-sized = 21 - 99, large >= 100 employees.

Source: World Bank Group's Enterprise Surveys covering 46,556 enterprises in 106 countries.

2.3 Constraints by country income group

Consistent with findings in the literature, access to power (electricity) is the top constraint for firms in low-income countries. About one quarter (25.7 percent) of firms in low-income countries considered access to power their top obstacle, followed by access to finance (nearly 21 percent).

Together, almost half the firms (46.4 percent) in low-income countries consider access to power or access to finance their most important constraint.

Among firms in high-income countries, the top constraint is skills of the labor force, with 17.6 percent of firms expressing this concern. The second-ranked concern is the tax rate, with 14.5 percent of firms expressing it as their biggest obstacle.

2.4 Constraints from a regional perspective

The most important constraints differ by region (see Table 4.1). In Sub-Saharan Africa (SSA), more than one fifth (22.3 percent) of firms expressed access to power as their biggest obstacle, whereas firms in other regions consider other obstacles the top constraint. In the East Asia and Pacific (EAP) region, firms rank access to finance as their top constraint, with 16.6 percent of firms expressing it as their biggest obstacle. In the Europe and Central Asia (ECA) region, the tax rate was the top concern, with 16.7 percent of firms saying so. In the Latin America and Caribbean (LAC) region, informality was the top obstacle, with 16 percent of firms expressing this concern; and in the South Asia (SAR) region, political instability was the biggest concern, with nearly one quarter of firms expressing it as their largest obstacle.

One noticeable finding from the regional perspective is the issue of access to power in the South Asia region. Although it ranks narrowly as only the second biggest concern in the region, almost a quarter (23.4 percent) of firms saw access to power as their biggest concern, which is in fact the highest percentage among all regions.

Table 4.1: Top 3 obstacles by region

| | SSA | EAP | ECA | LAC | SAR |
|---------------------|------------------------------|-------------------------------|----------------------------|-------------------------------|---|
| 1st obstacle | power (22.3 percent) | finance (16.6 percent) | tax rate (16.7 percent) | informality (15.9 percent) | political instability (24.4 percent) |
| 2nd obstacle | finance (19.2 percent) | informality (12.0 percent) | finance (15.3 percent) | finance (15.3 percent) | power (23.4 percent) |
| 3rd obstacle | informality (9.7 percent) | power (11.5 percent) | informality (12.9) | informality (12.9 percent) | finance (19.9) |

Source: World Bank Group Enterprise Surveys.

2.5 Industry perspective

Access to finance is the top constraint expressed by firms in three sectors: manufacturing, retailing, and services (Table 4.2). Over 18 percent of firms in the manufacturing and retail sectors and 15 percent in the services sector express this as their top concern. For the second obstacle, the ranking order is quite different: for manufacturing it is access to power (15.9 percent), for retail it is informality (12.6 percent), and for services it is the tax rate (12.5 percent).

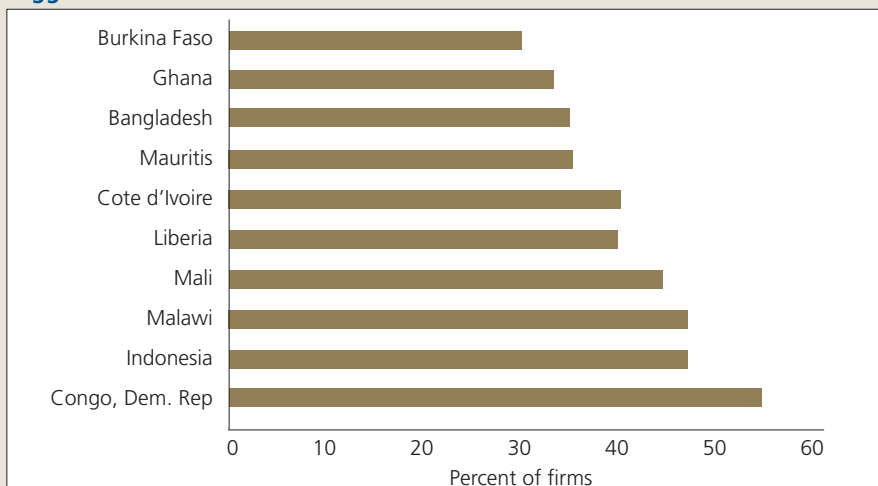
Table 4.2: Top 3 obstacles by industry

| | manufacturing | retail | services |
|---------------------|-------------------------------|-------------------------------|-------------------------------|
| 1st obstacle | finance (18.6 percent) | finance (18.5 percent) | finance (15.1) |
| 2nd obstacle | power (15.9 percent) | informality (12.6 percent) | tax rate (12.5 percent) |
| 3rd obstacle | informality (12.7 percent) | power (9.9 percent) | informality (11.6 percent) |

Source: World Bank Group Enterprise Surveys.

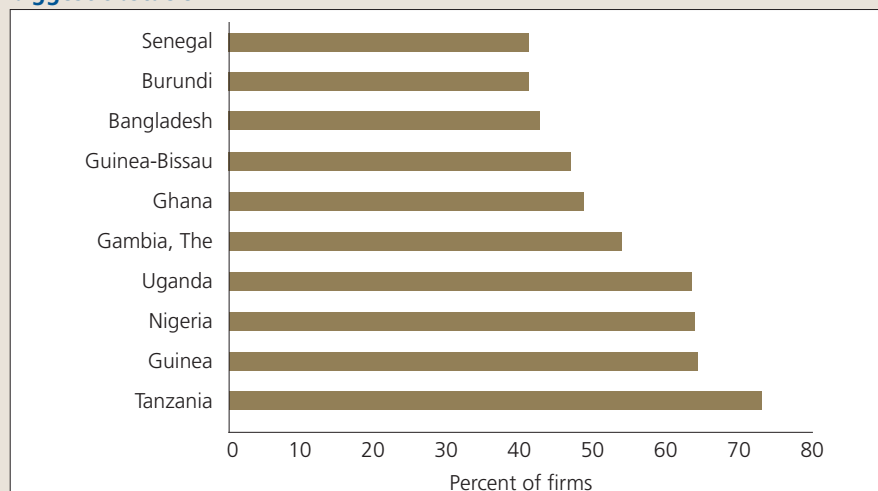
As established in the literature, the perception over the biggest constraint facing firms can differ significantly due to other characteristics such as the years in operation, the ownership type, the city size where the firms are located, and productivity. Furthermore, many constraints are evident at the country macro condition or regional level. Using the same ES data set, these perceptual constraints' differentials by firm size, country income group, region, and industry discussed above were largely confirmed in the multivariate context.

Figure 4.5a: Percentage of firms expressing access to finance as their biggest obstacle



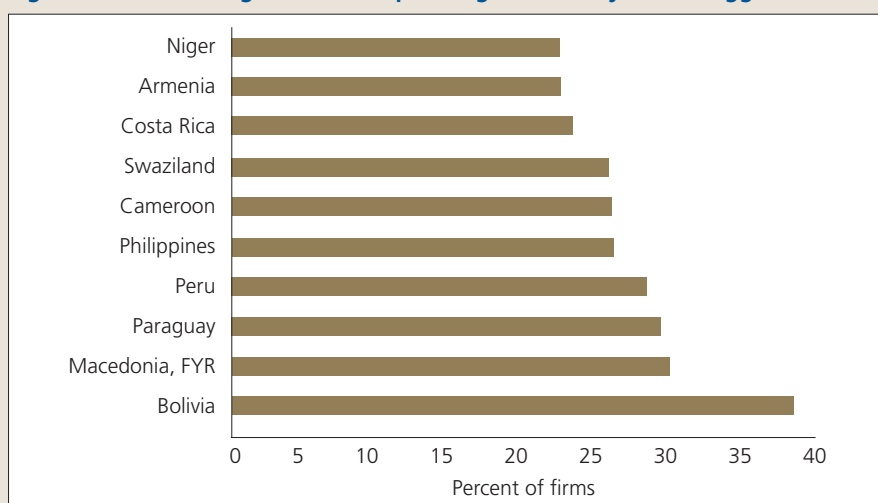
Source: World Bank Group Enterprise Surveys.

Figure 4.5b: Percentage of firms expressing access to electricity as their biggest obstacle



Source: World Bank Group Enterprise Surveys.

Figure 4.5c: Percentage of firms expressing informality as the biggest obstacle



Source: World Bank Group Enterprise Surveys.

3. Top constraints in the country context

In this section, we discuss the prevalence of top constraints in the country context. Figures 4.5a, 4.5b and 4.5c show the ten countries where obstacles to accessing finance, accessing electricity, and informality, respectively, are cited most prevalently. Figure 4.5a shows that access to finance is perceived as a particularly severe constraint in the Democratic Republic of Congo, where over half of the firms (54.5 percent) consider it their biggest obstacle, followed by Indonesia and Malawi, where about 47 percent of firms consider it their biggest concern. This is three times higher than the sample average of 16.5 percent.

Access to power is considered the biggest constraint by a large percentage of firms in Tanzania (73 percent), followed by Guinea, Nigeria, and Uganda (each about 64 percent). This is nearly five times higher than the sample average of 13.5 percent (Figure 4.5b).

Competition from the informal sector is considered the biggest concern by a large number of firms in Bolivia (38 percent), FYR Macedonia, and Paraguay (both almost 30 percent). This is considerably higher than the sample mean of 11.8 percent (Figure 4.5c).

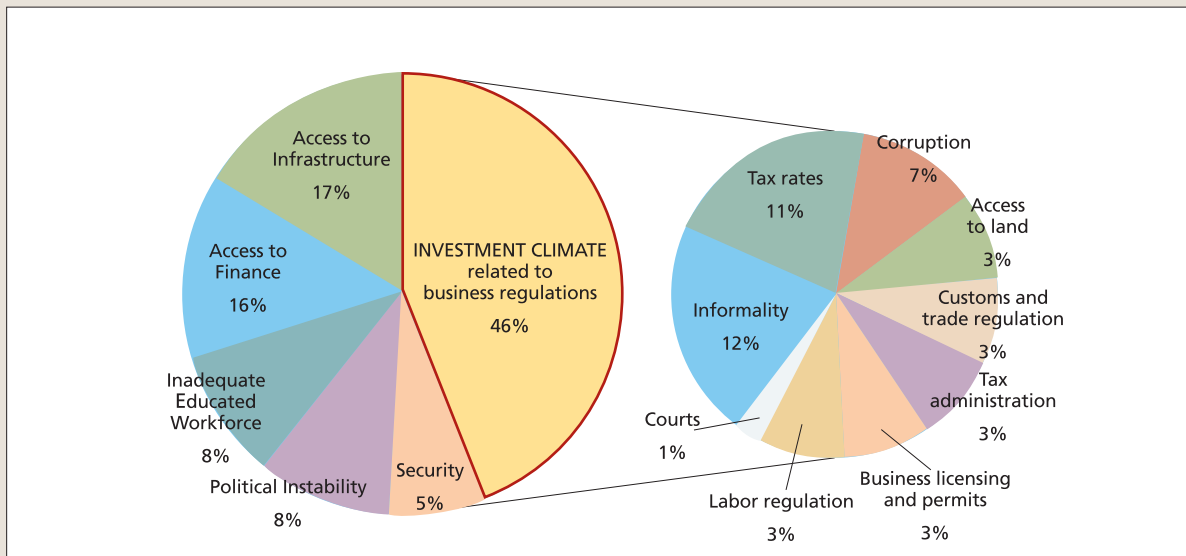
4. Grouping constraints thematically

This chapter has treated all obstacles individually. However, some obstacles can be grouped together, which brings in a complementary perspective. In particular, informality, tax rates, customs and labor regulation, tax administration, business licensing and permit, courts, access to land, and corruption can be grouped together as an indicator of investment climate (narrowly defined as the legal and regulatory framework and its implementation). In a similar fashion, access to power and roads can be grouped together to form an indicator of access to infrastructure.

In this context, investment climate becomes the biggest constraint, with almost half of firms identifying it as such (figure 4.6). Access to infrastructure, which includes access to power and transportation, comes second. Access to finance comes third. Inadequate workforce follows (along with political instability).

This thematic classification of obstacles guides the order in which the following chapters of this report are presented.

Figure 4.6: Constraints by thematic issue



Source: World Bank Group Enterprise Surveys.

5. Conclusion

A fundamental requirement for job growth is to remove the obstacles that prevent it. Business owners' perceptions about the most important constraints they face provide a good indication of the most serious bottlenecks, and are closely correlated with more objective indicators about what affects business performance. Thus, policymakers should focus on eliminating the biggest obstacle identified by firms. Obstacles differ significantly by country, and policymakers should consider the most binding constraints for companies in their specific context. Subsequent chapters will further illustrate how a sound investment climate, improved infrastructure, better access to finance, and training can contribute to job growth.

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Endnotes

- ¹ Aterido et al. 2009); Batra et al. (2003).
- ² Gelb et al. (2007).
- ³ Dollar et al. (2005); Kaplan and Pathania. (2010); Ferro and Wilson (2011); Hallward-Driemeier and Stewart (2004).
- ⁴ Dinh et al. (2010); Shi (2012).
- ⁵ World Bank (2004).



INVESTMENT CLIMATE

Summary

A sound investment climate is a prerequisite for robust private sector growth and job creation. Simple, clear, transparent regulations create a good level playing field and are key for creating a conducive environment for the private sector. Reducing regulatory barriers to business entry and competition, including inefficient tax administration, helps increase the number of firms that register and raise productivity, thereby creating jobs in the economy. Targeted investment climate reforms (such as special economic zones) can support job creation, if they are carefully planned and implemented. Regulatory simplification can also help create incentives for firms to move from the informal to the formal sector.

Getting the basics right

The very first step to set up an economy for growth and job creation is to get the basic enabling conditions right. Macroeconomic stability, clear and transparent regulations, and the rule of law, together form the fundamental operating environment within which the private sector makes its decisions to invest and create jobs. Investment climate reforms, including investment promotion efforts, spur economic growth that helps create jobs,¹ which is a principal way to escape poverty. Besides, investment climate reforms level the playing field and have the ability to positively affect the informal sector, where large proportions of poor people work in low-skilled jobs. The international community clearly underscored the importance of an enabling business climate for private investment and job creation, during the G-20 Mexico Summit in June 2012. Therefore any effort to create jobs in an economy needs to begin by ensuring that the investment climate in which the private sector operates is clear, simple and streamlined. This chapter focuses specifically on the legal and regulatory framework and its implementation. Other aspects of the operating environment for private enterprises—such as infrastructure and access to finance—are covered elsewhere in this report.

Examples from Africa illustrate the critical role that investment climate can play in creating jobs. Four evaluations conducted for IFC-supported investment climate reforms in Burkina Faso, Liberia, Rwanda, and Sierra Leone estimate that approximately 50,000 jobs had been created in those four countries in 2008–2010 (Table 5.1 and Box 5.1).² This is roughly equivalent to about 0.3 percent of the total labor force in the four countries. While these programs were multipronged, not simple undertakings, the pay-offs of these types of efforts can be far-reaching. In each of these countries, the reforms helped generate in two years: i) about US\$1 million to \$5 million in cost savings for the private sector; ii) US\$5 million to \$51 million in savings for the private sector companies; and iii) an additional 23,000 enterprises registered, of which about 10,000 were informal but chose to register and formalize as a result of the improvement in business regulations.³

Importantly, three of these countries incorporated a “public-private dialogue” (PPD) mechanism to effectively work with a broad range of stakeholders. Especially useful in countries with a disenfranchised or underdeveloped private sector, PPDs help ensure the participation of such groups as micro, small, and medium enterprises (MSMEs), women, minorities, and the broader civil society.

Table 5.1 Comprehensive investment climate reforms led to approx. 50,000 jobs in four countries

| Summary of Four-country Investment Climate Interventions | | | | | |
|---|---|----------------------------|-----------------------|-----------------------|-------------------------|
| | | Burkina Faso | Liberia | Rwanda | Sierra Leone |
| Reform impact | Number of Jobs created (estimates) 2008-2010 | 1,700 - 2,000 ¹ | 16,300 - 20,400 | 15,000 - 17,600 | 13,500 - 16,800 |
| | Approx. Private sector cost savings | US\$2.7m (2007-2010) | US\$4.7m (2008-2010) | US\$5.1m (2008-2010) | US\$0.9m (2008-2010) |
| | Private sector investment generated, 2008-2010 ² | US\$5-6m ³ | US\$11-13m | US\$44-51M | US\$15-20m ⁴ |
| | Approx. number of new business registered, 2008-2010 | 1,200 | 8,200 | 8,000 | 5,600 |
| | Within, formalized from informality | 250-300 | 3,300-4,100 | 4,400-5,200 | 2,250-2,800 |
| Investment Climate Interventions | Access to Business Land | | | X | |
| | Business Entry | X | X | | X |
| | Business Exit | X | | | |
| | Business Licensing | | | X | |
| | Construction Permits | X | | | |
| | Contract Enforcement | X | | | |
| | Doing Business Reforms ⁵ | | X | X | X |
| | Investment Promotion | | X | X | X |
| | Labor Regulation | X | | | |
| | Property Registration | X | | | |
| | Public Private Dialogue | | X | X | X |
| | Special Economic Zones | | X | | |
| | Taxation | X | | X | X |
| | Tourism Development | | | | X |
| | Trade Logistics | X | | X | |
| Program preparation and implementation duration (IFC assistance provided) | | 57 months (Mar 2006~) | 51 months (Oct 2006~) | 35 months (Jan 2008~) | 31 months (Dec 2008~) |
| IFC's project expenditure (incl. others' funding) | | US\$2.8m | US\$8.9m | US\$3.3m | US\$8.5m |
| Country Data | Per Capita GDP in current US\$ (2011), WDI | US\$600 | US\$281 | US\$583 | US\$374 |
| | Population (2011), WDI | 16,967,845 | 4,128,572 | 10,942,950 | 5,997,486 |
| | Official unemployment rate, WDI | 3.3% (2007) | 3.7% (2010) | n.a. | 3.4% (2004) |
| | Total labor force (2010), WDI | 7,544,166 | 1,374,476 | 5,228,059 | 2,260,968 |
| | Informal economy % GDP ⁶ | 40.5 | 44.2 | 40.1 | 45.6 |

Source: Based on 4 case studies conducted by Economisti Associati

1. No impact could be detected in the case of Labor Law reform.
2. Generally these programs contributed to 3-4% of total private investment.
3. The reform program is believed to have contributed to economy's investment climate and thus overall investment increase, including large FDIs not included in this impact evaluation.
4. Improved institutional capacity resulted from the program is estimated to generate \$150m in private investment for 2011-2013.
5. The component specifically focuses on the investment climate measured by WBG's Doing Business Report.
6. Friedrich Schneider, Andreas Buehn, Claudio E. Montenegro 2010, based on the definition of "all market-based legal production of goods and services that are deliberately concealed from public authorities to avoid payment of income, value added or other taxes, to avoid payment of social security contributions, to avoid having to meet certain legal labor market standards, such as minimum wages, maximum working hours, safety standards, etc., and to avoid complying with certain administrative procedures, such as completing statistical questionnaires or other administrative forms.

This chapter is divided into **three main sections**:

The **first section** illustrates examples of economy-wide business regulations that facilitate a level playing field through clear, consistent and simple standards, processes, and regulations. The **second section** consists of targeted interventions that proactively attempt to attract private sector investment, often through investment promotion policies, special economic zones or industry-specific policies. These complement the above-mentioned business regulations. The **third section** is a discussion on informality and jobs. Informality can be a direct outcome of a poor investment climate, and is often associated with poverty, lower wages, and poor working conditions.

1. Regulatory Simplification: Creating a level playing field

As shown in Figure 4.6, various investment climate factors, taken together, account for about half of the top constraints for formal private enterprises. These constraints, led by informality, tax rates, and corruption, tend to mutually reinforce one another. Hence, investment climate reforms should attempt to remove or reduce such constraints by leveling the playing field for all enterprises, and strengthening governance and enforcement of law in a country.

Having a set of simple, clear, transparent rules to register a business or close a business, or pay taxes, can go a long way in creating a conducive environment for the private sector. Such conditions encourage more entrepreneurs to set up a business, operate in the formal sector, and also encourage existing firms to expand and grow - all of which stimulates investment and job creation. As examples, this section will discuss seven types of regulatory simplification reforms that help create an encouraging investment climate.

1. Business entry
2. Competition policy
3. Taxation
4. Secured transactions and collateral registries
5. Inspections
6. Business licenses and permits (for registered firms)
7. Trade logistics

1.1 Business entry reforms

A business entry reform is a legal or regulatory change in which required processes and procedures to register a new or existing, unregistered business are rationalized, simplified and modernized. Such a reform results in reduced time, costs, and procedures to start a business. Less bureaucracy and lower costs to register a business encourage more firms to register and operate in the formal sector. This increase in firms stimulates job opportunities in the formal sector, which tends to offer better quality jobs. Abolishment of License Raj in India that involved cutting down procedures to register a business led to a 6 percent increase in the number of registered firms (after controlling for other effects).⁴

In 2002, the Mexican government passed a federal law to reduce the number of procedures required to start a business from 15 to 2, thus reducing the time it took a business to register from 67 days to 72 hours. In the next four years the country built a modern, efficient regulatory system for opening a business – Rapid Business Opening System (SARE) – in most of its urban municipalities. SARE was successful in rationalizing business entry procedures. An evaluation of the business entry reforms

Box 5.1: Reforms in investment climate helped create about 15,000 new jobs in Rwanda

Rwanda recently implemented a comprehensive reform program to improve its investment climate and boost private sector investment.

According to an external evaluation, within 2 years of implementing these reforms the country saw positive impact in terms of:

- \$5 million in time and cost savings to the private sector
- 8,000 new and “formalized” enterprises
- 15,000 – 17,600 new jobs created and
- Approximately \$50 million in new investment generated

Rwanda now ranks 45th in Doing Business 2012—an improvement of 113 ranks from the start of the program. With more than a dozen major pieces of legislation were passed that included reforms in business registration, issuance of construction permits, procedures for paying taxes and trade logistics involved in exporting or importing goods. The government showed commitment to creating a more efficient, and transparent business climate, and as a result Rwandan businesses have already begun to reap the rewards. The program also included investment promotion intervention and showed that emphasizing continuous dialogue with public and private stakeholders (through the Public-Private Dialogue mechanism) helped the government respond better to the business needs.

found that there was a 5 percent increase in the number of registered businesses in the eligible industrial sectors. The reform also helped *total employment to increase in the eligible industries by 2.8 percent* from the pre-reform level within one year (after controlling for other factors).⁵ While there were also job losses in non-eligible industries, people who were previously unemployed or out of the labor force were more likely to obtain jobs after the reform. This study clearly links reforms in the business registration processes to employment creation.⁶ A similar study in Colombia found that business entry reforms in Colombia facilitated a 5.2 percent increase in the registration of new firms.⁷

1.1.1 Do these newly created firms survive?

A Portuguese business registration reform in 2005 led to a 22 percent increase in employment. The reform was primarily to simplify the lengthy and burdensome process of starting a business through an “On the Spot Firm” program. Jobs created were primarily in the agricultural, retail trade and construction sectors, and the start-up businesses are relatively smaller. Interestingly, firms that entered the market after the reform were about 4 percent less likely to survive their first two years than comparable incumbent firms having entered prior to the reform.⁸ This is presumably due to increased competition in the market with more entrants, paired with eased market entry. Nevertheless, at a 17 percent increase in registered firms, the net effect on new business creation is positive. While survival rates of newly created firms is an important dynamic to take into account, one can generally expect there to be a positive and sustainable job growth as a result of reforms because job growth in surviving firms generally makes up for jobs lost in exiting firms.⁹ In addition, even though some firms leave the market after the reform, this tends to be a positive market mechanism to reallocate resources to more efficient players in the economy.¹⁰ Low aggregate productivity in developing countries is in part due to misallocation of resources across firms and that complex regulation is one factor that contributes to this misallocation.¹¹

1.1.2 Business Entry reforms work best when complemented with other investment climate reforms

There is evidence from various studies that reforming the business entry processes works most effectively when such reforms are part of a package of reforms.¹² However, introducing multiple reforms at the same time is generally more challenging in terms of implementation.

1.2 Competition policy

Policies that help open markets and remove barriers promote competition, typically resulting in lower prices and better deals for consumers. They tend to stimulate innovation, productivity and economic growth.¹³ This economic growth then helps create jobs. For example, a study based on OECD countries found that reducing pronounced state controls and barriers to competition would increase long-run employment rates by 2.5 to 5 percent.¹⁴ Another study illustrates that removing anti-competitive regulation in energy, telecommunications, and transport in Croatia would increase GDP per capita by about 1.4–3 percent, as it would provide firms with incentives to reallocate resources to more productive activities, and increase innovation and technological diffusion.¹⁵ Besides, less restrictive regulations may positively affect employment by reducing the rents that some firms extract from overregulation.¹⁶ Another example—deregulation of shop opening hours in the US—resulted in an increase in employment by about 5 percent.¹⁷ All these studies confirm that increasing competition and opening up markets help stimulate growth and job creation.

1.2.1 Encouraging competition raises productivity

Competition drives productivity growth through two key mechanisms: (a) it shifts market share toward more efficient producers; for example, the removal of price floors and advertising ban in the legal profession in Italy led to a market correction where more productive lawyers are more likely to stay in the profession;¹⁸ and (b) it induces firms to become more efficient in order to survive; for example, land reforms that helped Vietnam move from community-based to market-driven production led to a large increase in total factor productivity in main rice-growing regions.¹⁹ The efficiency gains from increased competition and liberalization in gas, water, and electricity in the United Kingdom resulted in an increase in productivity growth of more than 10 percent.²⁰ Although the relationship between productivity and employment is complex, the effect of an increase in productivity on employment is generally positive, as discussed in an earlier chapter.

1.2.2 Regulatory barriers to competition hurt employment

An interesting study on the French retail industry highlights how restrictive zoning regulation in France impacted employment negatively. A 1973 legislation of the French parliament introduced measures to protect small shopkeepers and craftsmen in the French retail industry in the face of a rapidly evolving large distribution market. This regulation implied that creation of

any new large store had to be first approved by a regional zoning board. The study found that these barriers to entry had a negative impact on employment; retail employment could have been more than 10 percent higher at the time of the study (2002), had this entry regulation not been introduced.²¹

1.3 Taxation

A tax regulation reform may adjust different tax rates for companies, or it may modernize and rationalize the tax system and administration, including adoption of electronic tax payment portals. High tax rates, or taxes that are perceived to be unjustified, result in some firms preferring to operate informally without registering the company. Firms identify the tax system as one of the most important parameters in making an investment decision. Cumbersome tax structures are a drain on investor time and resources and act as a disincentive to participation in the formal economy. A streamlined tax system can increase the number of firms in the formal economy, facilitate investment, widen the tax base, and rationalize a company's tax compliance cost—and it need not decrease tax revenues (Box 5.2). A poorly designed or executed tax system negatively impacts investment, and economic growth suffers.²²

Box 5.2: Reforming the tax system leads to a 12 percent increase in employment in Brazil

In 1996, Brazil introduced a business tax reduction and simplification scheme (SIMPLES) for micro and small firms. The program aimed at enabling small, unskilled labor-intensive firms to compete more effectively with larger enterprises and hence excluded from eligibility all activities that require the employment of professionals with regulated occupations, such as manufacturing of chemical products, machinery and equipment, education and health services, and incorporated companies.

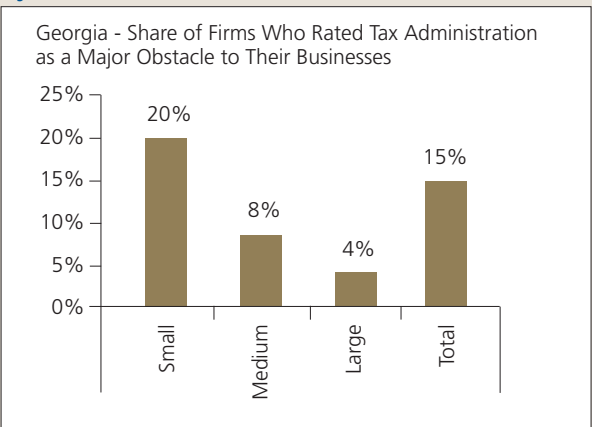
This reform had several positive effects:²³

- It reduced the tax burden by about 8 percent for eligible firms.
- It led to a substantial reduction in labor costs (by replacing a fixed cost with a standard payroll contribution), and hence created a strong incentive to hire new employees and legalize already existing labor relationships.
- It led to an increase in formality.
- Newly created firms that opted to operate in the formal sector had higher revenues and profits, and employed more workers.
- *Employment increased by 12 percent.*

1.3.1 An inefficient tax administration imposes a significant constraint on private sector

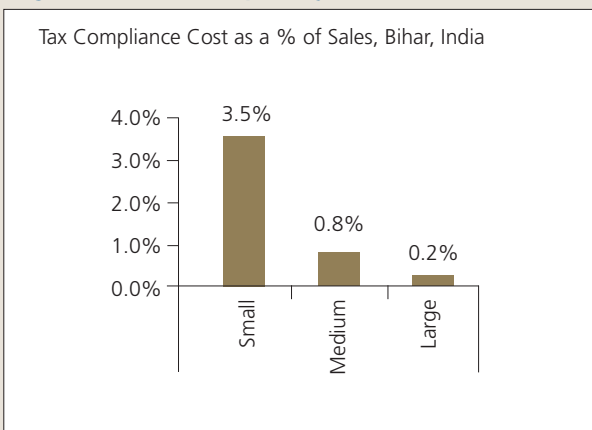
Feedback from the World Bank Group Enterprise Surveys shows that tax administration and tax rates constitute serious constraints for business, in particular for SMEs. As significant drivers of informality, high tax rates are primarily a result of multiple taxes, in some cases over the same base and across different layers of governments. The burden of tax administration is due to procedures that taxpayers need to comply with, such as tax filing and tax inspections. In most cases, these procedures are excessive, imposing a significant cost of compliance of businesses, especially for SMEs, which are typically more burdened.

Figure 5.2: Small firms are most affected by inefficient tax administration



Source: Enterprise Survey 2008

Figure 5.3: Inefficient tax administration imposes a large cost on firms, especially on small firms



Source: World Bank Group

In Georgia, for example, 20 percent of small businesses identified tax administration as their main obstacle to doing business, as compared to 8 percent for medium-size businesses and 4 percent for large businesses (see Figure 5.2). Similarly, in the state of Bihar in India, the cost of complying with the tax system is equivalent to a 3.5 percent tax on sales for small businesses (Figure 5.3).²⁴

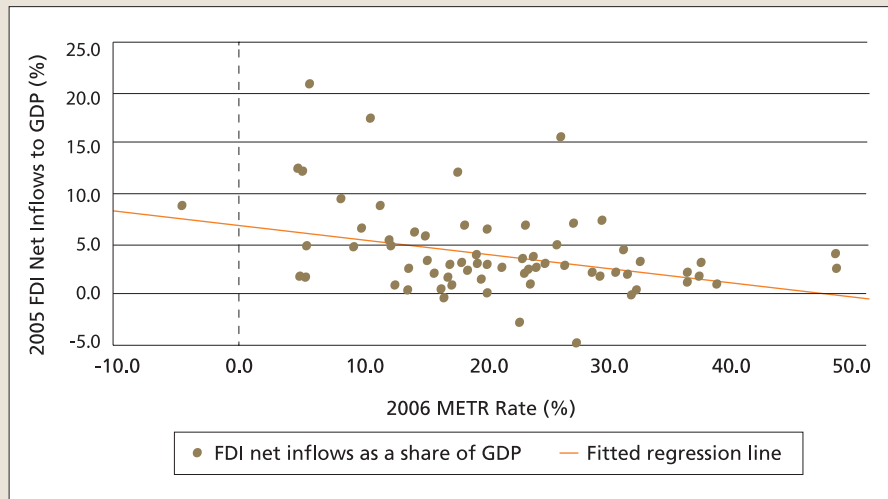
1.3.2 Tax rates affect Foreign Direct Investment flows

Most studies on the relation between tax and investment have been on OECD countries. While some studies show that tax policy has little effect on investment when macroeconomic data are used,²⁵ other studies find that taxes do affect the volume and destination of FDI.²⁶ A meta-study of the literature concluded that, on average, a 1 percentage point increase in the tax rate reduced FDI by 3.3 percent.²⁷ However, most of these studies were in OECD countries.

Recent research by the World Bank Group and the International Monetary Fund (IMF) has tried to extend the OECD-based studies to developing countries. The IMF conducted a study on how corporate tax rates and tax incentives affected FDI in 40 Latin American, Caribbean, and African countries during 1985–2004. The studies had findings similar to those of the OECD studies, although the impact of tax rates on investment is considerably smaller. A 10 percentage increase in the corporate income tax rate lowers FDI by 0.45 percentage of GDP.²⁸ Another study found that a 10 percentage point drop in the marginal effective tax rate (METR) caused FDI to rise by 3 percentage points of GDP in a sample of 69 countries, including several developing ones.²⁹

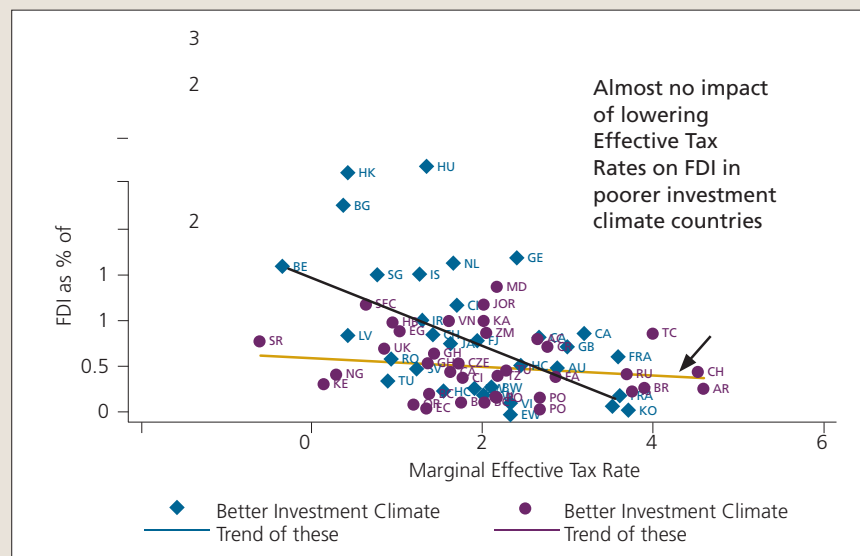
One reason why the relationship between tax rates and investment is stronger in OECD countries than in developing countries is because of the investment climate. For countries with a weak investment climate, a lower METR has limited impact on FDI (Figure 5.4).³⁰ For example, having an METR of 20 percent instead of 40 percent raises FDI by 1 percent of GDP for countries ranked in the bottom half in terms of investment climate—while the same difference in the METR has an effect eight times greater for countries in the top half.³¹ This finding implies that tax policy is far less effective in attracting FDI in countries with weaker investment climate than those where investment climate is more favorable. Other regional studies also support the conclusion that tax incentives have been much less effective in attracting FDI in West and Central Africa³² than in the Caribbean countries.³³

Figure 5.4: Higher FDI is linked to lower effective tax rates



Source: International Monetary Fund; calculations by Andrew Tarasov.

Figure 5.5: The relationship between higher FDI and lower tax rates is weaker in countries with poorer investment climate



Source: James and Van Parys (2010)

1.3.3 FDI plays an important role in quantity and quality of jobs

For many developing countries, foreign direct investment provides an opportunity to augment scarce internal resources in terms of capital, skills, and technology. Moreover, in the last decade, the rate of growth of FDI-related employment (28 percent) has far outpaced growth of the global labor force overall (16 percent), indicating a deepening importance of FDI in job creation. Therefore FDI has job creation implications that developing countries cannot ignore. FDI helps direct and indirect generation of jobs, generally creating higher paid jobs than domestically generated jobs, and leads to enhanced productivity of the host country labor force.³⁴ In 1997, US\$488 billion in global FDI inflows had an employment effect of 26 million direct jobs and 42 million indirect jobs, or one job for about every US\$68,000 in FDI.³⁵ Moreover, workers in foreign-owned firms tend to receive a wage premium over domestic-owned firms, especially in developing countries. For example, a study of Mexico and Venezuela estimated this wage difference at 30 percent, controlling for other factors.³⁶ In addition, FDI has been found to have a positive spillover effect on the productivity of the host country labor force. A study of firms across Europe regions found productivity gains of up to 40 percent, while increasing (not decreasing) labor demand in the long run.³⁷

1.3.4 Investment promotion intermediaries can help attract FDI and create domestic jobs

Besides reforming the investment climate in general, some countries make special policies to attract FDI by creating investment promotion intermediaries (IPIs) to appeal to foreign investors. Policy advocacy to reform the investment climate was the investment promotion activity with the largest return for expenditure.³⁸ A recent study has shown that on average, one dollar spent on investment promotion was associated with an increase in FDI inflows by 189 dollars, and that 78 dollars spent on investment promotion helped create an additional job by a foreign affiliate.³⁹ However, one has to be careful attributing all the effects to investment promotion expenditures, since those governments spending money on investment promotion may also be the ones that are generally more welcoming toward private investment. Nevertheless, agencies that promote FDI help address information asymmetries and overcome burdensome bureaucratic procedures.⁴⁰ In a recent survey of executives with site selection responsibilities, 47 percent indicated a strong likelihood that they would use the IPI website, and 83 percent responded that they would make direct inquiries with IPIs during the site selection process.⁴¹ A well-functioning investment promotion intermediary can provide valuable customer service to a foreign investor looking for investment opportunities, and can therefore help increase FDI inflows into a country (Box 5.3). A study found that on average, a 10 percent increase in IPI budget was associated with a 2.5 percent increase in a country's FDI inflows.⁴² An analysis of 30,000 high value-added FDI projects shows that government-provided information and assistance significantly influenced investor decisions to locate in one economy or another.⁴³ According to another recent study of 156 countries, there is a strong positive correlation between a country's investment facilitation performances—based on the IFC Global Investment Promotion Best Practices (GIPB) framework—and its FDI inflows. It compares each country's average annual FDI inflows from 2000 to 2010 with its average performance in the three GIPB reviews.⁴⁴ The study found that a 1 percentage point increase in performance was associated with a 1.5 percentage point increase in FDI inflows (controlling for other factors).

1.4 Secured transactions and collateral registry

Secured transactions or secured lending generally refers to lending based collateral provided by movable assets such as inventory, account receivables, livestock, equipment, and machinery. Secured transactions reforms unleash credit potential in the economy, especially for smaller enterprises (discussed in the Chapter Access to Finance) (Box 5.4). An independent evaluation of a reform of China's secured transactions law found that the surveyed SMEs that received accounts receivable financing clearly increased their workforce. The evaluation found that 21 percent of the SMEs surveyed confirmed the reform impact on job creation for their businesses.⁴⁸

Box 5.3: An effective investment promotion intermediary agency helps attract FDI, generate jobs, and empower women in Nicaragua⁴⁵

ProNicaragua, an official Investment Promotion Intermediary (IPI) for Nicaragua, was set up in 2002 as the public-private, non-profit agency, with support from the World Bank Group. It has been featured amongst the top performers on Global Investment Promotion Best Practices (GIPB) 2008 and 2012 and recognized favorably by evaluations.

At just three years of operation, ProNicaragua:

- Contributed to the creation of 22,996 jobs by attracting FDI in the labor-intensive apparel and textile sector, becoming the champion of job creation in the Central American region since 2005.⁴⁶
- Contributed to higher household income and consumption.
- Helped women's economic empowerment- those jobs paid higher wages to women.⁴⁷ It has enabled women to formally enter the workforce, contributing to their higher self-esteem and household consumption levels.
- Helped attract over 130 foreign investors representing \$830 million in FDI.

Box 5.4: Reforming secured transactions law helps increase employment in China

China's comprehensive Property Rights Law went into effect in October 2007. With IFC's assistance, China successfully developed a modern secured transactions law and a security interest registry. The law covers the creation of security interests on various types of property and recognizes and protects private property rights with respect to certain property types, such as immovable or real property. It also enabled establishing security interests in movable assets, such as account receivable and inventory, promoting access to finance using those assets as collaterals.

The outcomes were impressive.⁴⁹

- Over 250,000 loans were secured by accounts receivable in 3 years.

- The reform fundamentally changed the credit market structure, enabling significant innovation and growth of movables financing, particularly in accounts receivable financing.
- SME finance was facilitated and the increased access to finance was highly valued by entrepreneurs leading SMEs. Female entrepreneurs are among the key beneficiaries of the reform.
- SMEs that received accounts receivable financing clearly increased their workforce in 2011.

1.5 Inspections

Inspections are government mechanisms to ensure compliance in key areas such as health, safety, and the environment. Such inspections typically involve visits by government-appointed officials to private sector facilities. Inspections can also be a time-consuming and expensive burden, affecting business productivity and deterring owners from joining the formal economy.⁵⁰ Poorly written, complex inspection regulation could lead to corruption, as it leaves room for inspectors to demand bribes.⁵¹ Improvements in a business inspections framework and practices are expected to lead to more companies operating as registered entities (promoting formalization) and, through compliance, more sustainable labor, environmental and social conditions.

Although there are no formal studies on the job creation impact of inspection reforms, one could expect that a reformed inspection mechanism would encourage job creation by 1) cost savings for the private sector, which could be used for more productive purposes (Box 5.5); and 2) increased investment because of risk reduction with improved compliance (more discussion follows in the chapter on quality of jobs).

Box 5.5: Inspection Reform in Jordan generated savings for the private sector⁵²

The Jordan government introduced inspection reform with IFC's advisory engagement, which involved developing a management system, an inspection organization structure, and a comprehensive operations manual. As part of the implementation, inspectors were trained to gain updated inspection skills and knowledge on procedures, management systems, and communication. As a result of reform, incidence of non-compliance decreased and the number of worker complaints increased over time (indicating improved awareness among workers of their

rights). It also hired additional inspectors, including more female field inspectors to address gender issues.

The reform led to:

- Increased efficiency of inspectorates
- Increased transparency of inspection operations
- Improved implementation of regulations
- Expected private sector savings of \$2 million per annum which would enable more output and employment.

1.6 Business licensing and permits

A license simplification reform that was launched in January 2006 in Lima, Peru simplified and reduced business licensing procedures, the time to obtain business licenses, and the average number of inspections. This set of efforts helped reduce the time taken to obtain a business license from two months to 6 days, reducing the cost by about 60 percent. In the first six months after the implementation of this reform, there was a 263 percent increase in the number of firms in operation that applied for a license. The impact evaluation, however, did not find statistically significant evidence on firm performance indicators, such as income, profit per worker, investment in machinery, number of employees, and access to credit. This finding is consistent with the emerging picture where growth-oriented micro enterprises generally seek a business license to avoid risks, not necessarily to improve firm performance.⁵³ However, it is possible that a medium- to long-term evaluation may show effects on business growth and job creation.

1.7 Trade logistics

Faster, leaner, more efficient trade logistics systems are essential for businesses to survive in competitive global markets. Firms increasingly use global sourcing strategies that require flexible, speedy, and cost-effective solutions. Improving trade logistics services is therefore an important reform for promoting not only trade, but indeed, economic growth, private sector investment, and jobs. An improved trade logistics system usually includes simplifying and harmonizing procedures and documentation, implementing electronic processing, automation, and “single window” systems, and introducing risk management in border inspections and clearance.

Colombia implemented a trade logistics reform in 2008. With the passage of over 15 pieces of legislation, various improvements were effected from an online registry for trade transactions to streamlined physical inspections. Since 2008, the time to import and export goods decreased from 20 and 24 days, respectively, to 14 days in 2010 for both. A 10 percent reduction in the time to trade implies an increase in trade by roughly \$780 million for Colombia.⁵⁴ Traders witnessed a 30 percent decrease in the time to obtain transaction approvals through the single window system. While a direct quantitative link between trade reforms and jobs was not established in most studies, one can assume that a reduction in the time and cost for the private sector to trade would positively affect the output of firms, and hence job creation.

2. Targeted investment climate reforms

Realizing the importance of investment climate in attracting investments for growth and employment, many governments proactively promote and facilitate investments in certain targeted sectors of strategic interest or regions in the economy. Instruments used include setting up special economic zones, or formulating targeted investment policies for specific sectors such as tourism, for example. These two specific instruments (and their role in employment creation) are discussed below in this section. These instruments become even more effective when used in complementary ways as part of an overall investment climate reform package, as shown by the experience of Panama, where targeted investment generation reforms has led to the creation of 4,800 jobs (Box 5.6).

2.1 Special Economic Zones

A Special Economic Zone⁵⁸ is a piece of serviced land (typically industrial) with good connectivity and infrastructure, governed by a comprehensive and integrated set of laws and regulations often compatible with international trade agreements. For developing countries, SEZs have traditionally attempted to create a good investment climate policy environment along with providing good quality, reliable infrastructure in a specific area to potential investors (the importance of good quality infrastructure in attracting private sector investment is discussed in Chapter 6). Through SEZs, governments aim to develop and diversify exports, support local industry and clusters, attract FDI, create jobs, and pilot new policies and approaches to create jobs—particularly those removing or reducing key administrative barriers, regulatory difficulties, and land-rights issues. SEZs also provide improved physical infrastructure and services to investors in a sustainable and environmentally friendly manner, and allow for more efficient government supervision of enterprises, provision of off-site infrastructure, and environmental controls.⁵⁹

2.1.1 SEZs can support employment creation

While SEZs represent less than 1 percent of global employment, they can be an important source of employment in some countries, especially smaller ones. The impact of these jobs in countries with high rates of unemployment and underemployment

Box 5.6: A targeted investment climate instrument creates 4,800 jobs in Panama⁵⁵

The Panama Pacifico project is a good example of multifaceted investment facilitation efforts to achieve growth and create jobs. This project involved establishment of a Special Economic Zone (SEZ) managed in the form of a public-private partnership (PPP).⁵⁶

In early 2000, the Panama government sought to convert the former 2,500-hectare Howard U.S. Air Force Base into a hub for international trade, logistics, services, commerce, and industry. Panama, a Central American country of about 2 million people, has a significant comparative advantage in world trade logistics. However, it recognized that the significant regulatory barriers were too difficult to solve at a national level.

Since June 2001, the government of Panama, with support from the World Bank Group, established a modern SEZ regulatory framework conducive to business and FDI, drawing on experiences of other countries such as the Philippines, Malaysia, and Singapore. They established a dedicated agency structured as a true one-stop shop on site, and then launched an SEZ development tender process under a PPP approach. The master plan development contract was awarded to an international private agency. The area has now developed into a platform for economic growth that has generated over 4,800 jobs.⁵⁷ It has attracted international corporations like 3M, BASF, Dell, 3PL, and Cable & Wireless. Over the next 20 years, the SEZ is expected to create another 20,000 high-value jobs and bring about \$3 billion of FDI into Panama.

This successful experiment is now being used in other countries like Democratic Republic of Congo, Kenya, and Haiti to attract investment and create jobs.

are significant.⁶⁰ It is estimated that in 1975, there were 79 zones in 25 countries, employing about 800,000 people. Today, it is estimated that 3,500 SEZs operate in 130 countries. Of these, there are more than 2,300 zones in 119 developing and transition countries, mainly in Asia and the Pacific and the Americas, employing 66 million. For some countries, such as China, Korea, Mexico, Malaysia, and Mauritius, SEZs have been transformational.

Through SEZs (or Export Processing Zones, or EPZs), Bangladesh has generated \$2.4 billion cumulative in investments and a total of 340,000 gross jobs (in its eight EPZs) since 1983 (see Box 5.7), while Panama has seen 4,800 jobs created (as noted previously). Although such estimates only capture the number of direct jobs created, SEZs also help generate indirect jobs and other spillover benefits within the entire economy.

2.1.2 SEZs can affect quality of jobs

Another advantage of SEZs is that they enable job creation in the formal sector, as companies within the SEZ need to be legally established in the country and are typically subject to stricter regulatory compliance. Formality and better compliance with labor, social, environmental, health and security standards, and typically better enforcement within SEZs, tend to elevate the quality of these jobs in comparison to those in the rest of the economy.⁶¹

2.1.3 SEZs can help create jobs for women

SEZs have been especially effective in generating jobs for women in the formal labor market.⁶² Worldwide, 60 to 70 percent of SEZ employees are women, who tend to be engaged in labor-intensive, assembly-orientated activities requiring manual dexterity, such as production of garments, textiles, and electrical and electronic goods. In Bangladesh, women represent about 64 percent of over 200,000 total workers, and the share increases to 75 percent in fully foreign-owned garment firms.

However, it has been observed that jobs for women tend to be concentrated in lower-paid production, while men dominate in supervisory and skilled positions. Concerns about women's low wage levels, lack of training, and suppression of labor standards and rights have been raised even within the zones, especially among the least developed countries. However, such issues can usually also be addressed more easily within the zones, as is being piloted in Bangladesh.

Box 5.7: An EPZ helps generate investment, create jobs, improve productivity, and increase women's economic participation in Bangladesh⁶³

The development of a special economic zone is usually a significant undertaking. With its first SEZ (an EPZ) in Chittagong, the Bangladesh Export Processing Zones Authority (BEPZA) zone program started in 1983. Today, there are eight EPZs in the country that together account for US\$2.4 billion of cumulative investment, US\$4.3 billion of annual exports (2012-13), and employ more than 340,000 people on a gross basis.

With the assistance of FIAS and IFC since 2004, and funding support from the UK government and the EU since 2007,

BEPZA has benefited from strong private sector engagement, technical feasibility studies, on-site infrastructure development in the form of public-private partnerships, better environmental and other regulatory standards, stakeholder analysis, and investment promotion capacity building. In addition, a major accomplishment has been the enacting of the Economic Zone Act of 2010, which allows the private sector to develop new economic zones—to scale up the benefit.

2.1.4 However, the SEZ experience has been mixed across the globe

Global experience with respect to SEZs has not been uniformly successful. Successes in East Asia and Latin America have been difficult to replicate, particularly in Africa. In some cases, the special status accorded to SEZs gave rise to corruption opportunities. Other reasons for mixed outcomes have been poor strategic planning, mismatch of comparative advantages, and lack of financial viability. There is also ongoing debate on the effectiveness of using SEZs at an economy-wide level. Ideally, all investors should have the same transparent regulatory conditions to be competitive, irrespective of where they locate in a country. However, this is far from the reality in most parts of the developing world, and even less in low-income countries or fragile and conflict-affected states. In such situations, SEZ could be used as an instrument to strengthen the investment climate in a smaller targeted area to pilot reforms before scaling them up to the national level. China's economic zones grew in a phased way. Some post-conflict countries like Rwanda,⁶⁴ Iraq, Nicaragua, and El Salvador are now successfully using SEZs or other types of economic zones to further achieve their peace-building efforts.

One way to mitigate the risks of implementing poorly designed SEZs is to follow an approach based on private sector principles, i.e., to be careful in designing an SEZ that is responsive to local, regional, and global market demand and that is

consistent with the country's comparative and competitive advantages. By offering turnkey connection points with simplified business processes, better infrastructure, and quick access to markets, without the usual burden of land acquisition, utility connections, etc., SEZs could be effectively used for generating growth, investment, and jobs in an economy.

2.2 Industry-specific investment climate policies

While economy-wide reforms are often required to level the playing field for competition among businesses, sector-specific initiatives could help address certain regulatory constraints that inhibit specific industries.

Taking the example of tourism, several economies strongly rely on this sector for growth and jobs (see Boxes 5.8 and 5.9). The travel and tourism industry currently generates 234 million direct and indirect jobs (approximately one in twelve jobs) worldwide.⁶⁵ The jobs that tourism helps create are particularly valuable, as they are often in remote locations where other employment opportunities may be limited. Tourism is a labor-intensive industry and employs a high share of unskilled or medium-skilled youth and women workers—maximizing its potential impact for the poor and marginalized. The generation of earnings among local people directly or indirectly (through the local supply chain) involved with the industry, in turn, stimulates spending in the local economy, thus creating induced jobs. For example, targeted investment climate interventions by the governments of Mozambique and Sierra Leone (described below) are expected to generate investment that would create 60 and 400 jobs, respectively, along with positive spillovers of the tax revenues that are generated. However, maximizing development returns from the tourism sector needs careful planning and stakeholder engagement.⁶⁶

While industry-specific efforts could be effective, they require very careful diagnostics on country-specific competitive advantages and growth barriers. Such a diagnosis further requires detailed information and also strong government capacity to make objective choices.⁶⁷ The specific risks associated with such targeted investment reform decisions are that preferential policies toward any sector have distributional implications that could affect other stakeholders, sometimes unintentionally.

Box 5.8: Tourism helps spur local growth and create jobs in Mozambique⁶⁸

Mozambique launched the development of a \$3 million eco-lodge, Maputo Special Reserve, in a 70,000-hectare prime protected area. Bordering the Indian Ocean, the reserve offers tourists a variety of beaches, bays, coral reefs, forests, lakes, rivers, and a host of wildlife including an estimated 350 elephants. Co-financed by Switzerland and other donors through the World Bank Group, the Maputo Special Reserve in Mozambique was implemented through a concession to attract qualified eco-tourism investors.

A joint venture between a local community association, A Hi Zameni Chemucane, and a private investor, the Bell Foundation, was set up to build and operate a 36-bed lodge at Ponta Chemucane in the reserve. It is Mozambique's first agreement granting a community long-term concession rights for a tourist area within one of the country's leading national parks. The lodge is expected to create 60 full-time jobs and help spur local growth in an area that has few

opportunities for formal employment, a positive externality of tourism projects like this. In addition, annual concession fees to be paid to the government will be used for park and longer term conservation management.

Following investment in the Maputo reserve, a standardized set of procedures was compiled and a toolkit developed for future use by Mozambican authorities. The Maputo model has been replicated to attract a \$30 million investment for a 200-bed eco-lodge in Mozambique's Zambézia Province. It is also assisting in sustainable tourism development. Through new investment zone regulations, for example, the government can reserve land with unique natural, cultural, or historic attributes for tourism development. As a result, the Inhassoro and Crusse-Jamali sites along Mozambique's coasts have been declared the country's first tourism investment zones, securing over 4,500 hectares.

Box 5.9: The right regulatory approach helps attract good quality investors in tourism and create jobs in Sierra Leone⁶⁹

The government of Sierra Leone was in search of a credible investor for the Cape Sierra Hotel, an abandoned 100-room hotel in a suburb of Freetown. At the time, there were no international hotel brands in Freetown, and the existing three hotels offered about 120 rooms, well below the demand, estimated at 400 rooms. The government needed to attract a branded hotel operator as a strategic investor to redevelop the Cape Sierra into an international first-class hotel.

The government decided to establish a PPP structure

and engage in efforts to improve the sector business environment in tourism with a strengthened regulatory framework. It proceeded with the tender on the basis of structuring a concession and sublease agreement, supported by the World Bank Group

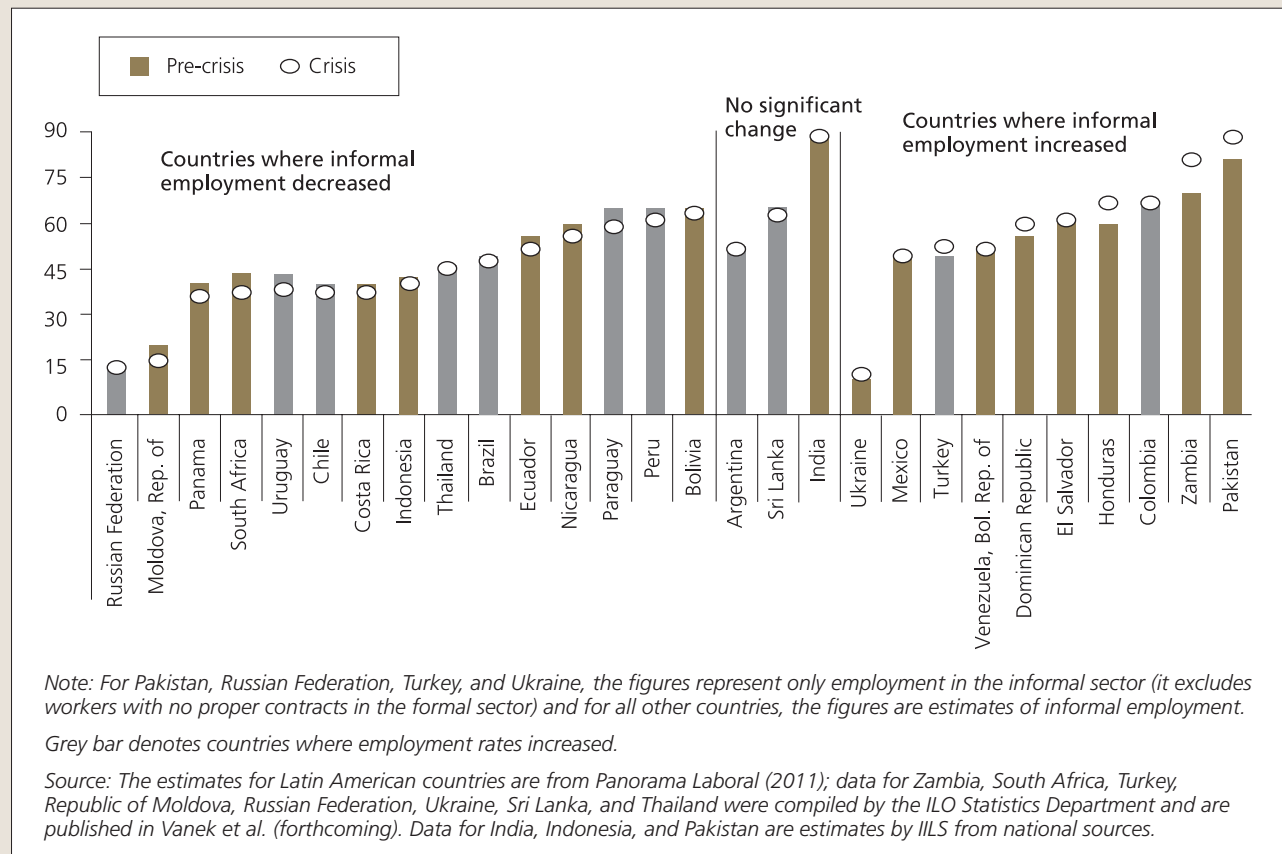
IDEA UK and Hilton International were selected as the highest-ranked bidder to completely redevelop the Cape Sierra into a 200-room hotel (at a cost of about \$40 million). The hotel is expected to create more than 400 jobs.

3. Informality and jobs

A poor investment climate, in the form of cumbersome regulations as well as their weak enforcement, usually results in a large informal sector. Firms often find that formalizing imposes excessive costs and time and is often not commensurate with the potential benefits, which is why they prefer to operate under the radar screen as informal initiatives. Hence the informal sector is often a direct outcome of poor regulatory frameworks. Therefore, any reforms in investment climate that ease regulatory barriers would make it more attractive for firms to formalize.

In developing countries, informal employment accounts for over 40 percent of non-agricultural employment (Figure 5.6).⁷⁰ Typically, high-income countries are associated with a proportionally small informal economy, with Switzerland at 8.5 percent of GDP, whereas lower-income countries typically have a much larger informal economy, even exceeding 60 percent of GDP (e.g., Bolivia, Georgia, and Panama).⁷¹

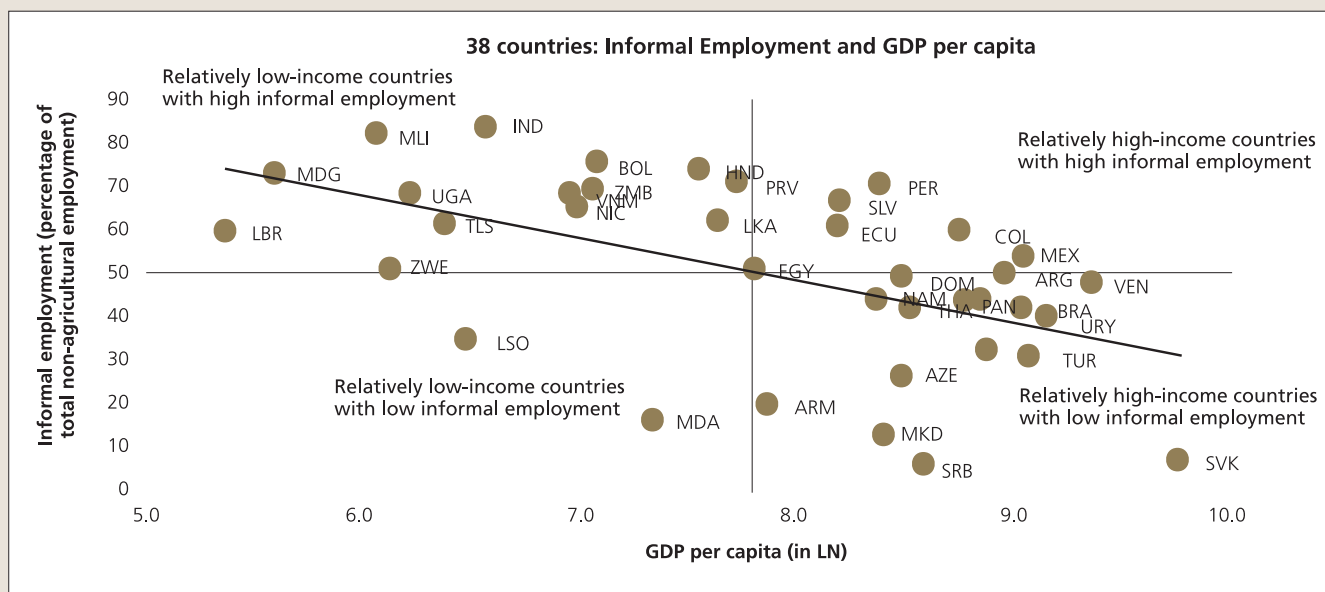
Figure 5.6: Informal employment in developing economies (percentage of total non-agricultural employment)



Source: ILO World of Work 2012: Better jobs for a better economy

The informal sector generally includes informal companies engaged in economic activities, individuals carrying out unregistered economic activities, or formal companies engaged in informal economic activities to make money. Their activities do not contribute to the officially calculated GNP.⁷² These activities generally include subsistence-type activities that people use for survival or business activities that are carried out without formal compliance of regulations (such as tax evasion, avoidance of labor regulation, or not registering the business).⁷³ While most of such survival, subsistence-type informal economic activities may pose unfair competition to formal players by not being subject to certain cost and compliance requirements, people who live on these informal activities are largely trying to make ends meet. They are typically those who were unable to find wage jobs in the formal sector. Often such persons prefer to operate informally to avoid costs of formalization or burdensome regulations.⁷⁴

Figure 5.7: Informal employment tends to be higher at lower levels of development



Source: ILO, IMF, World Economic Outlook.

3.1 How informality affects different stakeholders

- **Government:** Having a large proportion of economic activities outside the formal sector implies lost tax revenue, which further limits the ability of the government to provide services or shape macroeconomic outcomes through policies (as a large portion of activities are outside the zone of influence of a policy). This undermines the “fiscal-social contract” between the state, business, and citizen, represented by the exchange of regulatory compliance and tax on the one hand and for services and the rule of law on the other, and further undermines democracy and the emergence of effective states.⁷⁵ It limits a country’s capacity to grow.⁷⁶
- **Private Sector:** Operating informally restricts a company’s potential to grow. The absence of predictable, enforceable rules increases risks and corruption.⁷⁷ Informal firms are typically small and less productive compared even to small formal firms, and especially relative to larger formal firms.⁷⁸ This is partly due to formal firms generally being run by better educated managers, who are able use opportunities like advertisement and access to finance that can only be available to formal firms.⁷⁹
- **Workers:** The informal sector provides the last-resort opportunities for some to obtain income, skills and experience—usually of low quality compared to the formal sector jobs. There is a much higher concentration of lower-skilled workers in the informal economy than intermediate- and higher-skilled workers (Figure 5.8). As also discussed in the chapter on Quality of Jobs, informal jobs tend to be lower in quality, often paying lower wages and lacking labor safeguards. Informal workers generally receive no overtime compensation or benefits such as health insurance or retirement savings. Work can be discontinued at any time without severance. This is due to the fact that informal employers are not bound by labor and other standards to protect workers. Formal firms tend to provide safer working conditions than informal firms. Having proof of employment often brings additional benefits for workers, such as eligibility for loans and leases, and certain social status.

3.2 Informal jobs are often associated with poverty

Although informal jobs help make ends meet, they tend to be suboptimal solutions that could further perpetuate rather than reduce poverty. Many of the 4 billion people estimated to be at the Base of Pyramid (BoP) depend on informal sector activities, which can act as poverty traps.⁸⁰ Workers belonging to this sector cannot advance in their economic status, and often remain in poverty.⁸¹ There is also a strong negative correlation between the size of the informal economy and income per capita.⁸² Figure 5.9 points to a relationship where a larger informal economy is generally associated with a larger degree of poverty.⁸³ Women are three times more likely than men to be hired informally⁸⁴ and are much more likely to be unpaid workers who contribute to the family’s business than are men.⁸⁵

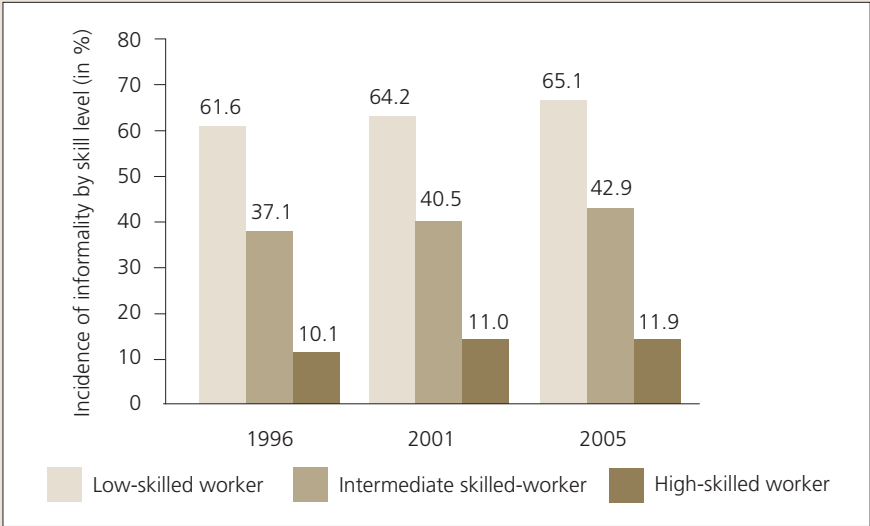
3.3 Easing regulatory costs and constraints will help incentivize some firms to formalize

The operation of a large proportion of economic and potentially productive activities in the informal sector represents a suboptimal situation for all stakeholders concerned. Formalization of companies and jobs could potentially provide more security and stability to individual workers and also be beneficial for companies that could use opportunities associated with the formal sector, such as access to finance, in order to grow. Yet informality cannot be easily addressed through a few simple quick-fix measures.

One obvious policy approach is the one many countries are trying—that is, easing regulatory constraints and reducing costs that prevent firms from formalizing. A study in Sri Lanka found that modest increases in the perceived benefits of being formal could lead to a potentially large increase in demand to formalize among informal firms (Box 5.10).

An insight from a study in Mexico⁸⁷ is that business entry reforms alone may not be enough to incentivize all firms to formalize. The business entry reform in Mexico did lead to the creation of new businesses. However, a large number of firms

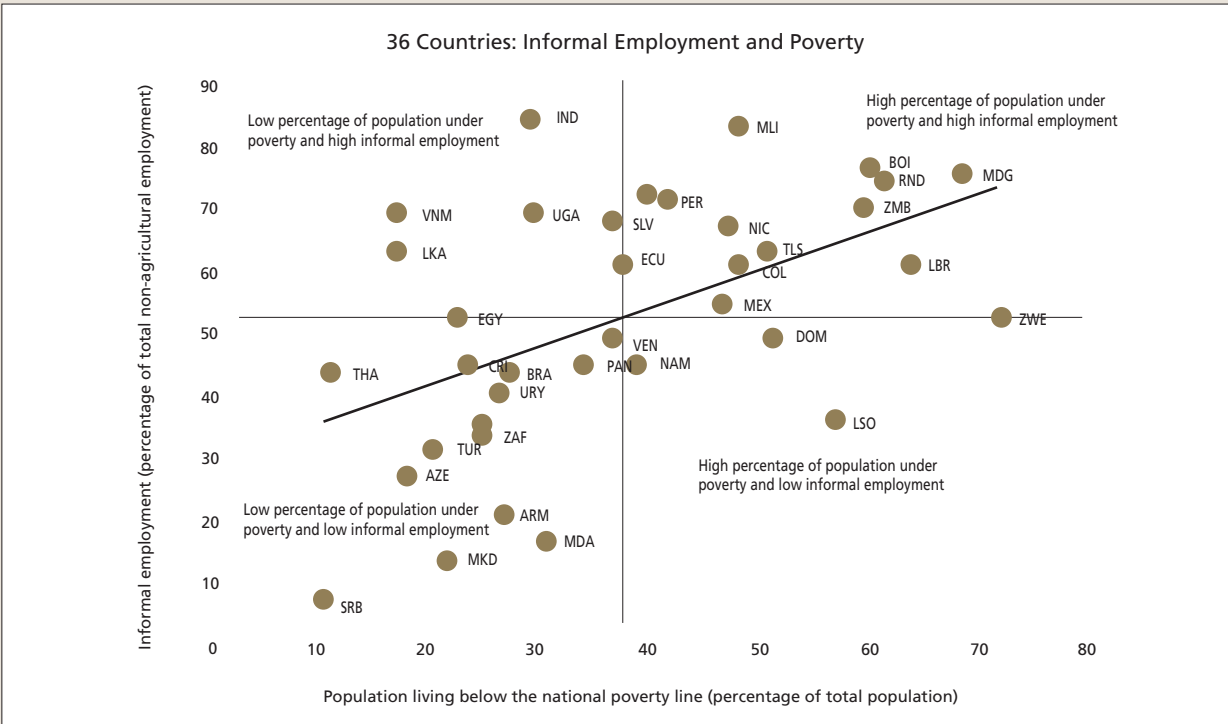
Figure 5.8: Low skilled workers tend to be concentrated in the informal sector



Source: ILS estimates based on the ILS Informality Database, Economic Commission for Latin America and the Caribbean (ECLAC).

Note: The figure displays the share of informally employed workers as a percentage of total employment by skill level. Informality covers salaried workers in small firms, non-professional self-employed and zero-income workers. Countries included: Argentina, Brazil, Chile, Costa Rica, Ecuador, Mexico, Panama, Paraguay, Uruguay, and Venezuela.

Figure 5.9: Informal employment is positively associated with poverty



Source: ILO, IMF, World Economic Outlook.

Box 5.10: Experiment to move from informality to formality in Sri Lanka⁸⁶

This study conducted a field experiment in Sri Lanka that provided incentives for informal firms to formalize as follows: The first group was offered only information about the registration process and reimbursement for direct registration costs; no firm ended up registering. The second group was offered payments equivalent to one-half to one month's profits for the median firm, and around one-fifth of firms registered. The third group was offered a larger payment equivalent to two months' median profits and about half of the firms registered. While not the primary focus on the study, the experiment demonstrated that modest increases in the perceived benefits of being formal could lead to potentially large increase in demand to formalize among informal firms. One-third of those who

didn't register despite being offered incentives reported problems, such as land issues, which would significantly increase their costs for registration. Other concerns included facing labor taxes in the future and bureaucracy in the registration process.

While the authors overall found little evidence for hypothesized benefits of formalization (such as access to credit and formal contracts and programs), formalized firms were found to advertise more and use receipt books. In interviews, owners of formalized firms expressed that the formalization established more legitimacy of their businesses and a large increase in trust in the government.

continue to operate informally even after the entry reform.⁸⁸ Informal business owners who wanted to be business owners ("entrepreneurs out of aspiration") but found the business registration too cumbersome were 14.3 percent more likely to register their business after the reform. In contrast, informal business owners who run informal business to make ends meet while looking for a wage job ("entrepreneurs out of desperation") are less likely to register their businesses after the reform, but they are 20.4 percent more likely to become wage workers as job opportunities increase. This suggests that it is difficult to draw simplistic conclusions about a direct and clear effect of business entry reforms on the informal economy. Only 14 percent of informal companies that were previously unregistered due to high regulatory barriers did formalize their businesses after the reform. Similarly, only 6 percent of informal business owners who had wanted to be wage workers did become wage workers. The study suggests that policy interventions that seek to reduce the size of the informal sector may need to take a dual-pronged approach, targeting both firm formalization and job creation (as was done in Mexico's SARE process). Another lesson is that bringing a larger fraction of informal enterprises into the formal sector and creating additional jobs would require other reforms as well, such as a tax reform.

A review of the Brazilian experience suggests that the intervention to incentivize informal enterprises to formalize could be timed strategically to capitalize on the favorable economic environment.⁸⁹

Although not the main focus of this section, another aspect of informality is the illegal shadow economy activities of companies that choose to operate informally in exchange for financial benefits or profits by avoiding costs through or carrying out criminal operations. In this case, policies need to focus on stronger governance and enforcement capability to complement improved policy and regulatory framework to close loopholes.⁹⁰ In general, informality, poor governance, and corruption reinforce one another in many developing countries.⁹¹ Therefore, along with improving the quality of the regulatory framework, it is also important to strengthen institutions and to improve governance and the enforcement of regulations in order to discourage illegal and criminal activities and encourage a rule of law.

Conclusions

- A good quality investment climate is a prerequisite for an economy that wants to grow and create jobs.
- Simplifying and streamlining regulations create a good level playing field within which the private sector can operate productively and help create jobs. Complex, poorly written regulations could lead to corruption.
- Reducing regulatory barriers to entry incentivizes more firms to register and helps create jobs.
- Investment climate reforms work better when they are comprehensive and planned as a package, rather than stand-alone reforms. The specific components of an ideal investment climate reform package that would be comprehensive and effective would depend on the country context.
- Encouraging competition raises productivity and helps create jobs in the economy.
- Inefficient tax administration imposes a significant constraint on the private sector.
- FDI inflows generally help create more and better quality jobs. A well-functioning investment promotion intermediary can help attract crucial FDI, which would, in turn, help create jobs.

- Targeted investment climate reforms like SEZs can support job creation, although the experience has been mixed across the globe. SEZs work best when they are based on market demand and the competitive advantage of the region or country.
- Formal enterprises perceive the informal sector as presenting unfair competition. Simplifying and streamlining regulatory barriers through a good investment climate can help incentivize firms to formalize, although the issue of informality is more complex, and one cannot assume that business entry reforms will automatically cause all firms to formalize.

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- ⁵⁵ Sourced from: i) Marques De Sa and Manchanda (2009); ii) IFC Success Stories – Infrastructure Advisory (2009); iii) Interview with London and Regional, Panama Pacifico SEZ operator, by Armando Heilbron, July 2011 and September 2012; iv) Interview with Sebastian Arango, London & Regional, Panama, September 2012; and v) World Bank, International Trade Department BBL Series, March 2011
- ⁵⁶ With IFC as the principal advisor, global coordinator, and lead negotiator, the World Bank Group coordinated policy advice and quality control of legislation and regulations and supported targeted investment promotion.
- ⁵⁷ Interview with Sebastian Arango, London Regional Properties, Panama. The actual job figures are based on Social Security records.
- ⁵⁸ A “Special Economic Zone” is a commonly used term for this type of zone described in this section, but other terms, such as “Export Processing Zone” or “Special Industrial Zone,” are also used.
- ⁵⁹ World Bank Group Investment Climate website (www.wbginvestment-climate.org).
- ⁶⁰ FIAS (2008).
- ⁶¹ World Bank (2011).
- ⁶² World Bank (2010).
- ⁶³ Sourced from i) BEPZA’s website: www.epzbangladesh.org.bd; and ii) internal source.
- ⁶⁴ In post-conflict Rwanda, the government is employing IEZs as a policy tool to effect needed reforms to attract investment and create jobs in such targeted sectors as agriculture, tourism, high-technology, manufacturing, social infrastructure, labor housing, and hospital and school developments.
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- ⁶⁶ World Bank and IFC (2012).
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- ⁷² Ibid. This also introduces two other definitions: “Market-based production of goods and services, whether legal or illegal, that escapes detection in the official estimates of GDP” by Smith (1994), “Assessing the Size of the Underground Economy: The Statistics Canada Perspectives,” *Canadian Economic Observer*; and “Those economic activities and the income derived from them that circumvent or otherwise avoid government regulations, taxation or observation” by Dell’Anno (2003), Dell’Anno and Schneider (2004), and Freige (1989). Another study by Flodman, *The Informal Economy*, Sida (2004) describes informality generally as businesses completely or partially avoiding tax payment, which are not accounted for in the economy’s total income and are not supervised by any public institution.
- ⁷³ “World Bank Group Concept of Informal Sector, <http://lnweb90.worldbank.org/eca/eca.nsf/1f3aa35cab9dea4f85256a77004e4ef4/2e4ede543787a0c085256a940073f4e4?OpenDocument>
In this particular definition, corruption, the third top perceived constraint in investment climate business regulations by surveyed formal companies is basically a type of informal sector activities. Also see: Donor Committee for Enterprise Development (DCED), 2009 Business Environment Reforms and the Informal Economy, Table 2.1: “A simplified typology of the degree of enterprise informality Characteristic”
- ⁷⁴ Unofficial business activities, like money laundering and corruption, are also classified informal but are not the focus of this chapter.
- ⁷⁵ Donor Committee for Enterprise Development (2009).
- ⁷⁶ La Porta and Shleifer (2008).
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- ⁸¹ <http://www.ilo.org/global/topics/employment-promotion/informal-economy/lang-en/index.htm>
- ⁸² It indicates GDP per capita as the most robust predictor of the size of the informal economy, which is interpreted as a manifestation of underdevelopment.
- ⁸³ Internal source.
- ⁸⁴ World Bank and IFC (2006).
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- ⁸⁶ de Mel, McKenzie, and Woodruff (2012).
- ⁸⁷ Bruhn (2012).
- ⁸⁸ The author cites other literature suggesting evidence from Bolivia and Indonesia that not all informal firms benefit equally from registering, and that for some firms in Bolivia, formalization lowers profits (McKenzie and Sakho, 2010, McCulocu, Schulze and Voss, 2010, Perry et al. 2007)
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- ⁹⁰ Donor Committee for Enterprise Development (2009).
- ⁹¹ Internal source.



CHAPTER 6

ACCESS TO INFRASTRUCTURE

Infrastructure provides the foundation for economic growth, thereby improving quality of life and generating jobs. The private sector plays an important role in addressing the large infrastructure deficit in low-income countries, which is a major problem for private companies. Creating jobs in the short term is not the sole, or even primary, objective of investing in infrastructure. However, the literature shows that infrastructure investments generally have high employment multipliers, which work through several channels—direct, indirect, and induced. These investments often generate many more indirect and induced jobs than direct jobs. However, the most significant effect of infrastructure projects on employment comes from improved services. For example, providing a reliable power supply allows businesses to produce more and hence create more jobs. Other sectors where investments can create new jobs include transportation, telecommunications, and water.

Infrastructure is a sector with a special capacity for promoting inclusive growth, particularly by providing productive opportunities for the poor and by facilitating access to basic services, including water, education, and health. Furthermore, there is an increasing awareness of the need to adopt gender-sensitive policies when planning and designing infrastructure investments. Infrastructure also plays a crucial role in urbanization, an integral process in the development of countries.

1. Infrastructure provides the foundation for economic growth, improving quality of life and generating employment.

Access to transport, telecommunications, power, gas, and water networks are critical inputs for firms as they undertake productive activities, expand, and create jobs. Literature shows, for both developing and developed countries, a positive relationship between infrastructure investments and economic growth, though estimates on the magnitude of this relationship vary.¹ For example, investments in electricity and telecommunications produce an approximately 0.25 percent increase in long-term economic growth rates for each 10 percent increase in service penetration,² and economic growth is positively correlated with job growth.

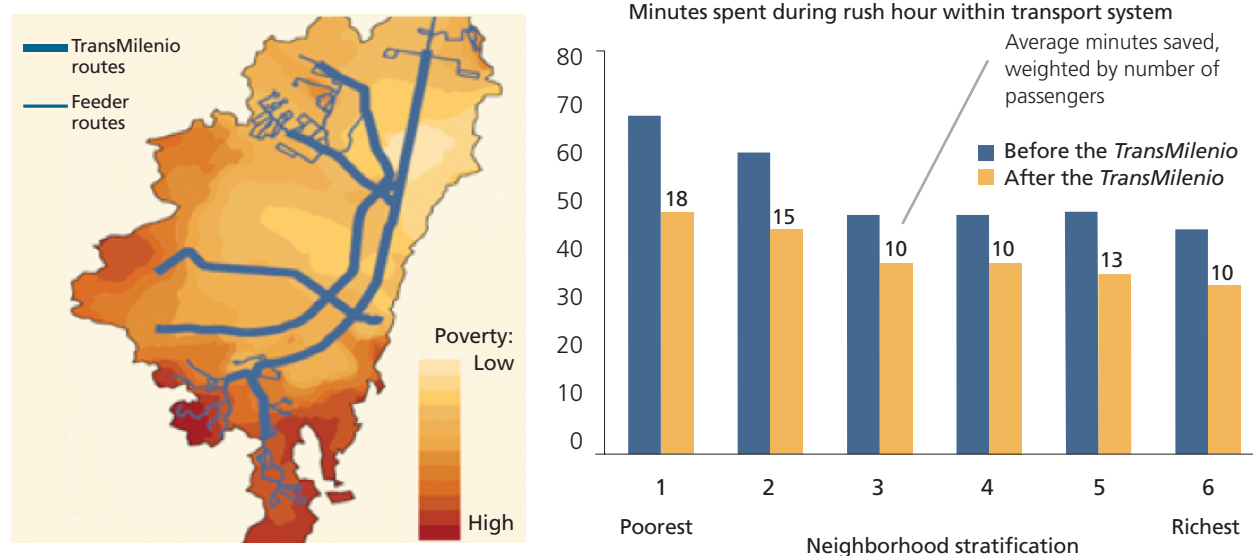
1.1 Infrastructure is a key tool for reaching the poorer sections of the population and for promoting inclusive growth

Infrastructure (along with agribusiness, health, and education) has a special capacity for promoting inclusive growth,³ especially by providing access to basic services, including water, education and health for the poor. See Box 6.1 for an illustrative example in Bogota (Colombia). The positive impact on poverty is affected by affordability, which makes pricing decisions of infrastructure services very critical.⁴

Empirical evidence from various countries observed over long periods of time shows that the increase in the quantity and quality of infrastructure has reduced poverty and inequality.⁵ Access to infrastructure helps the poor by reducing the time to collect wood and water, which can be used instead for education or income earning. For example, in Bangladesh, electrification projects in selected rural areas were associated with 10 percent higher incomes and a 7 percent lower poverty rate.⁷ In the case of transportation, several studies have highlighted the poverty reduction effect of facilitating labor mobility and providing opportunities to rural workers for better-paid non-agricultural jobs.⁸ Moreover, infrastructure enables access to basic services, positively affecting education and health.⁹

Box 6.1: Infrastructure can help create inclusive pro-poor urbanization

About 43 percent of Bogota, Colombia's capital city is considered poor. However the city has taken steps to make its urbanization and infrastructure inclusive. Since 2000 a public private bus rapid transit system, the *TransMilenio* has helped connect the poorest parts of the city, including about 1440 informal settlements and other poor neighborhoods, and reduced travel times by an average of 15 minutes, with larger reductions for households in poorer parts of the city.



Source: World Bank, World Development Report 2009.

1.2 Access to infrastructure is a key constraint for the private sector

Inadequate infrastructure is one of the biggest constraints faced by the private sector. Perception data from Enterprise Surveys in Africa also show that firms that rank infrastructure problems as severe are often the most productive because they tend to be firms that sell in larger markets and are more dependent on infrastructure.¹⁰ A recent World Bank report found that electricity is one of the most binding constraints that prevent firms from creating more and better jobs. Interestingly, it also found that job-creating firms are more severely affected than other firms by virtually the entire range of constraints that were analyzed.¹¹ Therefore it is very important for policymakers to ensure that investments in infrastructure are proactive and forward looking, and not simply responding to natural growth in demand.

It is particularly common for firms in developing countries to spend their own resources directly on buying infrastructure services or providing them on their own. For example, in low and lower-middle income countries, firms often invest in buying their own power generators to deal with power supply disruptions. This is a suboptimal situation and is a drain on resources, since the cost of obtaining power from generators is substantially higher than from the regular grid.¹² Besides, individual power generators have negative environmental consequences.

1.3 Infrastructure, urbanization, and development

Infrastructure plays a crucial role in urbanization, an essential process in the development of countries. As agriculture becomes more productive, cities grow by absorbing workers from rural areas. Industry and services expand, creating higher value-added jobs, and the economy diversifies. The geographic concentration of productive activities in cities creates agglomeration economies, which further raises productivity and growth. The increase in income and demand for agricultural products in cities

Did you know?
During the next two decades, the urban population of two of the world's poorest regions—South Asia and Sub-Saharan Africa—is expected to double. Proper infrastructure planning is vital to help turn this challenge into an opportunity for inclusive development.

stimulates more investment in agriculture, which helps increase rural productivity and further strengthens the shift toward rapid urbanization in developing economies.

Infrastructure plays a critical role in this process of urbanization. For example, transportation infrastructure creates a crucial link between the urban and the rural economies, enabling complementary and balanced growth, and allows firms to benefit from advantages of agglomeration like access to better inputs and access to markets for their products. As firms grow, they provide jobs for rural migrants, which generally tend to be better paid and formal than jobs in rural areas. In fact, larger cities tend to be more productive, enabling firms to grow faster.¹³ Urban areas are critical spaces within which most new jobs in the coming years are likely to be created. Urbanization is thus an engine of development and also of job creation.

Besides, urbanization creates tremendous pressure on cities, especially on their ability to provide adequate access to infrastructure like water, power, and roads. One reason why urbanization in Africa has not generated as much economic growth as in other developing countries is because of challenges in reaping agglomeration economies, one reason for which is an inadequate infrastructure.¹⁴ The share of urban population in Africa is expected to rise from 15 percent in 1960 to 60 percent by 2020. This rapid urbanization poses an enormous challenge for infrastructure policy, in terms of avoiding congestion costs and facilitating balanced and inclusive growth of both rural and urban areas.¹⁵ The need for mobilizing investments in infrastructure therefore becomes one of the key challenges for urban policymakers throughout the developing world. It is very important for urban policymakers to incorporate infrastructure planning into their land use plans in order to ensure that urbanization fosters inclusive development, growth, and job creation.

1.4 Investment in infrastructure creates jobs

There are two main categories of jobs that are created through infrastructure investments (see Box 6.2).

A. Job creation associated with construction and operation & maintenance (O&M) of infrastructure assets

There are three main types of employment effects from construction and O&M of infrastructure projects: *direct*, *indirect*, and *induced*. Construction and O&M of infrastructure assets need workers (direct effect), but also create jobs in the supply and distribution networks (indirect effect), and for the providers of household consumption goods and services for these direct and indirect workers (induced effect).

Box 6.2: Infrastructure investments create jobs through different channels

Infrastructure investments, such as a new power plant, generate employment through several channels:

1. Jobs associated with construction, operation, and maintenance:

- **Direct effect:** Jobs that are created in a specific enterprise, e.g., IFC's client, through additional and professional staff hired to build and then operate the power plant.
- **Indirect effect:** Jobs in the supply chain (backward linkage) or distribution network (forward linkage) that are created as a result of the power plant that has been set up. The power plant buys inputs from other sectors like

cement and cables (especially during construction), and these create employment through the backward supply chain.

- **Induced effect:** Jobs created through additional rounds of effects, e.g., spending by workers. For example, the workers in the power generation plant and other firms supplying it spend more, which creates additional employment in various other sectors that supply to household consumption, creating a multiplier of further demands.
- ##### 2. Second-order or growth-related jobs.
- These effects occur throughout the economy as each constraint to growth is removed. An increase in power supply allows higher power consumption, generating more industrial production, economic growth, and hence employment.

The short-term employment generation potential of infrastructure investments is often what makes them attractive to policymakers. An analysis of the potential employment effects of infrastructure projects in the Latin America and the Caribbean (LAC) region found that an investment of US \$1 billion in infrastructure would generate approximately 40,000 direct and indirect jobs (these estimates exclude induced jobs).¹⁶ Similar estimates for the Middle East and North Africa region (MENA) show that in the short run, for every US\$1 billion invested in infrastructure, over 110,000 additional jobs could be created in oil-importing countries, 49,000 in developing oil exporting countries, and 26,000 in the Gulf Cooperation Council countries.¹⁷ Such regional estimates of the employment generation potential of infrastructure investments depend on the choice of infrastructure sectors that attract investment, the technologies employed, local wages for skilled and unskilled labor, and the degree of imports in the supply chain.

Both the LAC and MENA studies mentioned above focus only on short-term employment effects of *constructing* the infrastructure assets, and do not account for the employment that would be generated because the infrastructure created would relieve a constraint, and hence enable more production and employment (discussed later).

Studies also show that the combined effects of indirect and induced employment are often larger than the direct employment created through infrastructure projects.¹⁸ For example, a study using an input-output model from the US Federal Highway Administration found that US \$1 billion spent on road construction in the US generates about 6,000 direct jobs, 7,790 indirect jobs, and 14,000 induced jobs.¹⁹ A number of studies that have estimated employment effects for infrastructure projects find that the employment multiplier (number of direct, indirect, and induced jobs for each direct job) often exceeds 2.²⁰

B. Job creation associated with improved services provided by infrastructure

Most studies capture the jobs created through construction or O&M of the infrastructure assets, and often do not account for the employment that would be generated when the new infrastructure relieves a supply constraint and hence enables more production and employment. Indeed, the most crucial way that infrastructure projects help create jobs is through improved services and higher economic growth, i.e., increased output from removal of a constraint.

For example, manufacturing sectors in developing countries are often constrained by a lack of reliable power. With additional power, these sectors can produce more, consume more inputs from other sectors, and hence create additional employment. In fact most firms invest in alternative arrangements to compensate for unreliable infrastructure services—like a back-up power generator. “Buying reliability” of power supply through generators often means additional cost for firms. For example, in Tanzania, it is estimated that the cost of using a generator is 264 percent higher than accessing power from the grid.²¹ With increased power generation, power supply could be more reliable and would reduce dependence on costly generators, which would further stimulate output and job creation. However, considering that access to regular power from the grid is limited, firms have to fall back on the next best (but very expensive) option available: investing in power generators.

Estimating how this additional power supply and (improved reliability) helps generate employment is very important in order to get a more complete picture of the job creation effects of infrastructure investments. Studies show that there is a large impact of infrastructure on growth, which in itself indicates that growth-related jobs can be substantial.²² However, studies estimating the job impact through this higher economic growth (second order effects—i.e., jobs created due to an increase in supply of infrastructure services like power) are very scarce.

One study, for example, used an input-output approach, and estimated that the establishment of a new container terminal in a port in Brazil helped create 245 direct jobs involved in the management of the terminal, but also created about 6,200 growth-related jobs in the surrounding region by eliminating transport bottlenecks (see box 6.4).²³ In India, a new power transmission line generated about 75,000 jobs over 6 years by increasing power supply and improving its reliability, a number much larger than the approximately 9,700 jobs created over 25 years through construction and O&M (see box 6.3).²⁴ Growth effects can also be very substantial in the telecommunications sector; an investment of \$10 billion in expanding the US broadband network could create almost 270,000 growth-related jobs (see section 4).

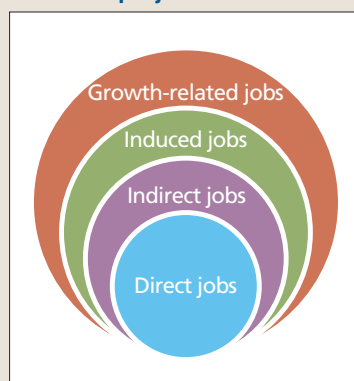
Therefore, going *beyond* the number of jobs created through construction and O&M is especially important for infrastructure investments in order to correctly assess their development impact. Figure 6.1 depicts this vision of the job effects from infrastructure investments.

1.5 Access to infrastructure is important for women’s empowerment

Access to infrastructure is an important prerequisite for women’s empowerment. Integrating a gender approach to infrastructure can help create more efficient and sustainable projects and programs, enhance productivity and income for families, and hence contribute to poverty reduction and growth. Such inclusive approaches to infrastructure that empower women as well as men have positive effects on maternal and child mortality through better access to potable water and improved

Key message
Job creation from having improved services can be much larger than short-term job creation from construction of an infrastructure asset.

Figure 6.1: It is important to focus on second-order growth employment effects of infrastructure projects

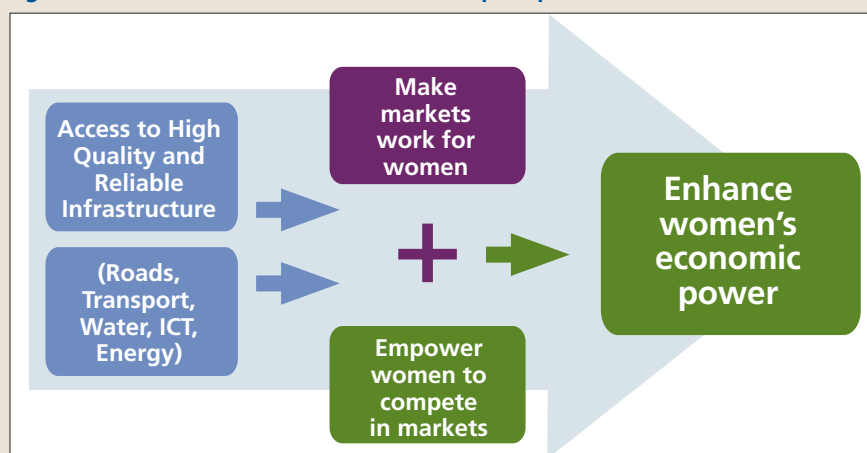


Source: Author’s elaboration

sanitation. Infrastructure underpins women's economic empowerment by helping them access services, making markets work for them, and opening the door to better paying jobs—which can further empower women (figure 6.2).

Men and women have different roles, responsibilities, and constraints, because of which their respective demand for infrastructure facilities and services often vary. For example, there are considerable differences between the travel patterns of men and women. Evidence from village-level travel and transport surveys and case studies in Africa showed that the major part of the household transport burden falls on women, who contribute up to 65 percent of the total transport effort related to agriculture.²⁵ Rural women pay a particularly high price for the lack of infrastructure, because they tend to spend most of their time bringing water for domestic or agricultural uses, processing and marketing food and other agricultural or nonfarm products, collecting firewood, and obtaining health services for themselves and their families.²⁶ This “time poverty” in turn limits their ability to attend school or engage in income-earning activities to improve their own lives and those of their families. If households get access to electricity, potentially large amounts of time spent in fuel-wood collection and in food preparation with traditional fuels could be saved for other economic activities.²⁷ Electrification of rural communities of South Africa led to a 13.5 percentage increase in female employment in those communities.²⁸ The reason why female employment increased more than male employment in response to rural electrification is that when less time is required in home production due to access to electricity, women are more likely than men to substitute this time toward market work, and are hence more affected by rural electrification than men. Thus access to infrastructure has important implications for women's access to jobs.

Figure 6.2: Access to infrastructure can help empower women



Source: Presentation on Importance of Infrastructure in World Bank Group's GAP (Gender Action Plan). Poverty Reduction and Economic Management Network

1.5.2 Infrastructure policies need to be gender-sensitive

The infrastructure sector is often assumed to have a *gender-neutral* development impact. But there is now increasing awareness about the need to adopt gender-sensitive policies while planning and designing infrastructure investments. Some sectors within infrastructure have made more progress in this sphere than others. For example, water and sanitation services are often seen as “female” activities, and therefore much work has been done to develop gender-sensitive policies in this sector. By contrast, interest in gender aspects of transportation is relatively recent, while sectors such as telecommunications have very little literature on gender (see section 4.2).²⁹

A gender analysis of infrastructure services is important to understand how some assumptions about gender in infrastructure planning could in fact create infrastructure facilities that *fail* to meet the needs of women in poor communities. While this could be due to poor implementation, very often it is also a result of gender-blind assumptions in planning. For example, water pumps introduced to provide clean water have broken down because handles were designed for use by men rather than for women and children, who are the principal water bearers in the community.³⁰

1.5.3 Direct jobs created through infrastructure tend to benefit men more

Direct job creation in the infrastructure sector disproportionately benefits men.³¹ For example, in 2011, only about 35 percent of jobs provided by IFC's infrastructure investment clients went to women.³² Also, women are more likely to be employed in clerical categories, occupying low positions, while men are concentrated in production-related, technical, or managerial positions, which are also usually the more skilled and better paying jobs.³³ However, increased involvement of women in construction does not always bring financial benefits, and in some cases puts more burdens on women. For example, a road maintenance program in Lesotho paid women for their maintenance work only in food. In self-help housing projects, women are often relegated to “secondary chores” such as carrying water, wetting bricks, mixing mortar, or tidying verges.³⁴ Therefore policymakers need to be aware of some implicit, but often incorrect, assumptions that direct job creation in infrastructure projects benefit men and women equally.

1.6 Infrastructure sectors differ in their propensity to generate construction and maintenance jobs.

The number of jobs created by an infrastructure project varies widely, depending on the sector. It is estimated that spending on roads and bridges would generate more direct jobs than any other infrastructure investment because these sectors are much more labor intensive; the cost of a direct infrastructure job in the roads/bridges sector is about a fifth of the cost of a direct job in the power generation sector.³⁵ Estimates in the LAC region found that an investment of US \$1 billion in coal-fired power generation projects would create 750 direct jobs, compared to 100,000 direct jobs for water and sanitation network expansion, or 23,000 for rural electrification. Similarly the number of indirect jobs generated by an infrastructure project would depend on the extent to which that sector requires inputs from other sectors to produce its output.³⁶

1.6.1 Factors that affect employment elasticity with respect to infrastructure

- **Import content:** The extent to which inputs for a particular sector come from imports as opposed to local sources affects the number of direct and indirect jobs that an infrastructure investment creates within a particular region or country. The larger the percentage of inputs that come from imported goods and services, the less the employment effects of an infrastructure investment within a region or country. Even if all the initial spending is in the domestic economy, supply industries or induced spending may be partially drawn from abroad, thus diverting jobs away from the domestic sector. However, even if an investment draws in imports from another region, the job creation effects will still be positive, even if some proportion of the additional jobs are created in another region.
- **CIM jobs vs. O&M jobs:** An important distinction must be drawn between the employment generated for construction, installation, and manufacture (CIM) of an infrastructure project and the employment generated for the O&M phase of the project. The CIM phase typically creates jobs that are short term in nature, while the O&M jobs are required for the life of the infrastructure asset that is created. Therefore, an important consideration to keep in mind is the time element – even though the *number of jobs* created during CIM may be larger than the number of jobs created during O&M, the total *number of job-years* created by projects for O&M could be of similar magnitude to the number of job-years created by CIM, because the life of a project is usually many years more than the CIM phase of the project.
- **Availability of skilled labor:** The number of jobs that an infrastructure investment is able to generate also depends on the availability of labor with the necessary skills to respond to the direct, indirect, and induced demands that are created.

1.7 What about ‘net’ effects?

Many studies on employment effects do not fully consider the counterfactual scenario. When a government spending program provides stimulus through infrastructure investments, the resources often come from spending cuts in other programs, raising taxes, or borrowing, which further affects employment in other sectors. Similarly, renewable energy projects could create additional jobs but may cause job losses in the fossil fuel sector. While roads projects have large economic and welfare effects (see section 2), it is possible that in the short term they could hurt local producers by making imports cheaper.³⁷ Calculating the “net jobs” created (or destroyed), or the re-allocation of jobs within the economy, is methodologically very challenging, and is hence overlooked in most analyses.

1.8 The private sector plays an important role in addressing the large infrastructure deficit in low-income countries

Low-income countries continue to struggle with very low access to basic services, as shown in figure 6.3. The difference between low- and high-income countries is particularly significant for electricity access.

Provision of infrastructure is no longer a task assigned exclusively to the public sector. The large amount of resources needed, especially with rapid urbanization, and the public good nature of network assets notwithstanding, the private sector is playing an increasing role in providing infrastructure. The involvement of public-private partnerships (PPPs) in infrastructure projects in low- and middle-income countries has increased significantly in the last decade, especially in the energy and telecommunications sectors but also in transportation. PPP investments in water and sewerage remain more modest and stable (figure 6.4).

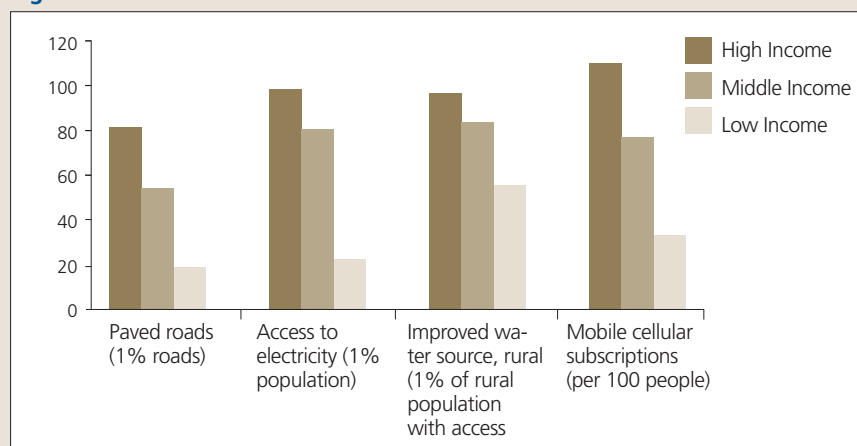
While infrastructure remains primarily the domain of the government, the private sector can play a very important role in augmenting funds, bringing in technology, efficiency, and results-based approaches to infrastructure through market solutions. Studies show that in telecommunications, power, ports or high-traffic roads, the involvement of the private sector improves outcomes, especially in terms of the efficiency of the operators, but evidence is more mixed on the water sector.³⁸ Publicly

owned water operators often suffer from very poor performance, but several factors limit the penetration and impact of private participation in this sector, especially incomplete cost recovery schemes (due to political and social considerations).³⁹

A frequently discussed concern about the role of the private sector and employment is that productivity and efficiency gains could be achieved via a reduction in the number of jobs. In general, privatization of previously state-owned companies could lead to lower *direct* jobs in the short run, but in the medium to long term the efficiency gains can stimulate growth and employment creation, especially within the sector and throughout the economy.⁴⁰ Indeed, evidence shows that in several instances the faster sectoral growth triggered in the medium term by liberalization and privatization reforms can create new jobs and offset the initial decrease for the affected operator.⁴¹ Further, efficiency gains are spread through the economy, stimulating growth and hence employment creation.⁴²

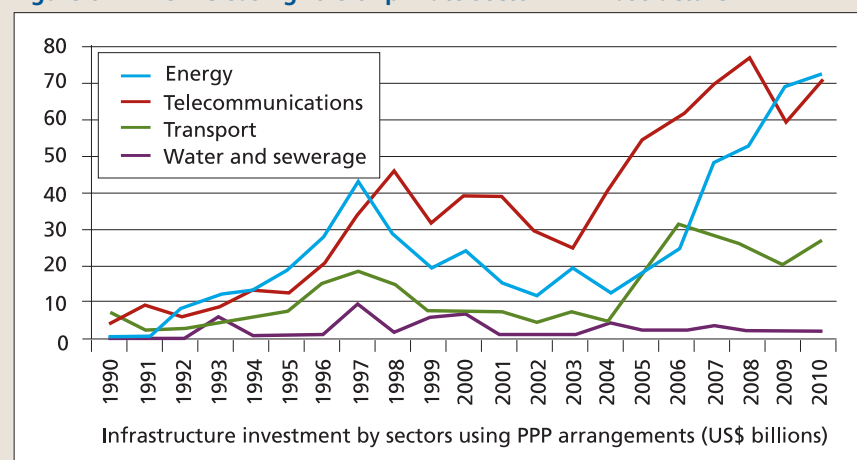
Participation of the private sector might entail additional benefits. An independent evaluation of IFC's infrastructure projects by the Independent Evaluation Group (IEG) found that a relatively high proportion of IFC infrastructure projects contributed to private sector development beyond the immediate effect of the project. For example, the projects propelled regulatory and legal improvements and increased competition or the use of responsible social and environmental standards.⁴³ However, harnessing the potential of the private sector, especially in complex sectors like infrastructure, also needs an effective regulatory framework. PPPs in Latin America, for example, have seen a high frequency of renegotiation of concessions due to weak regulatory framework and accountability.⁴⁴

Figure 6.3: Low-income countries have an infrastructure deficit



Source: World Development Indicators. Data for paved roads and electricity for 2009, and data for water and mobile subscriptions for 2010.

Figure 6.4: The increasing role of private sector in infrastructure



Source: Private Participation in Infrastructure Database.

2. Power

Access to reliable power is one of the most critical factors affecting the economy of developing countries. Interrupted power supply and frequent power outages negatively impact output and employment creation. It is estimated that in Africa, the cost of power outages could amount to 1-2 percent of GDP.⁴⁵ The detrimental effect is more keenly suffered by exporters.⁴⁶

According to the Enterprise Surveys, lack of access to electricity is identified by firms as one of their biggest constraints. These data also show that lack of access to power affects all firm sizes, and that firms in low-income countries are particularly vulnerable to power shortages, with 25.7 percent of firms reporting this as the biggest constraint (the largest percentage for any constraint), as opposed to only 5 percent of firms in high-income countries (figure 6.5).

Infrastructure, especially power, is now well recognized as one of the essential foundations of development. Access to good quality power improves living standards, stimulates growth, helps private sector development, and creates jobs. In addition,

greater access to power helps reduce poverty not only by stimulating overall growth but also in indirect ways, by facilitating access to other resources and services. For example, access to education is facilitated by increasing the possibility of students studying at night, or through the use of more sophisticated equipment in schools, or through the reduced amount of time children spend collecting traditional fuels.⁴⁷

The development effects of power projects require parallel progress on multiple fronts (generation, reliability, reduction of transmission and distribution losses, institutional and legal reforms, etc.). In Uganda and Madagascar, for example, positive policy and institutional reforms were undermined by inadequate investment in power generation.⁴⁸

Finally, while access to power is an important prerequisite for private sector growth and productivity, the private sector can also play an important role as a provider of power, complementing the role of government in expanding a country's capacity in power generation, transmission, or distribution.

2.1 Power projects can also serve as a potential source of jobs, while boosting long-term growth

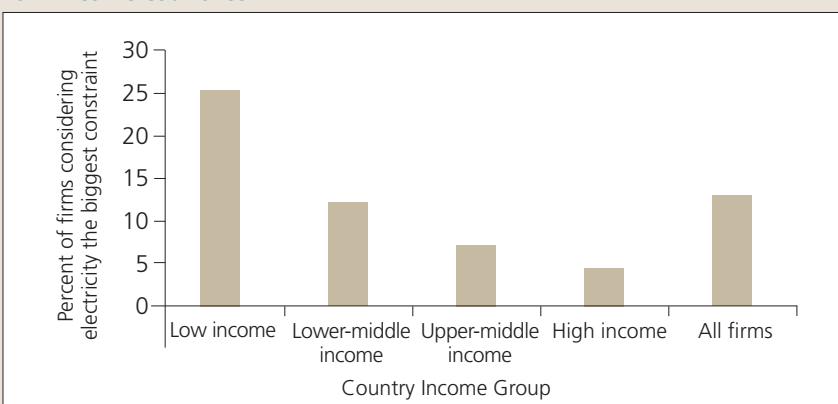
The Government of Tanzania, for example, is focusing on increasing access to electricity not just as a source of growth and productivity for the economy but also as a source of job creation. The government has set a goal of connecting 500,000 households to the national grid over the next five years, and it estimates that if the plan is implemented, more than one million direct and indirect jobs will be created throughout the economy, which it is hoped will in turn reduce poverty. This electrification is considered a key driver of employment growth for the country by increasing productivity and the demand for labor, thereby generating higher earnings and household income. Investments in the power sector, and its employment generation potential, are therefore a key element of the Tanzanian government's poverty reduction policy.⁴⁹ Another study on peri-urban Tanzania found that access to electricity not only increases the probability of nonfarm-wage employment, but also strongly increases nonfarm-wage labor earnings.⁵⁰

While investment in power projects generates direct jobs, the most significant employment effect of such investments comes from the fact that an increase in power supply (and its reliability) relieves one of the key binding constraints on the output of firms, and this helps firms create more jobs. Reliability of power supply is a very significant issue for firms. The lack of reliability of power supply and the frequency of power outages cause firms to lose production and incur high self-generation costs. Firms lose a large share of their output to power losses. In South Asia, 10.7 percent of sales for the region as a whole, up to 27 percent for Nepal, are lost due to power outages.⁵¹

The use of generators is a very common means of mitigating the adverse effects of unreliable power supply in most low-income countries. Analysis of data from Enterprise Surveys indicates that having or sharing a generator contributes on average 2.5 percentage points to annual employment growth, and over 4 percentage points in low- and lower-middle income countries, or countries that suffer from six or more power outages per month.⁵² While these results are based on firm-level data, thus not addressing aggregate employment effects, they suggest that there could be substantial gains to be achieved by ensuring access to a reliable regular grid. In fact, given that power from the grid tends to be significantly cheaper, it is likely that improving the reliability of that power supply would have even greater effects on employment growth.

Evidence from a power transmission project in India confirms the importance of improved power supply and reliability on job creation. The study found that second order employment effects of power investments (from increased power supply) are much larger than the number of direct jobs created (see Box 6.3).

Figure 6.5: Lack of access to power is an obstacle for firms, especially in low income countries



Source: World Bank Enterprise Surveys

Box 6.3 Second-order employment effects of a power transmission project are much larger than the direct jobs

In 2003, IFC committed a loan of US \$75 million to Powerlinks Transmission Limited (PTL) a joint venture company, to construct power transmission lines that helped transmit hydropower from Bhutan to a number of states in north and east India.

Unlike most studies, which tend to focus on jobs created through construction and O&M, this study looked at employment effects more comprehensively and also estimated second order growth effects—jobs created as the increase in power supply brought by PTL helped firms expand their output and hence create employment. The study also specifically focused on the impact that increased reliability in power supply through reduced power outages had on job creation.

- **Large indirect and induced job effects:** Using input-output tables, the study found that construction and O&M will create a total of about 243,000 persons-year employment (roughly 9,700 additional jobs) over the 25-year life of the project, combining direct, indirect, and induced jobs. Induced and indirect effects are much larger (199,000 person years) than direct jobs (44,000 person years) created.
- **Significant impact on poverty:** Besides, the jobs created during construction added Rs 47,000 lakh to household income, which has special implications for poverty reduction, as the transmission lines were constructed through some of the poorest states in India. In addition, a large portion of induced jobs are created in the

agricultural sector, creating employment and income for rural low-skilled population.

- **Significant second order effects:** Growth-related jobs created by this project are much more significant, as power supply is a binding constraint for firms in India. Using econometric time series, the study estimated that the increase in power supply from Bhutan's Tala hydropower plant transmitted through PTL's transmission lines created about 75,000 new jobs in India over the period 2006-2012, of which about 4,600 are in West Bengal. Reliability of power supply is a very important issue for firms in India. Using a simple step-by-step estimation model to obtain a rough approximation of the magnitude of the issue, the study found that by enabling a reduction in power outages in West Bengal, the project helped create about 1,600 jobs (out of the 4,600) over a period of 6 years.
- **Development impact in Bhutan:** Additionally, as this vital transmission link enables cross-border trade of power from Bhutan to India, it has a significant development impact in Bhutan. This comes from higher GDP growth and government revenues, which further enable the Bhutanese government to spend more on social sectors such as health and education. This spending improves the quality of life and also the employability of the people of Bhutan.

Source: IFC Job Study (2013): Estimating Employment Effects of Powerlinks Transmission limited project in India and Bhutan.

2.2 The power sector has high employment multipliers

A review of 35 studies in the energy sector found that employment multipliers of energy projects are usually quite large.⁵³ The type II multiplier (the ratio of the sum of direct, indirect, and induced jobs to direct jobs) often exceeds 2, indicating that the combined level of indirect and induced employment for an energy project is likely to be larger than the direct employment itself. For example, a study of the employment effects of a 75 MW solar plant in Washington State, US, showed that the sum of indirect and induced jobs created were much greater than the direct employment (multiplier higher than 3 for construction), and the indirect employment was almost all concentrated in the CIM, while O&M hardly required inputs from other sectors.⁵⁴ Therefore, as mentioned earlier, it is critical to consider the economy-wide spillover effects when estimating employment effects of power projects. Calculating only the number of direct jobs created as a result of a power project would substantially underestimate its employment generation potential.

While a number of studies on the employment effects of power sector investments come from the developed world, it can be assumed that in general, a similar relationship would also hold for developing countries. However, multipliers tend to be larger for developing countries due to the use of more labor-intensive production methods. But if the construction of the infrastructure relies on imports, part of the job creation effects is not captured by the country conducting the investment, but by the exporting country.

The Asian Development Bank evaluated the impact of its assistance to the Indonesian power sector through 27 loans for 26 power sector projects from 1970 to 2000 and found a likely positive poverty reduction impact through employment generation during project construction, creation of employment in power service delivery, and new economic opportunities for growth that resulted from the increased availability of electricity (see box 6.4).⁵⁵ The availability of power for longer hours

also affects productivity, growth, employment, and earnings, as firms are able to run longer uninterrupted shifts. Self-employed informal workers can also work longer and earn more.

2.3 Does technology matter? Do energy efficiency projects create more employment?

The employment-generating propensity of power projects varies with technology. However, the literature comparing employment potential of different energy technologies is heterogeneous, using different methodologies and definitions and thus making it difficult to draw final conclusions. A study found that 1 megawatt (MW) of solar PV on average generated 35.5 direct jobs, 1 MW of wind generated 4.8 jobs, and 1 MW of biomass co-firing generated between 3.8 and 21.8 jobs, depending on the feedstock.⁵⁶ Comparisons between alternative projects based on equivalent output or equivalent cost indicate that renewable energy or energy efficiency projects generated more gross employment than fossil fuel projects. The total number of jobs-years per gigawatt hour (GWH) varies from as high as 1.4 for solar photovoltaic (PV) (0.87 on average) to as little as 0.11 for gas or coal.⁵⁷ Renewable and energy efficiency projects tend to have lower O&M and larger CIM components than fossil fuel generation projects.⁵⁸

Energy efficiency projects may have high direct employment effects (e.g., retrofitting buildings to be more energy efficient can be very labor intensive), and can also affect employment through their impact on household budgets. The European Climate Foundation study in Hungary estimated employment effects of building an energy efficiency retrofit program in Hungary and found that the spending from extra income generated from energy savings created further induced employment.⁵⁹ On the other hand, where energy efficiency projects result in increased cost of energy to the user, the result was reduced expenditure on all goods and as a consequence reduced employment.⁶⁰

Nevertheless, fuel substitution decisions can have unintended consequences. When a specific fuel preference is stimulated via budgetary support and one fuel is substituted for another, some energy subsectors may experience job losses.⁶¹ Finally, and as mentioned previously, while the use of labor-intensive techniques and technologies could immediately lead to direct job creation, short-term employment should not be the basis for selection of infrastructure investments. In fact, maximizing the labor cost of generating energy could impact labor productivity negatively.

3. Transportation

As in the case of power, transportation infrastructure generates jobs not only for construction, operation and maintenance, but also through higher economic growth.

3.1 Investment in transportation infrastructure has immediate direct job creation impacts

Investments in transportation infrastructure generate an immediate impact in terms of job creation in the construction and operation activity. For example, in 2009, IFC conducted a comprehensive assessment of the logistic sector for the MENA region. The assessment concluded that the development of this sector could generate investments of up to \$25 billion and create more than two million direct jobs over 20 years.⁶²

Since construction and maintenance of roads are more labor intensive than most other infrastructure investments, road projects tend to have large direct job effects, while multipliers for indirect and induced effects are comparatively more moderate

Box 6.4: Hydropower project creates new job opportunities in Indonesia

A study by the Asian Development Bank found that during the construction of the Singkarak hydropower project in Indonesia, many local people found employment by working directly on the project, or they found work in Dumes (special housing areas for the project's consultants), and after the project was completed, many of the local workers were able to find employment in the expanded local economy. For example, some were able to buy motorcycles with their project earnings and became motorcycle taxi drivers. One interesting finding from the evaluation was that motorcycle taxi driving developed as an occupation in the area, and local people formed a cooperative of drivers in the mid-1990s.

Source: ADB (2003).

Think about it:
Good-quality transport infrastructure can help facilitate inclusive urbanization, effectively linking rural to urban areas and increasing labor mobility to access better jobs.

because other inputs are less intensively used.⁶³ In the US, six different types of highway projects had type II multipliers averaging 1.9.⁶⁴ These direct jobs are mostly temporary and also tend to benefit men over women.⁶⁵

3.2 Investments in transport also generate employment through higher economic growth and trade

Besides generating employment through construction and maintenance, improved transport infrastructure reduces transportation costs (lower vehicle maintenance costs and lower time spent) and thus supports economic growth and job creation, especially through the development of trade and markets.⁶⁶ For example, the Asian Development Bank has estimated that the rehabilitated road corridor from Eastern Europe to China could generate an additional 3.19 percent of GDP growth in Kazakhstan by 2015.⁶⁷ However, proper maintenance of infrastructure is necessary for these medium- and long-term effects to be realized.⁶⁸

Unfortunately, studies of such growth-related effects on employment are scarce. It has been estimated that in the US, for every 10 percent increase in the stock of highways in 1983 in a given city, employment increased by 1.5 percent in that city over the following twenty years.⁶⁹ There is no doubt that availability of roads and rehabilitated roads in rural villages are associated with higher sectoral and geographical labor mobility. A study in Peru found that in rural areas with rehabilitated roads the estimated probability of accessing the labor market increases by 8.8 percentage points, although this increase is restricted to non-agricultural wage employment.⁷⁰ In general, workers from rural villages with better roads have access to new non-agricultural activities and also have a higher potential of finding productive employment in nearby cities, thus benefiting from urban jobs, which tend to be more formal and permanent.⁷¹ Transport is a crucial sector that supports inclusive urbanization, as discussed in previous sections.

While rural roads might only have very localized effects, investments in highways and ports impact regional and international trade. A simultaneous upgrade of the main international roads in Africa would lead to an estimated additional trade equivalent of \$250 billion in 15 years, generating hundreds of thousands of jobs for construction and maintenance.⁷² Another study found that for countries of the Asia-Pacific Economic Cooperation forum, port efficiency is more important for trade than the customs environment, the regulatory environment, or the use of Internet for commerce.⁷³

3.3 Regulatory frameworks affect how well private investments contribute to development

As in the case of power, the impact of investment in transportation depends on the existence of other infrastructure facilities and of an appropriate regulatory framework. For example, a new road would facilitate access to health and education only when there are hospitals and schools in the area. Also, benefits from constructing or improving a highway might not be passed on to consumers if there are not enough players in the merchandise transportation sector.⁷⁴ This lack of competition explains the relatively higher prices for road transport services in Africa.⁷⁵ Complementarities with other infrastructure and with the regulatory environment are thus crucial in determining the outcome of investments on transportation networks, and these should be factored in at the policy decision level.⁷⁶

The involvement of the private sector in transportation investments (through PPPs) has increased in recent years but still lags energy and telecommunications (figure 6.4). Higher private sector involvement is associated with better performance—for example, higher productivity of ports (see box 6.5) and railways.⁷⁷ However, the increased use of PPPs in transportation has not been without problems and has sometimes involved costly cancellations and renegotiations. In Sub-Saharan Africa, prob-

Box 6.5: A new container port terminal creates second-order employment effects

Between 1999 and 2001, the IFC assisted the Government of Pernambuco (Brazil) in the establishment of a container terminal in the Suape port through a Public Private Partnership. According to an evaluation conducted in 2011, this project has been very successful in increasing direct employment from 172 at start of the concession in 2002 to 417 at time of evaluation in 2011. In addition, the evaluation estimated that the new transport capabilities allowed

the expansion of firms in the regional economy, generating another 6,205 second-order or growth-related jobs. This analysis found that 78 percent of the firms reported that the new container terminal was important or indispensable for them in terms of location.

Source: Final Report for the Evaluation of the Suape Port Public Private Partnership, 2011.

lems have emerged mainly due to political conflicts; in Asia for non-competitive tendering; in Latin America for lack of proper regulatory policies; and in Central and Eastern Europe for lack of experience and low feasibility of the projects.⁷⁸

3.4 Socioeconomic and redistributive impact of transport investments

The spillover effects of transport investment can have a redistributive impact within the economy. In general, transportation projects support broad-based and inclusive growth. As mentioned above, roads tend to provide nonfarm employment opportunities to rural workers. In addition to economic benefits, investment in transport infrastructure facilitates access to basic services such as education, health, water, and sanitation, thus reducing poverty directly.⁷⁹

However, this distributional impact is not always straightforward. Transportation networks could reduce the cost of importing products from outside the region, which may cause job losses for local producers in the short term.⁸⁰ In the long term, however, the expectation is that these workers would shift to a different sector reflecting the area's comparative advantage and exploiting the new productive opportunities offered by the new infrastructure.

There are other instances where the impact on the poor is not clear. If poor households do not have access to motorized vehicles, paving a road may disproportionately benefit higher income groups. Also, a new road may increase the price of surrounding land, creating land concentration and potentially increasing the pressure on renters, who tend to be poor. Nevertheless, investment in rural roads usually tends to have a direct impact on poverty reduction, especially compared to investment in high-quality highways.⁸¹ In terms of the direct jobs, while technical jobs at airports and ports may benefit more educated workers, road maintenance has the potential to offer jobs to low-skilled workers (thus having a greater poverty reduction impact).⁸² Thus, investment in transportation assets can be pro-poor if it is targeted and designed appropriately.

4. Telecommunications and ICT

The telecommunications sector, like transportation, reduces significantly communications cost and facilitates access to information and services. This has a direct impact on growth, job creation, and poverty.

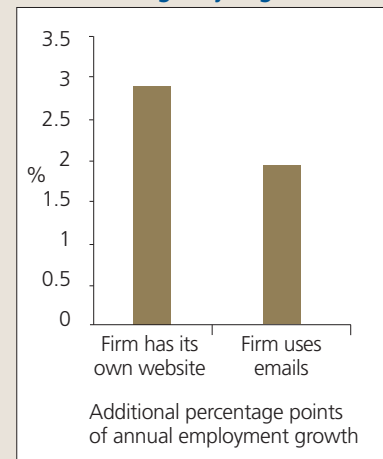
4.1 ICTs have a high growth and productivity impact and are a source of job creation

Information and communication technologies (ICT) increase connectivity among firms, clients, and suppliers and help create networks of entrepreneurs. In particular, it is widely recognized that information and communication technologies have an enormous potential to generate productivity growth.⁸³ Technologies such as mobile telephony have low physical requirements and have expanded rapidly, including in low-income countries, and have had a large growth impact.⁸⁴ According to World Bank estimates, advances in the telecommunications sector have contributed significantly to Africa's GDP per capita growth, and more than roads or power.⁸⁵

There is also evidence on the impact on jobs. A study conducted by IFC found that firms in developing countries using ICTs achieved not only higher labor productivity but also higher job growth. In particular, and controlling for other factors (country, industry, and size, among others), using email and having their own websites contributes almost 3 and 2 percentage points to annual employment growth respectively (figure 6.6).⁸⁶ However, firms in developing countries, and particularly small and medium enterprises, are often at a disadvantage, due to their lack of capacity and financial resources, to benefit from new technologies.⁸⁷ As another (striking) example, in rural villages of South Africa, employment increased by 15 percent when they received full mobile phone coverage.⁸⁸

As in other infrastructure sectors, the growth-related employment effects can be larger than the direct, indirect, and induced effects. The Information Technology & Innovation Foundation from the US found that investments in broadband have a multiplier of 2.6 indirect and induced jobs per each direct job created, and a multiplier of 1.2 growth-related jobs per each direct, indirect, and induced job created. This institution estimates that an investment of \$10 billion in the US broadband network would create more than 60,000 direct jobs, about 165,000 indirect and induced jobs, and almost 270,000 growth-related jobs. Growth-related jobs are substantial because of the "network" effect of these technologies (the larger the number of users, the higher the profitability and impact for each user).⁸⁹

Figure 6.6: Use of ICT is associated with higher job growth



Source: IFC (2012b).

The expansion of telecommunication technologies, especially mobile phones, has been accompanied by a stronger presence of the private sector. The number of PPPs in the telecommunications sector has increased very rapidly in recent years, much more than in transportation or water (figure 6.4). There is wide consensus that the use of PPPs in the telecommunication sector has helped expand coverage, lower prices and has generated clear efficiency gains.⁹⁰

Box 6.6: ICTs for inclusive growth

Since 2005, the World Bank Group has invested in PPP mechanisms, particularly in Africa, to increase access to broadband and high-speed Internet. One example of such PPP includes the IFC-supported Eastern Africa Submarine System (EASSy) which has triggered a race for connectivity, with prices expected to decrease five-fold or more. The approach is being adapted in Central and West Africa, the Caribbean, and the Pacific. IFC has supported expanding access to ICT by developing and replicating innovative programs such as the Village Phone program. This program has provided microcredits to help extend the reach of mobile phone service into rural communities of Africa, creating new economic opportunities, especially for women, while introducing additional incentives for literacy and education.

IFC also supported a global venture that promotes affordable satellite-based Internet access for developing countries. The IFC led a group of development institutions in provid-

ing \$260 million in financing to help O3b Networks (O3b) complete a satellite system that will provide affordable broadband access to developing countries near the equator. O3b, which stands for the other 3 billion, refers to the nearly half of the world's people not adequately served with broadband Internet access. Affordable high-speed broadband provides people and businesses the opportunity to connect with each other, innovate, and grow their economies. O3b, using eight satellites that circle the equator, will provide broadband services for developing countries 45 degrees latitude north and south of the equator. The satellites will serve countries in Africa, Asia, the Middle East, Europe, and South America that have insufficient connectivity because of geographic obstacles or the high cost of alternative means of connectivity.

4.2 ICTs can help build inclusive growth

Investment in ICT can promote inclusive economic growth by extending access to broader populations. IFC recently helped arrange a \$125 million financing package for Wataniya Mobile Palestine to help expand its operations in Gaza. The potential developmental impact of this project is especially high as telecommunications can help reduce the effect of the physical restrictions on movement. Wataniya Gaza is expected to grow from 6 direct employees in 2011 to 177 in 2014, while adding another 200 indirect jobs (dealers, distributors, franchisees).⁹¹ Box 6.6 provides other examples of ICT projects promoting inclusive growth.

4.3 ICTs can help create jobs for youth and women

IT-based services offer many direct and indirect employment opportunities, particularly for youth and women. It is estimated that the IT industry will create about 4 million additional direct jobs by 2016, while indirectly creating as many as 12–16 million more in other sectors. In India young people (ages 26–35) hold around 70 percent of jobs in this industry, and in the Philippines women account for 60 percent of the IT-based services workforce—a much higher rate of youth and female participation than in the service and manufacturing sectors in general, for jobs that pay 50–100 percent more than comparable service jobs.

As already discussed in the section of technology and employment (in chapter 2), ICT technologies can also play a role in reducing skill mismatches and improving the efficiency of the labor market. Mobile phone companies in some developing countries have established matching networks for employers and job seekers via mobile phones, reducing the cost and time needed for interviews and for job seeking in general. ICTs can also facilitate the distribution and access to learning programs: governments have used ICTs to expand access to education and higher skills, for example by connecting schools to the Internet.

ICTs help address gender gaps in health, education, and material assets, can offer distance education, and also open some new opportunities for women. New ICT-enabled jobs in services—particularly information processing in banking, insurance, printing, and publishing—are being taken up mainly by women. Female employment in data entry and processing was initially highest in Barbados, Jamaica, and the Philippines. ICT-related jobs are now concentrated in software, call centers, and geographical information systems clustered in Malaysia and India, particularly Delhi and Mumbai, where call centers employ

more than 1 million people, most of them women. In Morocco, home-based female weavers use the Internet to sell rugs and other textiles and to keep a larger share of their profits than in traditional middleman systems.⁹⁵

Policymakers need to exploit fully this enhanced potential of IT-based services and use them as an integral part of national development strategies for inclusive growth. In order to do so, it is necessary to provide the population with the necessary skills to use and develop information and communications technologies.

5. Water and irrigation

Most research on water and sanitation focuses on the welfare and health effects of providing safe drinking water and basic sanitation services to families, clearly establishing that investment in water and sanitation has strong pro-poor implications.⁹⁶ Besides, this infrastructure sector has large welfare implications for women, since the burden of collecting water is usually borne by women.⁹⁷

However, there is very little literature on the impact of water and sanitation infrastructure on economic growth or employment. This lack of literature should be interpreted with caution.⁹⁸ It is evident that better access to water and sanitation services eventually generates growth and employment: improvement in health increases labor productivity (especially through increase in school attendance and reduction of worker absenteeism). Time spent on collecting water can be used for more productive activities, especially for women. The overall economic gain of meeting the Millennium Development Goal target for water is estimated at \$3.5 billion.⁹⁹

Studies show that irrigation projects help increase agricultural output, productivity, and employment.¹⁰⁰ Much more can be done to expand irrigation in rural areas. In Africa only 3.5 percent of agricultural land is irrigated, compared to almost 34 percent in Asia.¹⁰¹ Irrigation infrastructure also contributes to reduction in poverty. For example, in Peru, villages benefiting from a rehabilitated irrigation infrastructure hired 30 percent more agricultural workers than other comparable villages, and poor farmers benefited more than non-poor farmers.¹⁰²

6. Conclusion

- Improving infrastructure helps remove major obstacles for the private sector in most developing economies, but particularly in the lowest-income countries.
- The more severe a constraint and the poorer a country, the bigger the effect from removing the constraint. For example, an unreliable supply of electricity is the dominant problem in low-income countries, and in those countries—and in countries suffering from six or more power outages per month—the job-creation benefits of reliable power are much greater than elsewhere.
- Providing infrastructure stimulates job creation immediately (the construction phase) but has even larger employment effects in the medium term to long term by removing barriers (such as unreliable power) to economic growth and development. Estimating the jobs generated because of this growth effect is important in order to accurately assess the employment effects of infrastructure investments.
- The number of indirect and induced jobs created as a result of infrastructure investments is often much larger than the number of direct jobs generated by the construction and maintenance of an infrastructure asset.
- Therefore, policymakers should focus not on short-term job-creation effects, but on long-term costs and efficiency of infrastructure projects and their growth-related effects on employment.
- Infrastructure investments are critical for planning inclusive development, especially in urban areas. The private sector can make an important contribution by augmenting government resources, improving productivity, bringing a results-based approach to infrastructure, and creating additional jobs.

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ACCESS TO FINANCE

Private sector companies, particularly small and medium-size enterprises (SMEs), perceive lack of access to finance as one of their main constraints. Businesses in less-developed countries tend to face more financial obstacles, given the lower level of financial development. The main factors that prevent financial institutions from providing more services to firms are high borrowing and risk-management costs, lack of information about a potential client, a weak regulatory and legal framework, and a poorly developed financial system.

The channels by which access to finance leads to job creation are diverse, since access to formal financial sources gives companies several benefits, namely: 1) helps them start new businesses, 2) allows them to make larger investments in capital and new technologies, 3) provides them with liquidity, and 4) results in the creation of indirect jobs in their suppliers and distributors. Evidence shows that improved access to finance can lead to generation of new jobs, but it is difficult to attribute job creation solely to it. The results tend to be larger and more significant for SMEs and for firms operating in developing countries.

Development finance institutions, financial intermediaries, and governments should help improve access to finance for private companies. Governments and the private sector should work together on implementing policies to support improvements in the legal framework and financial infrastructure. Other methods of developing access to finance are support for lending to underserved groups, promotion of competition in the financial sector, and policies to support financial intermediaries that can increase their financing services for businesses while reducing the lending costs and risks for the intermediaries.

1. Access to finance is important for the private sector in developing countries

The financial sector plays an important role in mobilizing and allocating resources, managing risks, and facilitating transactions across companies. The literature has found a positive relationship between access to finance and countries' long-term growth.¹ Studies suggest that financial development helps generate capital accumulation, higher productivity growth, innovation, and entrepreneurship which propel growth.² Additionally, access to finance is related to job creation as firms expand operations and become more productive. However, it is difficult to attribute job creation effects entirely to access to finance.

In recent years, there has been a trend toward increased financial openness in several countries, more competition among banks, and growing domestic credit for the private sector that raises the question whether lack of access to finance remains a constraint for private-sector growth and job creation in developing countries or not.

The recent financial crisis disrupted this trend (particularly in higher income countries), and in lower-income countries access to finance remains severely constrained and will likely worsen in coming years as a result of the crisis in Europe. There is no doubt that firms will always want financial resources at lower interest rates, and flexible conditions to fund their operations. But it also is important to understand how lack of access to finance represents a constraint for firms that, once relieved, can support job creation.

1.1 Access to finance supports development of the private sector

The financial sector has the potential to prop up countries' growth by supporting private-sector development. As already stated in previous chapters, the private sector in developing countries, as the main employer, has a key role in promoting growth and development. Financial development (using different measures) is positively associated with employment growth.³ The measures that had a significant relationship were a strong banking sector (the ratio of private credit over GDP) and financial openness (the sum of foreign assets and foreign liabilities over GDP). While the total credit provided by the financial sector is

relevant for job growth, so too is the distribution of these resources among different firms in the economy, the mix of products offered and the costs involved. A main challenge for the financial sector is to increase the supply of external sources of financing for firms that have growth potential but that have no access to credit or are under-served.⁴

In developed countries, the financial sector provides significantly more credit to the private sector than in developing countries and serves a higher share of firms, thus supporting their growth and job creation potential. The domestic credit the private sector receives as a percent of GDP varies from around 30 percent in low-income countries to 83 percent in upper middle income countries (Figure 7.1). Even though the share has been increasing since 2000 for all country income levels, developing countries still lag behind high-income countries. This is reflected in firms' access to finance: less than 20 percent of micro, small and medium enterprises (MSMEs) in developed economies have no access, while in regions such as South Asia and Sub-Saharan Africa over 59 percent of MSMEs lack access.⁵

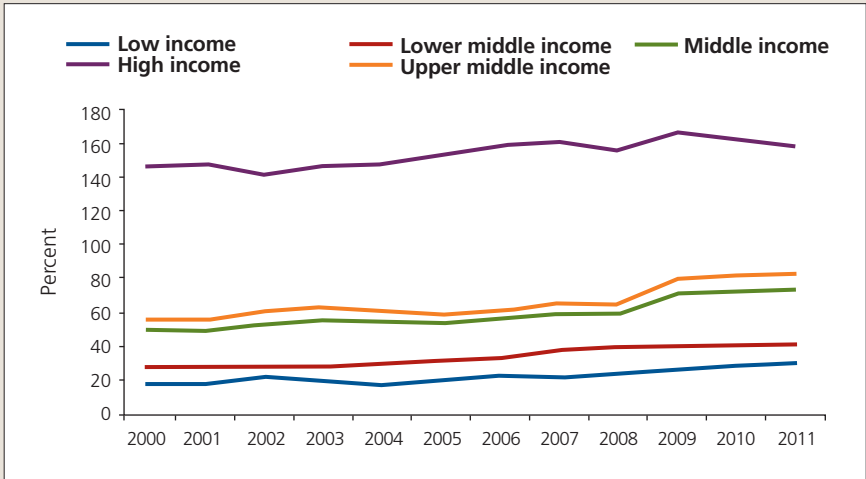
Even before the recent financial crisis, there was discussion about the potential harmful effects of poorly regulated financial markets. A study using pre-2007 data found that banking crises affect employment growth more in industries that depend on financing and in countries with higher financial development.⁶ In addition, a recent study found that financial depth⁷ and economic growth were positively related till the ratio of private credit to GDP reached levels of 60–70 percent.⁸ Above ratios of 80–100 percent, the relationship became negative. Lower-income countries' ratios are below those levels, suggesting that the expansion of credit can have a positive effect on their growth. However, other aspects such as institutional quality, strong bank supervision, capital requirements, and private monitoring play an important role in the positive connection. Too much credit in the economy can bolster volatility, increase vulnerabilities to shocks, or result in inefficient allocation of resources.

Access to finance affects new firms' ability to raise financing and to support long-term growth through gains in productivity.⁹ Firms need mainly two types of finance: short-term credit (i.e., working capital, trade credit, supply credit) and long-term debt for capital investments, equity, leasing, etc; both types are complementary for their operations. A developed and well-operating financial sector is essential to achieve economic growth. Access to finance also is linked to job creation in the private sector, a connection that will be discussed in section 3.

1.2 The missing middle

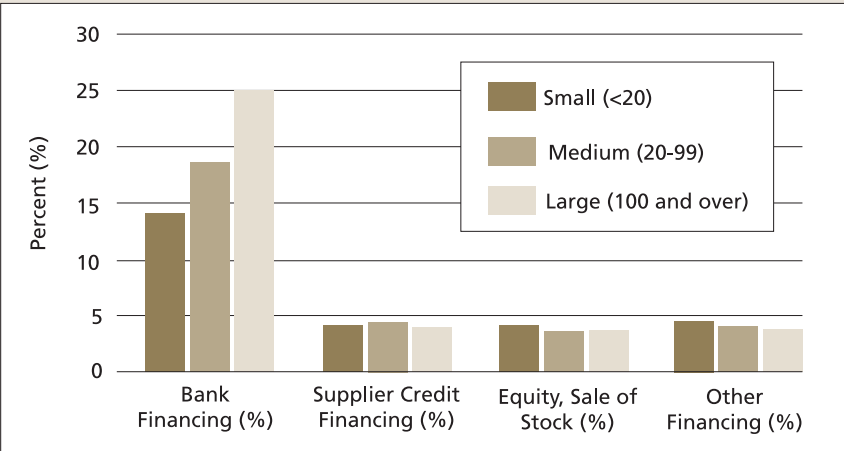
The Chapter on Major Constraints Facing Firms already pointed out that private-sector firms perceive lack of access to finance as a major constraint, together with a weak investment climate and lack of infrastructure. It also presented some objective measures of access to finance

Figure 7.1: The ratio of domestic credit to the private sector over GDP has been increasing in all country income levels, but is still very low compared to high income countries



Source: World Bank Group.

Figure 7.2: Bank financing is the main external financing source for fixed capital...but the smaller the firm, the less access to financing it has



Source: IFC 2010 (using WBG's Enterprise Survey Data).

by firm size, concluding that SMEs rely less on bank financing, which is the most important external source of financing for working capital and fixed investment needs (Figure 7.2). Small firms—those with fewer than 20 workers—are less likely to use banks to finance their fixed investment needs (14 percent) than medium-size (18 percent) and large firms (25 percent). SMEs rely more heavily on alternative funding sources, especially on retained earnings and internal funds, which together account for about 69 percent of their financing.¹⁰

The lack of access to finance for SMEs, a large sector not served by microfinance institutions and not effectively covered by commercial banking institutions, is known as the missing middle.¹¹ Estimates of the size of this credit gap are that about 45 to 55 percent of formal SMEs have no access to finance at all (do not have a loan or overdraft but need credit) and 21 to 24 percent are underserved (have a loan and/or overdraft but face financing constraints).¹² SMEs are very important, since they provide about two-thirds of the formal jobs in developing countries¹³ and the majority of jobs overall. The unmet credit needs of formal SMEs in the developing world add up to \$850 billion.¹⁴ If they are unable to obtain any or enough financial resources, they cannot grow into larger companies.

As mentioned earlier in the report, in lower-income countries SMEs have much higher employment shares than large companies. Especially in low-income countries, small companies provide the largest share of employment (Figure 7.3). This firm-size distribution pattern and the lack of access to finance explains the inability of SMEs to grow, leading to their “stunted growth,” and is consistent with findings that capital-constrained firms have slower growth rates generally.¹⁵

As economies develop, the role of larger firms becomes more important in job creation and productivity. As well, these firms are key for creat-

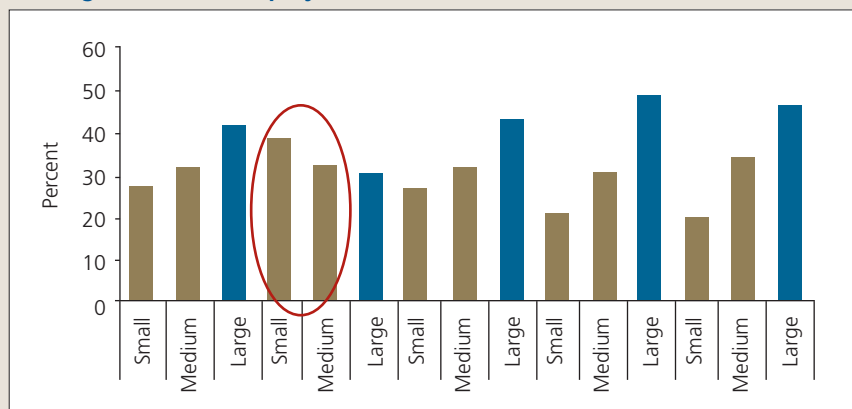
ing better working conditions since they usually pay higher wages, provide better quality of jobs and give more training to their workers than smaller firms.¹⁶ Some of these larger firms also face financing constraints that need to be addressed to allow them to grow and create employment. These companies potentially have large indirect employment effects when they grow, especially if they have local linkages in their value chain. But access to finance has proven a bigger problem for small- and medium-sized businesses because it prevents firms from growing to their fullest potential.

When firms cannot borrow from FIs or enter capital markets, they have to resort to their own funds or informal credit sources.¹⁷ Firms without a banking credit relationship most likely will not have access to alternative external financial sources such as equity markets. Other short-term sources such as trade credit are an unlikely option for firms that have no credit access. In addition, firms have a limit to the amount they can obtain in the form of debt, since they would need equity to maintain appropriate leverage ratios.¹⁸ High leverage ratios prevent firms from obtaining more credit from financial institutions. Hence, firms cannot acquire more debt if they cannot grow their equity; but financing their growth exclusively or mainly out of retained earnings can restrict their growth potential.

In the case of equity financing, SMEs face relatively higher costs to enter capital markets than do larger firms, due to their higher credit risk and smaller financial needs. A major fraction of costs involved in accessing capital markets are fixed and as a result some SMEs might be hard-pressed to afford them. In addition, private equity investment funds like venture capital funds that invest in and technically support start-ups and young firms are still relatively new in developing economies. As of 2009, there were approximately 192 investment funds providing support to small and growing businesses in emerging markets.

Equity finance remains an important constraint for SMEs, putting them in a bind because if they do not have enough earnings their access to financing may suffer.¹⁹ Studies in developed countries that analyzed the relationship between private equity investments and job growth found a short-term negative employment effect compensated by a long-term employment growth.²⁰ Another study found that firms supported by private equity achieved higher employment than those that did not have private equity financing.²¹

Figure 7.3: In low income countries, small and medium-size enterprises have the largest share of employment



Source: World Bank Enterprise Surveys (Small 5 – 19 employees, medium-size 20 – 99, and large firms =>100 employees).

2. Lack of adequate access to finance prevents firms from growing to their full potential

Private sector firms consider lack of access to finance an important constraint for their operations. Hence, it is important to understand why credit markets are constrained in order to identify specific channels to relieve credit constraints. It is also necessary to distinguish between firms lacking access to finance and firms that choose not to seek financing.

The distinction between access to finance and use of financing is depicted in Chart 7.1. As revealed in the chart, some firms might voluntarily exclude themselves from obtaining financing. The following two subsections show supply-side and demand-side factors that explain why firms experience restrictions on their access to finance. The bottom line is that FIs and firms need to align their incentives: the former to obtain profits from serving a customer segment and the latter to be willing to pay the costs and find the required financing.

Credit markets can be affected when adverse selection behavior that creates moral hazard²² and information asymmetries lead to an inefficient allocation of resources.²³ As well, the demand for financing may suffer if firms voluntarily restrain their borrowing even though they are financially sound. That can happen if firms expect to be rejected, fear the consequences of not being able to repay or lack the financial literacy to apply for financing. High interest rates or complicated applications may also discourage some borrowers.

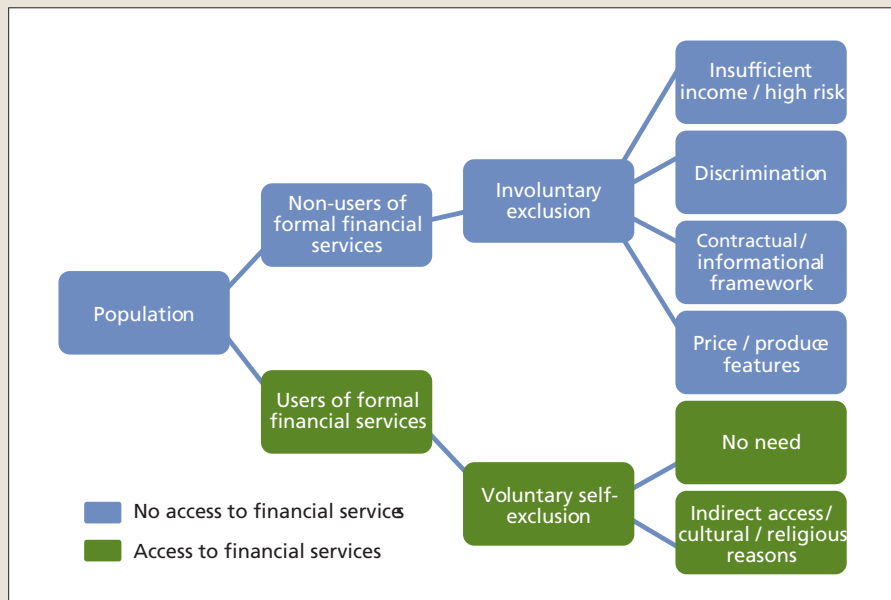
Firms that operate in the informal sector also face constraints when seeking financing from external sources, leaving an important share of businesses in developing countries underserved. If these firms could obtain financing, then they might be able to employ more people. For example, a study in Mexico showed that opening bank branches to serve individuals who had no access to credit and requiring less documentation for loans than commercial banks led to an increase in informal businesses, which further had a positive impact on total employment.²⁴ Some firms may decide to stay informal because of regulation costs, taxes and other factors.

The Investment Climate chapter discusses informality in more detail.

2.1 Supply side constraints

Given the structure of the markets, it has been claimed that financial constraints faced by firms come mainly from the supply side.²⁵ In markets that function well – and in which information is available—FIs would make their lending decisions based on financial performance and expected outcomes, thus reducing the impact of supply-side constraints. But market imperfections like a lack of credit bureaus can create barriers to information flows that mainly affect smaller firms. FIs need information from firms to make lending decisions, they require collateral to limit their potential losses, they need to ensure loans will be profitable and they must manage risks as effectively as possible (Box 7.1).

Chart 7.1: Distinction between access to finance and use of financing



Source: World Bank 2008.

SMEs have intrinsic characteristics that can discourage FIs from lending to them because of higher costs and less profitability. For example, SMEs usually borrow smaller amounts than larger companies so transaction costs are higher, many lack credit histories, financial statements or projections and they have fewer assets to cover collateral requirements.²⁶ SME lending also means higher risk-management costs because of their lower survival rates, high revenue volatility, low risk diversification, and greater vulnerability to crises.²⁷ Finally, small firms may be restricted in gaining access to financing because lending organizations prefer to lend to larger companies.

Box 7.1: Supply side constraints are relevant due to market imperfections

| SUPPLY SIDE CONSTRAINTS | |
|--|--|
| Information quality and availability | <p>FIs need information to make their lending decisions. When countries have credit bureaus and registries, it is easier and less costly for banks to provide loans. However, less developed countries might not have well-established and functioning systems. Additionally young and/or small firms might not be registered or might lack credit history.</p> <p>Strong accounting and auditing standards facilitate banks' lending decisions. However, meeting the standards might be too costly for SMEs.</p> |
| Property rights and enforceability | <p>Strong creditor rights and effective collateral regimes improve access to finance by diminishing losses and risk of lenders. Effective enforceability supports creditors, while the inclusion of movable assets into collateral registries help SMEs obtain access to finance given that they usually have higher proportion of movable assets compared to immovable assets.</p> |
| Regulatory framework | <p>High regulation of banking activities might affect the provision of financial services and propel the creation of inefficiencies. An analysis of banking deregulation in France during the 1980s concluded that high regulation and intervention of the government in banking activities could impose entry and exit barriers to firms.²⁸</p> |
| Risk management and credit costs | <p>Administrative and risk management costs seem to be a main constraint to providing loans. There is often an inverse relationship between administrative costs and the size of the loan provided.²⁹ The higher administrative costs of lending to small enterprises compared to larger ones are an important factor in providing less credit. In the case of the Philippines, the cost relationship in percentage was six times larger for small enterprises than for large ones.³⁰</p> |
| Financial system development and Bank competition | <p>Increased bank competition can help increase reach to unserved groups that would not be covered in a less competitive environment. Firms with more bank options can benefit from lower prices and more services. However, SMEs usually work with fewer banks. A study found a positive relation between firm size and the number of banks firms worked with: large firms (over 500 employees) were much more likely to have a loan (by 25 percentage points) than firms with less than 20 employees. Size seemed a more significant determinant of access to finance than firm performance, e.g. sales growth.³¹ Macroeconomic conditions, including political and economic stability, define the openness and development of financial markets.</p> |
| Government intervention, corruption | <p>Governments can implement sector-specific development policies that limit credit availability for firms not being benefited. For example, the government in Bangladesh, given its objective to promote growth in small-scale industries (SSIs) serving the domestic market, implemented target lending policies. A proportion of banks' loan portfolios was destined to specific sectors.³² While this clearly increased credit to SSIs, such requirements can lead to an inefficient provision of resources. The financing of politically connected firms restrains credit for the remaining firms and misallocates financial resources. In China, after financial liberalization, constraints that small firms faced increased, but politically connected firms were still being served.³³ In Indonesia, non-connected firms had to substitute financing through accessing equity markets. Firms with foreign securities outperformed politically connected firms during the Asian crisis.³⁴</p> |

Box 7.2: Demand side constraints—the other side of the story on access to finance

| DEMAND SIDE CONSTRAINTS ³⁶ | |
|---------------------------------------|---|
| Growth rate and revenues | Firms need to grow sufficiently to suffice the lending costs. If they do not repay loans, they could lose the collateral they provided. Firms might restrain from demanding loans or other financial services if they are uncertain that they will be profitable enough. Additionally, SMEs tend to have more volatile cash flows reducing their debt payment capacity. |
| Information | Banks' extensive and sensitive information requirements can discourage firms from obtaining financing. This is a constraint particularly for SMEs that have weaker reporting than larger firms due to the high cost of preparing statements, or because managers might consider that statements are futile since they know the relevant information of their firms. |
| Costs | Borrowing costs might be too high for firms to demand credit, including collateral registration. A study found the main reason for Brazilian firms not applying for formal loans was high interest rates, regardless of firm size. Fifty-seven percent of firms believed that high credit costs were their main constraint to grow. ³⁷ Fixed costs for registration in equity markets deter SMEs from entering them. |
| Insolvency Fears | The higher rate of exit (due to insolvency) for SMEs compared to larger firms can be relevant to limiting the demand of financing. SMEs might fear insolvency which can entail high transaction costs and long-term liability to creditors and shareholders. |
| Informality | Firms that are informal cannot access formal credit markets. The owners might obtain personal loans for their firm's operations, securing the loan through personal belongings as collateral, but the risk of losing it if the business does not survive is significant. |

2.2 Demand side constraints

Firms may voluntarily limit their demand for credit even when they could benefit from more financing. Explanations for why firms do so are set out in Box 7.2. Among constraints are high credit costs and increased bureaucratic procedures in the application process.³⁵ Firms, especially SMEs, often fear the possibility of not surviving. These firms, as discussed earlier, sometimes resort to alternative funding sources such as their own funds or informal sources that can be costlier and insufficient to meet their funding needs.

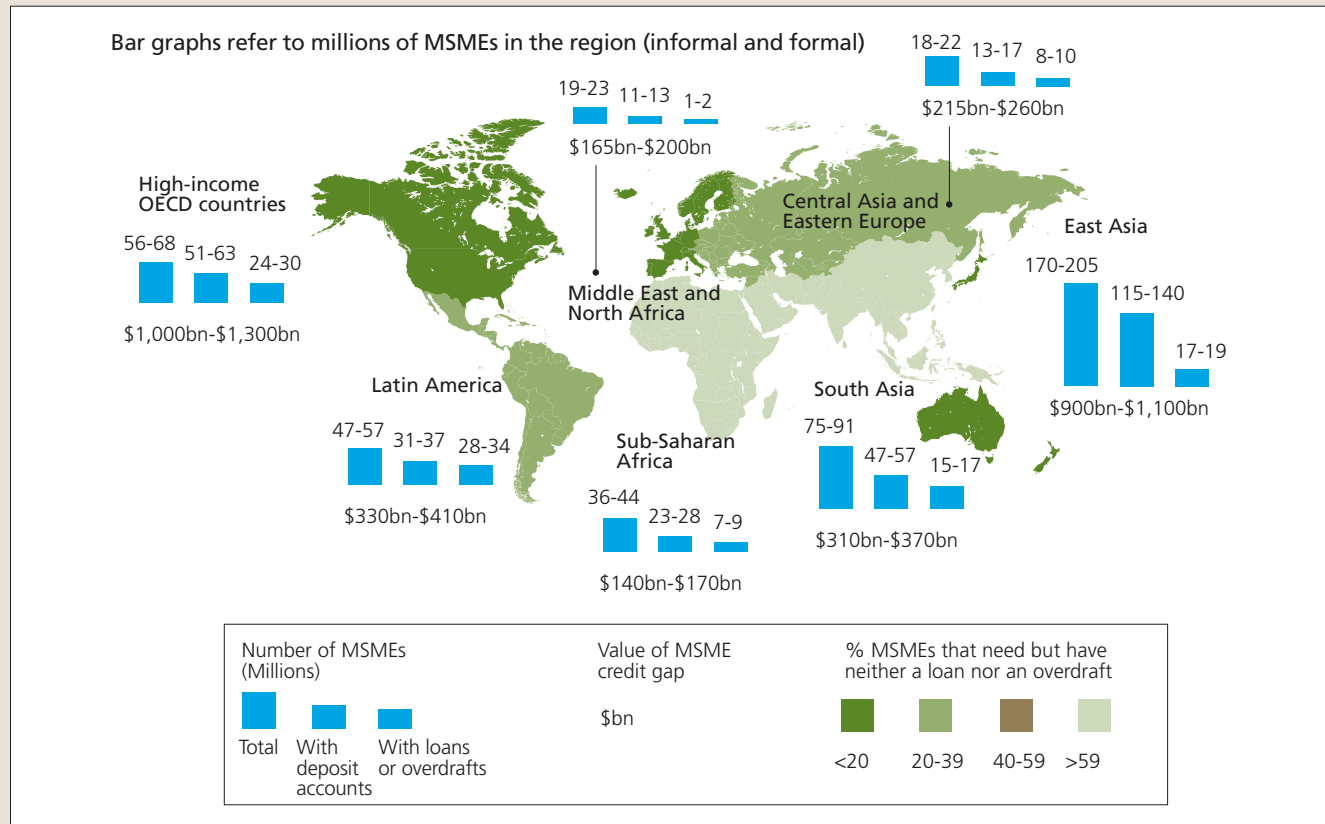
2.3 Access to finance: A binding constraint

Access to finance is an important element for private sector development, and lack of it is a binding constraint on business growth in developing countries. A measure known as the credit gap, which estimates the number of firms that need credit but either do not obtain it or get less than required, illustrates the problem. Out of 365 to 445 million MSMEs in developing countries, including informal and formal establishments, about 70 percent do not use external finance (Figure 7.4).³⁸ Total unmet credit needs are estimated as high as US \$2.5 trillion, or around 14 percent of GDP in the developing world.

Several studies have concluded that lack of access to finance is among the main constraints to firm growth and employment generation, along with the investment climate and lack of infrastructure. Financial constraints can be binding, and the lack of finance partly explains why SMEs are less likely to grow into larger firms in developing countries.³⁹ Firms that perceived access to finance as their biggest constraint, mainly SMEs, were more likely to experience sluggish output growth.⁴⁰

Studies have shown how providing financing to un-served firms can support their growth. A study of about 250 small-scale industries⁴¹ in India showed an increase in turnover after they became part of a subsidized lending program.⁴² The study did not identify a substitution effect for other financial sources when the new credit was accepted, but there was an important expansion of operations. It also indicates that firms were credit constrained and that they were able to expand operations when financing was available. Similar results were revealed in a study in Pakistan, in which privately owned firms decreased their export output after losing eligibility to access external credit since they were not able to find alternative funding sources.⁴³ These firms became credit constrained, which affected their operations. In contrast, large publicly traded firms did not show a drop in their sales activities after losing eligibility.

Figure 7.4: Lack of access to finance for formal and informal MSMEs



Source: Stein, Goland, and Schiff (2010).

3. The link between access to finance and job creation

Firms that have access to finance have higher job growth rates than firms without it.⁴⁴ A micro-case study conducted to measure job creation effects of SMEs served by a bank in Sri Lanka found that firms having access to finance had high job growth—more than double the national average. While it is difficult to attribute job creation effects entirely to access to finance, the various channels through which access to finance positively affects jobs are as follows:

- There is a positive relationship between external finance and the number of start-ups, closely related to entrepreneurship.
- Access to formal financial sources allows higher investments in capital, new technologies, research and innovation. It can also support leverage that can lead to improved returns.

Box 7.3: Interdependencies in the economy: Tea processing firms, employment, and poverty reduction

Tea processing companies can support a significant number of jobs in their supply chain. Sri Lanka is the second largest exporter of tea in the world, a labor-intensive industry. The Commercial Bank of Ceylon provides financial services to tea manufacturing companies to support their operation and expansion. These, in turn, support their suppliers' employment: green leaf producers.

An analysis of a small sample showed that on average, tea manufacturers have 2,700 small-scale suppliers (usually individuals) who depend on them to make a living. They usually distribute their production to only one tea processing company. Considering only the supply chain, for every worker employed in a tea processing company, there are 14 workers supplying green leaves. This figure only considers the upward supply chain element, and it ranges from 6 to 30, having an important poverty impact since suppliers depend on the tea processing factories to obtain income.

Green leaf suppliers → Tea processing factories → Large distributors

Note: This example depicts interdependencies in the economy without showing causality between access to finance and employment.

- It assures liquidity, improves risk management in firms, and allows the acquisition of productive assets.⁴⁵
- Access to finance can also have indirect employment effects in the supply chain of firms served when they expand their operations (Box 7.3).

Entrepreneurs and firms can transform new business opportunities into higher sales and revenues, achievement of business stability, and expansion of operations into new markets. Thus, improving access to finance should have positive effects on employment via the creation of new firms and sustained growth of the existing ones. The provision of access to finance would have an impact on poverty, as it creates job opportunities in countries, reduces inequality, and reaches self-employed individuals through microfinance (Chart 7.2). It is not just a matter of number of jobs but also the quality of jobs that are created. The report addresses the relevance of job quality at length in another chapter.

3.1 Direct employment: Entrepreneurship

For entrepreneurs that want to start a business, external financing sources like equity and debt are essential, apart from the expertise, and skills required to establish a firm. There is a positive correlation between financial development and entrepreneurship, suggesting that improved access to finance is associated with a stable and vigorous private sector (Figure 7.5).⁴⁶ Countries with more developed financial markets have more entrepreneurs - for example, the average firm entry rates⁴⁷ of industrialized countries between 2003 and 2005 were 1.7–3.5 percentage points higher than in emerging markets.⁴⁸

Entrepreneurship and firms' subsequent growth can be an important source of job creation in developing countries as most start-ups tend to start small. Developed financial markets can enable them to grow to their potential size. Lack of access to finance in low-income countries often prevents the growth of entrepreneurs' firms into larger firms.⁴⁹

Increasing the reach of financial services to the unserved firms can support employment by promoting entrepreneurship and increasing firm survival. A study on the effects of new bank openings to unserved low-income groups in Mexico found that they led to an increase in the segment of informal businesses by 7.6 percent.⁵⁰ The study compared municipalities with and without bank branches before and after the openings. Total employment, which included an increase of informal business owners and wage earners, rose by 1.4 percent. Men were more likely to have an informal business, while women mainly became wage earners. Other benefits were higher income levels of about 7 percent, suggesting that better living standards were reached by low-income individuals.

Chart 7.2: Relieving credit and financing constraints can have an effect on job creation and poverty reduction

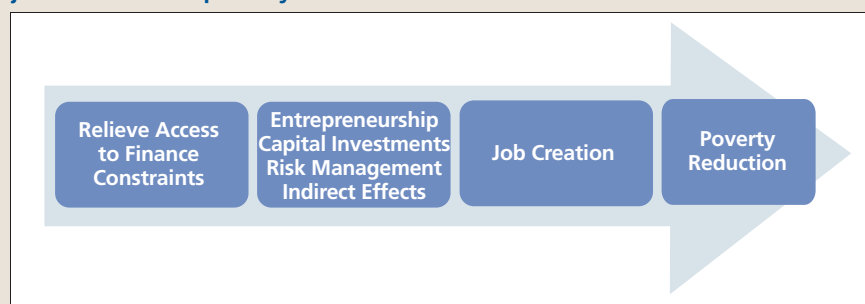
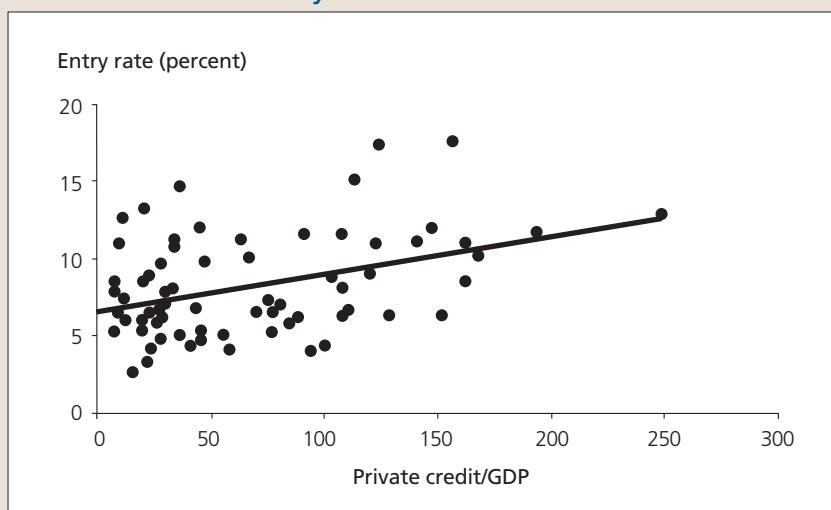


Figure 7.5: The ratio of domestic credit to the private sector over GDP is correlated with firm entry rates



Source: Klapper et al (2007) using data from the World Bank Group.

Women face disadvantages in entrepreneurship compared to men: 1) only 34.3 percent⁵¹ of firms in developing countries have female owners, 2) females tend to own smaller firms in terms of sales, assets, profits, and employees,⁵² and 3) entrepreneurs' wage gap can be large—in Bangladesh, women entrepreneurs make 12 cents per every dollar that men earn.⁵³ A study analyzing whether financial institutions discriminated against entrepreneurs based on the gender of owners in European and Asian countries found that women-owned firms, on average, had higher rejection rates and paid 0.5 percent higher interest rates than men-owned firms with similar characteristics.⁵⁴ For a more detailed discussion on how lack of access to finance can be a constraint for women entrepreneurs, refer to the chapter on Gender.

Think about it:
Female-owned firms might be discriminated against when applying for loans.

3.2 Direct employment: Operations and expansion

Access to finance allows firms to utilize investment opportunities to grow and develop, besides sustaining their survival. Economies with larger and more developed financial sectors tend to have a higher share of large companies, part of which can be the result of a supportive financial sector that shore up their growth. Studies have found that policies that promote access to finance bolster firm creation and growth, which turns into higher employment.⁵⁵ In Bosnia, the availability of financial services was linked to a higher survival rate for new entrepreneurs.⁵⁶ Firm survival supports job creation in the long run and can reduce employment destruction effects.

Firms that have access to finance can have higher employment growth than firms without it, since they can use it for liquidity needs and capital investments, which can improve returns and reinvestments. A study measuring the impact on firms that had a loan or an overdraft facility concluded that they had a 3.1 percent rate of higher growth of permanent employees than firms that did not have financing access. Firms that had access to external investment funds posted 4.2 percent higher employment growth than firms without such access.⁵⁷ This analysis used data from 98 developing countries to confirm a positive relationship between job growth and access to finance, but it did not explain the channels that can lead to job growth. A micro-case study analyzed the impact of access to finance on SME job creation, and provides more information on how firms can achieve job creation through obtaining financial resources (Box 7.4).

Box 7.4: SMEs created jobs using financing to expand operations and invest in technology: A case study in Sri Lanka

A micro-case study conducted in Sri Lanka to estimate job growth in MSMEs showed that business expansion and technology investment were the two main channels of job creation for firms that obtained loans. IFC has partnered with Sri Lanka's largest private bank, the Commercial Bank of Ceylon (CBC), since 2003.

Analysis of interviews with a sample of 100 MSMEs that had obtained loans from CBC in 2009 found that the firms created 2,650 permanent jobs between 2009 and 2012, with an annual job growth of 12 percent—more than twice the country's job growth in 2001. Job creation was equal for men and women, and the companies also increased their labor productivity. The rapid job growth coincides with companies starting and expanding operations using credit from CBC and taking advantage of a better investment climate. Of the firms that identified constraints for their business, the majority identified access to finance as the main constraint, since they needed more resources or else could not afford the interest rates.

Extrapolating the sample results to CBC's portfolio of MSMEs that received loans in 2009, it was estimated that they may have created between 140,000 and 340,000 jobs over three years, which represents about 1.8–4.3 percent of employment in Sri Lanka in 2011.* But these jobs cannot be exclusively attributed to the financing. The study

estimated that 10–31 jobs were created for every \$100,000 of loans provided to MSMEs.** However, more than 80 percent of the firms surveyed also got other loans before or after 2009, which could have also contributed to their expansion and the impact on job creation.

Some caveats:

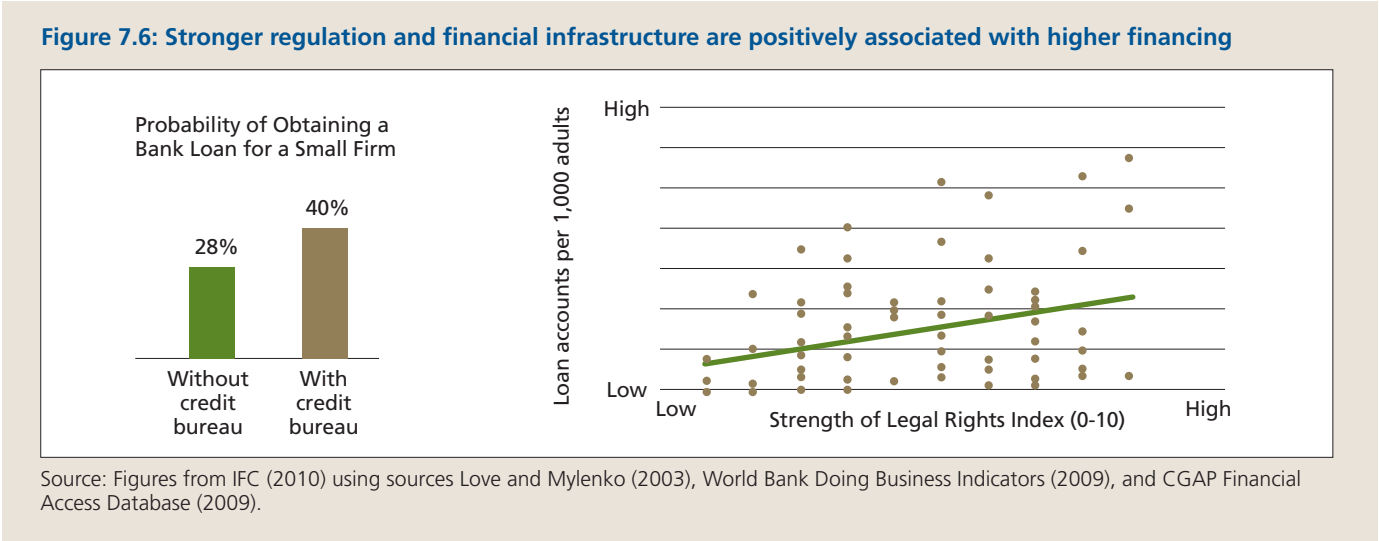
- The study did not measure job losses that competitors could have experienced due to MSMEs' expansion.
- The sample of firms interviewed did not include firms with nonperforming loans.
- Banks select high-performing MSMEs, as they are expected to grow faster than other MSMEs not eligible for loans.
- Access to finance played an important role in business growth, but it is difficult to attribute job creation effects just to the loans provided by CBC in 2009.

Source: Leyva Urenda (2012)

* The approach used the 25th percentile and the median to extrapolate the results. The percent was calculated using the most recent annual employment (2010–2011), which excludes the northern region.

** Based on an exchange rate of 114 Sri Lankan rupees to \$1. The range of the multiplier is based on all industries considered and was calculated using the 25th percentile and the median.

Employment creation via access to finance can have a long-term pattern and has proven more relevant in developing economies since their private sector is more credit constrained. A study that used industry data in 63 developing and developed countries from 1970 to 2003 showed that financial development supported firms’ output growth.⁵⁸ This was achieved through higher use of capital and labor. But financial development had no effect on labor productivity or real wages. The analysis did not prove significant for OECD countries. Other research found similar results on the positive relationship of financial development and growth, but without a significant impact for developed economies.⁵⁹



The legal framework to protect creditor rights and a more developed financial infrastructure can also have jobcreation effects through reducing information asymmetries that constrain the supply of credit. There is a positive relationship between creditor rights and access to finance measured by the ratio of private credit to GDP and by number of loan accounts per adult.⁶⁰ A developed financial infrastructure also contributes to job creation through credit expansion, especially reaching underserved groups such as SMEs. The probability of obtaining loans for small firms increased from 28 to 40 percent in countries that had credit bureaus, using data of 51 countries (figure 7.6).⁶¹

Collateral requirements can hinder expansion of existing firms and the creation of new businesses, especially SMEs. SMEs tend to have a higher proportion of movable assets than immovable assets, but the former are not always accepted in banks as collateral. Allowing use of movable assets as collateral could free up more loans to businesses. As well, while the most forgiving bankruptcy regimes try to support entrepreneurs, this can cause creditors to be less willing to lend and more worried about risks if they feel a legal framework is not in place to protect their rights.⁶²

Financial development can also foster business growth by creating deeper markets that offer more financial instruments (Box 7.5), increased bank competition and lower risk management costs. This can also lead to lower levels of interest rates. One study gauging the relevance of lending costs on the SME finance gap found that 80 percent of it was linked to high credit costs.⁶³

Box 7.5: Housing finance has the potential to create jobs when financial markets are developed

Financial development is related to financial depth and product development. Housing finance, a very important sector for job creation, is constrained by less developed financial markets in developing countries. Markets in less developed countries compared to developed ones have relatively lower lending, shorter term funding, higher or flexible (vs. fixed) rates, fewer mortgage financing instruments, or lack secondary mortgage markets.* The effects of housing finance on job creation can be considerable in developing countries, given that housing building is a labor-intensive activity that requires other infrastructure investments which support job creation such as water, electricity, telecommunication, roads, etc. (table 7.1).

Table 7.1: Multiplier effects associated of construction give an idea of the effect of investment on housing construction

| Country | Investment | Direct | Indirect |
|-----------|---------------|--------|----------|
| Argentina | 1 million USD | 123 | 61 |
| India | 1 million USD | 600 | 1,000 |

Table built by the author using data of studies cited in Williams-Stanton (2012).
 * Williams-Stanton (2012). For Argentina the exchange rate used by the author is ARS 3.07 for 1 USD.

3.3 Direct employment: Access to finance bolsters SME job creation potential

SMEs can have a higher impact on job creation than larger firms when they get access to financing, since they tend to be more labor intensive.⁶⁴ But they also can benefit most when financing restrictions are relieved, since they tend to be more credit-constrained. Studies have found that SMEs have lower access to financial services than larger firms, resulting in a negative impact for their operations.⁶⁵ SMEs are very important for developing countries, since they contribute about 29 percent of formal GDP⁶⁶ and provide over two-thirds of formal employment.⁶⁷

The potential of SMEs to create jobs is important; they accounted for over 80 percent of jobs created from 2006 to 2010, without considering job destruction of non-surviving firms.⁶⁸ Studies have shown that access to finance is particularly a problem for smaller firms.⁶⁹ By using different measures of credit access, MSMEs in developing countries added more to employment growth than did larger firms when they were able to gain access to different forms of financing (i.e., sales on credit, external financing of working capital and investments).⁷⁰ The results showed relatively higher gains in micro and small firms. Research has also found that it is often a relatively small number of companies—sometimes called “gazelles”—with rapid and sustained job growth that can account for a large portion of employment growth in countries.⁷¹ The majority of these firms are typically SMEs.

Most studies reviewed in a meta-evaluation conducted for the report found that access to finance was associated with positive employment effects on SMEs. But it was difficult to establish a direct link.⁷² One study in Ghana found that after providing loans to micro and SME clients, there was an increase in the hiring of permanent employees. Another study found anecdotal evidence that after SMEs received a loan, their number of employees increased. A third evaluation found that the combination of lending with advisory services could lead to more job creation.

3.4 Indirect and induced employment effects

So far, this chapter has discussed only direct employment effects from obtaining access to finance. But when firms expand operations, the indirect and induced employment effects can be larger than direct effects.⁷³ Two studies of the social effects of opening branches of Standard Chartered Bank in Indonesia and Ghana estimated direct, indirect, and induced job creation effects of 67,000 jobs in Indonesia and 15,400 in Ghana.^{74,75} Thus, combining job effects of Standard Chartered and its clients accounted for about 1 percent of total employment in Indonesia and 1.5 percent in Ghana. In both cases, SME financing was productive in terms of value-added and job creation when measured against each US\$1 million invested and especially so when compared with the effects of global corporate and consumer loans. This may reflect an efficient allocation of resources within the SME sector where innovation and productivity gains can be significant.

IFC conducted two macro-case studies to measure the direct and indirect job creation effects of financial sector interventions in Ghana and Jordan. This sought to demonstrate what the impact on the economy can be when SMEs obtain financing through FIs. By investing in FIs, development financial institutions (DFIs), use FIs' expertise, reach, and resources invested in local economies to have a larger and more efficient impact than investing directly in these firms. In general, the results showed that investing in FIs led to more value added and job creation than investing in nonfinancial institutions (Box 7.6). This was a result of more diversification of firms reached in the local economy and less focus on large capital intensive corporations that IFC usually invests directly in.

3.5 Finance, jobs, and poverty reduction

Access to finance has effects throughout an economy and therefore belongs high on the agenda for policymakers. For example, it can have a real impact in alleviating global poverty. Financial development reduces inequality by enabling more efficient allocation of resources, especially in higher income countries where access to financial products is more widely available.⁷⁶ In addition, microfinance gives poor people access to basic financial services in markets where it might otherwise be impossible to obtain credit. However, evaluations have found mixed results on impact of microfinance on employment, consumption, assets, and education effects.^{77,78}

A meta-evaluation of six microfinance investments in different countries (Mexico, the Philippines, Bosnia, Mongolia, Morocco, and India) found that four of the projects resulted in more enterprises or higher self-employment.⁷⁹ Self-employment can be an important way out of poverty when few job opportunities exist in the economy. The fifth study did not find results in non-agricultural activities, although it did show that agricultural employment increased in households where microfinance was made available when compared with households where it was not. Microfinance can support consumption and can be the only financial resource for some unserved groups (Box 7.7).

Box 7.6: Development financial institutions (FIs) can reach out to more firms by investing in FIs than by investing directly in companies

In Ghana, outstanding financing from IFC to FIs as of June 2011 was associated with an output increase in firms reached of \$171 million and 29,100 employees, accounting for about 0.3 percent of the employed labor force in Ghana, without considering re-expenditures of household incomes. The economy-wide employment impact associated with investments of \$1 million through FIs was 228 direct and indirect jobs.

| | Economy-wide value added related to \$1 million (\$ millions) | | Economy-wide employment related to \$1 million (number of jobs) | |
|---------|--|---------|--|---------|
| | Direct/indirect | Induced | Direct/indirect | Induced |
| Non-FIs | 0.34 | + 26% | 40 | + 46% |
| FIs | 1.34 | + 26% | 228 | + 33% |

For Jordan, the outstanding financing from IFC to FIs as of June 2011 was related to an output increase of \$122 million. The financing was linked to employment effects of 5,600 people, or 0.35 percent of the employed labor force. The economy-wide employment related to \$1 million invested was 107 direct and indirect jobs.

| | Economy-wide value added related to \$1 million (\$ millions) | | Economy-wide employment related to \$1 million (number of jobs) | |
|---------|--|---------|--|---------|
| | Direct/indirect | Induced | Direct/indirect | Induced |
| Non-FIs | 0.4 | + 30% | 14 | + 45% |
| FIs | 2.3 | + 33% | 107 | + 40% |

Source: Macro-case studies for IFC Jobs Study.

A study of small business lending in Bangladesh showed that 17 percent of the employees in small businesses were poor. Five key factors that would be reasonably easy to assess in firms (number of employees, percent of female and unskilled workers, rural location, and certain sectors) were positively associated with poverty levels among the workers. Indicators like these could be useful for FIs (and DFIs) that seek to reach poor or underserved groups and want to measure their success in doing so.⁸⁰

3.6 Lack of access to finance during crises impacts job creation

This chapter has analyzed job creation during macroeconomic stability, but access to finance becomes more constrained during crises. In the recent financial crisis, negative effects were larger since the global downturn started in the financial sector

Box 7.7: The impact of microfinance can be significant in terms of outreach to unserved groups

In 2002, after 23 years of civil conflict, Afghanistan experienced a shortage of formal financial networks. During the same year IFC engaged with an equity stake of US\$1 million in the First MicroFinance Bank Afghanistan (FMFB-A), which was followed in 2006 by a US \$1 million greenfield investment in BRAC, the sole MSME bank in the country. The investments were supported by a strong advisory services program aimed at improving credit policies, anti-money laundering (AML) systems, and human resource management systems.

Results in terms of job creation: FMFB is currently providing employment to close to 1,000 people.

FMFB reached out to about 50,000 borrowers—25 percent of market penetration—of whom 16 percent were women.

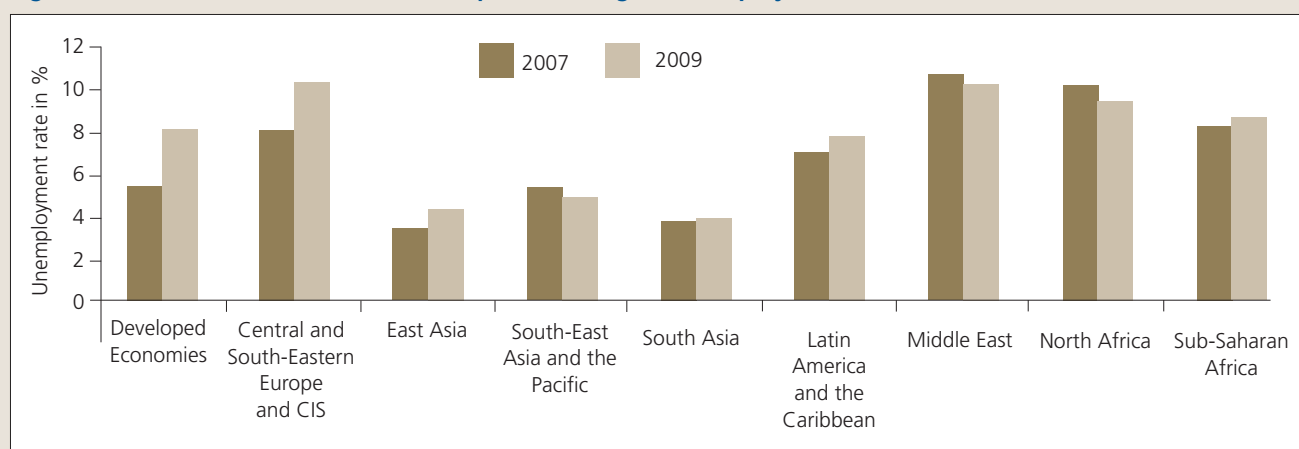
IFC's and BRAC Bank's engagement resulted in lending to 4,294 enterprises, with a catalytic effect in the development of the microfinance sector in Afghanistan through:

- Formalizing microfinance lending, which was solely informal and charged exorbitant interest rates
- Facilitating the regulatory framework and deepening the banking landscape—from 6 state banks operating in 2002 to 17 mostly private sector banks
- Creating best practices and setting industry standards: AML procedures, risk management tools, and insurance; and
- Pioneering innovative products, including a mobile banking platform

and was transmitted to other sectors through shocks to trade, private capital flows, remittances, and aid.⁸¹ These transmission mechanisms affected growth, employment, poverty, and debt for both the private and the public sector. At a global level, GDP decreased 2.2 percent, and developing countries went through an economic slowdown.⁸²

The increase in world unemployment was significant, from 170.7 million in 2007 to 197.7 million in 2009.⁸³ Labor markets in developing countries tend to be less affected by shocks, as a high share of employees can reallocate to informal markets in the form of self-employment and family work.⁸⁴ Nevertheless, developing countries still accounted for 45 percent of the unemployment increase, with higher vulnerable employment⁸⁵ in 2009 in Latin America and the Caribbean, North Africa, and Sub-Saharan Africa.⁸⁶ Even though Central and South-Eastern Europe and the Commonwealth of Independent States (CIS) was the only region with a contraction of total employment in 2009 (Figure 7.7), other regions' unemployment rates peaked due to demographic trends (i.e., more people entering the labor force).

Figure 7.7: CES, EAP, SSA, LAC and AFR experienced higher unemployment levels from 2007 to 2009



Source: International Labour Organization 2012

The crisis lessened access to finance in developing economies and depressed economic activity. The credit crunch in financial markets and decreased participation of foreign banks reduced liquidity and confidence in emerging markets' financial sector. The private sector suffered from lower capital flows, higher lending costs, and vulnerabilities to price volatility and foreign exchange shocks:

- Lower demand of goods and services and worse credit conditions affected firms.⁸⁷
- Low liquidity in financial markets forced the public and private sector to lay off workers or stop capital investments that could otherwise lead to expansion. Lending to emerging markets during the first semester of 2011 had not recovered to pre-crisis levels.⁸⁸
- A reduction in global trade, especially imports from developed countries, had a significant negative effect on export-oriented sectors in developing economies. Combined with a significant contraction in construction, this was reflected in an employment reduction of 9.5 million employees in the industry sector globally.⁸⁹

It can be expected that in a credit-constrained environment, where banks are becoming more risk averse, SMEs will be mainly affected (since banks typically perceive that SMEs are riskier than larger companies). Business lending decreased following the crisis, and lending to SMEs in the forms of bank credit, leasing, and factoring particularly decreased.⁹⁰ Additionally, credit conditions have become more stringent for SMEs in terms of maturities and collateral requirements. SMEs reacted by increasing the demand for working capital and decreasing it for capital investments.⁹¹

ILO analyzed whether disadvantaged groups (i.e., female or youth) had been more severely affected by the crisis in terms of employment. On the one hand, the global male unemployment rate increased more than the female rate, mainly driven by the poor performance of male-dominated sectors such as construction and finance.⁹² On the other hand, the crisis particularly hit youth⁹³; unemployment among youth increased the overall unemployment rate by 1.1 percentage points between 2007 and 2009 to 12.8 percent. Youth are almost three times more likely to be unemployed than adults.⁹⁴ Additionally, a large percentage of discouraged young people gave up searching for jobs and left the labor market—estimated at about 6.4 million by 2011. In developing countries, youth account for a considerably high share of the working poor⁹⁵ and certain regions have high youth unemployment rates—Central and South-Eastern Europe and CIS and MENA with over 20 percent of youth unemployed in 2009.

IFC identified several policies to address future crises in bringing back confidence and expanding credit: 1) enlarge short-term finance mainly through trade finance, 2) expand equity investments, 3) increase long-term financing to banks to support SME lending, 4) expand medium-term financing to corporate companies, and 5) develop a portfolio management strategy to supervise and test stress scenarios.⁹⁶ The effect of policies directed to tackle medium- and long-term issues cannot be assessed yet, since it is too early. But the short-term initiatives that supported trade and trade finance reached the targets established and helped reinvigorate trade.⁹⁷

4. DFIs support the improvement of access to finance

DFIs focus on the private sector, and work with donors and other DFIs supporting financial markets in developing countries. Governments also play a fundamental role in providing access to finance to the private sector. IFC is the largest DFI and provides about one-third of total development financing of international financial institutions directed toward the private sector, besides providing advisory services that aim at improving financial systems and institutions. DFIs' support for SMEs, microfinance, and trade can be made through financial intermediaries, which can reach the MSME segment more efficiently and broadly than DFIs.

As an example of the reach and magnitude of DFIs, IFC's financial markets portfolio in fiscal year 2011 (FY11) had a value of \$18.3 billion reaching almost 850 clients in the world. The client base has experienced a growth of 100 percent since FY00. The products that IFC has developed to serve MSMEs are: SME and women banking, microfinance, leasing, insurance, capital markets, private equity, debt and asset recovery, trade finance, and financial infrastructure which includes development of collateral registries, credit reporting, and securities markets. IFC Access to Finance Advisory Services supports FIs that provide sustainable lending to SMEs and micro-enterprises, helps build financial infrastructure, and improves the legal and regulatory framework in developing countries. It also provides advice to IFC clients through its regional offices.

4.1 Financial intermediaries

While IFC tracks direct employment in client FIs, the jobs provided by the MSMEs financed through these FIs tend to be larger. But FIs do not regularly track employment information of the firms they serve and, as stated before, it is difficult to attribute job creation effects to the financing and advisory services received. Studies presented in section 3 of this chapter show alternatives to estimate IFC's involvement with FIs. Furthermore, another exercise was launched in 2011 to estimate jobs provided by MSMEs served through client FIs, including gender disaggregation.

As of June 2011, IFC was working with financial institutions in 92 countries as part of its effort to reduce the MSME financing gap. A set of firm-level employment data of over 3,100 borrowers, which received SME loans from 34 IFC client financial institutions in 25 countries, allowed IFC to estimate that over 100 million jobs had been provided by 23 million MSMEs financed by IFC client FIs at the end of 2011. This is a conservative approximation, based on an estimated range of jobs between 80 and 202 million. IFC is in the process of gathering more evidence on jobs created by companies receiving finance.

4.2 Private equity and job creation

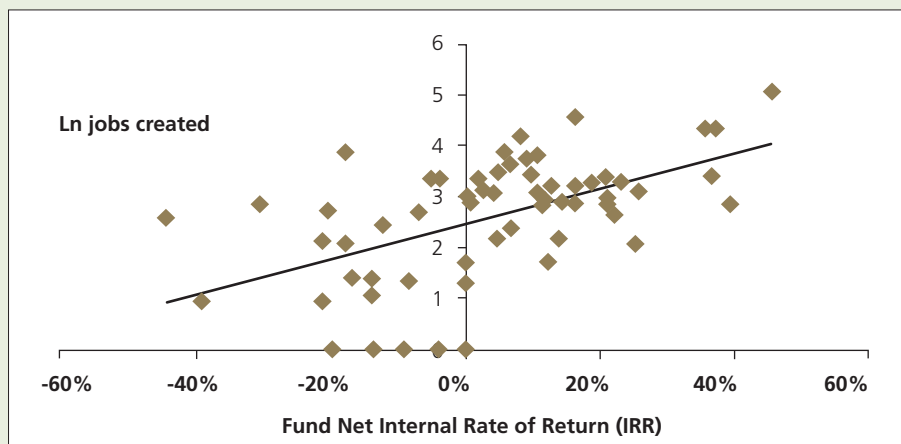
DFIs also work with private equity and investment funds to provide access to finance to private sector firms in developing countries to help fill financial gaps. IFC places a special emphasis on needs faced by MSMEs. Private equity in emerging markets is mainly growth equity. IFC has reached about 10 percent of the funds that entered the emerging market since 2000. Only 15 percent of MSMEs either had access to the credit needed or did not require it, leaving 85 percent of MSMEs enduring financial constraints.⁹⁸ The regions where MSMEs have higher needs are East Asia, South Asia, and Sub-Saharan Africa, where more than 85 percent of MSMEs do not obtain the needed access to finance.⁹⁹ A study to understand the impact of private equity funds showed high job growth rates of financed firms (Box 7.8).

Box 7.8: Firms served by equity funds had high annual employment growth rates of 14.7 percent

IFC analyzed 69 growth equity funds it had supported from 2000 to 2010 as well as the employment growth of 496 companies supported by these funds for which employment data was available.* The average annual job growth rate was 14.7 percent and SMEs achieved faster growth rates than larger firms, recording 18 percent growth, compared to 9.7 percent for larger firms. In absolute numbers, large firms created the majority of jobs, with a total of over 239,000, while SMEs created around 55,000. Large firms also received the majority of the funds, with 67.5 percent out of the \$4 billion provided by the investment funds, of which around 10 percent came from IFC. The analysis also found a positive and significant association between fund returns and job creation.

Source: Parc and Shi (2012)

*Employment data were available for 496 companies out of 600 that these funds had supported. For this analysis, “SMEs” are enterprises with under 300 employees.



4.3 Development of Capital Markets

Well-developed and functional capital markets have proven relevant to mobilize capital, but an in-depth coverage of this topic is beyond the scope of this report. Local currency financing tends to be particularly important for MSMEs and the FIs that supply them, and particularly for infrastructure and housing finance. Local currency funding with long tenures (such as those that can be supplied by pension funds or insurance companies) is essential. Development of stock markets is important to allow larger companies to raise equity financing, and also to provide exit options for private equity funds and thus facilitate the establishment of that industry and its investments in growth companies. Often, changes in the legal and regulatory framework are necessary to allow the development of capital markets.

5. Conclusion

Lack of access to finance keeps companies from reaching higher levels of sustainable growth and taking advantage of opportunities in their sectors. The intervention of governments, development finance institutions, financial intermediaries, and other private-sector actors is necessary to relieve constraints and spur job creation. Businesses that are more credit constrained benefit the most when obstacles are removed. Measures that can improve access to finance include reform of regulations, enhancement and development of financial infrastructure, stepped-up bank competition, support to financial intermediaries with additional funding or advice, and support for measures to reach underserved groups.

SME-focused policies can help stimulate job creation. Programs should aim at lowering costs of financial services and reaching unserved and underserved SMEs. These companies are more credit constrained than larger businesses, with a significant credit gap in developing countries. Financial intermediaries face high administrative costs when lending to SMEs, and thus provide lower levels of financing to small businesses or charge them higher interest rates. High costs can in turn discourage the SMEs from seeking financial services. The expansion of bank lending programs for SMEs also can encourage informal small businesses to become formal, particularly in low-income countries. Banks surveyed in 45 developed and developing countries recognized that the SME sector had good prospective clients.¹⁰⁰

Financial intermediaries can reach large numbers of micro, small, and medium enterprises—well over 20 million in the case of IFC’s financial intermediary clients that employ at least 100 million people worldwide. IFIs need to further deepen their understanding of what types of micro, small, and medium enterprises are likely to create the most jobs, create most value added, or provide opportunities for underserved groups such as women, youth, or poor people. For example, microfinance will support poorer segments and more women, but may create fewer jobs and jobs with relatively lower wages and value-added. The

focus should be on identifying those SMEs with the highest growth potential and helping them grow into larger companies that tend to be more productive and offer higher wages and often better quality jobs.

Evidence from IFC's private equity funds shows that it is important to support smaller companies—which tend to have higher rates of job growth and also larger companies that created more jobs. Larger companies also face financing constraints and can play a significant role in job creation, for example through their supply networks. The availability of long-term local currency funding is important for these larger companies, particularly for infrastructure and housing finance, both of which can significantly contribute to job creation.

Countries' financial depth (ratio of total credit to the private sector over GDP) should be considered when developing appropriate policies. At very low levels of financial depth, increasing access to finance in general can have considerable effects on growth and employment, provided there is appropriate regulatory oversight for financial intermediaries. At intermediate levels of development, increasing access to underserved groups and to SMEs that have high growth potential may be the best option. Very high ratios can increase the risk of overheating the economy and creating credit bubbles. These, in turn, can result in a financial crisis that can lead to major job losses, as during the recent global crisis.

Governments, development finance institutions, and private sector financial intermediaries could support strengthening access to finance for the private sector through:

- **Regulations:** Improving financial sector regulations can spur the creation and growth of businesses, and jobs. Financial liberalization can promote the creation of new companies and the closure of inefficient or unprofitable ones, which can help reduce lending costs and allow profitable businesses to flourish. It is also necessary to improve enforcement of regulations. For example, better protection of property rights and the use of moveable collateral can increase access to finance, especially for small companies.
- **Financial Infrastructure:** A more developed financial infrastructure can make more information available about potential clients, and therefore reduce transaction costs and expand credit, particularly for SMEs. More credit for underserved companies will enable them to grow faster.
- **Bank competition:** A more competitive banking sector can help bring more financing for un-served groups, and also help reduce interest rates. Governments can promote competition in the sector by encouraging entry of financial intermediaries or diversification of their lending.¹⁰¹

Development finance institutions can work with financial intermediaries in the following interventions:

- **Funding to financial intermediaries:** Investments that help financial institutions broaden their lending activities to underserved groups, such as smaller companies or women-owned businesses, can help generate jobs. One example is partial credit guarantees, which mitigate the credit losses of financial institutions in the event of default and can promote lending to SMEs.
- **Advice to financial intermediaries:** Helping the intermediaries to establish new institutions or introduce products that target previously un-served or underserved groups can entail high up-front costs but have significant public benefits.

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CHAPTER 8

TRAINING AND SKILLS

There is a mismatch between the workforce skills demanded and supplied within countries and in the global economy. In developed economies, advanced skills are more prevalent, but the supply of workers with these skills has not kept up with demand.¹ In addition, with about 45 million job seekers entering the labor force every year,² their chances of finding jobs are not favorable unless they acquire the right skills. By 2020, it is estimated that there will be a global surplus of 90 to 95 million low-skilled workers.³ In addition, business owners and managers tend to lack the skills required to manage and expand their businesses,⁴ limiting their businesses potential to grow and create more jobs.

A comprehensive approach is necessary to increase the supply of needed skills and to reduce unemployment, particularly for youth. Doing so will require multiple, coordinated efforts rather than isolated ones. Participation from all relevant stakeholders, including the private sector, will be necessary. In particular, the private sector should be engaged in the design of curricula for vocational and tertiary education. Chances for success will be improved if the investment climate and macro-economic environment are favorable. In addition, there must be a coordinated effort that includes multiple sectors and different levels of education. It is important to emphasize the value of secondary and post-secondary classroom education complemented by on-the-job training to ensure that youth can make an easy transition from one level of education to the next and later to the job market.

Training and skills development programs can be part of this comprehensive approach, and classroom education can be combined with on-the-job training for best results. This approach will be even more important for SMEs, since they seem to be under-investing in training—including for their managers and owners,⁵ - a factor that limits their potential to grow and create more jobs. An apprenticeship system could be particularly beneficial also for the informal sector, which forms a large portion of employment in in developing countries. But such training programs should be combined with incentives to encourage the informal sector to enter the formal economy. Greater emphasis should be placed on the importance of adopting new technologies and innovation, since doing so will allow SMEs to move up the value chain and create more jobs, and on training for women and youth, since focusing on disadvantaged groups tends to yield better results. Data collection, monitoring and evaluation are key to designing these programs.

1. There are not enough workers for high-skilled jobs, not enough jobs for low-skilled workers, and not enough business owners and managers who have the required skills to manage their businesses.

More than one-third of companies in 41 countries around the world report an inability to find the workers they need.⁶ There is a mismatch between the workforce skills demanded and supplied within countries and in the global economy. Developed economies have a higher prevalence of advanced skills and training, but the supply of workers with advanced skills has not kept up with the demand.⁷ By 2020, a shortage of 38 to 40 million college graduates could appear in advanced countries plus China.

Approximately 45 million job seekers join the labor force every year,⁸ but the prospect of finding a job is low unless they can acquire the right skills. By 2020, advanced economies will face a surplus of 32 to 35 million workers without a college education; while in India and developing economies, this number could be approximately 58 million.⁹ The mismatch of skills is expected to grow, both in advanced economies and in developing countries.¹⁰

The mismatch can be attributed to many factors including countries moving to more productive activities, difficulties that the education sector faces in keeping up with skills demanded, and the fact that current technology trends are compelling companies to update their equipment—equipment that must be operated by workers with more advanced skills. In addition to the mismatch, business owners and managers often lack the skills required to manage and grow their businesses,¹¹ which also limits the potential for these businesses to grow and create more jobs.

The right education or training is best achieved through adequate labor market institutions and cooperation among relevant stakeholders such as the public sector, the private sector, and youth associations. Youth around the world are more likely than adults to be unemployed or to work in low-quality jobs. Reducing youth unemployment and creating jobs for those hundreds of millions young people that are hoping to join the labor force within the next few decades requires addressing the skills mismatch.

2. As economies move from low-income to higher-income groups, and as firms grow in size, the lack of worker skills becomes an increasingly binding constraint in their operations.

The lack of skills among workers becomes a more important constraint in firm operations as countries move from low-income to higher income groups, and companies grow in size from small to large.¹² The latest Enterprise Surveys conducted across 106 countries around the globe ask firms about their biggest obstacles to operate. On average, approximately 17.5 percent of firms in high-income countries viewed the lack of an adequately educated workforce as their biggest obstacle to operate, while this number is 2.4 percent in low-income economies (Figure 8.1). In low-income countries, constraints such as access to finance or infrastructure are perceived as more pressing.

The types of economic activities that dominate a particular country are a function of its level of development, which in turn determines the types of skills that are in demand in that country. As countries move from lower to higher income, they face structural changes, and new businesses with higher labor productivity are created. At the same time, workers move from lower to higher labor productivity activities, and businesses in lower labor productivity activities experience net job losses.¹³ In lower income countries, relatively more workers with lower-level skills are needed to work on lower productivity activities such as agriculture.¹⁴ But in higher income countries, more workers with advanced skills are needed to work on higher labor productivity activities such as more sophisticated manufacturing, finance, and business services. Primary and secondary education should be a priority for countries around the world.

Regarding firm size, more often larger firms perceive the lack of an adequately trained labor force as their biggest obstacle to operate, and, as discussed earlier in this report, larger firms tend to be more concentrated in higher income countries. On average, 7.3 percent of small and 9.7 percent of medium-size firms chose having an inadequately educated workforce as their biggest obstacle, while this figure is 12 percent for large firms (Figure 8.1).

Think about it:
Firms are demanding higher skills from workers. Should training programs focus entirely on providing advanced skills?

Figure 8.1: Larger firms and firms in higher income countries are more likely to consider an inadequately educated labor force as their biggest obstacle



Source: World Bank Group Enterprise Surveys. SSA: Sub-Saharan Africa; EAP: East Asia and Pacific; ECA: Europe and Central Asia; LAC Latin America and Caribbean.aa

When looking at regional differences, income disparities across regions markedly affect whether training and skills are a priority. In regions with more countries in the lower income groups, the percentage of firms stating that training and skills are their biggest constraint is smaller than the percentage of firms stating that their biggest obstacles are access to finance, electricity, and informality. For instance, in Latin America and the Caribbean (LAC), 12.5 percent of firms state that training and skills are their biggest obstacles to operate, while this percentage is 3.2 in Sub-Saharan Africa (SSA).

On current trends, it is expected that by 2020 China, despite significant investments in higher education, will still face a shortfall in workers with tertiary education as it moves to higher value-added activities, whereas India is expected to face a shortfall of people with secondary education.¹⁵ Given the size of these markets, this could have a significant impact on the global search for skilled workers.

Soft skills are often overlooked by the education system because they can be seen as easier to adopt in the workplace. However, firms and policymakers are recognizing that skills such as critical thinking, self-respect, and getting things done can be fundamental in the workplace.¹⁶ A study conducted in Poland in 2009 found that soft skills (e.g., teamwork, motivation, communication) can be as important or even more important for employers than general and technical skills (e.g., literacy, problem solving).¹⁷ In addition, China has been characterized by an education system with an emphasis on memorization, which has left the country facing deficits in talented managers and business leaders. China's investments in higher education will lead this country to become the largest supplier of college-educated graduates to the global labor force by 2030.¹⁸ Soft skills should be highlighted as an important part of skill development for the workplace in the coming decades.¹⁹

Box 8.1: Identifying constraints in training and skills using perception-based surveys should be done with caution.

Results from sections 1-4 of this chapter are based on data from Enterprise Surveys. However, these data are based on the perceptions of entrepreneurs about their constraints to do business and need to be interpreted with caution.

Entrepreneurs can fail to identify the benefits from training and their own training needs. For instance, a program in Peru lending to female entrepreneurs found the largest effects from the program among women who were less interested in receiving the training;²⁰ one of the reasons for this is a failure to identify their own training needs. In addition, many firms requesting loans from banks fail to identify the benefits from training. Therefore, some banks are offering business training to SMEs in addition to the loans that they usually receive. This is an effort to increase client sustainability, reduce delinquency, etc.

Entrepreneurs could also fail to identify their actual constraints when doing business. For instance, firm managers could fail to identify their own lack of management skills as the reason for their business failure, while believing that the reason is their employees' lack of skills. Finally, small

and medium enterprises tend to identify access to financial capital as one of their top constraints, and pay less attention to human capital as a constraint; however, human capital may be affecting their business performance even more than access to financial capital.²¹

In addition, Enterprise Surveys typically include only firms that were operating as formal enterprises at the time the survey was conducted. Different perception on constraints to doing business might arise if the surveys were to include informal firms, firms that were previously in the market and went out of business, or potential entrepreneurs that did not enter the market.

Besides its limitations, perception-based data have been widely used among researchers, and there is evidence about these data showing similar results to more objective data. More detailed information about the strengths and limitations of Enterprise Surveys can be found in Chapter 4 of this report.

Source: WDR 2013. Other sources already included in the box.

3. Small companies under-invest in training even though they identify skills as a constraint

Enterprise Surveys data shows a positive relationship between firm size and firm training provisions. Around 40 percent of firms offer training to their workers, but training provisions vary across firm size, and SMEs are investing less than larger firms (Figure 8.2). About 29 percent of small enterprises, around 44 percent of medium-size enterprises, and about 67 percent of large enterprises offer training to their workers.²² One reason why smaller firms might be under-investing in training is the uncertainty about the effects of their investments in training.

The definition of training provisions by Enterprise Surveys refers to formal training, which may include classroom work, seminars, lectures, workshops, and audio-visual presentations and demonstrations. This does not include training to familiarize employees with equipment and machinery on the shop floor, training aimed at familiarizing employees with the establishment's standard operation procedures, or employee orientation at the beginning of an employee's tenure.

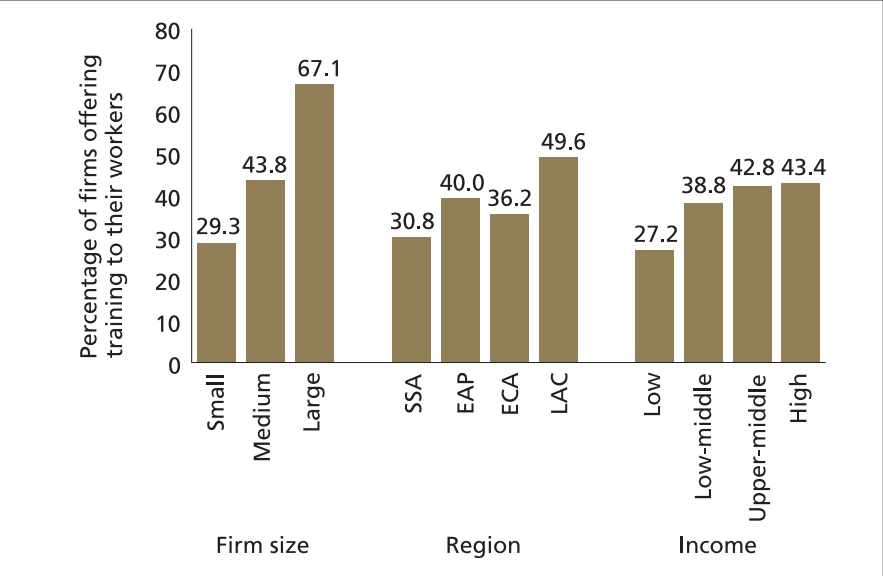
The percentage of firms offering training to their workers does not vary much by region and country income group, but does vary much more by firm size. LAC is the region where offering training is most prevalent, while in Sub-Saharan Africa it is less common. As expected, low-income countries invest less in training and skills development for their workers, while in higher income countries the percentage of firms investing in training and skills is higher than 40 percent.

4. Investing in training, technology, and innovation can have an impact on job growth

Training can increase worker productivity, which in turn affects job growth in the economy, industry, or sector. Productivity can have both positive and negative effects on job growth, and while these effects are covered widely in chapter 2 of this report, a brief explanation follows. As worker productivity increases, fewer workers are needed to produce one unit of output. Assuming that firms do not change the amount of goods they produce, productivity leads to losses in jobs, which is a negative effect of productivity growth. However, if productivity increases, then it also reduces the cost of production per unit. Thus the price of goods decreases and consumers are able to buy more goods, which also increases the demand for these goods. In addition, firms become more competitive in prices at the international level, which could result in increased exports and global demand for their goods. As a result, firms can sell and produce more, and therefore may end up expanding and hiring more workers. In the long-term, job growth and productivity move in tandem.²³

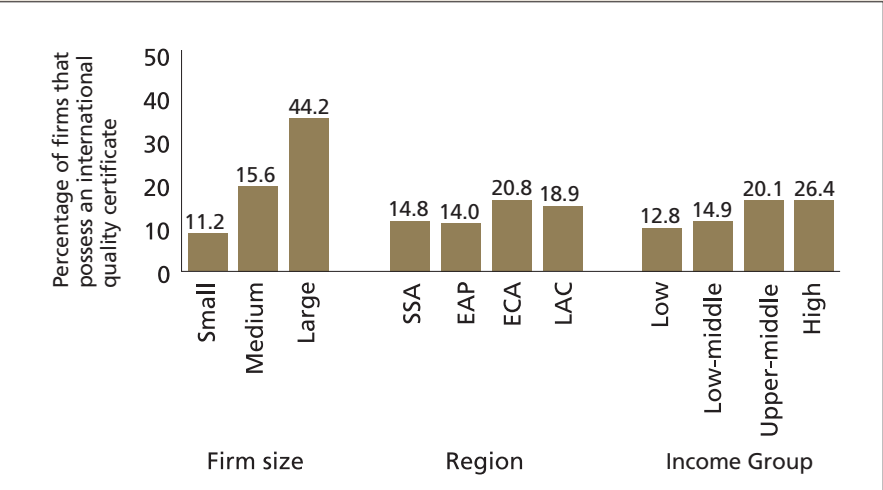
Investing in training can help raise firms’ profits and labor market outcomes due to positive productivity returns from worker education. Enterprise Surveys show that having a higher percentage of workers who have completed secondary education is correlated with a higher growth rate of sales in these firms.²⁴ In addition, firms that invest in innovation tend to experience higher job growth rates than those firms that do not innovate, and among those that innovate, growth tends to be higher for those firms with a larger proportion of unskilled workers and in particular women.²⁵

Figure 8.2: Larger firms and firms in higher income countries are more likely to offer training to their employees



Source: Enterprise Surveys. South Asia was omitted from the analysis because of the small number of observations.

Figure 8.3: Larger firms and firms in higher income countries are more likely to have internationally recognized quality certification



Source: World Bank Group Enterprise Surveys. Note: South Asia was omitted from the analysis because of the small number of observations in the database.

Internationally recognized quality certification programs often require the adoption of technology or training and skills development programs to be acknowledged, and can also be associated with job growth.²⁶ Some firms undertake internationally recognized quality certification programs²⁷ due to their desire to become more competitive at the international level. Data from enterprise surveys show that larger firms (44 percent) and firms in higher income countries (26 percent) are more likely to have an internationally recognized quality certification program than small firms (11 percent) or firms in lower-income countries (13 percent). The variation by region is not as strong as by income group and firm size (Figure 8.3).

Training and innovation can often be identified as a cost rather than a benefit for firms, especially for those with higher turnover of employees, which face uncertainty in the expected returns from training provisions. There is a higher employment growth rate in firms that offer training or have an internationally recognized quality certification compared to those that do not.²⁸ For this reason, it is important to provide information based on evidence of the benefits from training and innovation programs. Given that young firms are the ones with higher employment growth rates but lower investments in training relative to larger firms, it would be appropriate to target innovation programs for this group of firms in order for them to be able to keep up with employment growth and productivity gains in the long-term.

According to Banerjee and Duflo (2011), one of the potential causes for under investment in training could be that some entrepreneurs lack commitment or enthusiasm to manage and grow their businesses. They may have become entrepreneurs due to a lack of alternative opportunities and not by choice. Thus, not every entrepreneur has the potential or desire to grow his or her business by having commitment, taking risks, working hard, being persistent, etc., and the fact that these entrepreneurs are going out of business may be healthy for the market.²⁹

5. Effects of specific training and skill building programs on employment are mixed, but combining training with work experience works best and usually has a positive effect on employment.

Training and skill-building programs for workers can be a component of the comprehensive approach to tackle unemployment. This chapter has reviewed three types of training and skill-building programs: 1) Managerial and entrepreneurial training; 2) Technical and Vocational Education and Training (TVET); 3) Active Labor Market Programs (ALMP) such as retraining or training for the unemployed. In addition, the chapter will discuss cross-cutting issues like gender, youth, and quality of jobs.

When skills and training development programs target business managers and entrepreneurs, they can potentially increase the productivity of firms, which can have a positive impact on the growth of firms and jobs. Additionally, TVET in secondary or post-secondary education can equip people for a specific occupation in agriculture, trade, crafts, nursing, or industry. TVET usually involves on-the-job training, where the employer/manager—or expert craftsman—can convey his expertise to the apprentice on a specific profession. TVET can often be found as a dual system where classroom education is combined with a more practical or on-the-job training experience. Finally, ALMPs can include activities to foster employment and productivity such as: (a) increasing the quality of labor supply (e.g. retraining); (b) increasing labor demand (e.g., public works projects); (c) improving the matching of workers to jobs (e.g., job search assistance).³⁰

This section will review evaluations that have measured the impact of training programs on job-related variables (e.g. probability of employment, earnings, firm productivity, and firm management practices). The key lessons learned are shown in Box 8.2.

5.1 Training for managers and entrepreneurs

The main purpose of training programs for managers and business owners is to strengthen their business management and technical skills. The IFC Job Study meta-evaluation³³ reviewed two evaluations on training programs for manager entrepreneurs. The first evaluation consisted of a two-day training workshop for entrepreneurs working in cell-phone retail distribution in Sri Lanka. This evaluation included a quantitative assessment – before and after with control and treatment groups – and a qualitative assessment—using focus groups and measuring the number of people employed as an outcome variable. The second evaluation, located in Bosnia-Herzegovina, used an experimental design to measure the effects of comprehensive business and literacy training for young entrepreneurs on the probability of business survival.³⁴ The evaluations did not find significant program effects on the probability of business survival or the number of people employed. However, the evaluation in Bosnia-Herzegovina found an improvement in business practices, which could be translated into higher productivity, after participation in the business and literacy program. Since these evaluations were conducted shortly after the training was provided, it is possible that it may have been early to fully demonstrate job growth effects, which may take longer to materialize.

Box 8.2: Impact of training and skill building programs: Evidence from evaluations

It is important to note that there are not yet enough rigorous evaluations to provide an authoritative and conclusive view on the effectiveness of these programs (Managerial and entrepreneurial, TVET and ALMP). Therefore, this evidence should be considered preliminary.

Managerial and entrepreneurship training:

- Effects on job related variables seem to be mixed. Three out of five evaluations found no impact on jobs, but four of them found a positive impact on business practices and productivity. Most evaluations look at short-term effects, but more evidence is necessary to draw definitive conclusions; training programs appear to be ineffective in the short-term, but their effects are more positive in the medium-term.³¹

Technical and vocational training:

- Combining classroom training with on-the-job training had positive effects in multiple evaluations. Results show that this combination of training can increase the probability of employment by up to 25 percent in urban areas and up to 20 percent in rural areas.³²
- Vocational training was most beneficial for women and disadvantaged youth across most programs reviewed.

Active Labor Market programs:

- Results on the impact of retraining programs are inconclusive: overall, they do not seem to have a positive effect, but comprehensive programs seem to be the ones yielding positive results more frequently, and these effects usually favor disadvantaged groups such as women, youth and low-income groups.
- In summary, training for the unemployed seems to increase the probability of employment, but does not translate into higher earnings for participants. Results regarding the impact of gender seem to be more positive for women than for men, but still insufficient to draw any definite conclusions.

Cross-cutting issues: Women, youth and quality of jobs:

- Training and skill-building programs tend to have positive effects on the probability of finding a formal job, but there is insufficient evidence to determine whether these jobs are lasting jobs rather than short term only. In addition, effects from training interventions tend to be stronger for low-income youth and women.
- Little evidence exists measuring the improvement in the quality of jobs due to training and skill building programs.

Source: WDR 2013. Other sources already included in the box.

Two more recent evaluations found that managerial training does have a positive impact on the productivity levels of firms.³⁵ One of the impact evaluations was a randomized control trial conducted in Mexico, where small and medium enterprises received subsidized training once a week over the course of one year.³⁶ One to three months after the intervention ended, the treatment group had increased sales by 80 percent, and productivity and profits by 120 percent more than the control group. However, this evaluation did not find an impact on the number of workers employed. The second evaluation was a randomized experiment conducted in India that provided free consulting services on management practices to large Indian textile firms. The treatment group received five months of management training, while the control received only one month of training. Productivity increased by 17 percent in the first year in the treatment firms compared to control firms, and more production plants opened within three years. Since increases in productivity were associated with employment growth, as discussed earlier in this report, it is quite possible that employment growth effects in this evaluation had not yet materialized due to a lag.

The fifth evaluation used both qualitative and quantitative methods to measure the impact of training on obtaining a Certificate in Entrepreneurial Management.³⁷ Impact was measured up to six years after program implementation. The evaluation used a retrospective approach (no baseline) without a comparison group for the quantitative approach, and focus groups for the qualitative approach. Profits, managerial skills and business practices (productivity), and employment increased after the training. It is quite possible that the longer time frame of this study relative to others is what led to the observed employment effects.

In summary, there was variation among the characteristics of the evaluations on entrepreneurship programs (e.g. program design, type of evaluation, length of program and its evaluation) and results on job related variables seem to be mixed. Three out of five evaluations found no impact on jobs, but four found a positive impact on business practices and productivity. The only evaluation that found no significant effects was the shortest program implemented, lasting only two days. The rest of the programs found significant effects on productivity and sales. The evaluation that conducted the follow-up survey a long time after the program ended did find a significant effect on new firm creation, which is related to employment growth.³⁸ This finding is consistent with other results from the literature, where longer-term Active Labor Market Program evaluations tend to yield more positive results on program outcomes than short-term evaluations. For instance, even though classroom and on-the job training programs appear to be ineffective in the short-term, their effects are more positive in the medium-term.³⁹

5.2 Active Labor Market Programs

Retraining programs.⁴⁰ The IFC meta-evaluation reviewed two evaluations on retraining programs and results on the effectiveness of these programs were mixed. The first evaluation used a quasi-experimental design to measure the impact of retraining programs in Russia and Romania.⁴¹ The impact of the programs was measured one year after the program ended. Overall, the program had no impact in Russia, while it did have an impact in Romania for almost all of the variables measured (probability of employment, increase in salary and decrease in the length of unemployment). When taking into account age and gender subgroups, results differed somewhat. In Russia, training improved employment status for people with low levels of education, from rural areas or older than 45 years old; however, there was no clear effect on those below 30 years old. There is no difference on program impact by gender group in Russia, but women benefitted and men did not in Romania. The second report was a meta-evaluation that reviewed 159 studies. This meta-evaluation found no positive impact of retraining programs, with a few exceptions, which usually pertain to comprehensive employment services packages. The program implemented in Bosnia Herzegovina was the most successful case identified in this meta-evaluation, but it is impossible to generalize results from just one country, particularly since this country has a post-conflict setting.⁴²

Other more recent evaluations also find mixed evidence from retraining programs. A French retraining program that measured short-term impact found mixed results.⁴³ The probability of finding a job for displaced workers that join the program increases, but the probability of finding a job for displaced workers who do not join the program could have been even higher; this outcome, however, is not measured since displaced workers did not join the program. Another evaluation of a comprehensive program in Austria that combines job-search assistance with counseling, retraining, and occupational re-orientation increased wages of those who found a job (mostly youth and low-wage workers), and the probability of employment for participants (most frequently older workers).⁴⁴

Results on the impact of retraining programs are inconclusive: overall, they do not seem to have a positive effect, but comprehensive programs seem to be the ones yielding positive results more frequently, and these effects are usually favoring disadvantaged groups such as women, youth and low-income groups. However, more evidence on the impact of retraining programs is needed in order to draw conclusions.

Training for the unemployed. These programs are addressed in the IFC Job Study meta-evaluation by one evaluation⁴⁵ conducted in Spain, and by one meta-evaluation that covered studies in 14 developing countries and in 35 developed countries. According to the meta-evaluation⁴⁶ that covered 14 developing countries and 35 developed ones, training for the unemployed usually increases employment rates, but it does not necessarily translate into higher earnings. Results from these evaluations indicate that training was more effective in developed economies than in developing ones, and training was more beneficial for women than for men. The evaluation in Spain found an increase in the probability of employment from 8 to 9 percent, and effects that are more positive for men than for women. However, there could have been self-selection of individuals into the program. In summary, training for the unemployed seems to increase the probability of employment, but does not translate into higher earnings for participants. Results regarding the impact of gender seem to be more positive for women than for men, but still insufficient to draw any definite conclusions.

5.3 Cross-cutting issues

Impact of training programs on youth and women. General findings from the meta-evaluation conducted by IFC indicate that most of the evidence is based on programs located in Latin America. The first evaluation analyzed by IFC Jobs Study meta-evaluation (Card, et al. 2007) does not find much statistical support for the effect of youth training and their chances of finding employment after the program, but it does observe an increase in earnings for those trained (at least 17 percent), and a positive and significant impact on job quality. A second document analyzed is a meta-evaluation by Ibarra, et al. (2008), which does not find any statistical evidence on the increase in the probability of employment as a result of the training program. However, there are evaluations with positive results on youth employment. Evaluations in Peru, Colombia and Mexico found positive effects on the probability of finding a job in the formal sector. The evaluation of Jordan New Opportunities for Women did not find conclusive, lasting effects on employment levels of women (Box 8.3).

In summary, training and skill-building programs tend to have positive effects on the probability of finding a formal job, but there is insufficient evidence to determine whether these jobs are lasting jobs rather than short-term only. In addition, effects from training interventions tend to be stronger for low-income youth and women. Little evidence exists measuring the improvement in the quality of jobs due to training and skill building programs.

Box 8.3: Jordan New Opportunities for Women

The Jordan New Opportunities for Women (Jordan NOW) is a pilot program to decrease the obstacles that discourage firms from hiring women. The study takes a sample of 1350 young women graduating from community colleges in 2010, whose main fields of study are business administration, medical assistance, and teaching.

Female graduates were given a wage subsidy, a voucher that they could take to firms when looking for a job. The voucher would cover minimum wage for 6 months. In addition, these women were invited to take training courses on soft skills for the workplace.

Students were randomly assigned to four groups: 1) women

who only received the voucher; 2) women who only received the soft skills training; 3) women who received both the voucher and the training; 4) women who did not receive any of the above.

Even though the subsidy increased the probability of employment for these women in the short-term while the subsidy was still active, the impact of the subsidy mostly disappeared in the long-term. Soft skills did not have an effect on increasing the probability of employment.

Source: David McKenzie's blog, "Development Impact", published on July 15, 2012 and June 28, 2012. For more information on this randomized experiment, please view Groh, M. et. al. (2012).

6. Comprehensive approach to the mismatch of skills and unemployment

International organizations such as the World Bank Group and ILO have mentioned the importance of a more comprehensive or integrated approach to unemployment. The ILO's 2005 International Labour Conference called for "an integrated and coherent approach that combines macroeconomic and microeconomic interventions and addresses both labor demand and supply and the quantity and quality of employment,"⁴⁷ because "there are too many young people who do not have access to decent work" and "face challenges in the labor market."

Given the complex nature of unemployment around the world, a comprehensive approach is needed rather than isolated or stand-alone programs or projects (see Box 8.4).

Box 8.4: The comprehensive approach

A comprehensive approach refers to an inclusive strategy to tackle unemployment with participation of multiple and complementary interventions rather than isolated ones. This system would require coordination and participation from relevant stakeholders including the private sector, public sector, international organizations, nongovernmental organizations working with youth or the unemployed, etc.

This strategy's success requires a favorable investment climate and macro-economic environment. It is fundamental to reinforce general education, while emphasizing the importance of secondary and post-secondary classroom education complemented with on-the-job training, and

with an easy transition to the job market. Addition of job placement and job searching counseling components can help the transition from school to work.

Technology is important to guarantee that students finish school with a higher level of skills. Data collection, monitoring, and evaluation are key to redesigning these programs as needed.⁴⁸

Finally, this system should also engage with the informal sector or vulnerable employees by helping these jobs become more productive. Incentives to formalize should accompany the system that targets vulnerable employment.

6.1 Cluster and sectoral approaches

Cluster refers to the association of businesses or institutions that work together or compete with each other but are linked by a common interest in a particular field, technology, or skills. The cluster includes entities in the value chain by adding customers, service providers, suppliers, or specialized institutions.⁴⁹ Sometimes these groups have common management. Clusters tend to be entities located close to each other, but they may also be located in several regions, cooperating with each other to grow and disseminate knowledge.

Skill needs can be identified for the cluster, and specific training can be designed based on these needs and implemented by multiple companies at the same time. Transaction costs are reduced by bringing together the entities that are geographically closest to one another or that share a common interest in training. Clustering can make it easier and more cost-effective to provide training for firms, while at the same time more beneficial for workers to acquire specialized skills, since they are able to apply those skills in more than one enterprise. Such clusters can arise without public intervention, as firms can choose advantageous locations, follow the example of a successful enterprise, or be supported through government intervention (e.g., establishing special economic zones for certain clusters). Urbanization can also help the formation of clusters, as can the establishment of a large enterprise with a cluster of suppliers in its value chain.

Because such clusters help establish a higher number of workers and firms that could benefit from training, they also make it more attractive for training providers to focus on specialized skills.

In addition, clusters are helpful to obtain support for developing improvements to schooling programs, as well as changes in regulations and standards, by bringing together multiple entities with similar interests. Some characteristics of dual vocational training programs could be implemented if these programs are supported in clusters by region or sector. Firms that share interests in a particular skill provision from workers could join the cluster.⁵⁰

Another form of grouping firms in order to more efficiently identify needs and offer training is the sectoral approach. This approach leverages relationships between direct competitors with similar activities operating in the same product markets. One challenge could be a lack of willingness for firms to cooperate with competitors in the same industry. Some examples are shown in Box 8.5.

7. IFC focuses on education that prepares students for the workplace and helps budding entrepreneurs

Current IFC programs in education, training, and skills development take two different approaches. One approach uses investments in education providers, focusing on tertiary education and vocational training, i.e., programs that prepare students for the workplace. The other approach uses management and technical skills development programs that help SME owners and farmers manage and grow their businesses. This section focuses on describing the projects that belong to IFC's current portfolio and that have a potential impact on jobs.

7.1 Farmer and SME Training (FaST) product and its relationship to jobs

The IFC's FaST product team within IFC Advisory Services leverages two scalable platforms: SME Toolkit and Business Edge, focused on training needs of farmers and SME owners. The platforms aim to improve management capacities and technical skills among trainees, which can enhance their ability to increase revenues and access growth markets.

7.1.1 Business Edge

Business Edge (BE) is an IFC program that provides management training to SMEs. The product aims to develop managerial skills that match firm needs, spur entrepreneurship, and better position SMEs to attract bank financing. By improving SME profits and market access, BE aims to stimulate better employment opportunities across the supply chain. Since 2002, BE has trained more than 160,000 SME owners and entrepreneurs, 1,100 trainers, 36 master trainers, and 184 quality control assessors globally. The program also trained more than 30,000 women as of 2011. BE is designed to secure partial cost recovery through fee-based services, aiming to develop a self-sustaining market for management training services in emerging markets.

7.1.2 Impact of FaST programs

Measuring the impact of Business Edge on firm growth and jobs has been an ongoing interest of the program. Highlights from impact assessment surveys that evaluate the training's impact on business performance and jobs are noted in Box 8.6.

7.2 Investments in education

IFC's investment strategy for education has shifted over the years to investing directly in education institutions with the objective of increasing access to quality education and developing skills in the labor market to enhance employability. IFC's Global Education team started working in 2001. Since then, IFC has invested in 84 projects in 35 countries with over 1.5 billion in total project value. Projects have reached approximately 1.4 million students over the years, and currently employ 60,000 people.

In the 2000s, the education strategy on the investment side was focused on supporting direct investments in educational institutions (Business to Consumer, B2C), with the goal of increasing access. As a result, the team focused mainly on scalable

Box 8.5: Example of cluster program: Maryland US

In 1995, the state of Maryland in the United States undertook a sectoral approach by bringing together hundreds of businesses from diverse sectors. This was useful in identifying business needs for training and skills, and later in establishing particular skills to be assigned to clusters. The project was made possible by federal funds from the school-to-work program.

Montgomery County in Maryland is one of the top industry clusters in the United States; the Cluster Advisory Board specializes in related topics such as laboratory practice, biology, chemistry, medicine, etc. People belonging to the cluster, such as career counselors, school faculty members, etc. work together to design and implement programs that range from secondary education (high schools) to the second or fourth year of undergraduate schooling. This cluster model has been expanded to adults and other groups besides youth.⁵¹

Source: OECD (2012a).

Box 8.6: Effects from fast projects on jobs

| | |
|---|---|
| Afghanistan | Trainees apply their learning to the workplace. |
| About 51% of respondents found that their revenues increased after BE training. Additionally, 34% claim to have hired between one and five people following the management training course. The initial results suggest that BE's intervention in Afghanistan had a positive impact on income generation and job creation. But the evaluation has limitations since the results are based on a post program implementation self-assessment by trainees in the context of post-conflict Afghanistan. | |
| India | Trained farmers have higher productivity increases. |
| IFC developed a package of training materials for sugarcane farmers working with its investment client DCM Shriram Consolidated Limited. Training included seed management, soil improvement, water usage, planting techniques, micro-nutrients and inter-cropping. In the second year of project implementation, farmers trained by the project increased productivity by 86 percent, compared to an increase of 19 percent of farmers in the control group (farmers that did not receive training). A total of 150,000 farmers are expected to be reached throughout the value chain. | |
| Pakistan | Training increases SME revenues. |
| SME owners received Business Edge training. More than half of the SME owners reported an increase in revenues of 21-50 percent. An additional 18 percent stated that their profits increased by half because of the training. | |
| Yemen | Training produces productivity gains for SME employees. |
| In 2009, Business Edge targeted 16,000 people in a joint training effort with Yemen Education for Employment Foundation. The program achieved placement rates of 45% for youth with more than 400 recent college graduates in the construction, oil and tourism industries (IEG 2012). Hundreds of women started their micro-businesses (e.g. sewing, farming, craftwork, and dentist's offices). | |

Sources: Sustainable Business Advisory (forthcoming), "Creating Jobs in Yemen and Nigeria", "Helping Business Flourish in a Fragile Environment," and SBA (2012c); Briefs; IEG (2012); IFC South Asia (2012); interviews with IFC's Sustainable Business Advisory team.

business models, especially those with the potential to reach lower income students. More recently, in addition to access, the team has looked for opportunities to invest in the Business to Business (B2B) and Business to Government (B2G) space, supporting education companies developing content, learning management systems, assistant services, technology and other innovations to support public and private schools in improving learning outcomes.

The strategy also has a more targeted focus on investments that can increase the supply of labor market relevant skills to support employability. The objective of this revised strategy is to significantly expand student reach and impact to support the role of governments in the strengthening of education systems. As of June 30, 2012, the active IFC investments in education were \$558 million.







Most education investments are concentrated in LAC and in tertiary education. Education investments in International Development Association (IDA) borrowing countries are 13 percent of all active investments in education. These investments are mostly in K-12 (primary and secondary education) investments.

Around half (23/42) of the education companies in IFC's portfolio tracked direct employment between 2003 and 2008. These 23 companies provided 26,000 jobs for females and 32,000 jobs for males, for a total of 58,000 direct jobs provided in this period ("provided" refers to the level of employment in these firms at a specific point in time). It has been estimated that these investments reach approximately 1.35 million students in the education institutions where they invest.

Investments in private education have the potential to address the challenges in the education sector by complementing the efforts of the public sector and expanding access to quality education. Investments such as DUOC in Chile, Anhanguera in Brazil, and Asian Hospitality School in the Philippines are providing training in job-relevant skills. IFC's education portfolio companies only track impact on direct employment; however, the education team is advancing efforts to pilot approaches to measure the employability of graduates.

As mentioned before, the focus of IFC's education programs is mostly on tertiary education; these programs could potentially have a significant impact on increasing the availability of job-relevant skills and the employability of students when they join the workforce. The impact of education programs on job related variables has not yet been tracked, though efforts are being made, since "Expanding equitable access to quality education at affordable costs and leading to employment opportunities" is the objective of IFC's education strategy from mid-2012 to mid-2015 (Chart 8.1).

Chart 8.1: IFC's education strategy for 2013-2015

| WBG's Objective | 'Learning For All'  Very low   Very high | | |
|-----------------------------------|--|--|---|
| IFC's Objectives | Increase Reach and Impact <ul style="list-style-type: none"> • More students globally • More balanced IFC geographic mix • Focus on quality as well as on access | | Develop Skills and Enhance Employability <ul style="list-style-type: none"> • Improved skills • Better labor market outcome |
| IFC's Strategic Priorities | Scalability 1 Invest in quality private service providers with a focus on scalable models <i>Expected evolution of relative importance of this priority for the strategy implementation period:</i>  | Innovation 2 <i>Support innovation by investing in new business models in service delivery (i.e. low cost) and in the provision of inputs to institutions (i.e. mainly those most directly related to quality improvement such as content and technology)</i>  | Convening power and thought leadership 3 <i>Leverage IFC's and, more broadly, WBG's convening power and thought leadership to influence the strengthening of education systems around the world</i>  |
| IFC's Levers | Financing: Debt, Equity, Structured, Blended (to be explored) Knowledge Transfers: North-South and South-South Partnerships: World Bank, other investors and multilaterals, and key education stakeholders | | |

Source: Global Education Team (2012) "Developing People: IFC Education Strategy," Manufacturing, Agribusiness and Services, IFC, September.

IFC's projects target students across different levels of education, although by definition the more substantial customer base of the portfolio companies is young people. The IFC-supported Grassroots Business Initiative expanded opportunities for youth entrepreneurs. The Middle East and North Africa (MENA) region has started programs with a particular focus on youth, which are part of the regional strategy: E4E initiative for Arab youth, and the Business Edge program in Yemen: are part of the strategy. The E4E initiative is managed by the MENA region and the Islamic Development Bank.

7.3 Special initiative with a regional focus: "E4E"– Initiative for Arab Youth⁵²

The Arab world has an unprecedented employment challenge, and labor market rates are among the lowest globally. In the Middle East, the youth unemployment rate is higher than 25 percent, while in North Africa it is approximately 24 percent, and in the Arab world it is more than 30 percent for female youth. Youth labor market participation rates in MENA are among the lowest globally, and the education systems do not adequately address the needs of labor markets; as a result, the graduates are not well equipped for the workplace. The MENA region has been characterized as preparing students for jobs in the public sector, but there are not sufficient jobs to accommodate the current number of students that graduate.

This scenario prompted the development of the E4E initiative in 2011, an initiative headed by IFC and the Islamic Development Bank (IsDB). Implementation of the E4E initiative started in February 2012 and is based on a three-pillar strategy that involves close collaboration with the private sector: (a) investment in vocational education and training (TVET), universities, work readiness programs, and entrepreneurship training; (b) advisory services to improve the investment climate and regulatory framework for private education; and (c) an advocacy component.

Its objectives are the following: (a) improve the operating environment in the private sector; (b) increase the supply of work-ready students by improving the access and affordability of quality postsecondary education; and (c) change mindsets through advocacy on cross-cutting issues. The E4E initiative will track its impact on youth employability.

8. Dual vocational training systems that combine classroom with on-the-job training work best; Germany and Switzerland are among the most successful examples—globally—of how this approach can help tackle unemployment

The German model of vocational training has a reputation for excellence worldwide. Started in the 1880s, the model has proven successful in keeping unemployment levels low. In Germany, the unemployment rate is approximately 8 percent, while in other countries of the European Union such as Spain and Greece the youth unemployment rate is higher than 50 percent.⁵³

All students attend the same program until the age of 10, when they matriculate at one of four schools. The school they choose will determine the subsequent path that they choose and whether they obtain a university or a technical degree (the latter will prepare them for a specific vocation). Nowadays, more than 50 percent of students who were college-bound in high school but decided not to pursue a university degree apply for vocational training.⁵⁴ The German vocational training system has the following characteristics (Chart 8.2):

Chart 8.2: The German Dual System

| German Dual System | | | | |
|---|---|--|---|--|
| Learning by doing/ practical experience | Common standards are widely accepted and followed | Close collaboration with stakeholders (e.g. private sector, youth, trade unions) | Research and development to keep training programs up to date | Qualified training providers and instructors |

Learning by doing/practical experience: Vocational training prepares apprentices with practical and theoretical skills to graduate with qualifications to perform a specific occupation. The system relies on combining classroom with on-the-job training (work experience): a combination of theory and practice that allows learning on-the-job to develop soft skills such as teamwork, communication, and negotiation, while also creating “hard” skills on the use of modern technology and equipment.

Close collaboration among stakeholders: There are agreements between the private sector, trade unions, and organizations working with youth and employers’ federations to help develop the programs. The government provides the school facilities and ensures that there are qualified instructors/teachers for students in the schools. The private sector covers the cost of training at their locations with the understanding that they are training potential future employees.

Common standards include: Employers, trade unions, the government and institutions in general acknowledge a consistent set of specific apprenticeship programs and occupational degrees. This recognition makes it easier to move between different jobs, to return to school, and to transition into tertiary education.

Qualified training providers and instructors: The program uses qualified training providers, while the Chambers of Commerce and Industry run the exams and monitor the standards of the firms. Teachers in these vocational schools are required to have extensive experience in the area of relevant expertise rather than a university degree.

Skills are widely recognized by employers: The skills that students acquire are widely recognized and demanded by employers, since they are designed in conjunction with them to satisfy their business needs. In this respect, employers should train apprenticeships following established curricula; they should be willing to hire apprentices after the training; they should allow apprentices to attend part-time vocational school; and they should offer apprentices a payment for their services (usually a lower payment than that of a regular worker).

Research and development to keep training programs up to date: The system, the regulations, the occupational degrees, the training content, and the curriculum are continuously updated. The Federal Institute for Vocational Education and Training is in charge of setting up a meeting space between relevant stakeholders and for research in order to help update the programs.

“One of the crucial aspects of the German dual system is that it is created by a cooperation of the employers and the trade unions,” von Luede says.
“[It is] really a model that ensures that the qualifications that are needed within the industry are supported by this apprenticeship.”

National Public Radio (2012)

Switzerland's case: Switzerland is another country that is successfully implementing a dual vocational training system. In 2011, Switzerland's youth unemployment rate was almost one percentage point lower than Germany's.⁵⁵ After the sixth grade of elementary school, students are divided into those who will choose the apprenticeship path and those who will end up obtaining a university degree. Students who choose an apprenticeship path still have opportunities to pursue a university degree in the future, depending on their performance.

8.1 Adoption of dual vocational training system

Implementing the dual vocational training system as successfully as in Germany and Switzerland may require decades to complete and the right micro and macro policies that make it easier to implement. Therefore the approach may be hard to replicate. Since the 2000s, Germany has reduced unemployment benefits and social security contributions, liberalized temporary work, raised the pension age, and required federal governments to keep very small budget deficits.⁵⁶

The German system has been used as a model to design the vocational training programs in Mexico, Egypt, India, Vietnam, etc.⁵⁷ However, it is impossible to merely copy the model and aim for the same level of success, because every country has different institutional arrangements and economic structures. Countries need sufficient organizational capacity and involvement of core actors.

Box 8.7: Developing countries vocational training systems: Examples from Africa

Benin revamped its vocational training program in an effort to adapt to the new economic and urbanization demands of the country and has been implementing a new dual apprenticeship system since 2006. The scheme consists of both theoretical education and on-the-job training. Graduates obtain a certificate that qualifies them for a specific vocation such as crafts, plumbing or trades. Approximately three thousand students complete the program every year.

Mali introduced a dual vocational training system in 1997 that is focused on practical experience rather than formal classroom education. This system has been more successful than others in African countries, in part due to the private sector's participation, which has made it easier for apprentices to successfully find a job after completion. This system, however, focuses predominately on traditional crafts.

Source: Biavaschi et al. (2012)

The German system also faces challenges. According to Biavaschi et al. (2012), the number of spaces in dual vocational training offered over the past decade has decreased due to the following two reasons (among others): New occupations require more advanced skills (mostly driven by technological advancement) and thus higher training costs, which makes it more expensive to keep and hire apprentices. Also, the transition from a declining manufacturing to an expanding services sector requires an adjustment in dual vocational training to implement this system in services with the same high standards that have been used in manufacturing.

9. Training for small and medium enterprises

Fostering entrepreneurship creates opportunities for employment, particularly for youth, who are just starting their careers and might be more prone to undertaking higher risks and starting a new business. Training and skills development programs can try to identify entrepreneurs who do have the desire and potential to grow their businesses, and help them improve their managerial, entrepreneurial and business practices.

As SMEs move up the value chain and reach higher value-added products, these SMEs require the adoption of new technologies and innovation, which also require more advanced skills from workers. Bangladesh is an example of a country that was able to increase the productivity and value added in its garment manufacturing sector, leading to employment opportunities for millions of women, who often lived in poor conditions. Examples such as Bangladesh involve training programs that can adapt to new market needs.

The informal sector shares a big piece of the SME pie in developing countries. However, many of these informal firms are concentrated in activities such as crafts or low value-added agriculture. Skills programs targeting SMEs should consider the importance of informal businesses, while creating incentives for them to formalize and move up the value chain. Apprenticeship programs can be part of the strategy to support the informal sector, since they can link firms with technology providers and facilitate training provisions to employees.⁵⁸ However, apprenticeships for the informal sector should be accompanied by incentives for businesses to formalize.

10. Different funding mechanisms for training and skills development programs

The high cost of content development and the lack of information about the value of the programs (among other reasons) can inhibit the provision of training and skills-building. At the same time, the public good elements inherent in building capacity among firms justify the use of public money to help stimulate the market. However, the funding elements in these programs can create unexpected incentives and externalities.

By pushing money in through the supply side (subsidizing content delivery so trainers do not have to charge for services or can charge less), incentives for commercial providers to enter the market could be undermined. One potential alternative is the use of the so-called “smart-subsidy,” where the subsidy is applied on the consumer side (e.g., vouchers). In this way, the subsidy helps establish the market by building demand among consumers and providing suppliers with incentives to enter the market and fully cover their costs (including profit margins). The Business Edge model’s efforts to obtain at least partial cost recovery reflects IFC’s interest in providing capacity training for SMEs while also stimulating a broader marketplace for these services.

The OECD establishes that the costs of equitable education and training should be shared among individuals, the public sector, and employers, depending on the expected benefits from the project. However, the OECD states that promoting tax incentives for firms to invest in training requires careful thought before those policies are implemented, since they can create unexpected incentives. For instance, taxes that create incentives to invest in a particular sector may disincentivize investments in other sectors. In this respect, the OECD also states that the evidence on the impact of tax incentive programs related to training and education is mixed, and the impact on human capital development is still insufficient.⁵⁹

Other common sources of funding are loans and grants provided to individuals or firms undertaking the training. These funds can result in increased investment in training by firms and individuals. Australia is an example of a country granting loans to students who will repay the loans used in VET programs once they join the labor market and start earning money. The program is conditional on the students’ income. On the other hand, Singapore provides grants for both students who go to VET programs and those who pursue higher education. Singapore’s subsidy program aims to increase the reputation and attractiveness of VET programs, which is also accompanied by a high job placement rate after graduation.⁶⁰

Box 8.8: “Training Cheque” program in Germany

The Training Cheque initiative in Germany, which started in 2006, offers financial support for SMEs interested in training courses, regardless of their sectoral focus. The program targets employees who have not received recent training courses, and women who have been absent due to maternity leave. The training “cheque” program allows those people to take a course that will enable them to reintegrate into work life or grow their businesses.

Workers can apply to the program directly, or companies can submit applications for their employees. Participants in the program receive a 50 percent subsidy to cover the cost of their training, which must not cost more than 500 euro. SMEs can receive up to 10 different “cheques” a year. Workers can obtain only one “cheque” at a time (no more than one “cheque” can be used for each training course the employee is taking at a specific moment in time). From 2006 to 2008, 300,000 “cheques” were distributed to employees. The program has received 85 percent positive feedback from program participants.

Source: Anticipedia Moderator (2010).

This section mentioned some different mechanisms that policymakers are using to establish training and skills development programs. However, more research and evaluations are needed in order to understand returns on investments for employers, public sector, workers, unexpected externalities and incentives, etc.⁶¹

11. Youth employment

Box 8.9: Youth and the labor market: a missed opportunity?

There are 1 billion young people in developing countries, more than ever before, and this number will continue to increase in the coming decades.⁶² This creates an enormous challenge in terms of job creation. Youth tend to be less integrated into the labor market than their adult counterparts, suffering from higher unemployment and underemployment. In 2011, there were 75 million unemployed youth in the world, and their unemployment rate was almost 3 times that of adults.

There are strong differences across regions regarding unemployment rates for youth; although in all regions youth are at a disadvantage compared to adults (Figure 8.4). Unemployment rates for youth are highest in North Africa and the Middle East. The rest of the regions in figure 8.4 have seen youth unemployment rates stabilize or slightly reduce after the recent peaks. East and South Asia show the lowest unemployment, but the difference between youth and adult unemployment rates is significant, particularly in South Asia (more than four times larger).⁶³

Young workers are also more likely than adults to be underemployed, working under poor conditions and suffering from informality. Underemployment (where the worker does not fully utilize his or her qualifications and experience) is widespread among youth, especially in low-income countries. Lack of unemployment benefits and safety nets, along with the presence of poverty, drives youth to accept low-paid informal jobs or some other forms of underemployment.⁶⁴

Unemployment or low-quality employment in the early stages of a career can have negative long-term consequences. Unemployed youth see their skills deteriorate as they do not accumulate on-the-job training, which curtails their future career and wage prospects. In addition, the lack of job opportunities feeds discouragement and migration, which can generate social instability, especially in conflict-affected countries. This scenario leads to economic and personal costs for youth and for society in general, thus fostering the rationale for incorporating youth employment into the policy agenda.

Specific challenges facing youth

Youth face specific labor market challenges that can be grouped into three clusters: demand for workers by firms, supply of labor by workers, and labor and credit market conditions.

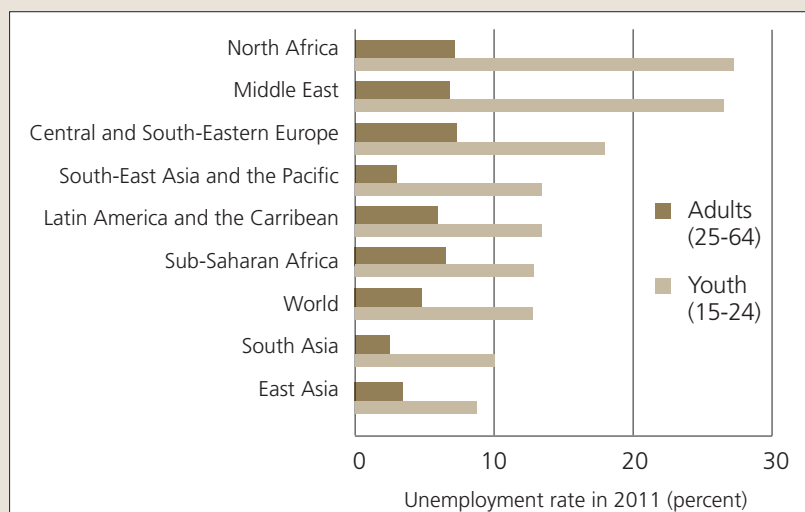
On the demand side, some of the challenges are the following. First, the economic cycle affects the demand for all types of workers, but youth are more vulnerable to economic downturns. They can be the first to be laid off because they have had less time to accumulate firm-specific human capital.⁶⁵ Second, young people may lack work experience, making employers to be reluctant to hire them. Third, fast-growing economies undergoing sectoral specialization could be quickly moving up to higher value-added activities, and this has an impact on the type of skills demanded of youth.⁶⁶

On the supply side, the demographic factor becomes relevant. The intensity of the youth bulge in several countries is such that it cannot be absorbed even in the context of strong job creation.⁶⁷

Finally, labor and financial market conditions play a role, since youth are more vulnerable to market difficulties. Flexible contracts for youth facilitate the transition from school to the labor market. However, such contracts can also foster labor market segmentation when not properly implemented, which makes it difficult for youth to transition from low-paid, low-quality contracts to better-paid, better-quality jobs. This scenario, combined with the lack of a network, career counseling and finance reduces development opportunities for youth and may drive youth to join the informal sector.

The skills mismatch relates to both demand and supply of labor and reveals the importance of providing not just education but quality education for youth. In some countries, educated individuals are more affected than their unskilled counterparts because they lack the skills required by the labor market. This issue is common in the Middle East and North Africa, where the public sector can no longer hire the bulge of college graduates, and the private sector either does not value their skills or is too underdeveloped to absorb the bulge.⁶⁸

Figure 8.4: Unemployment rates for youth are higher than for adults



Source: ILO (2012). Global Employment Trends 2012.

Comprehensive approach and private sector involvement

As mentioned previously in this chapter, the main emerging consensus on strategies to foster youth employment is the adoption of a comprehensive approach.⁶⁹

Integrating these interventions into a coherent framework would avoid bottlenecks and exploit synergies. Availability of formal training programs can be coupled with affordability of training; academic education can be complemented with vocational training; and both education and training need to be accompanied by career and job search counseling.⁷⁰

In this comprehensive approach, the content of education matters. For instance, in MENA, young people possess accreditation to work for the public sector, but the private sector demands workers educated in information and communication technologies or in skilled trades, and these professions are not generally considered attractive among youth.⁷¹

A lesson to learn is that the involvement of the private sector is crucial for the success of general education programs and, in particular, of technical vocational educational and training programs. This involvement ensures the relevance of the curricula and avoids skills mismatches.⁷² IFC has supported a TVET program in Brazil targeted to middle- and low-income youth and focusing on relevant professional skills (AES project), which seems to have improved earning potential for students.⁷³ In some developed countries, the use of dual vocational programs, which combine training

in schools and in firms (apprenticeships), may have been successful in fostering youth employment (see previous discussion in this chapter).⁷⁴ The objective should be not only to smooth the school-to-work transition, but also to help build long-term career prospects. The challenge in low-income countries is to formalize informal training, a process that would capitalize on the benefits of official recognition and certification of skills. As a close partnership with employees would increase the attractiveness of official programs, this would contribute to formalization.⁷⁵

Establishing updated training programs is even more important in fast-growing countries undergoing structural transformation. Youth need to be equipped with the tools necessary to remain employable in this changing context. Training should provide the young with the mobility to adapt and to contribute to a changing economy that is stepping up in the value chain. Since it is difficult to anticipate future skills, it is important to offer short and periodic training courses and to provide adaptable and portable skills.⁷⁶ A potent tool that allows the young to fully utilize their productivity potential is the use of the new technologies, and this should be factored into education and training programs.⁷⁷

Interventions other than education and training programs can also have significant impact. Given that in many developing countries the youth employment problem is an informality and underemployment problem, the business climate is of particular relevance. Legal and administrative obstacles to creating firms and hiring formally should be minimized.⁷⁸ In rural low-income areas it might be necessary to facilitate not only labor mobility but also access to credit and land, and to promote entrepreneurship and growth in rural agribusiness.⁷⁹

In conclusion, a comprehensive approach is needed to address youth unemployment and underemployment, and the involvement of the private sector is crucial. At the same time, the specific mix of policies should be tailored to the local context, taking into account variables such as the incidence of informality and underemployment, the overall business climate, the availability of financial resources, and the pattern of sectoral specialization.

Youth employment is now high on the agenda of many governments and international institutions.⁸⁰ As the latter start designing and implementing strategies, it is important to ensure accountability and to conduct evaluations of those programs in a more systematic fashion. Data collection could be improved by monitoring the impact of interventions for specific age groups.⁸¹ These efforts would enhance an evidence-based approach to identifying the most successful employment programs, which in turn would be a significant step toward tackling the youth jobs challenge.

Sources: Independent Evaluation Group (2012). International Labour Office (2012a). Ibid. *Global Employment Trends 2012*. International Youth Foundation (2012). OECD (2009). World Bank (2012). Youth unemployment and vocational training.

12. Conclusion

Approximately 45 million job seekers join the labor force every year in the current challenging macroeconomic environment,⁸² yet more than one-third of companies in 41 countries around the world report an inability to find the workers they need.⁸³ This suggests a mismatch between the workforce skills demanded and supplied within countries and in the global economy. The world's labor force is increasingly concentrated in developing economies, but there are not enough jobs for low- and medium-skilled workers either in developed or developing economies. Advanced skills and training are more common among workers in developed economies, but demand for highly skilled workers is even higher than the supply. This mismatch of skills is likely to grow more acute in both advanced economies and in developing countries.⁸⁴ Another challenge is that managers and business owners sometimes also lack the skills required to manage and grow their businesses,⁸⁵ thus limiting their potential to grow and create jobs.

A comprehensive approach is needed, and includes close collaboration with the private sector and with other relevant stakeholders like educational institutions, training providers, and organizations working with youth to design and implement education and training policies that are tailored to market needs. A sound general education provides a solid basis for youth development and for future employment opportunities. Ideally, this approach should emphasize the value of secondary and postsecondary classroom education complemented by on-the-job training to ensure that youth can make an easy transition from one level of education to the next and later into the job market.

Clusters also are an innovative way of building support for modifications to schooling programs for providing market-based training opportunities. Clusters of companies like those found in urban areas, special economic zones, or multiple suppliers or distributors linked to a value chain can be part of this strategy because they facilitate knowledge-sharing and provision of specialized training. Clusters make it easier to invest in training, technology, and innovation that increases competitiveness and allows firms to move up the value chain of production, which can lead to business growth and job creation.

Impacts of specific training and skill-building programs have been mixed, but combining classroom education with on-the-job training has proven to work best, especially for women and low-income youth. This result is especially significant when evaluations measure longer rather than short-term effects. More evidence is needed on the impact of training programs on quality of jobs.

A dual vocational training system, like that practiced in Germany and Switzerland, has been effective in reducing unemployment, especially among youth. But simply copying the model will not necessarily work for other countries who need to tailor their own system to meet their market needs. Countries need to take a comprehensive approach by involving all stakeholders in the process, making sure that funding for training is available, and helping graduates make the transition into the workforce. Since vocational programs suffer a negative image in some countries, efforts should be made to increase recognition of vocational training as valid and prestigious. This can be done by designing programs that are recognized by employers (e.g., by combining training with work experience, through accreditation, or by having employer associations administer final exams), so that students have real career prospects when they graduate. It should also be possible for graduates of vocational training programs to move easily into higher education if they wish to do so.

IFC focuses its educational support activities on preparing students for the workplace and fostering budding entrepreneurs. Its investment strategy has shifted from investing directly in educational institutions to investing through financial intermediaries, to reach larger numbers of training institutions. The revised strategy targets investments that increase the supply of skills most sought in labor markets. Through the FaST product, its advisory strategy also leverages two scalable platforms: SME Toolkit and Business Edge, which focus on training sought by farmers and SME owners. The emphasis on measuring impact through evaluations is now also key for Business Edge.

Uncertainty about the expected returns from training may lead some companies, especially SMEs to underinvest in providing training. In part, this is because there still is insufficient evidence to demonstrate the positive impact of training and skills programs on job creation and because it takes time for the employment benefits from more training to materialize. A greater effort is needed to collect and analyze data on the job impact from spending on education, training, and skills development programs to provide evidence of the effects of investing in building the right skills. Firms can benefit from a well-trained workforce in more ways than through increased production. In some cases, training can feed through to increase net returns on investments for SMEs. For example, programs that work with larger companies to improve their suppliers' skills can eventually benefit the larger company in the form of more and better products. Similarly, supporting the costs for producing training materials and new technology and providing training vouchers can increase the chances for SMEs to move up the value chain in production and to earn more profits.

Workers in informal businesses also need training to become more productive, but this should be accompanied with incentives to move to the formal economy. This is especially important for youth employment, given that developing countries—where the informal sector is more abundant—include about 87 percent of the global youth population. Many of these youth are in the most vulnerable employment conditions. Apprenticeship programs, designed for the informal sector, could benefit these workers by giving them access to training and to new technology.⁸⁶ Involving the private sector in these programs would also link them to market needs and reduce reliance on public sector financing.

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CHAPTER 9

GENDER

Worldwide, education levels of women have increased, and educated women earn more than their uneducated peers. But the gender participation gap and wage gap between men and women persist. Women comprise 49.6 percent of the world's population but make up only 40.8 percent of the formal global labor market. This is untapped economic and productive potential. When women are able to fully participate in the labor market, companies benefit from increased business opportunities and access to new market segments. Productivity gains from women's inclusion in the labor market come from the variety of ways women bring added value to their workplaces, including their high education levels and alternative labor practices. More broadly, equality of employment opportunities for men and women is associated with poverty reduction and higher GDP levels.

Why are women's workforce participation rates so low and opportunities so few? And what can be done to increase economic opportunities for women in the labor market? Barriers to women's full and productive participation in the workforce exist at the regulatory and company level. In addition, there are cultural restrictions that determine if and where a woman can work, and women entrepreneurs have difficulty obtaining finance and financial services. The result is low overall economic participation of women and a concentration of women in less productive sectors. Two main strategies have been identified to address this problem: (i) increase the number of women in industries that are already women-friendly, and (ii) encourage the participation of women in nontraditional fields, where possible. Other targeted approaches that have been successful in the past include promoting women as business leaders and supporting women entrepreneurs' access to finance.

1. Introduction

At its core, a discussion about full and productive employment for women is important for everyone. We all lose out when our global capacity for productive potential remains untapped. Globally nearly half (48.4 percent) of the available productive potential of females is underutilized or unutilized, compared to 22.3 percent for men.¹

Over the past 25 years, the global gap between men's and women's labor force participation has fallen from 32 to 26 percentage points—leading to an overall increase in women joining the labor market. With that said, women's labor force participation is uneven across countries and regions. Participation is still very low in the Middle East and North Africa (averaging 26 percent); has risen significantly in regions such as Latin America and the Caribbean, which has seen a 16 percent increase since 1980; and is relatively high in East Asia and the Pacific, where roughly 70 percent of women participate in economic activities, higher than any other region. The increases were driven by a number of factors, including higher education, falling fertility, and expansion of new employment opportunities, particularly in manufacturing and services.²

Strengthening women's participation in the formal labor force harnesses this untapped potential for advancing development. It also empowers women. Women are empowered when they make their own career decisions, open up new businesses in their communities, or work in paid positions that help them provide for their families. Women are empowered when they can fully take advantage of available economic opportunities.

"When you want to invest and create GDP, there is no better or more effective investment – no lower-hanging fruit to pick – than investing in women."

- Lloyd C. Blankfein,
CEO, Goldman Sachs

So it becomes clear that a discussion about full and productive employment for women is relevant for the firms, societies and economies of the world. Full participation translates into more business opportunities for the private sector, stronger communities for society, and greater sustainable GDP growth for countries.

1.1 Good for firms

For firms, women's full economic participation means better overall performance due to a wider talent pool, increased business opportunities, and access to new market segments. A representative survey of companies in Germany in 2008 found that family-friendly firms received 31 percent more applications for staff openings and retained employees 14 percent longer than other firms.³ Productivity gains from women's inclusion into the labor market come from the variety of ways women bring added value to their workplaces, including their high educational levels and alternative labor practices. In the agricultural sector, increased access to productive resources for women (commensurate with levels for men) could have productivity gains as large as 4 percent.⁴

For male-dominated industries, removing obstacles for women to enter these occupations could trigger productivity increases by up to 13 to 25 percent. This issue of women's incorporation into non-traditional industries will be more fully explored later in the chapter. But it is important to know that policies intended to benefit women in male-dominated occupations and sectors have redistributed the work without efficiency losses.⁵

In general, productivity gains that derive from efficient human resource practices and higher diversity within the workplace are more difficult to quantify.⁶ A US study found that intangible assets such as people, brand, and intellectual property were seen to create more than 85 percent of corporate value.⁷ At the firm level, an engineering, construction, and chemicals group in Brazil, Odebrecht, reported higher productivity after hiring women due to the new gender mix that led to the development of new ways to work.⁸

1.2 Good for society

Society's years of investment in educating girls pays off when women are able to capitalize on their schooling by participating in productive economic activities. Furthermore, educated and employed women have the ability to positively contribute to poverty reduction efforts by helping their families and communities out of the cycle of poverty, forming a virtuous cycle of prosperity.

Women influence the productivity and competitiveness of future generations by rearing children for success.⁹ Research suggests that women-headed households reinvest 90 percent of their income into their families, compared to 30 to 40 percent contributed by men.¹⁰ Evidence from developing countries shows that higher household incomes managed by women impact education opportunities for children, as well as the survival rates of girl children.¹¹ Other studies have found women's empowerment within families impacts child nutrition and education levels.¹² This is in addition to the intrinsic benefits that empowerment has on women themselves.

With regard to poverty reduction, a study conducted in Turkey simulated an increase of the relatively low participation of women in the labor force from 23 to 29 percent and found that it could help reduce poverty by 15 percent if women took full-time positions, or 8 percent if they had part-time jobs.¹³ The situation in Turkey suggests that the effects would not be the same for men, as participation rates are especially low among women with only primary or secondary education. In some developing countries, female participation rates are lower than expected and notably lower than for men - considering education and age levels of population—especially in the Middle East and North Africa (MENA) region. Therefore, raising the female labor force participation rates to the expected level would boost household income by 25 percent.¹⁴

1.3 Good for the economy

Full and productive employment for women can have a positive economic impact on countries. Equality of employment opportunities for men and women is associated with poverty reduction and higher GDP levels. For example, barriers preventing women from fulfilling their economic potential are estimated to have cost the Asia-Pacific region somewhere between \$42 and \$46 billion in GDP losses.¹⁵ Recent research by Oxford Strategic Consulting from the Gulf region provides just one

Key business drivers for investing in women's employment:

- Enhancing reputation
- Broadening access to talent
- Curbing labor shortages
- Improving access to new and existing consumer markets
- Driving up productivity and quality
- Complying with legislative requirements
- Meeting expectations of investors and buyers
- Creating a more cohesive working environment

Source: IFC WINvest 2012

example: if 2 million of the region’s highly educated women entered paid work, the region’s GDP could rise by an estimated 30 percent, or \$363 billion. A recent Goldman Sachs study in Australia found that narrowing the gap between male and female employment rates would have huge implications for the global economy; in Australia alone, it would boost GDP by 11 percent.

2. Where women work

Specific sectors that rely heavily on women workers include agribusiness, tourism, and textiles.¹⁶ Women tend to be underrepresented in industry and extractive sectors as well as in other highly productive activities, working instead primarily in agriculture or services. Women are concentrated in sectors that are generally characterized by low pay, long hours, and often informal working arrangements.¹⁷

During the ten-year period between 1998 and 2008 an interesting shift is observed: women moved from working mainly in agriculture to have a larger sectoral employment share in the services sector.¹⁸ In 2008, female employment share in services was 46.3 percent, versus 35.4 percent in agriculture and 18.3 percent in industry. The services sector comprises the majority of women in the regions of Latin America and the Caribbean, Central and Southeastern Europe, and the Middle East and North Africa. Overall, the service sector is the largest employer, with 84.4 percent of female employment.¹⁹ Even though it tends to have lower productivity than industry and is generally lower-paid, the service sector can provide better working conditions than agriculture and more opportunities for women to continue their job progression. This could account for the higher employment share in this sector.

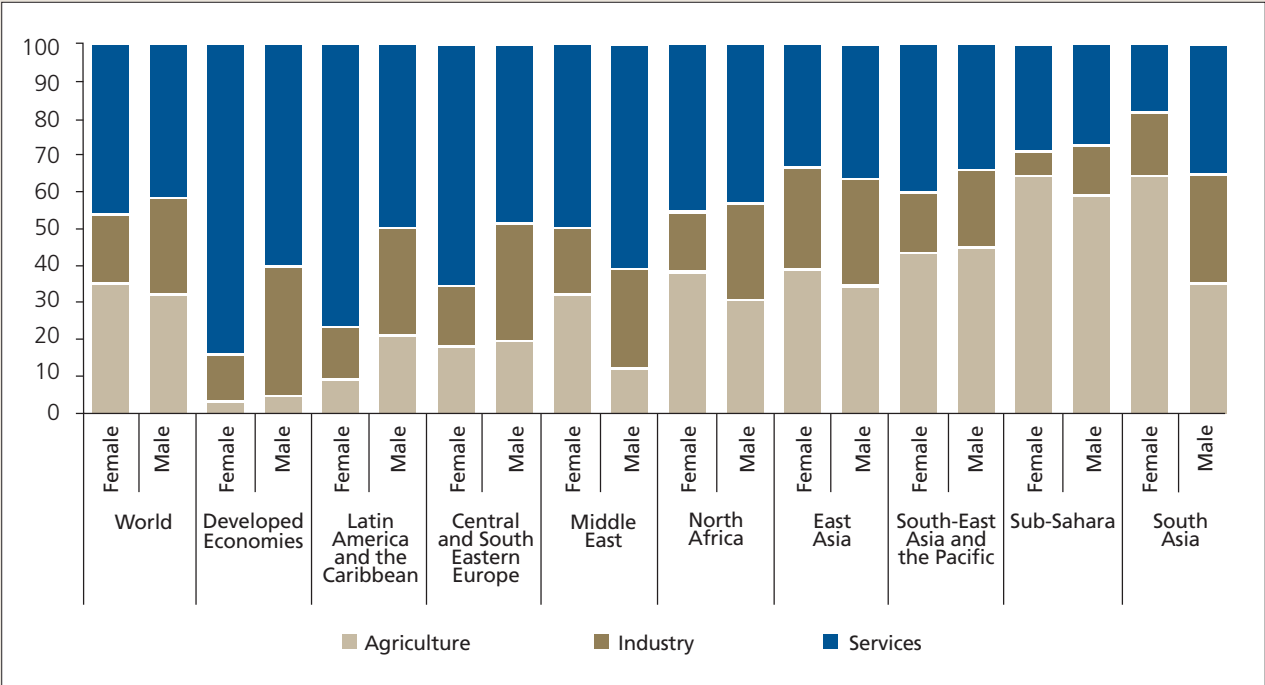
In developing countries, women’s participation in the industry sector has slowly increased from 17 to 18.3 percent over the same ten-year period. Contrast this with women in developed economies who have decreased their employment share in the industrial sector and have only 2.9 percent of females employed in agriculture. Women have the highest sectoral share of employment in agriculture in South Asia,

An important consideration

As most female household work continues to be classified as non-economic activity, women who are thus occupied are classified as outside the labor force. More than six in ten women remain economically “inactive” in three regions then, according to the ILO in 2010: North Africa, South Asia, and the Middle East.

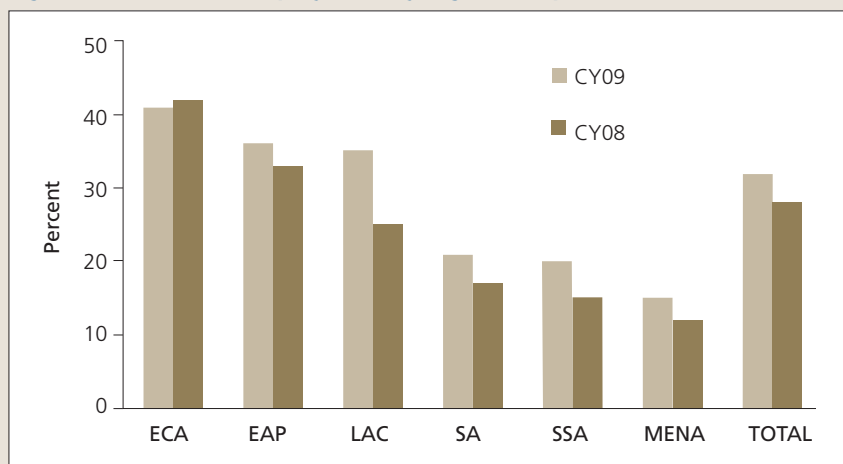
Source: ILO (2010)

Figure 9.1: Sectoral share in employment by regions (female and male in percent)



Source: ILO 2009.

Figure 9.2: Women's employment by region: IFC portfolio (%)



Source: IFC DOTS database. Direct employment in IFC client companies

Sub-Saharan Africa, Southeast Asia and the Pacific, and East Asia.

When looking at comparable data for men, the distribution for women is largely biased toward the services and agriculture sectors. The distribution is less concentrated and more even for men, with the services sector comprising 41.2 percent of the sector employment share, agriculture 32.2 percent, and industry 26.6 percent.²⁰

The quantity of women's employment is measured by IFC, in addition to where these jobs are located and what kinds of sectors they are concentrated in. In 2008, IFC started to

systematically track gender-related indicators as part of the Development Outcome Tracking System (DOTS). Half of the firms reported data in 2009 on female employment, and one-third on female wages. IFC client employment portfolio in emerging markets is 32 percent female. IFC encourages its clients to pay equal wages for equal work—which may also have productivity gains for the company.

Data from IFC's clients show a higher share of women employed in Europe and Central Asia, with 42 percent of female employment. Services provided the majority of jobs for women, led by retail, health care, and education. Extractives, the financial and insurance sector, and plastics and rubber industries had the lowest female participation in employment.

3. Gender gaps

3.1 Participation gap

Women comprise 49.6 percent of the world's total population but make up only 40.8 percent of the formal global labor market.²¹

The good news is that the gender gap—the difference between the number of economically active men and women—has been slowly decreasing over the past 30 years. It reached 26 percentage points in 2008 compared to 32 percentage points in 1980, evidence that constraints to reduce gender employment differences are being eased.

In the nine-year period between 2002 and 2011, the changes in female and male employment-to-population ratios in all developing regions moved in the same direction, showing that economic conditions impacted both groups to the same degree. Most important, in the regions in which more women are entering the labor force, men have not been displaced. In the regions of East Asia and the Pacific, Middle East and North Africa, Sub-Saharan Africa, and Latin American and the Caribbean, the male-female employment-to-population ratios have increased.²² It is now more a gender gap related to inequity and quality of employment opportunities between men and women.

3.2 Wage gap

Gaps in average wages between salaried men and women remain significant in both the formal and informal sectors. Differences in average wages by gender range from 20 percent in Mozambique and Pakistan to more than 80 percent in Côte d'Ivoire, Jordan, Latvia, and the Slovak Republic. In East Asia and the Pacific, women still earn an average of 70 to 80 percent less than men for similar work.²³ Clear differentials are present in male-female pay in all occupations across all skill bases.²⁴ For 14 countries with available recent data, the majority have a strong wage bias toward male-dominated occupations.²⁵

IFC data show the ratio of female to male wages among manufacturing client companies in its portfolio (during 2008 and 2009) at about 70 percent—a clear gap of 30% that mirrors the realities in most countries of the world. It is important to note the differences in methodology. IFC's figures are a simple average (average female over average male wages) and thus do not account for differences in positions. To the extent men are more likely to be in management positions, this is a more stringent test than when controlling for job types.

4. Constraints: Obstacles and opportunities

Why does such an endemic market failure continue to persist? Some widely cited reasons for this include women's time constraints, lack of access to infrastructure, limited access to education and appropriate skills training, availability and cost of child care provision, household and family responsibilities, inadequate social protection, discrimination, regulatory constraints, and working conditions not suited for women.²⁶ Not all constraints can be expanded upon in this chapter, but the dynamics and interconnected nature of the constraints will be captured.

4.1 Legislative barriers to full participation

In many countries, legislation regulating work in the formal sector treats men and women differently. This legislation may have to do with hours of work, industry caps, taxation, parental benefits, or even retirement.

Legal disparities can affect women's ability to participate in the economic sphere. The World Bank Group's *Women, Business and the Law* report provides insight into the legal areas that impact women's access to employment. In Cameroon, Egypt, and Kuwait, for example, women cannot work the same night hours or in the same industry as men. Nor are women entitled to any legal protection from discrimination in hiring practices or sexual harassment in the workplace. A number of countries, including Oman, Pakistan, Saudi Arabia, and South Africa, also lack legislation requiring equal pay for equal work. In other countries, laws are much more conducive to women's employment—such as the Czech Republic, Latvia, and Montenegro, all of which enable employees with children who are minors to have flexible or part-time work schedules, and where it is illegal to ask questions about a family status during a job interview.

Some labor regulations may serve to enhance a woman's incentives and abilities to get the job of her choice; others may inhibit her chance to do so. Women, Business and the Law recorded that in 102 out of 141 economies, there exists at least one legal difference that could hinder women's economic opportunities.²⁷ In some cases, the intention may be to protect women. This is the case of retirement laws, an oft-cited example in the literature. Yet, gender-differentiated retirement ages may actually curtail a woman's working life, perhaps even negatively affecting her career prospects, lifetime earnings, pension benefits, and retirement savings.

The constraints outlined in this chapter are interconnected. For example, the regulatory framework in some countries outlines unequal access to legal and property rights between men and women. This is one reason why women lack access to credit and financing to begin their jobs as businesswomen. When seeking a loan, women and men can encounter many obstacles when they do not possess the right types of assets to pledge as collateral. In developing countries, banks often prefer to use immovable assets, such as land and buildings, as security interests. Women, who tend to have less access to these assets, can have more difficulty securing such loans. The problem is worse where there are gender-differentiated property rights.²⁸ In fact, 19 percent fewer women are able to get loans in countries where they don't have equal property rights as men.²⁹ Furthermore, a woman's increased business productivity depends on how much property she owns and how she can use it.³⁰

4.2 Cultural considerations

Social and cultural constraints can negatively affect levels of female labor force participation. These restrictions play a role in economies where female participation in the formal labor market is low. A negative correlation is observed between more traditional views of female labor force participation and the number of females employed in the formal sector, as well as the gender wage gap.³¹ In economies where women cannot get a job without permission from their husband or guardian, there are fewer women in the workforce on average compared to economies where such restrictions do not exist.³² There are two distinct times in a woman's life where this constraint is particularly binding: adolescence and after marriage.³³

This is in part due to "the double burden" that women face, with equal responsibilities at home and at work. Inadequate child care in some parts of the world can make it difficult for women to work and raise children. These considerations are

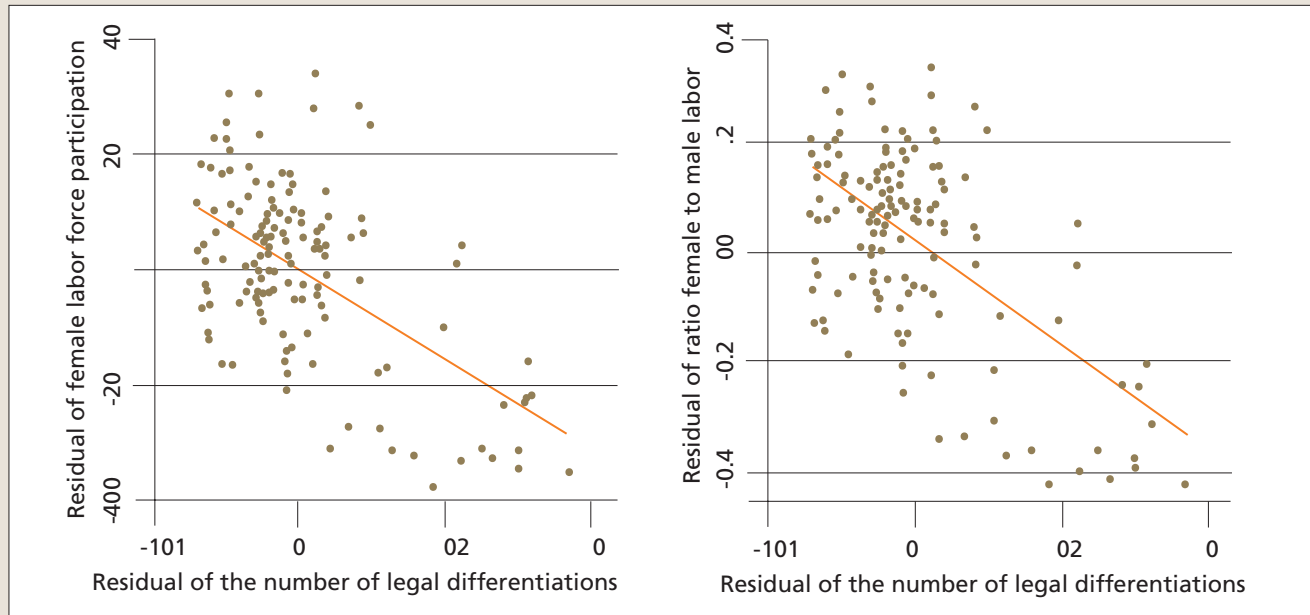
"Organizations who have gender diverse boards and diverse management teams perform better financially."

- Jim Turley, CEO and President of Ernst & Young

"Countries that impose restrictions on women have on average lower female labor force participation (45 percent compared to 60 percent in countries with no restrictions), and higher gender participation gaps (45 percent compared to 25 percent in countries with no restrictions)"

-WDR 2012 on Gender

Figure 9.3: When there is greater legal differentiation based on gender, fewer women work, or own or manage businesses



Source: Women, Business and the Law database; World Development Indicators; Enterprise Surveys.

Note: The graphs present the partial correlations between the two variables identified after controlling for income per capita.

important even for highly educated and professional women who have access to child care options,³⁴ and have even been cited as one of the reasons for unbalanced gender ratios on company boards.³⁵ Research suggests a business case for family-friendly policies. For example, a German government study found that the average return on investment for women and family-friendly policies was 25 percent. In Vietnam, Nalt Enterprise garment factories saw a decrease of staff turnover rates to the tune of 30 percent after the firm established a kindergarten for workers' children.³⁶

In many countries the discussion goes beyond working conditions to cultural considerations. In Turkey, where female labor force participation is 23.5 percent, traditional ideas about a women's place in the home and society inform cultural considerations. These include family disagreement about a woman working outside the house, concerns about her safety, and mistrust that she will actually go to work.³⁷

4.3 The connection between education and employment participation is more complex than it seems

Can higher education levels increase female participation and decrease the wage gap?

Evidence from a variety of countries shows that increased levels of education for women has significant positive effects on increased levels of women's participation in the labor market. An extra year of primary school boosts girls' eventual wages by 10 to 20 percent; an extra year of secondary school boosts eventual wages a further 15 to 25 percent.³⁸ More educated women participate in the labor market at higher levels than their less-educated counterparts.³⁹

In Latin America, for example, this increase in human capital accounts for a 42 percent rise in female labor force participation from 1975 to 2012.⁴⁰ In Argentina specifically, the universal public schooling program successfully raised women's participation in the labor force, with significant effects on household income and child welfare. Policies in Bangladesh intended to provide access to secondary school with the goal of retaining high-achieving women had a considerable effect on their probability of becoming paid workers in the formal sector.

In universities around the world, women make up more than half of student populations, but differences across countries and fields of study remain. Women have high levels of college participation in developing countries such as Brazil (60 percent) and China (65 percent). But there are challenges in other areas of the world. In Sub-Saharan Africa, for every 100 boys that finish primary school only 91 girls do.⁴¹ Overall, education attainment rates for women and men have been converging, but the new challenge is the participation differences in sector and occupation, which can play a relevant role in wage disparities and field segregation, with a high concentration of women in sectors characterized by low productivity.

Labor market participation of women between 15 to 24 years has declined as a result of higher enrollment in education during this period of their lives.⁴² This is good news as educational gaps between women and men have been overall decreasing, reaching closer to equal levels of participation in primary and secondary education in accordance with the third Millennium Development Goal.⁴³

Women's increased levels of education are not translating into higher numbers of educated women entering the labor force compared to educated men. The gap between male and female participation persists. Consider for a moment that in most countries (44 of 53 with comparable data), a higher proportion of the female labor force had attained tertiary education, while a larger share of men than women in the labor force were educated at the primary level or below. In other words, economically active working women are more likely to hold a tertiary degree than their male counterparts. Furthermore, there is a greater tendency for the educated woman, at both the secondary and tertiary levels, to face unemployment than a man with the same education level.⁴⁴ By extension, this also means barriers are higher for uneducated women, an already vulnerable segment of society.

Higher education levels attained by women do not seem to be directly translating into increased formal employment levels for women compared to men with comparable levels of education.

Source: ILO (2010)

5. Women entrepreneurs and small business owners face different constraints and opportunities

If the formal labor market environment does not work for them, women may seek other economic opportunities that tend to be less productive and sometimes informal. Informality is a reality, one without a regular wage or social protection. Women may choose to become small business owners or entrepreneurs, a path that comes with its own set of challenges and opportunities. This matters for job creation, because women business owners means higher female participation at all levels.

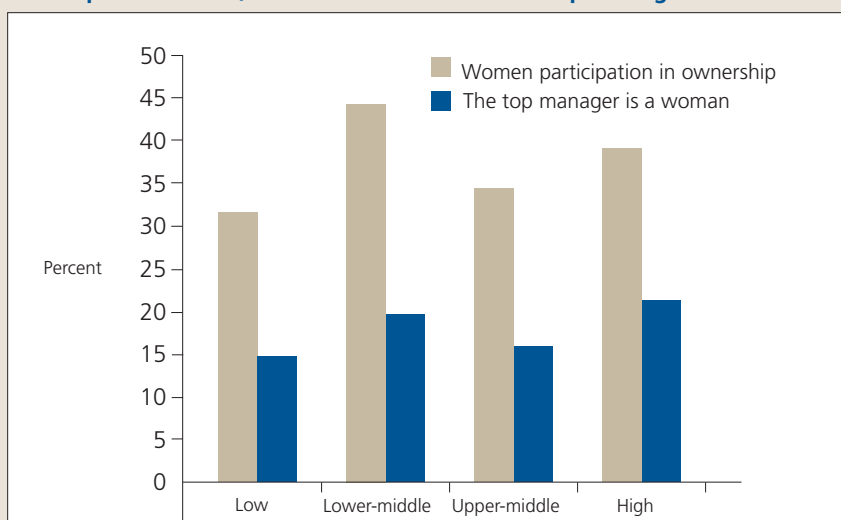
What difference does it make if a woman owns a firm? A study of MENA countries shows female-owned firms employ a higher share of women as compared to male-owned firms.⁴⁵ Women own a lower proportion of firms globally—especially in less developed economies (Figure 9.4). Firms run by women are also usually smaller than those operated by men in terms of number of employees, asset value, and annual turnover, besides being less profitable and productive,⁴⁶ probably due to other constraints such as difficulties obtaining financing. A study that looked at 34 countries in developed and developing economies in Europe and Asia found that female-owned firms had fewer employees overall than male-owned firms (six versus nine employees), were about 1.5 years younger, and mainly operated in the services sector.⁴⁷

The growth and success of women-owned businesses constitute one of the most profound changes in the business world today. There is no doubt that women are an emerging market force. But many businesswomen are not able to access commercial credit, an essential driver of business success. Lack of access to finance and financial services is repeatedly identified as the major constraint for women entrepreneurs.

A new World Bank Group–housed project funded by the Bill & Melinda Gates Foundation is now measuring how people in 148 countries—including the poor, women, and rural residents—save, borrow, make payments, and manage risk. This is the first time cross-country comparable data have been available for so many countries.

It confirms that women have a lower formal account penetration in every region, with the lowest rates reported in the Middle East and North Af-

Figure 9.4: Women participation in ownership is somewhat lower in less developed countries, and there are few female top managers



Source: Enterprise Surveys.

rica and Sub-Saharan Africa, and the widest gaps in lower middle income economies as well as in South Asia and the Middle East and North Africa. Moreover, unbanked women in developing countries are far more likely than men to report not having an account because “someone else in the family already has one.”

It is important to recognize the large variety of women’s entrepreneurial activities between countries: in Sri Lanka the entrepreneur wage gap is 50 cents to every \$1 of male earnings, and in Bangladesh women entrepreneurs make 12 cents per \$1 men earn.⁴⁸ When measuring the female entrepreneurship gap it is clear there is room for improvement in both developing and advanced economy contexts. In the United States, women account for 35 percent of entrepreneurial activity. Only 20 percent of women-owned firms had over US \$100,000 annual revenue, compared to 33 percent of men-owned firms – a significant difference.⁴⁹ The finding of important differences between female-owned and male-owned firms and the lower debt-to-equity ratios⁵⁰ of women-owned firms raises the question about whether women entrepreneurs are more financially constrained than their male counterparts.

5.1 Access to Finance: A constraint for women entrepreneurs

Do banks behave differently when lending (e.g., rejection rates, collateral requirements, loan rates) depending on the gender of the entrepreneur, provided that firm recipients have similar characteristics? In developing countries especially, it is difficult to conduct a thorough analysis of whether a female entrepreneur faces discrimination when applying or obtaining a loan, given the lack of information on variables to control for in the study.

But a study using 2005 data from 34 countries of Western Europe, Eastern Europe and Central Asia, and East Asia and the Pacific confirmed the hypothesis that women owned or managed firms are more constrained than men’s firms.⁵¹ There were different results depending on the development level of countries. As expected, the probability of women obtaining loans was higher in more developed countries, and women had to give less collateral on average.

The differences in financing between male and female entrepreneurs might come from a demand side component. In other words, female entrepreneurs might demand less financing than men as a result of less personal wealth to use as collateral, more risk aversion than men to apply for loans, or self-doubt given the low probability of obtaining loans, based on past experience.⁵² Nevertheless, gender financing discrimination from the supply side might not be only a matter of perception.

Firms that were owned or managed by women were 5 percent less likely to receive a loan. Female-owned firms had on average 0.5 percentage points higher interest rates than male-owned firms.

Source: Muravyev, Talavera, and Schäfer (2009)

6. What are the entry points for private sector intervention?

Women play a central role in business. With the private sector holding the key to 90 percent of jobs, ignoring half the working age population in these efforts would be detrimental to sustainable employment creation. Successful solutions that aim to equalize labor market opportunities for men and women are those that ameliorate constraints faced by women workers. Improving the investment climate through regulatory reform, for example, can bolster enterprise creation efforts while generating employment opportunities for all. The private sector can play a major role in promoting women as valuable leaders, productive employees, and dynamic entrepreneurs.

6.1 Promoting women as leaders

There have been numerous studies on the business case for promoting women on boards. Many point to the inclusion of female directors as having a positive link to a company’s profits and risk management. Other studies are less conclusive.

IFC found that diverse ethical and professional boards are a strong indicator of a well-run company. These companies help attract and retain investors, create much-needed sustainable jobs, provide steady sources of income for local citizens, and contribute to tax revenues to help address critical national development needs.

There is agreement that it matters to have the best talent in an age of talent scarcity, and it matters to capitalize on the particular benefits that women in leadership positions bring to an organization.

The private and public sector have roles to play in advancing women’s board representation. Among the various tools and mechanisms are: government quotas, targets, disclosure requirements, sponsorship/mentorship programs, research on the business case, stock-exchange initiatives, and initiatives that were led by men. To date, seven national governments have

mandated targets for board representation, and eight have set non-mandatory targets. In some countries, even individual municipalities and provinces have taken on initiatives toward mandated targets (such as Berlin, Nuremberg, and Quebec).

IFC promotes diversity on boards and, through its programs on corporate governance, supports training for senior women executives. As of October 2012, 19 percent of IFC nominee board directors are women. IFC aims to increase this share to about 30 percent by 2015.

6.2 Promoting women as employees

The private sector plays a pivotal role in fostering growth and creating about 90 percent of the jobs in developing countries. Moreover, many sectors that are critical for economic growth in some of the world's poorest countries rely heavily on women employees. As employees, women are a formidable economic force across the world, making up 40 percent of the world's workforce—yet smart employment practices that enhance productivity while creating more appropriate working conditions are often overlooked. Promoting adequate employment conditions for women can be a win-win situation for employers and employees alike; bringing benefits to business, women, men, and communities. Anecdotally, a variety of approaches that can result in internal and/or external business benefits have already been adopted by some companies. These could be implemented more broadly to facilitate the advancement of women in the workplace, especially in developing countries.

Broadly, two main approaches have been identified to increase participation levels of women employees: (i) create opportunities in sectors or industries that are traditionally women-friendly; (ii) increase space for more women workers in male-dominated sectors.

6.2.1 Traditional sectors

Expanding employment opportunities for women in traditional sectors means building upon existing processes and structures that have been successful in sectors such as agriculture and apparel. Providing adequate employment opportunities for women employees in traditional sectors can translate into improved working conditions and higher productivity.

Agriculture

In Bangladesh, where more than 90 percent of the workforce is unskilled, 400 local women farmers were trained and created the first Women's Seed Federation. By selling seeds to local buyers, each trained farmer earned \$500 more income annually. In Rwanda, the Clinton Foundation is currently working on stimulating domestic demand for soy. The Foundation has funded the construction of soy-processing plant in Rwanda with the aim of contracting with local farmers to grow soybeans. As a result, the project is expected to provide 30,000 farmers in eastern Rwanda—55 percent are women—with jobs.⁵³

Mriya Agro Holding in Ukraine began leasing plots from local smallholders and converting them into large-scale commercial farms. In 1992 Mriya began with just one square kilometer of land, and by 2011 it had nearly \$300 million in annual revenue, selling produce in over 20 countries. Since 2009, Mriya has increased its female workforce by more than double—from 160 workers to 364. Many of these women workers are professional agronomists, lab specialists, and division heads; 24 percent of women are in top-management positions. Some of Mriya's unique women-targeted initiatives include separate changing rooms for women, additional paid vacation days for single mothers, and an annual Women's Day celebration with the aim of creating an inclusive work environment.

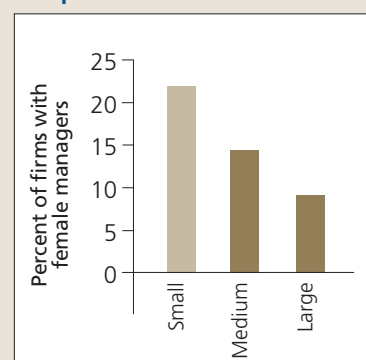
Apparel

The textile or apparel sectors can be a lifeline for women in many developing countries. The global brand Levi Strauss (a partner of the ILO-IFC Better Work program; for more information please see Chapter 10 on Quality of Jobs), maintains that workers who are loyal, healthy, and well educated are invaluable assets to a company. Levi Strauss experiences show that an investment in the well-being of workers and their communities translates into a healthy and sustainable workplace.⁵⁴ At

A Credit Suisse study found that companies that have at least one woman on the board were found to outperform others in the industry by 26% with shares climbing faster post 2008 financial crisis.

Source: Leong (2012)

Figure 9.5: Women tend to be top managers in smaller companies



Source: Enterprise Surveys

Nalt Enterprises, an export garment factory in Vietnam, 85 percent of the workers are women. The company pays the annual school fees for workers' children and has a government-accredited health clinic that provides free medical care for workers and their families. As a result of the health and child care provisions, Nalt reports greater employee retention, reduced worker absenteeism, and overall better relations between employees and management.

6.2.2 Nontraditional sectors

The literature shows that women's participation in nontraditional sectors can increase productivity gains in addition to promoting other business benefits for companies. For example, by introducing a new shift that operated on family-friendly working hours, Anglo-American was able to increase its equipment and production rates by one hour per truck each day at Foxleigh in Australia.⁵⁵

Based on its experience increasing female participation in nontraditional industries, IFC finds that companies are able to find new talent, reduce risk levels, and improve overall community impact when local women are hired and integrated. For example, when the Brazilian construction firm Odebrecht was looking to hire altitude-acclimatized workers for a road project in Peru, the company didn't limit the potential talent pool, and included women into the recruitment process. Moreover, supporting women's employment can help employers with their branding and image as an "employer of choice." This is exactly the approach of Mriya, the Ukrainian agribusiness company. More than one-third of all women recruited by the Ukrainian company Mriya in 2010 and 2011 were under 28 years old, a clear message that the company applies its anti-discrimination policy and supports the hiring of women of child-bearing age. During the same one-year period, Mriya jumped 39 places from 74 to 35 on Ernst & Young's annual survey of university graduates ranking Ukraine's best employers.⁵⁶ It is important to note that these nontraditional industries, such as chemicals, construction, and extractives, provide higher incomes for women at the micro level and contribute significantly to strong economic growth at the macro level.

Lessons learned from practical experience

In Newmont Gold Ghana Limited in the Ahafo region, the share of women employees during the construction phase was 18 percent. The company wanted to increase the share of female truck operators from 13 to 35 percent.

- Since 2007, Lonmin in South Africa increased female employment by 42 percent, resulting in increased development impact.
- In Chile a program was supported to hire female equipment operators in positions that were only occupied by men and the eleven available positions were filled.
- IFC's Women in Business program has provided new loans to 2,200 women-owned SMEs and trained 3,000 women entrepreneurs.

Source: IFC Project Portfolio; IFC (2011).

Chemicals and construction

IFC invested in a Greenfield chemical plant in India in 2008, which was part of a group with more than 2,000 male employees and no female employees. The project intended to make the new factory a female-employee-friendly plant for hiring women, even if additional expenses were required (female restrooms, locker and shower facilities, and flexible work schedules). Three years later in 2011, out of the 630 employees of the new company, 45 were women. Managers have expressed their satisfaction with women's performance. The demonstrative effects of this project have been great, as other IFC chemical clients in India have started to adopt similar employment practices. On the other side of the world, anecdotal evidence from the Brazilian construction company Odebrecht, reveals that business performance was enhanced by increasing female employment at the company. At Odebrecht's Santo Antonio hydroelectric power plant construction site in Rondonia state, Brazil, a female-led team with a majority of women workers performed electro-mechanical assembly tasks 35 percent more quickly than teams with a majority of male workers.⁵⁷

Mining

Increasing opportunities for women workers in male-dominated industries such as mining has involved making the case to client companies to employ women. Evidence from South Africa points to the successful integration of women in the mining industry after legislative barriers were removed.⁵⁸ But the benefits are not just seen at the firm level, as communities and firms benefit from the implementation of inclusive strategies that reduce gender segregation in communities. Business practices can have lateral positive effects in this way, and are seen to reduce the incidence of diverse social harms (e.g., prostitution, income inequality, diseases, etc).

6.3 Help women access finance

Globally, women-owned businesses are well represented in the entrepreneurship space; yet it is estimated that they only access between 2 and 10 percent of commercial bank finance. This holds true in emerging markets, where women-owned firms represent 31-38 percent of all small and medium enterprises (SMEs), but have unmet financial needs close to \$300 billion every year. Serving this market not only makes business sense; it is also known to have positive development impacts for society as a whole by expanding economic growth and job creation.

This under-tapped market presents an enormous opportunity for financial institutions and other business providers that support women-owned businesses. Research indicates that women tend to be loyal customers and cautious investors, in addition to having better loan payback rates. As a result, IFC set itself the goal of ensuring that in the coming years, 25 percent of IFC loans provided to SMEs through financial intermediaries go to women-owned businesses.

IFC's Banking on Women program focuses on country contexts with large numbers of women entrepreneurs and strong enabling ecosystems for SMEs. IFC works in the space between financial institutions and women entrepreneurs, and uses its investment capital to help institutions profitably expand their portfolios while helping entrepreneurs strengthen their business with new forms of financing. Community banks, cooperatives, chambers of commerce, and regulators are used as nontraditional models for increasing the reach to women entrepreneurs in need of finance.

A concrete example of this work in action is IFC's \$30 million investment in Garanti-Romania, of which half is earmarked for women-owned businesses. This investment allows the financing of at least 300 women-owned businesses by year-end 2015, and Garanti-Romania's SME portfolio will reach up to \$1.4 billion in outstanding loans.⁵⁹

Again, the interconnected nature of different constraints also applies to the solutions to ameliorate or remove barriers for women's full and productive participation in the labor market. An improved investment climate means small and micro enterprises can enter the formal sector; this bolsters enterprise-creation efforts by budding women businesswomen, and also generates employment opportunities for all.

Microfinance Outreach

IFC is one of the leading multilateral investors in terms of outreach to microfinance institutions, working with 150 institutions in more than 60 countries.

As of December 2010, IFC's investee clients had an outstanding portfolio of nearly 8 million microloans, worth nearly \$12.6 billion.

Source: IFC Portfolio

7. Conclusion

Recommendations for policymakers and governments

- Ensure that legislation provides equally opportunities for women and men.
- Where legislation is gender-neutral, ensure that nondiscrimination is actually practiced, especially in times of recession and recovery when backsliding or lack of enforcement may occur.
- Scale up efforts to increase the participation of women in the labor force and to ensure that women and men receive the same gains from their respective economic activities.
- If there is low female participation in the labor force, reduce or remove the barriers to entry.
- If the problem is more about fairness or equality of employment, rather than equal opportunity to enter gainful employment, go beyond standard labor market interventions and try a more innovative policy approach, tailored to the unique constraints of working women.

Recommendations for academia

- Conduct more research on how gender diversity positively contributes to business performance.
- Develop more fully the business case for hiring women.
- Collect more data disaggregated by gender, which will be helpful for further research.

Recommendations for IFC and other development finance institutions

- There is great scope to act as a thought leader in this area, especially if the demonstration effects of your actions are large.
- Unique approaches to more fully incorporating women into the labor market have the highest likelihood of success because they can be tailored to fill the spaces where opportunities exist. For example, in Tunisia, the Inter-Arab microfinance institution is supporting economic recovery in the country after its political transition, by reaching out to micro, small, and medium enterprises.
- Continue to work on encouraging financial institutions around the world to provide finance to women-run SMEs, and help connect these SMEs to sources of finance and capital.
- Connect women workers in some of the poorest countries to global markets and the opportunities they present.
- Continue to create space for women to enter nontraditional industries and sectors, and into leadership positions.

Recommendations for the private sector

- Help facilitate the transition of women from the public sector, where they are concentrated in large numbers, into formal private sector activities.
- Strive to include women in the formal labor force, which has positive effects in the form of increased productivity, more flexibility, access to new markets, and in some cases expansion of the customer base.
- Increase the number of opportunities for women to work in traditionally women-friendly sectors or fields, and incorporate them in male-dominated sectors where their value-added can be fully maximized.

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CHAPTER 10

QUALITY OF JOBS

"If you were to ask me, from all the world polling Gallup has done for more than 75 years, what would fix the world—what would suddenly create worldwide peace, global well-being, and the next extraordinary advancements in human development, I would say the immediate appearance of 1.8 billion jobs—formal jobs... This raises an important distinction—not only do we need to create more jobs, we need to increase the number of good jobs."

—Jim Clifton, Chairman and CEO of Gallup

It is not just the number of jobs created that counts; quality matters. The quality of jobs matters not only for the worker who receives fair wages on time, or the worker who has the correct protective mask—quality jobs are important for all workers and their families, everywhere. This is because a job is a critical pathway out of poverty for most people. Jobs that are good for development contribute to fundamental changes in society by raising living standards and improving social cohesion and productivity. Such societies are conducive to a healthy business environment, which in turn creates good jobs. Furthermore, quality jobs are most effective at maximizing companies' productivity and efficiency. The emerging business case for compliance with labor standards finds increased profits, sustainable growth, and new market opportunities for compliant firms. Furthermore, compliance improves worker productivity, which results in increased loyalty and low turnover rates, collaborative team dynamics, and reduced workplace accidents and injuries.

Companies have noticeably shifted their focus in the past decade from the desirability of various labor regulations to their effectiveness. Corporate social responsibility initiatives picked up speed in the late 1990s as a response to new challenges presented by economic globalization. This shift has been in part a response to demand-side pressures, with knowledgeable and socially conscious clients and customers increasingly considering the environmental and social practices of companies when conducting business or buying new products.

The most effective way to improve the quality of jobs is a combination of monitoring and tackling the root causes of poor working conditions. Policy-makers and the private sector need to act now to ensure the availability of good jobs in the global labor market at a time when they are needed most.

Did you know?
More than half the people at work in developing countries are not wage earners. This highlights the role of the private sector to create more formal jobs that tend to offer better wages and working conditions.

1. What is a 'good job'?

A mid-level business manager in Tokyo. A drycleaner in Hamburg. A lady who sells lunches outside factories in Phnom Penh. What does a "good job" mean to these workers?

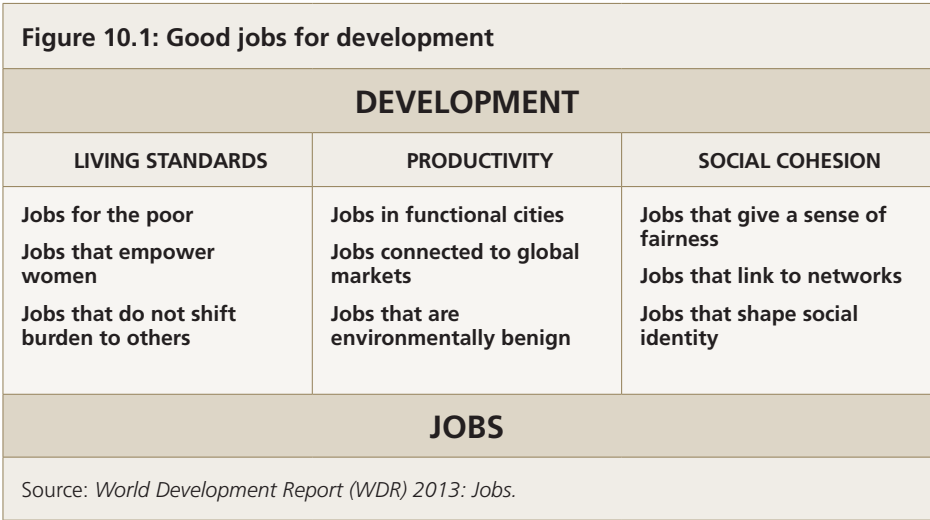
Despite many longitudinal studies and large-scale national surveys,¹ there has been relatively little exploration of cross-sectional variation in job satisfaction within large socio-economic groups.² In short, the definition of a "good job" depends on whom you ask. The question is part of a large and growing debate about globalization and working conditions, where there is the realization that not all jobs are good jobs.³ Formal private sector jobs tend to offer better wages and working conditions than those found in the informal sector.

When it comes to defining and creating good jobs, many of the metrics commonly used relate to wage employment. However, good jobs can have different meanings, depending on the context. Workers have identified various dimensions of job quality in addition to income, including positive working relations between supervisors and workers, the implementation of occupational, safety and health (OSH) policies, opportunities for career advancement, and flexibility regarding doctors and sick leave.⁴

Because jobs provide earnings, and often also access to benefits and insurance, they are often the source of broader life satisfaction. Development in large part consists of increasing the positive direct effects of jobs on individuals.⁵

Interestingly enough, simply having a job does not guarantee high levels of life satisfaction. A study in Vietnam finds workers with higher life satisfaction are more likely to perceive working conditions as good, are not concerned with verbal abuse, have treatment facilities at work for headaches and minor injuries at their workplace, and have received training in the last 6 months. Interestingly, there was no statistically significant finding related to wage levels.⁶ Factors related to job security are more important than income in some other studies that found levels of earnings variability, job instability, or health and safety concerns affect a person’s well-being.⁷

For our purposes, we will use the definition of a good job elaborated in the IFC Performance Standard 2 (PS2) on Labor and Working Conditions. IFC PS2 addresses labor and working conditions, and recognizes that the pursuit of economic growth through employment creation and income generation should be accompanied by protection of the fundamental rights of workers. This understanding is situated in the broader framework of systems-level transformations outlined in the *World Development Report (WDR) 2013: Jobs*—namely, that good jobs for development are those that do more to support three fundamental transformations in society: social cohesion, living standards, and productivity. (See Figure 10.1.)



The connection between good jobs for development and social cohesion is clear. One need only look at recent events—from the uprisings in the MENA region to the riots in London—to see that jobs are how people earn their living by making use of their potential and energy as human beings.⁸

With regard to living standards, it has been established in earlier chapters that a job is a pathway out of poverty. But we must also ask: how are the gains from growth distributed? And how can they contribute to even higher growth? There is also

a need to go beyond growth models to some extent, as jobs affect social outcomes through non-market interactions in households.⁹ Potential positive economic and social spillovers from the creation of quality jobs include increased household investments in schooling or health, opportunities for investment, skills development, sustainable livelihoods, and better resource allocation.

Having said this, the nature of the jobs with the highest development impact does vary across countries, depending on their phase of development, their endowments, and their institutional features.¹⁰ With regard to institutional features, it appears that the productivity-enhancing role of social protection depends on three key characteristics: sound system design, efficient administration, and good governance.¹¹

Many IFC interventions are targeted at the firm level, where all investments have to be compliant with IFC Performance Standard 2 on Labor and Working Conditions. It is through the creation of good jobs at the firm level that positive macro-level transformation can take place within the society and economy. Quality jobs at the firm level help contribute to the creation of global public goods such as respect for rights, increased levels of trust, human capital, gender equality, poverty reduction, and peace. Good societies are conducive to creating a healthy business environment, which in turn creates a virtuous cycle of good job creation.

1.1 IFC's Performance Standard 2 on Labor and Working Conditions

The requirements of IFC Performance Standard 2 (PS-2, see Box 10.1) have in part been guided by a number of international conventions and instruments, including the International Labour Organization (ILO) and the United Nations (UN). The cross-cutting themes of PS-2 are reflected in the ILO's Decent Work Agenda (see Box 10.2), which takes into account both the quantity and the quality of jobs created.

IFC's Performance Standards are practical. It is for this reason that they have become globally recognized as a benchmark for environmental and social risk management in the private sector.

Box 10.1: IFC Performance Standard 2 (PS-2)

PS-2 recognizes that the pursuit of economic growth through employment creation and income generation should be balanced with protection of basic rights for workers.

Objectives:

- To promote the fair treatment, non-discrimination, and equal opportunity for workers
- To establish, maintain, and improve the worker-management relationship
- To promote compliance with national employment and labor laws
- To protect workers, including vulnerable categories of workers such as children, migrant workers engaged by third parties, and workers in the client's supply chain
- To promote safe and healthy working conditions, and the health of workers
- To avoid the use of forced labor

Source: IFC (2012a)

The wide applicability of the Performance Standards and grounded in the understanding that management systems are a key entry point and crucial driver for continual improvement and ongoing labor standards performance in the supply chain. These management systems also serve as the foundation upon which corporate social responsibility is integrated into a company's core business activities.¹²

There is also an awareness built into the Performance Standards of the multilayered structure of employment configurations. To this end, the type of employment relationship between client and worker defines the scope of application of PS2. This includes the following

three types of workers: direct workers (those who are directly engaged by the client), contracted workers (those who are engaged through third parties to perform work related to core business processes of the project for a substantial duration), and supply chain workers (those who are engaged by the client's primary suppliers). This way, everyone is held accountable at various stages of the process.

Most countries in which IFC invests have already ratified ILO conventions, which means their business activities should already be in compliance with local and international law, though this might not always be the case in practice. The Performance Standards express a strategic commitment to sustainable development and are an integral approach to IFC's risk management. IFC Performance Standards apply during the environmental and social risks and impacts identification process of an investment deal, as well as subsequently during supervision.¹³

Box 10.2: Four pillars of ILO's Decent Work Agenda, with gender equality as cross-cutting theme

1. Job Creation: Generating opportunities for investment, entrepreneurship, skills development, job creation, and sustainable livelihoods
2. Rights at Work: Recognizing and respecting the rights of all workers, particularly disadvantaged or poor workers who need representation and laws that work for their interests.
3. Social Protection: Promoting both inclusion and productivity by ensuring that women and men enjoy working conditions that are safe, allow adequate free time and rest, take into account family and social values, provide for adequate compensation in case of lost or reduced income, and permit access to adequate health care.
4. Social Dialogue: Involving strong and independent workers' and employers' organizations is central to increasing productivity, avoiding disputes at work, and building cohesive societies.

(ILO 2012)

An example of the application of PS2 with regard to contracted workers can be found in the story about IFC's client, Antea Cement in Albania.

1.2 Successful incorporation of PS2 requirements: The case study of Antea Cement

IFC provided 29.4 million in financing to Antea Cement in late 2008 to help the company build and operate a blended-cement plant with a capacity of 1.3 million tons in Albania. This project is a good example of interagency collaboration between IFC and the European Bank for Reconstruction and Development (EBRD), a successful foreign direct investment (FDI) in Albania by a Greek company that was contracting Chinese workers, and the successful inclusion of PS2 requirements in firm-level agreements and activities. Antea used IFC and EBRD financing to construct the plant, resulting in the creation of 300 jobs and an additional 500 indirect jobs.

CBMI Construction Company, a member of the Chinese Sinoma Group, had the contract to design, construct, and set up the plant. At the peak of the construction period, CBMI planned to hire approximately 800 Chinese workers and wanted to build worker accommodations for them on site. The risk assessment for labor was included in the Environmental & Social Impact Assessment process. In addition, the development and implementation of human resource policies and procedures were in line with the requirements of PS2. Antea included specific PS2 requirements as clauses into the actual contractual agreement with CBMI and other contractors that it employed. The monitoring program for contractors, including internal and external audits, took place as planned and Antea was able to meet, and be audited against, the widely known Social Accountability (SA8000) standard.¹⁴

Convincing the sponsor of the importance of managing labor and working conditions with their contractors was difficult at the beginning of the process. But after two years of implementation, the Titan Group and the Sinoma Group are presenting the Antea project as a case example of best practice. The benefits of such cooperation between companies included on-time and on-budget completion of the project, zero accidents, best practice on contractor managements, and improvement of labor and working conditions at Sinoma that will create opportunities for them in new European and North American markets.

2. The Equator Principles¹⁵

IFC's experience as the largest development finance institution working on the private sector was critical in developing PS2 and making it practical. It is not just an exercise of standards for standards' sake, but one of developing standards that are useful, practical, and help financial institutions and their clients manage risks. The evidence of this is that the Equator Principles (EPs), which are based on IFC Performance Standards, have been adopted by a large number of financial institutions.

A credit risk management framework for determining, assessing, and managing environmental and social risk in project finance transactions, the EPs are applied in cases where total project capital costs are greater than US\$10 million. Project Finance is often used to fund the development and construction of major infrastructure and industrial projects, where the EPs are intended to provide a minimum standard for due diligence to support responsible risk decision-making.

Currently, 77 adopting financial institutions (74 Equator Principles Financial Institutions [EPFIs] and 3 Associates) in 32 countries have officially adopted the EPs, covering over 70 percent of international project finance debt in emerging markets. In this way, the EPs are an example of IFC operating as a thought leader in this space. IFC actions can have potentially large demonstration effects, as the EPs have become the industry standard for environmental and social risk management and financial institutions, clients/project sponsors, and other financial institutions. Some industry bodies even refer to the EPs as good practice. Furthermore, multilateral development banks, including the EBRD, and export credit agencies through the OECD Common Approaches, are increasingly drawing on the EPs in their work.

When we talk about labor standards performance in a company or its supply chain, we are really talking about human rights and labor rights in the workplace.

- IFC Performance
Standard 2 Handbook

3. Why should the private sector care about creating good jobs?

At the heart of this discussion is a question about incentives. Conventional wisdom tells us that businesses sometimes consider compliance with labor standards costly. For example, firms are often leery of revamped human resource (HR) policies. However, changes in HR practices are viewed in the literature as another aspect of production technology¹⁶ similar to shop-floor production technologies and may improve firm productivity, performance, and survival.¹⁷ This is just one example of the growing business case for improvements in labor standards compliance.

There has been a noticeable shift in the past decade or so, a relatively short time in the policy world,¹⁸ from the relative desirability of various labor regulations to their efficacy. “Corporate Social Responsibility” (CSR) initiatives picked up speed in the late 1990s as a response to new challenges presented by economic globalization.¹⁹ Particular attention was paid to the monitoring of complex global supply chains, where there was a perceived “race to the bottom” by unscrupulous employers who were taking advantage of workers in faraway low-income countries.²⁰ As has been mentioned throughout the report, global supply chains and distribution networks tend to be where the most jobs are created. It is also in these supply chains that the largest poverty reduction impacts can be seen. It is for this reason that global supply chains demand good jobs.²¹

This shift has been, in part, a response to demand-side pressures from customers. Knowledgeable and socially conscious clients and customers increasingly consider the environmental and social (E&S) practices of companies when conducting business or buying new products. Evidence on consumer behavior from experiments conducted in a major retail store in New York City in 2005 found that sales increased for items labeled as being made under good labor standards, and demand for the labeled products actually increased in spite of price increases of 10-20 percent above pre-test (unlabeled) levels.²² Studies like these reveal a strong latent consumer demand for improved labor standards. So it matters to brands whether a supplier factory is providing protecting equipment to workers on their assembly line, it matters to customers whether a cotton shirt sold at a famous brand store was made by a child. These considerations have led businesses to consider their social license to operate. It also means targeting markets where consumers care.

This demand-side pull eventually translates into greater understanding by suppliers that there are benefits to providing good working conditions.²³ Emerging evidence from a variety of industries in different countries points to the productivity-enhancing improvements of labor standards compliance as it fosters collaborative team dynamics, increases worker loyalty, and reduces workplace accidents and injuries.²⁴ In addition, the ability to recruit and retain workers has been shown to have major payoffs for compliant firms. In a study of the garment industry in Laos, an analysis was conducted to understand why the sector remained stuck in a suboptimal equilibrium of low productivity. The study found that workers’ lack of understanding of their contractual obligations, difficulty transitioning from rural to urban areas, and excessive overtime working hours were the main culprits.²⁵ Furthermore, access to new markets and to different forms of financing was cited as an endogenous benefit to firms that are seeing the value of creating quality jobs.

What interventions work best? The answer is a combination of monitoring and tackling root causes of poor working conditions. A root cause intervention such as enabling suppliers to better schedule their work with an eye toward improving quality and efficiency has been seen to improve working conditions considerably.²⁶ A forthcoming study from Vietnam finds that firms that pay as promised and do not engage in verbal and physical abuse to elicit work effort earn higher profits than their peers that do not.²⁷ It seems these two factors together lead workers to be more productive, as they believe their work adds value, and trust they will get a piece of the pie.²⁸ Building the business case with examples like these involve normative considerations that are harder to quantify.

4. How the private sector can improve labor conditions in distribution networks and global supply chains

It is trickier to track labor conditions in the distribution networks or supply chains associated with formal sector companies. But two examples, one at the firm level and the other at the industry level, show the potential to positively affect change in distribution networks and supply chains as well as their respective industries.

Global supply chains demand good jobs.

“Without worker’s rights, profitability is at risk”

- Hannah Jones, VP, Nike Inc.

Productivity-enhancing improvements due to labor standards compliance include collaborative team dynamics, increased worker loyalty, lower turnover and reduced workplace accidents and injuries.

4.1 At the industry level: The ILO –IFC Better Work program and model

Better Work, a partnership program between the IFC and the ILO, combines IFC expertise in private sector development and firm competitiveness with the ILO's knowledge of labor standards and working conditions. The program was launched in February 2007 with the goal of improving compliance with labor standards and competitiveness in global apparel supply chains. Better Work involves both the development of global tools and the implementation of country-level services, with a focus on scalable and sustainable solutions that build cooperation between governments, employers' and workers' organizations, and international buyers.

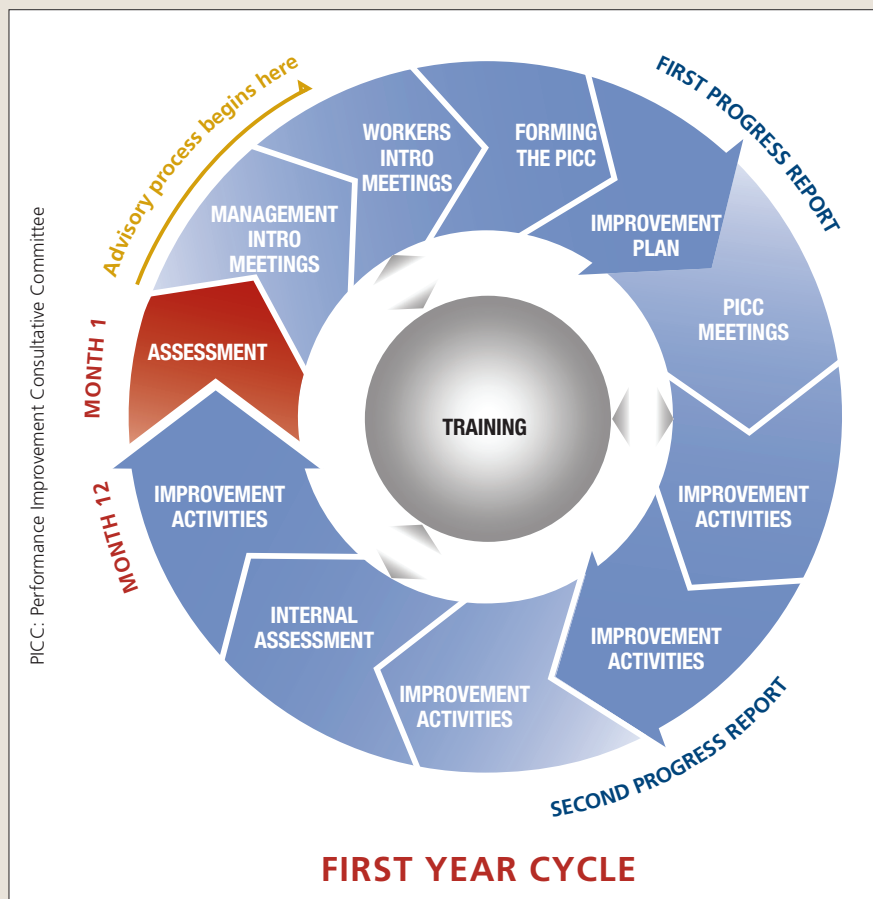
Better Work supports enterprises in implementing the ILO core international labor standards and national labor law. The underlying premise is that compliance with labor standards in global supply chains matters: improving the lives of workers can go hand in hand with success in industry. The Better Work strategy is a mix of practical workplace assessment and improvement activities with effective stakeholder engagement. Currently, the program operates in seven countries: Cambodia, Jordan, Haiti, Vietnam, Indonesia, Lesotho, and Nicaragua.

How does the program work? Better Work operates around three core services: assessment, advisory services, and training. Assessments establish a baseline of compliance with national labor law and ILO core labor standards. This information is then shared with factory management and their often brand-name customers. Better Work then provides advisory service to help factories make improvements through worker-management dialogue, in addition to other ongoing technical advice and inputs. The training services provide a deeper level of instruction in key areas needed by each factory, based on its compliance levels. (See Figure 10.2.)

The incentive structures are at the heart of Better Work's success story. On one hand, buyers that are global brands like Hanes, Levi Strauss, and Nike are motivated to work with the ILO and IFC on their supply chains as part of their CSR practices. On the other, factories are incentivized to comply with labor standards in order to keep their business relationship with buyers. The strategy is really to leverage buyers' interests in protecting their reputations to get factories to work on institutional change—long-term sustainable change. An added incentive is the reduction of costs by avoiding multiple labor audits, which can be expensive and time consuming for factories. Over time, Better Work has shifted from the role of an external observer to a vested partner. At the end of the day, improving worker-management relationships is the real sweet spot, and it is the main mechanism that Better Work utilizes.

The Better Work Impact Assessment Study conducted by Tufts University surveyed 80 factories—30 workers and 4 managers per factory. The research team found that employment in factories visited twice, 12 firms total, expanded by 165 percent between 2010 and 2011. Half the factories visited twice added production activities in washing, dying, printing, and appliqué, and added jackets and suits to their product lines. In addition, the factories saw a significant increase in the number of nearby competitors.

Figure 10.2: Better Work program factory level services



Source: Better Work (2012).

Surveyed factories reported innovations in production systems, supervisory skills and training, the pay package, grievance procedures, and worker committees. Furthermore, worker-management relations have improved. After one year of participating in Better Work Vietnam, factory managers changed their perceptions about workers—mainly through management dialogue. Unsure or negative initially, factory managers responding to the second round of the same survey unanimously regarded worker committees as somewhat effective or very effective in resolving problems within the factory.

Box 10.3: The business case for compliance: Better Factories Cambodia (BFC)

The Better Factories project in Cambodia (BFC) started in 2001 and was the predecessor of “Better Work.” At that time, a bilateral trade agreement between the US and Cambodia offered expanded market access to the US, subject to Cambodian apparel industry compliance with workers’ rights.

In 2005, two factors changed the set of incentives faced by Cambodian firms. First, the bilateral trade agreement was made obsolete by the end of the global quota regime. Second, BFC was no longer naming factories that were noncompliant. After these two events, compliance did not decline. In fact, it increased as employment, exports, and factories grew. Evidence from BFC shows that overall compliance is high and has increased consistently (>80 percent) in the Cambodian apparel industry. This is a notable example of the business case for compliance, as factories did not appear to find compliance overly costly or burdensome.

Source: Brown et al. (2011).

4.2 At the firm level: The Mindanao Banana Project in the Philippines²⁹

In June 2008, IFC Advisory Services in the Philippines launched the Mindanao Banana Project. In acknowledgement of the growing importance of the outgrowers in the supply chain and the challenges that they face, the Agribusiness Linkages Project focused on helping outgrowers comply with certification standards and acquire business management skills. The objective was to strengthen the position of outgrowers in the value chain and ensure the sustainability of the Cavendish banana sector in the Philippines.

Large banana exporters in the Philippines³⁰ source 50 percent of their bananas from outgrowers, thanks to the implementation of the Comprehensive Agrarian Reform Program (CARP), which mandated land acquisition and distribution to small farmers. As a result, corporate-managed farms are increasingly turned over to outgrowers under CARP.

However, for some export markets like Japan, the quality of the bananas did not meet premium market requirements. This was due to a variety of factors, including poorly managed financial and organizational structures, operational inefficiencies, and lack of information and compliance with social and environmental standards.

The IFC project intended to address the systemic problems of low productivity, poor business management, and poor compliance with environmental and social standards associated with outgrowers. In particular, the project was designed to help outgrowers achieve Rainforest Alliance (RA) certification and acquire management skills to enable them to supply RA-certified bananas to the Japanese premium market through Unifrutti Services Inc. (USI). The resulting impact of the project was improved outgrower income and increased revenue for the lead firm, USI. A win-win situation for all.

The project has resulted in an increased number of certified farms that are implementing high environmental and social standards. It has helped farmers to grow bananas in a sustainable and environmentally friendly way, and outgrowers to manage their business activities more effectively. The project also increased gender-sensitivity in the banana outgrowers community.

Finally, the project provided job opportunities³¹ and built the capacities of local RA auditors, who are now preparing to work with RA international auditors in evaluating farms and ensuring they meet the RA standards.

That’s Bananas!

Cavendish bananas contribute significantly to the Philippine economy. Philippine exports of Cavendish bananas in 2007 were recorded at 148 million boxes valued at USD 410 million. These exports went primarily to Asia and the Middle East, with Japan having around 39 percent of export volume. Other major markets include Iran, Korea, Taiwan, the United Arab Emirates and China.

-Pilipino Banana Growers and Exporters Association

A good understanding of intended beneficiaries is key. In this project, it became clear that the reason cooperatives have poorer management and financial structures (some of the outgrower cooperatives were operating at a loss in some years) was in part because of the cooperatives leaders' lack of political will to implement sound rules and regulations, for fear of not getting reelected. In some cases, the leaders' unwillingness to implement the required changes is also self-serving, since they are also members, and do not want to be restricted by the rules that they have imposed. One advantage of working with a cooperative is that the benefits are highly dispersed, with each member benefiting from increased savings or improved productivity.

Other advantages from improved labor standards can be seen in documented examples from China to Turkey (see Table 10.1) which include decreased worker turnover and saved working time from a reduction in accidents.

| Table 10.1: Benefits from Improved Labor Standards; Documented Examples | |
|--|--|
| China <i>Chai Da/Ying Xie</i> | Annual worker turnover decreased from 78 to 32 percent in three years |
| Cambodia <i>A factory in ILO Better Factories program</i> | Product Rejection rate reduced by 44 percent overall |
| Turkey <i>Yesim</i> | 37 percent decrease in lost time from accidents and sickness |
| Turkey <i>Topkapi</i> | Received 2.5 percent larger discount on insurance premiums for casualty and goods in transit |
| India <i>Esstee</i> | Worker turnover reduced from 75 percent to 35 percent |
| Source: IFC and Social Accountability International (SAI), 2010 | |

5. Conclusion

IFC's Performance Standard 2, which in part has been guided by core labor standards of ILO and key United Nations conventions, defines what constitutes a "good job": A job that guarantees workers' fundamental rights while paying them a decent and fair wage. The Equator Principles illustrate the wide applicability of Performance Standard 2 on global project finance in developing countries. The case study of Antea Cement in Albania shows how the standard can be incorporated into contractual agreements with positive business results and increased access to new markets. The Equator Principles also point to the importance of better management practices as a key entry point and driver for businesses to maintain and even improve their compliance with labor standards, especially in their supply chain. Evidence from Better Work and the Mindanao banana project corroborate this finding at the industry and company level, respectively.

These case studies provide evidence that interagency cooperation is very valuable in projects that aim to improve working conditions around the world. This can be seen in both the Mindanao Banana project and the ILO-IFC partnership program, Better Work. Such interagency knowledge sharing and collaboration seem to have major payoffs for key beneficiaries who are able to take advantage of each institution's respective strengths.

The emerging business case for quality jobs points to the endogenous benefits for companies: higher productivity, increased profits, and access to new clients and consumers. There also is evidence that compliant firms are more likely to survive financial crises. In our current political and economic environment, job creation is a key focus of academic institutions, international development agencies and governments alike. Not just any jobs, but jobs that are good for development and that contribute to higher global living standards, social cohesion, and productivity.

Recommendations for policymakers and governments

- Sign core ILO and relevant UN conventions if they have not been signed.
- Encourage private businesses to adhere to national and international labor laws.
- Start at home, and use the public sector as a model of good working conditions.
- Recognize that quality jobs translate into the creation of public goods such as respect for rights, increased levels of trust, human capital, gender equality, poverty reduction, and peace.

Recommendations for the private sector

- Improve occupational, safety, and health conditions in your workplace. While this may entail some upfront costs, these improvements enhance productivity and efficiency in the long run.
- Comply with labor laws, since compliance has been shown to increase both worker productivity and loyalty, and therefore also reduce worker turnover and costly retraining of staff. In addition, compliance opens up access to new markets.
- There is also emerging evidence that compliance helps protect a firm from external shocks such as financial crises or the termination of international trade agreements.

Recommendations for academia

- Conduct more research on the business case for compliance with labor standards.

Recommendations for IFC and other development institutions

- Ensure adequate working conditions for direct workers and—where applicable—for contractors and workers in the supply chain, for example by using the Equator Principles as a reference point.
- Talk to countries or clients about the value of good working conditions for the individual, society, and economy.
- Form partnerships with other development institutions whose goal is to improve working conditions.

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Endnotes

- ¹ Several large-scale surveys over time include the General Social Survey in the United States and the British Household Panel Survey which have both inquired about job satisfaction every year since 1972 and 1991, respectively.
- ² Ritter and Anker (2002).
- ³ Elliot and Freeman (2003); Polaski (2006); Greenaway, Gullstrand, and Kneller (2008); Berik et al. (2010).
- ⁴ Pike and Godfrey (2012).
- ⁵ WDR (2013).
- ⁶ Brown et al. (forthcoming).
- ⁷ ISSP (2005); Dooley, Prause, and Ham-Rowbottom (2000); Winefield (2002) as cited in the WDR 2013.
- ⁸ Levi (2011).
- ⁹ IFC (2012).
- ¹⁰ WDR (2013).
- ¹¹ Alderman and Yemstov (2012).
- ¹² IFC and SAI (2012).
- ¹³ IFC (2012a.).
- ¹⁴ Since 1997, the SA8000 has been the world's preeminent labor standard and certification system. It is based on international conventions of the ILO and UN and uses a management systems approach to judge compliance.
- ¹⁵ Equator Principles Association (2011).

- ¹⁶ Ichniowski et al. (2007).
- ¹⁷ Brown et al. (2011).
- ¹⁸ Polaski (2011).
- ¹⁹ Seidman (2007).
- ²⁰ Sabel et al. (2001); Elliot and Freeman (2003); Weil (2005); Barrientos and Smith (2007); Locke et al. (2009).
- ²¹ Oka (2012).
- ²² Hiscox and Smyth (2005).
- ²³ Oka (2012).
- ²⁴ Ergon Associates (2012); Robertson et al. (2011); Seo (2011); Robertson et al. (2009).
- ²⁵ Record et al. (2012).
- ²⁶ Locke et al. (2007).
- ²⁷ Brown et al. (forthcoming).
- ²⁸ Based on interviews with Amy Luinstra, Better Work Senior Operations Officer on findings of upcoming study of Better Work Vietnam.
- ²⁹ Information for this case study draws primarily from interviews with project team leaders, IFC internal project documents, and IFC 2012b.
- ³⁰ Large banana exporters including Dole Philippines, Del Monte, Chiquita-Unifrutti, Sumitomo, Lapanday Foods Corporation, and Nadar & Ebrahim S/O Hassan (NEH) Philippines.
- ³¹ Final job creation numbers are still being finalized, as the project closed in FY12.



CHAPTER 11

CONCLUSIONS AND IMPLICATIONS

1. Jobs, an urgent challenge

The world is facing an enormous jobs challenge, a challenge that is twofold. First, 600 million jobs must be created by 2020. Second, in a context where informality and working poverty are still widespread, future jobs must be quality jobs. The importance and urgency of this challenge cannot be overstated, as jobs are an integral part of the development of countries. Not only do they contribute to boosting living standards, productivity, and social cohesion, but they also are the main path out of poverty.

The private sector, which provides about nine out of 10 jobs in developing countries, holds the answer to this challenge. Therefore, it is crucial to understand the constraints that prevent companies from growing and generating jobs. The public sector must help build an environment where these obstacles are removed or minimized.

This report addressed this crucial issue by identifying and exploring the most binding constraints to growth and job creation. First, it presented employment trends in the developing world and discussed methods to estimate the impact of private sector development on jobs. Next, the study considered in detail four constraints: a poor investment climate, inadequate infrastructure, lack of access to finance, and insufficient skills and training. In particular, the report explored the effects of these constraints and of policies to remove them, on job creation, while identifying the circumstances under which these policies are likely to work and providing some estimates of the employment-generation effects. The study also discussed three cross-cutting themes, namely gender, quality of jobs, and youth employment. Other factors that affect job creation, such as the macroeconomic environment or social safety nets, were not analyzed because they are typically beyond the scope of what the private sector or development finance institutions oriented toward the private sector can address.

This report complements, and has been prepared in collaboration with, the World Bank Group's World Development Report 2013 on jobs.

2. Opportunities for job creation

This report provided evidence and advice about the job-creation effects of removing the main obstacles to companies' operations. It also identified the specific types of interventions that are most successful and discussed tools to measure these effects.

Establishing a friendly investment climate is the starting point for promoting job creation by the private sector. Cumbersome and costly regulations prevent firms from operating and growing in the formal sector. The report found that investment climate reforms were more effective when multiple barriers were tackled simultaneously. However, multi-reform programs require sufficient information and the ability of regulatory institutions to make sound policy decisions and coordinate among themselves. Certain stand-alone reforms—such as those affecting business entry, taxation, competition, and secured transactions—have demonstrated a positive impact on growth and jobs. For example, a study explored the link between tax rates and foreign direct investment, illustrating how investment-promotion efforts could proactively influence investors' decisions. Many countries also use targeted investment climate tools, such as creating a special economic zone or improving regulations in a specific industry.

The report explored the issue of informality, because informal jobs are often associated with poverty the last resort for vulnerable groups, such as the poor, the low-skilled, and women. An unfriendly investment climate, in the form of cumbersome regulations and weak enforcement, generally results in a large informal sector. Easing regulatory costs and constraints helps persuade businesses to formalize, but some informal entrepreneurs may prefer moving to wage-earning jobs if given the chance. In addition, one study suggests that modest increases in the perceived benefits of operating formally could persuade informal firms to formalize. Another lesson was that formalization and job creation would very likely require reform of business-entry regulations combined with other efforts, such as tax reform.

For most infrastructure projects such as roads, policymakers often consider only the jobs associated with construction, but the report found that the improved services that result from the new infrastructure can generate far larger numbers of jobs. Access to good reliable infrastructure is a big problem for companies, especially reliable electricity supply in low-income economies and transportation. Therefore, eliminating infrastructure bottlenecks can generate substantial economic activity and jobs. Sufficient infrastructure also helps reduce poverty by extending economic opportunities to broader populations and by facilitating access to basic services. For example, rehabilitated roads can provide nonfarm job opportunities in rural areas. Infrastructure also plays a key role in the process of urbanization and in building functional cities. The study noted that the private sector is playing an increasing role in providing infrastructure, especially in telecommunications, where private businesses have contributed to a rapid expansion of mobile phone technologies in recent decades. Because improved services can have the biggest employment effects, policies based on the short-term job creation of infrastructure projects can be misguided. Labor-intensive technologies and construction methods that maximize short-term job creation might not be optimal to promote long-term growth and employment. However, it is difficult to estimate job creation via growth effects, because this requires long time horizons and the effects can be geographically dispersed.

There are several ways to improve private companies' access to finance and financial services, and the best option may depend on the degree of development of the local financial sector. As expected, studies confirm that access to finance is associated with employment growth, although it is difficult to quantify this link. Access to finance supports job creation by facilitating entrepreneurship and by giving businesses the means to operate and expand their activities, and it also generates jobs through indirect effects among firms' suppliers and distributors. Financing helps reduce poverty, not only by creating jobs but also by reaching unserved and underserved individuals and companies. In addition, microfinance helps individuals become self-employed.

Providing access to finance for small and medium enterprises would generate the largest employment effects, at least in the short term, since these companies are the most credit-constrained and are the main formal employers in developing countries. IFC projects in Ghana and Jordan provided evidence of this. IFC investments via financial institutions had larger employment effects than when we invested directly in businesses, because local financial institutions had a more varied portfolio of clients, including small labor-intensive firms. However, direct investments in large companies can have stronger effects on productivity.

Governmental support is a necessary component of several potential programs that can improve access to finance and lead to job creation. These programs include reforming financial regulations to strengthen the sector, directing loans to profitable firms, building a strong financial infrastructure to diminish risk management costs for financial institutions, promoting bank competition, and increasing funding and providing advice to un-served and underserved firms. Policies must be adapted to the specific needs of each country. In countries where the private sector lacks sufficient credit, simply providing more credit can have the biggest impact, as long as the financial sector is strong and properly supervised. In countries with intermediate credit levels, efforts should be geared toward high-growth SMEs and un-served groups. Where credit is already available, constructing a balanced and inclusive financial sector and targeting un-served or under-served groups such as SMEs or women entrepreneurs should be the objective, along with appropriate supervision and regulation to avoid the risk of overheating the economy or creating credit bubbles.

There are not enough workers for high-skilled jobs, not enough jobs for low-skilled workers, and not enough skilled business owners and managers. Technology and productivity trends are producing a shortage of high-skilled workers for larger companies in higher-income countries. In addition, with about 45 million job seekers entering the labor force every year,¹ their chances of finding jobs are not favorable unless they acquire the right skills, which increases the surplus of low-skilled workers both in developed and developing economies. Meanwhile, many business owners and managers lack the skills required to operate and grow their enterprises, which also limits the potential for their firms to create more jobs.

3. Jobs and beyond: transformational jobs

The report showed that some reforms or programs and the jobs created as a result can have a transformational impact on an economy. Successful programs and projects can reduce poverty, increase competition, strengthen networks of local suppliers and distributors, improve working conditions, decrease the difference between the number of economically active women and men, and serve as a model for others to follow.

The clearest example of transformation, common to a series of micro-case studies in agribusiness and manufacturing, is the strengthening of local suppliers and distributors and the significant effect this can have on reducing poverty. The cases show that IFC programs help generate indirect jobs, by building the local supply and distribution chains. Furthermore, most of these indirect jobs are low-skilled and in rural areas, thus have the potential to reduce poverty.

There are other examples of significant impact. By investing in a microfinance institution in Afghanistan, IFC helped not only to support about 1,000 direct jobs, but also to formalize the sector, improve regulations, and increase local bank competition. Similarly, infrastructure investments such as making information and communication technology more widely available can increase productivity throughout an economy. Improving the quality of jobs and working conditions also can make a huge difference. Although companies traditionally view compliance with labor standards mainly as cost, the report provided evidence that such compliance can improve business performance in two ways. First, compliant firms might benefit from increased demand for their products by socially conscious clients and customers. Second, labor standards can improve worker productivity by fostering collaboration and loyalty and by reducing the number of accidents and injuries. An assessment of the Better Work program appears to confirm that job creation and better working conditions can go hand in hand. Still, more data and studies are needed in this field.

Therefore, it is not just the number of jobs that counts, but also their broader impact on the economy. The country case studies provided further insights. There can be a trade-off between the number of jobs created and the value-added per job, and what portion of the value-added goes to workers depends on the country and company. Similarly, IFC investments through financial intermediaries support more jobs than direct investments into real sector companies. However, direct investments can have a bigger transformational impact, because they help companies move to higher value-added activities or serve as successful examples for others to follow. Policymakers may focus on different priorities in different countries, depending on the stage of development and other circumstances.

4. Factors that determine the impact on job creation

- **Job creation occurs through different channels.** The number of direct jobs created in a specific company is often only a small part of the impact on employment and on reducing poverty. The report provided evidence that the number of indirect and induced jobs created can be much larger. In addition, as already mentioned, indirect jobs can potentially reduce poverty. Beyond direct, indirect, and induced jobs, programs that remove constraints and bottlenecks lead to job creation by allowing companies to produce more and more efficiently and therefore stimulating economic growth. These growth-related job effects can be large.

When comparing alternative programs, it is important to consider all types of jobs, not just direct ones. For example, investing in utilities can have large growth-related effects relative to other sectors, and investing in manufacturing relatively large indirect impacts.

Multipliers can be used to estimate the total number of jobs created per each direct job created. However, the magnitude of the multipliers will depend on country, industry, and company characteristics. Using multipliers per \$1 million invested incorporates cost considerations, but these still show significant variation. Therefore, it would be unrealistic to expect a single representative multiplier based on the industry and country. In addition, multipliers cannot capture the transformational impacts discussed above.

- **Constraints vary by region and country.** In general, lack of access to finance and electricity and competition from the informal sector constitute the biggest obstacles that businesses face in developing countries. But there are some differences across regions and countries. For example, in South Asia, political instability is the most-cited problem closely followed by power supply; in Europe and Central Asia, tax rates are the major obstacle; and in Latin America and the Caribbean, a lack of skilled workers is a key constraint. Therefore, it is necessary to adopt country-specific responses.

- **Firm size matters.** As countries become richer, both the share of employment provided by larger companies and the degree of formalization tend to increase. On the other hand in low-income countries, small and medium firms tend to dominate, indicating that they suffer from stunted growth. Allowing firms to grow would lead to productivity gains and higher wages. Institutional and financial constraints prevent the smallest companies from formalizing, accessing financial markets, and growing into larger businesses. Removing such constraints would disproportionately benefit micro, small, and medium enterprises.
- **There is a link between productivity, employment, and poverty.** This link depends, among other factors, on the type of innovation and level of analysis. There is evidence that product innovation is associated with increases in hiring and industry-wide gains. Furthermore, the link between productivity and employment is important to reduce poverty. In order for employment to lead to sustainable poverty reduction, it must be accompanied by higher earning possibilities, which in turn are associated with higher labor productivity.
- **Women and youth face specific employment challenges.** Therefore, their needs must be taken into account when formulating employment policies. Women still face significant disadvantages in many countries and sectors—ranging from legislative barriers to cultural norms—that often force them to work in jobs that pay less and are more vulnerable or informal. The report showed how programs that remove obstacles, for example in access to finance, can reduce the gender gap. Providing more and better jobs for women has a positive impact on their families' education and nutrition, their companies' productivity, and the economy overall.

Young people not only face higher unemployment than adults but also are more likely to work in informal jobs and be underemployed. A comprehensive strategy is necessary to address this multifaceted challenge. Training must integrate the needs of the private sector to give youth the skills they need for current and future jobs. The private sector also must provide sufficient job opportunities. In low-income countries, youth often are underemployed and in informal jobs. Solutions to addressing youth underemployment should include measures to improve the business climate, such as making it easier for businesses to start up or continue operations, plus training to promote entrepreneurship. The information and telecommunications sector is of special relevance for youth. Not only can it help close the skills gap, but it also is an important direct provider of jobs for young workers.

5. Implications

This report presented an approach that can be used by policymakers to help prioritize job-creation programs. The first step is to identify the biggest obstacles for the private sector in their specific country context. This study used World Bank Enterprise Survey data, but other data might be available. Use of these data, whether objective or subjective, would help establish an evidence-based approach to policy prioritization. For example, policymakers must take into account the distribution of companies by size or the specific situation of women and youth in their country. It is also effective to focus on specific sectors that may likely provide good job opportunities and to create areas where private enterprises can establish themselves and thrive, such as special economic zones.

The World Bank Group, IFC, and development finance institutions oriented toward the private sector also have a role to play in helping to remove barriers to job creation. In fact, this report confirmed that key elements of IFC's overall strategy (a focus on the investment climate, infrastructure, access to finance, and training and skills) are crucial not only for private sector activity but also for job generation. Furthermore, the report has provided evidence that jobs stimulated by such activities can be effective in reducing poverty. Still, it is important to consolidate this understanding of the job impact of private sector programs and to disseminate and integrate findings from case studies into operations, progressively creating a "community of practice" around jobs.

Where creating jobs is a priority, a "jobs lens" could be used in country, regional, and sector strategies, as well as at the project level. Given the impact of private sector programs and projects on job creation, which this report has helped bring to light, it is essential to use a "jobs lens" in decision-making. The objective is to identify major obstacles to job creation and to assess the job-creation effects of IFC programs. For example, strengthening backward and forward linkages clearly can have positive effects on job creation and poverty reduction. Three important components of the "job lens" are:

- **Focusing only on direct jobs misses the point.** Decisions must be based on the acknowledgement that job effects are often much larger in the supply chains and distribution networks and throughout the economy than in the client companies alone.

- **Strengthening the link between client companies and local suppliers and distributors helps reduce poverty.**
- **Using financial intermediaries supports job creation, but investing directly in large firms may have transformational effects.** Depending on a country's stage of development and current circumstances, policymakers may focus on different priorities.

Calculating the additional job effects in the supply and distribution chains and throughout the economy is important but methodologically challenging. Multipliers for indirect and induced jobs are very case specific, and methods to estimate jobs generated by higher economic growth are complex and varied. Nevertheless, IFC and other development finance institutions oriented toward the private sector should continue to improve their understanding of the variables that determine these additional employment effects and their size. Tools that track only direct job creation should be used with the knowledge of additional job effects. Collaboration among development institutions, including academia, can be very fruitful in this task. Another impediment is a lack of data, including data on the informal sector.

Formalization also can help reduce poverty. Another channel for addressing poverty is to make it easier for enterprises to become formal. The aim should be to reduce obstacles that prevent formalization, particularly in lower-income countries where informality is predominant. However, it is important to bear in mind that only a small portion of informal enterprises may formalize—and identifying those “entrepreneurs out of aspiration” is important—whereas a significant number of informal “entrepreneurs out of desperation” may opt for wage-earning jobs when opportunities arise.

A comprehensive approach is needed to tackle the lack of more advanced skills and future employment needs. This approach requires collaboration with the private sector and other relevant stakeholders, and also including different levels and types of education in order to design and implement policies and curricula that can more effectively address market needs. Development finance institutions can help facilitate this dialogue by working with private firms to assess their needs, supporting private training providers, and ensuring that private companies are engaged in the design of the curricula, which should combine classes with on-the-job training for best results. One area of concern is that SMEs appear to be under investing in training—including their managers and owners,² which also limits the potential for businesses to grow and create more jobs. Given that young firms are often the ones with higher employment growth rates, it would be appropriate to support training programs for this group of companies. An apprenticeship system could be particularly beneficial also for the informal sector, which forms a large portion of employment in developing countries and in SMEs. Finally, more data collection and evaluation of training and skills-development programs are needed to measure and track their capacity to create jobs.

Investing in training, technology, and innovation can have an impact on job growth and must be part of the strategy to decrease the skills mismatch. The best results come from combining programs that use on-the-job experience with classroom education.

Ensuring high environmental and social standards helps companies improve productivity, reduce risks, and increase the likelihood of survival during difficult times. Development finance institutions can help ensure high standards, for example by applying the Equator Principles, and should raise awareness of the benefits of good working conditions among affected workers as well as among companies.

Focus on the quality of jobs in client companies and in supply chains. The most effective way to improve the quality of jobs is a combination of monitoring and tackling the root causes of poor working conditions. Interventions such as the ILO-IFC Better Work program target labor compliance in global apparel supply chains. This program leverages the interests of global apparel brands to protect their reputation by incentivizing factories to work on institutional change. The Equator Principles—based on IFC's Performance Standard 2—also point to the importance of better management practices as a key entry point and driver for businesses to improve compliance with labor standards, including in supply chains.

Focus on creating opportunities for women and youth. Two main strategies have been identified to increase the economic participation of women and reduce the concentration of women in less productive sectors: (i) increase the number of women in industries that are already women-friendly, and (ii) encourage the participation of women in non-traditional fields. The private sector can play a major role in promoting women as valuable leaders, productive employees and dynamic entrepreneurs. A comprehensive strategy is necessary to address the multifaceted challenges facing youth. Training must integrate the needs of the private sector to give youth the skills they need for current and future jobs. Other pieces of the puzzle are investment climate reforms that facilitate entrepreneurship and programs that give youth recognition for training that they receive informally while on the job. Finally, policies to promote the information and telecommunications sector are of special relevance for youth. Not only can this sector help close the skills gap, but it also is an important provider of direct jobs for young workers.

Endnotes

- ¹ World Bank Group (2012).
- ² Bloom, Nicholas, et. al. (2012a).

STATEMENT BY MEMBERS OF THE IFC JOBS STUDY TECHNICAL ADVISORY PANEL

The Advisory Panel appreciates the opportunity to have engaged with the team writing this Report on three occasions during the preparation of the report. The team should be commended for the time spent soliciting comments and discussing the suggestions made.

The Advisory Panel itself represents a diverse set of backgrounds, from academia, multi-lateral institutions and the private sector – reflecting that the report itself aims to appeal to a wide audience. Getting the message right for any one subset is a challenge; pleasing all of them simultaneously is an almost impossible task. The team has put in a considerable effort to balance the presentation of findings to address the interests and concerns of these broad groups.

The panel members strongly support the central argument that the private sector is the key driver of job creation and it is appropriate to have this report focus on the role of the private sector coming out as a companion to the World Development Report 2013.

One of the key tasks the report seeks to accomplish is an analysis of the contribution that investments can make on job creation. The panel members support the qualitative discussion of the various channels that can affect the upgrading of existing jobs, the creation of new ones, and the possibility of reducing employment elsewhere in the economy. Being able to quantify these impacts is extremely challenging. Clearly assumptions are needed and the interpretation of any numbers given need to keep these assumptions in mind. The panel endorses the importance of providing the details and caveats of the methodology used, and looks forward to the report motivating a future research agenda to improve methods.

Expanding job opportunities is a critical issue for policy makers around the world. This report discusses the ways that policy reforms can strengthen the private sector's contribution to expand the number and productivity of jobs. We were all pleased to serve on this panel as we hope this report can help advance this important agenda.

JANUARY, 2013

Advisory Panel Members

- Major Gen. (Retired) Amjad Khan Chowdhury, Founder and CEO, Pran-RFL Group
- Arlete Georgete Jonass Patel Alves, CEO, Supermercados Ka da Terra
- Martin Rama, Director, 2013 World Development Report, World Bank
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