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The informal economy: What is it? Where does it come from? How big is it? Why is it growing?

Jacques Charmes

Abstract: It has been more than 40 years since the concept, or rather concepts, of informality have achieved their present success, due to their recognition within international definitions of the concepts of labour force, and in measurement methodologies of the System of National Accounts. After recalling the main debates leading to and following the adoption of these definitions then retracing the history of measurement methodologies, key trends and characteristics of employment in the informal economy, as well as the contribution of these activities to GDP in the various regions of the world are assessed and analysed.

Key words: informal sector, informal employment, informal economy, employment, national accounts, policies addressing the informal economy

Résumé : Cela fait maintenant 40 ans que le concept ou plutôt les concepts d’informalité ont été forgés avec le succès que l’on sait puisqu’ils sont parvenus jusqu’à la consécration de définitions internationales des concepts de population active et de méthodologies de mesure en comptabilité nationale. Après avoir rappelé les principaux débats qui ont conduit puis suivi l’adoption de ces définitions, puis retracé l’historique des méthodologies de mesure, les grandes tendances et les caractéristiques de l’emploi dans l’économie informelle, ainsi que la contribution de ces activités au PIB dans les diverses régions du monde sont établies et analysées.

Mots-clés: Secteur informel, emploi informel, économie informelle, emploi, comptes nationaux, politiques visant l’économie informelle

The present report is part of the outputs produced within the Research Network Support Facility (RNSF) launched to contribute to strengthening the related thematic EC programme “Support to enhance livelihoods for people dependent on informal economy and improve social inclusion of marginalised and vulnerable persons” EuropeAid/135649/DH/SER/MULTI.

The report is part of volume 2 (Definition of Informal Economy) of the body of research under the RNSF. A volume 3 will follow on policies addressing the informal economy¹. Rooted in previous research by the author and based on his active participation to the international definitions of the concepts and to their measurement in practice and continuous update, this report covers the questions of definitions and estimates of the informal economy.

1. Introduction

Informality has inspired authors with many zoological metaphors. Hans Singer, one of the fathers of the concept in the early 1970s, compared the informal sector with a giraffe, “difficult to define by usual standards, but easy to recognise when you meet one.” It is not a giraffe, but a unicorn, replied Bruno Lautier (1980): the literature abounds with definitions, but you will never have the opportunity to meet one, because it does not exist. The giraffe is sometimes re-appropriated and changed into an elephant (Donald Mead and Christian Morrisson, 1996), a metaphor that would rather suggest,

¹ The indicative organization of the research outputs is as follows: Volume 1: Summary; Volume 2: Definition of Informal Economy; Volume 3: Review of Policies; Volume 4: GPs and lessons learned (Vol. 4.1-GP and LL from the 33 EU projects; Vol. 4.2 GP and LL from non- EC projects; Vol. 4.3- GP and LL from other EU projects; Vol. 4.4 - GP and LL from the 17 EU projects); Volume 5: Outputs from the Regional workshops

beyond the difficulty of definition and the ease of recognition, that it is “too big to fail!” or at least too big for the State to get rid of it by simple policy measures. One could also compare it to a chameleon, for its ability to become invisible when the State or the law is too restrictive or inappropriate. Most certainly it is not a dinosaur at risk of extinction. Serge Latouche (1994) used to say that informal sector operators are *“ingenious but not engineers, enterprising but not entrepreneurs, industrious but not industrialists,”* a way of saying that they cannot be well understood through usual standards and norms.

Such anecdotes highlight the persistent difficulty of reaching an agreement on a common definition that would satisfy all users of the concept. Unfortunately and despite many efforts aimed toward creating an international definition, there are still many different thoughts and means of capturing and understanding the phenomenon, even if there are not as many definitions as there are authors, as it was the case in the 1970s and 1980s. Besides the international definitions of labour force concepts adopted in 1993 and 2003 by the International Conference of Labour Statisticians (ICLS) under the auspices of ILO, and their insertion into the System of National Accounts (SNA, in its 4th and then 5th revision, 2008), the concepts of underground, black, grey, parallel, non observed economy remain a complementary, though different, alternative way of approaching the phenomenon (OECD, 2002; Schneider and al., 2000 and 2010). Some authors however continue to assimilate, confound or restrict informality to self-employment.

An example serves to shed light on these variations for the understanding of the concept. In 1987, during the 14th ICLS, a preliminary discussion took place about the informal sector. As the discussion pressed on, focusing mainly on ‘moonlighting’, a term widely used to characterise the underground economy, the representative of Kenya – the country where the concept of the informal sector was coined at the beginning of the 1970s – asked for the floor and expressed to the audience that in his country, the informal sector was not comprised of these persons who operate in the moonlight, but rather of those working in the open sun. As a matter of fact, in Kenya the term “Jua Kali” or “under the burning sun” in Swahili, is used to define the operators of the informal sector. The 15th ICLS resolution adopted in 1993 hence stipulated that *“activities performed by production units of the informal sector are not necessarily performed with the deliberate intention of evading the payment of taxes or social security contributions, or infringing labour or other legislations or administrative provisions. Accordingly, the concept of informal sector activities should be distinguished from the concept of activities of the hidden or underground economy”*.

‘Jua Kali’: origins of local concept for designating the informal sector

Kenneth King, whose first works on the informal sector in Kenya, date back to the first half of the 1970s and books on the ‘African Artisan’ from 1977, wrote in 1996: *“Jua Kali in Swahili means ‘hot sun’. But over the course of the 1980s, and perhaps a little earlier, it came to be used of the informal sector artisans, such as car mechanics and metalworkers who were particularly noticeable for working under the hot sun because of the absence of premises. People began to talk of taking their car to jua kali mechanics. Gradually the term was extended to refer to anyone in self-employment, whether in the open air or in permanent premises. On 28 May 1988, The Standard reported that the Minister of Technical Training and Applied Technology wished to encourage the use of the term jua kali rather than informal sector, and had therefore announced that the small-scale industry which had come to be known as the informal sector would henceforth assume the name Jua Kali Development Programme”*(King, 1996).

This paper will provide a brief history of the concepts of the informal sector, informal employment and informal economy. It will discuss the prevailing definitions of the informal economy and their related methods of measurement, an assessment of trends in size of the informal economy will be presented in a third section, including the contribution of the informal economy to GDP.

2. A brief history of 40 years of conceptualisation and data collection on the informal economy

2.1. Theories and concepts

It has been more than 40 years since the first attempts of definition and data collection on informal sector and informal employment on a large scale were launched in the early 1970s. Long before, however, works by Boeke on Indonesia (1953), Arthur Lewis on 'Economic Development with Unlimited Supplies of Labour' (1954) and Clifford Geertz on 'Peddlers and Princes in Indonesia: Social development and Economic Change in Two Indonesian Towns' (1963) – who later invented the concept of bazaar economy (1978), paved the way for dualistic approaches which, before being disputed, offered an extraordinary space for expansion to the new theories of economic development. It must also be noted that closely following these precursors, it was the national accountants who were the first to propose procedures for overall estimates of the traditional sector, agricultural and non-agricultural, monetary and non-monetary in their attempts to measure GDP (OECD, 1965; Blades, 1975; Charmes, 1989; OECD, 2002) within the central framework of the System of National accounts (SNA, first established in 1953 and further revised in 1960, 1964, 1968, 1993 and 2008).

It was in 1971 that the concept of "informality" was born, quasi-simultaneously, at the two extremes of the African continent: in Ghana with the notion of "informal income opportunities" by Keith Hart (1971) and in Kenya with the multi-criteria definition of the informal sector by the ILO report of the World Employment Programme (1972, with Richard Jolly and Hans Singer as main editors).

Tentative typology by Keith Hart (1971)

The tentative typology of Keith Hart (1971), based on his fieldwork in Nima (a low-income neighbourhood in Accra) for a PhD in Anthropology at Cambridge, was presented in a paper delivered at the Conference on Urban Unemployment in Africa, at the Institute of Development Studies of the University of Sussex, 12-16 September 1971:

"1) Formal income opportunities

a) public sector wages

b) private sector wages

c) transfer payments – pensions, unemployment benefits (if any), etc.

2) Informal income opportunities (legitimate)

a) primary and secondary activities – farming, market-gardening, building contractors and associated activities, self-employed artisans, shoe-makers, tailors, etc., manufacturers of beers and spirits,

b) tertiary enterprises with relatively large capital inputs – housing, transport, utilities, commodity speculation, rentier activities, etc.,

c) small scale distribution – market operatives, petty trade, street hawkers, caterers in food and drink, bars, carriers (kayakaya), commission agents and dealers,

d) other services – musicians, launderers, shoe shiners, barbers, night soil removers, photographers, etc.; brokerage and middlemanship (the maigada system in markets, law courts, etc.); ritual services, magic and medicine,

e) private transfers payments – gifts and similar flows of money and goods between persons; borrowing, begging

3) Informal income opportunities (illegitimate)"

a) services – ‘spivvery’ in general; receiving stolen goods, usury and pawn-broking (at illegal interest rates), drug-pushing, prostitution, poncing (‘pilot boy’), smuggling, bribery, political corruption Tammany Hallstyle, protection rackets,
b) transfers – petty theft (pickpockets, etc.), larceny (burglary and armed robbery), peculation and embezzlement, confidence tricksters (money doubling, etc.), gambling.”

The multi-criteria definition of the ILO Report for Kenya (1972)

The ILO report on Kenya is one of the several reports of the World Employment Programme conducted by the ILO in the 1970s. The Kenya mission was headed, among the most well-known, by Hans Singer, with Richard Jolly, Dharam Gaï and John Weeks (from IDS), Ajit Bhalla and Louis Emmerij (from ILO). The authors note that their thinking in these matters has been *“greatly influenced and helped by a number of sociologists, economists and other social scientists in the Institute of Development Studies at the university of Nairobi”* and they add: *“One begins to sense that a new school of analysis may be emerging, drawing on work in East and West Africa and using the formal-informal distinction to gain insights into a wide variety of situations”* (p.6, footnote 1).

The definition lies in the introduction of the report (p.6):

“Informal activities are the ways of doing things, characterised by:

- a) ease of entry*
- b) reliance on indigenous resources,*
- c) family ownership of enterprises,*
- d) small scale of operation,*
- e) labour-intensive and adapted technology,*
- f) skills acquired outside the formal school system, and*
- g) unregulated and competitive markets.*

(...)

The characteristics of formal sector activities are the obverse of these, namely:

- a) difficult entry,*
- b) frequent reliance on overseas resources,*
- c) corporate ownership,*
- d) large scale of operation,*
- e) capital-intensive and often imported technology,*
- f) formally acquired skills, often expatriate, and*
- g) protected markets (through tariffs quotas and trade licenses).”*

The first notion, introduced by Hart, was individual-based and inspired many sociological and anthropological studies in Africa and elsewhere (Bromley & Gerry, 1979). In Latin America, for example, it sparked regular labour force surveys, thus initiating the measurement of the marginalisation of workers based on their level of earnings under the minimum wage, and in connection with poverty.

The second conception (ILO) was establishment- or enterprise-based and served as the basis of a number of ILO studies and surveys in Africa (Nihan et al., 1978; Maldonado, 1987), as well as the Jobs and Skills Programme for Africa (JASPA), in Latin America (Tokman, 1986), through the Regional Programme on Employment for Latin America and the Caribbean (PREALC), and in Asia (Sethuraman, 1981) generally at capital city levels.

Both approaches (individual-based and enterprise-based) consider the State the central cause of emergence of these petty activities. This was done so either by the intrinsic nature of an emerging capitalism that was supported by the new independent States and need for such labour reserve/surplus (Lebrun & Gerry, 1975, Gerry, 1979) or by the barriers that prevent private initiative to blossom out.

The first approach was inspired by the Marxist theory of labour reserve/surplus (Hart mentions “the reserve army of underemployed and unemployed,” as do Lebrun and Gerry) and focuses on the lower tier of the working poor. The second approach focuses on the higher tier, “the modern informal sector,” as Georges Nihan put it – not afraid of a contradiction in terms – and surveys the most visible part of the informal sector. This includes fixed establishments and those most likely to develop, grow and modernise - a concept and theory that culminates with Hernando de Soto (1986), who quotes that it can take several years in Peru for a start-up to be in compliance with the laws, whereas a few days, if not less, are sufficient in the US.

The two-tier concept of the informal sector was forged by Gary Fields (1990), identifying “*the voluntary participation in upper-tier informal activities but not easy entry ones*” echoing the survivalist ‘involutive’ sub-sector and the evolving micro-enterprise sub-sector of Philippe Hugon (1980), not to mention the intermediate or “missing middle” sector coined by John Page et William Steel (1978). These conceptions have remained deeply rooted in World Bank research on the sector until the recent book by Perry, Maloney and al. (2007), revisiting Albert Hirschman’s “Exit, Voice and Loyalty” (1970) and applying it to the informal sector operators by distinguishing informality driven by exclusion from informality driven by voluntary exit. Such conceptions of a dichotomy within the informal sector, which itself is the result of a dichotomy or a dualistic approach, prelude the vision of the informal sector as a continuum as expressed by [Guha-Khasnobis](#), [Kanbur](#) and [Ostrom](#) (2006) in the introduction “Beyond Formality and informality” to their book².

Non-compliance with official regulations far from signifies that these activities are illegal. Charmes (1990) notes that the inability of the State to make operators comply with the mandated laws is rather a matter of inadequacy, powerlessness and even unwillingness with regard to those jobs which are spontaneously created in a context of high unemployment and underemployment. The 1993 ICLS resolution (ILO, 1993b) also remarks, as previously noted, that the informal activities “are not necessarily performed with the deliberate intention of evading the payment of taxes or social security contributions, or infringing labour or other legislations or administrative provisions.” A basic criterion for the definition of the concept of informality, as implicated by the definition and related methods of data collection, is that neither the individual (in the labour or social security registers) nor the enterprise (in the fiscal or commercial registers) may be registered.

2.2. Statistical definitions

A brief summary, rather than detailing all international definitions used in the statistical surveys, is relevant here. The current definitions used, applied with national variations and adaptations, are two-pronged. The first is the establishment-based definition of the informal sector adopted in 1993, which followed the footsteps of the ILO Kenya report (1972) and was based on subsequent research on the ‘modern’ informal sector of micro-enterprises in sub-Saharan Africa. The other is the job-based definition of informal employment, which returns to the original idea of Hart (1971), but is more founded on the rapid increase of the process of labour externalisation and the development of outworkers, home-based workers and precarious jobs correlated with globalisation. Both definitions

² Titled: *Linking the Formal and Informal Economy: Concepts and Policies*.

overlap in some way and require an explanation about their scope in the labour force and among the institutional sectors of the System of National Accounts.

The informal sector was defined by the 15th International Conference of Labour Statisticians (ILO, 1993a,b), as one comprised of enterprises of own-account workers and enterprises of informal employers (a dichotomisation that could remind one of the two-tier or two sub-sectors identified by analysts). It refers to the characteristics of the economic units in which the persons work: legal status (individual unincorporated enterprises of the household sector); non registration of the economic unit or of its employees; size of fewer than five permanent paid employees; at least some production for the market. The conference recommended mixed (household-establishment) surveys in order to capture the informal sector. In this approach, all economic units operated by a household member were enumerated in the sampled households, then surveyed in a second stage through an establishment questionnaire. Later on in 1997, the Delhi Group on Informal Sector Statistics was set up by the UN Statistical Commission in order to improve and develop the definition and data collection of this sector. The group has met regularly since, and the reports and contributions are available on the Ministry of Statistics and Programme Implementation of India website (www.mospi.nic.in).

The 17th ICLS (ILO, 2003) has adopted guidelines for defining informal employment as that which comprises all jobs carried out in informal enterprises, as well as in formal enterprises by workers and especially employees *“whose employment relationship is, in law or in practice, not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits (advance notice of dismissal, severance pay, paid annual or sick leave...) because of non declaration of the jobs or the employees, casual or short duration jobs, jobs with hours or wages below a specified threshold, (...), place of work outside premises of employer’s enterprise (outworkers), jobs for which labour regulations are not applied, not enforced, or not complied with for any other reason”*.

Informal employment is therefore usually defined by the absence of social protection, non-payment of social contribution (mainly health coverage) or the absence of written contract (but this criterion can only be applied to paid employees and is consequently narrower than social protection). Nevertheless, individuals may benefit from social protection through the contribution of another member of the family. Consequently the appropriate definition should be related to the payment of social contributions by the workers concerned rather than to the entitlement of the workers to social benefits.

This new extended definition of informality is interesting in that it meets a usual practise in various parts of the developing world (in Latin America and some countries of Asia) where labour force surveys are often used to collect data on social protection coverage. As a consequence, the absence of social protection rather than the absence of written contract (which applies to wage employees only) has become the prevalent criterion for the measurement of informal employment. The introduction of questions in order to capture social protection (especially health protection) has rapidly disseminated in countries where household surveys are less common or did not include such questions. Nevertheless, practises continue to be diverse across regions and countries: the ideal consists of data collection through labour force surveys or other household surveys capturing both informal employment and informal sector employment, but this practise still remains rare.

Chart 1 below simplifies the complexity of both concepts and shows that they are not mutually exclusive as components of the labour force. Chart 2 attempts to shed light on the position of the informal sector and informal employment among the institutional sectors of the System of National Accounts (SNA).

Chart 1: Components of the informal sector and of informal employment in the labour force.

		Individuals/Jobs	
		Informal	Formal
Economic units / Enterprises	Informal sector	(1)	(2)
	Formal sector	(3)	(4)
Households	Paid domestic workers	(5)	(6)
	Production of goods for own final use	(7)	-

The two cells in grey cover the ‘informal sector’ while the four cells in double line cover ‘informal employment’:

- employment in the informal sector = (1) + (2)
- informal employment = (1) + (3) + (5) + (7)
- employment in the informal economy = ((1) + (2)) + ((3) + (5) + (7))

Cell (2) conveys that within the informal sector some individuals may have a formal job. It is important to note that informal employment is not inclusive of the informal sector in totality, as it is possible that the criteria for non-registered units and employees is not used in the national definition. This may also occur due to the fact that some workers in the informal sector benefit from social security as beneficiaries of parents or spouses who are registered. Such a category is assumed to be small. The main category is cell (3), which represents informal jobs outside the informal sector and in the formal sector. This category is assumed to be enormous and continually growing. Finally, cells (5) and (7) are components of the households themselves. The households are the employers of paid domestic workers and the production of goods for own final use refers predominantly to subsistence agriculture or subsistence activities in general which do not go to the market.

In order to avoid inconsistencies between the definitions of the two concepts, it can be useful and practical to consider that the informal sector is a component of the informal economy. This is also the definition adopted and applied in this paper, namely, *employment in the informal economy is comprised of all persons (whatever their employment status) working in informal enterprises, as well as all persons working informally in other sectors of the economy, i.e. formal enterprises, households with paid employees (domestic workers) or own-account workers producing goods (primary goods or manufactured goods) for the household’s own final use.* By definition, all contributing (unpaid) family workers are classified in informal employment. Formally paid employees working in the informal sector (a category which may exist where the definition of informal sector does not use the criterion of registration of the employees) and unpaid family workers working in the formal sector are equally classified in informal employment. This understanding slightly diverges from the ILO definition of informal employment, and thus in order to avoid misunderstanding between the two approaches they have been merged in the context of this paper to refer to the concept of informal economy, a broader concept than that of informal employment.

Measuring the contribution of the informal sector and informal employment to GDP requires an understanding of where these activities and jobs are positioned in the various institutional sectors of the SNA. Chart 2 hereafter attempts to make such an understanding easier: the informal sector is a sub-sector of the household institutional sector – it is only a part of it (and not necessarily the most important part) and does not belong to any of the other institutional sectors. Informal employment, on the other hand, cuts across all institutional sectors, including government, and cannot be defined according to the fundamental unit of the SNA, i.e. economic units. Informal employment needs to be measured within the labour input matrix, an instrument ensuring that all jobs and all hours of work

are taken into account in the measurement of the contribution of each institutional sector to the value added of all industries that compose the GDP.

Chart 2: Components of informal sector, informal employment and employment in the informal economy by institutional sectors in the System of National Accounts

	Institutional sectors	Sub-sectors	Jobs	
			Formal	Informal
Enterprises/Economic units/Institutional Sectors	General Government Non-Financial Corporations Financial Corporations Non Profit Institutions serving Households		1	2
	Households: Unincorporated enterprises	Formal	3	4
		Unincorporated Enterprises: Informal sector	5	6
	Households: Others	Production of goods for own final use	-	7
		Paid domestic services	8	9
	Employment in the informal sector = (5) + (6)			
Informal employment = (2) + (4) +(6) + (7) + (9)				
Employment in the informal economy = ((5)+(6))+((2)+(4)+(7)+(9))				

Source: Charmes (2013)

Summary of current definitions

In summary, the informal economy is comprised of micro-enterprises operated on a small scale by individual entrepreneurs, as well as of producers for own-account and paid employees who are not covered or not contributing to social security. It should not be confounded with the so-called “shadow” or “illegal” economy.

Statistically speaking, employment in the informal economy is comprised of:

- i) employment in the informal sector of micro-enterprises (operating under a certain size threshold in terms of the number of paid employees or number of workers - registered or not - according to differing national definitions),
- ii) informal employment outside the informal sector itself, comprised of:
 - a) informal employment in the formal sector, i.e. paid employees not covered by social security,
 - b) domestic workers not covered by social security,
 - c) employment in production activities for own final use.

In National accounts (i.e. GDP), the informal sector is a sub-sector of the household institutional sector, which also includes paid domestic workers as well as production activities for own final use. These components are generally clearly identified in the national accounts of countries that compile the detailed accounts of the household sector.

Informal employment in the formal sector contributes to all other institutional sectors but is rarely identified in national accounts.

2.3. Surveys and data collection in a historical perspective

The main sources of data are the most recent national labour force surveys and/or the mixed (household/establishment) surveys. However, many of the published reports are not always available and where they are available, they may not contain the required classifications and tabulations. In some countries, the reference to the concepts of informal employment or informal sector is not even mentioned. In these cases in particular, the main source of data are the ILO questionnaires sent in 2011 by the ILO Bureau to all statistical offices of member countries (developing countries and transition countries). It requested that the national offices compile detailed tables with statistics on employment in the informal sector and informal employment, with a special table on metadata conveying the information of survey coverage and definitions of concepts.

The detailed sources and specificities of definitions according to national circumstances can be found in Charmes (2011).

The enterprise-based approach taken during much of the 1970s and 80s makes this period stand out more than others. The strong emphasis on this approach is perhaps not so surprising when considering that during these decades it was deemed necessary to construct all national accounts and conceptualise GDP with data collected on earnings and production. Economic and door-to-door censuses of establishments were regularly conducted and followed by sample surveys. It is also during this period that the adapted and sophisticated designs of questionnaires were tested for the measurement of production, as seen for instance, in Tunisia between 1976-1982, where direct reporting was often underestimated by half compared with other controlled methods.

The census approach of activities, however, even when extended to mobile (non-sedentary) vendors failed to capture the bulk of home-based workers or rather outworkers - those workers who do not perform their activities in the premises of an enterprise and are not enterprise-based.

It is for this reason that there was a change of methodological paradigm that occurred from the end of the 1980s through the 1993 International Conference of Labour Statisticians, which defined the concept of informal sector. It was during this period when the first mixed household-establishment surveys were conducted in Mali (1989) and in Mexico (1991), just before the 1993 ICLS recommendation proposed this type of survey as the most appropriate for capturing all the diversity of informal sector activities. Many countries conducted such surveys at national level (India, 1999-00; Tanzania, 1991; South Africa, 2002; Cameroon, 2005; Morocco, 2007; among others) or at capital city or urban levels (the series of 1-2-3 surveys in the eight francophone countries of West Africa as well as in Cameroon and Madagascar) during the 1990s and early 2000s.

Asia followed in the second half of the 2000s with mixed surveys in Bangladesh, the Philippines and Indonesia as well as Cambodia, Mongolia and Armenia. The decades of the 1990s and 2000s are thus those of mixed surveys.

During the same period, efforts started to include adapted questions or even short sections in the questionnaires of regular household surveys (labour force surveys or living conditions surveys) in Latin America and in Asia (Pakistan, Thailand), while the LSMS questionnaires (and the surveys of the same type, for instance the GLSS in Ghana), as well as the “integrated” or “priority” surveys on living conditions of households, introduced a section for capturing the activities of own-account and employers’ enterprises.

With the 2002 International Labour Conference (ILO, 2002a and b) and the 2003 ICLS (ILO, 2003), the pendulum swings back to emphasise the individual-based definitions. Efforts are made to gather

information on the type of contracts and social protection for the paid employees and the benefit of some kind of social protection for all the workers and the whole population more generally through household surveys.

To sum up, one can say that the first two decades (1970s and 1980s) were decades of establishment censuses and surveys, which remains a continued concern for national accounts purposes. This period allowed for the obtaining of better knowledge of the upper tier of the informal sector (i.e. micro and small enterprises or MSEs).

The following decade (1990s) until the beginning of the 2000s was the decade of mixed surveys, achieving the requirement of accumulating knowledge on the characteristics of the various components of the informal sector including the lower tiers and employment creation.

Finally the last decade (2000s) saw the rise of the household surveys as the main vehicle of data collection on informality. This occurred firstly because these surveys had conveniently been the first stage of the mixed surveys, secondly because they have often become regular – if not permanent (annual or even quarterly) – and thirdly because they can accommodate a special section or module to informality in its broad sense (informal employment and informal sector).

It is not yet obvious whether the 2010s will see a repetition of mixed surveys at national level, although there are some signs that it is heading in this direction (Madagascar, Niger, Cameroon, RD Congo).

3. Trends and characteristics of the informal economy

3.1. Trends in employment

While the criteria for the measurement of informal sector and informal employment were introduced in the national surveys, policy-makers sometimes showed some reluctance to use these terms. For example, as previously mentioned, Kenya preferred referring to ‘Jua Kali’ and Tunisia designed policies addressing crafts and small businesses. However, year after year, indicators on informality have been compiled, the size and significance of which depend on the countries social structures, national and local economic policies, and governments’ willingness of enforcing their own fiscal or labour legislation.

Today estimates of informal employment and informal sector employment exist in many countries, sometimes for long periods. Yet systematic and comprehensive comparisons worldwide remain difficult for at least two reasons. Firstly, the harmonisation of concepts at the international level is far from being reached. Secondly – and especially – the two concepts of informal sector and informal employment are neither mutually exclusive (and as such not additive), nor is the latter inclusive of the former, i.e. informal employment does not include the informal sector in totality. This is why statistics of informal employment and informal sector employment are generally presented separately. This paper deliberately opts for a definition of employment in the informal economy as comprising employment in the informal sector and informal employment outside the informal sector (i.e. the unprotected workers in the formal sector and the domestic workers in the households, not to mention the persons working in the production of goods for own final use by the households).

Despite such difficulties, macro-economic pictures of the informal economy, as a share of labour force or production (GDP), have long been estimated by economists and statisticians and used for policy purposes. Many of them have existed at national level since the late 1970s-early 1980s, but it

was in 1990 that Charmes presented a first tentative international comparison at the global level in the OECD “Informal sector revisited” (1990). This work was updated in 2002 for the ILO-WIEGO “Women and men in the informal economy” prepared for consideration by the 90th International Labour Conference, and in 2008 for the OECD publication “Is Informal normal?” The tables presented in this paper have been prepared for the updating 2012 of the ILO-WIEGO publication and updated since then.

Table 1 hereafter attempts to assess the trends of employment in the informal economy by 5-year periods over the past four decades. The interpretation of this table requires three preliminary remarks.

Firstly, the indicator is based on non-agricultural employment while the definitions of the informal sector, informal employment and the informal economy are inclusive of agricultural activities. There are two reasons why an indicator based on non-agricultural employment has been preferred. The first is that in countries where agriculture occupies the bulk of the labour force (most sub-Saharan, Southern and Eastern Asian countries for example), the share of employment in the informal economy including agriculture is above 90% and as such, changes over time may not be visible because of the volume of the labour force. The second is because the importance of change may remain hidden by the dramatic flows of rural-urban migrations. An indicator based on non-agricultural employment makes these changes more visible and its greater variability is a better tracer of change.

Secondly, the table is based on estimates prepared along various procedures, which have changed over time depending on the availability of sources and data. Therefore it is far from being homogeneous in definitions and methods of compilation. Sources for this table have been given in details in Charmes (2009). From the mid-1970s and until the end of the 1980s-early 1990s, the figures for the first three 5-year periods (in Northern Africa, sub-Saharan Africa and Asia) mainly result from an application of the residual method, which consists in comparing total employment (in population censuses or labour force surveys) and registered employment (in economic or establishment censuses or administrative records); censuses of establishments – where they exist – allow identifying the informal sector on the one hand and informal employment outside the informal sector on the other hand. From the beginning of the 1990s, the results mainly come from the first mixed surveys and focus on the informal sector, while in the 2000s the labour force surveys become the main source of data and provide data on informal employment and employment in the informal economy at large.

Thirdly, another limitation comes from the fact that it is not exactly the same set of countries for which estimates are available from one period to another. Consequently the average can become non significant unless there is a presence of at least a few countries over all of the periods.

Despite these limitations several observations and conclusions can be drawn.

Until the end of the 2000s, the informal economy was on the rise in all regions: with 53% of non-agricultural employment in Northern Africa, 72.3% in sub-Saharan Africa, 57.7% in Latin America 69.7% in Southern and South-Eastern Asia, and 25.1% in transition countries. Since the beginning of the 2010s, however, a reversal in trend seems to be observed in all regions except in sub-Saharan Africa, where the informal economy culminates at the highest level: 73.8% in 2010-14, due to the sharp increase in Western Africa (81.1%).

Table 1: Employment in the informal economy in % of non-agricultural employment by 5-year periods in various regions and sub-regions.

Regions	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14
Northern Africa	39.6		34.1		47.5	47.3	53.0	48.7
Sub-Saharan Africa		67.3	72.5	76.0	86.9	63.3	72.3	73.8
Western Africa				66.4			75.6	81.1
Middle Africa							80.5	78.3
Eastern Africa								72.2
Southern Africa							62.7	42.7
Latin America				52.5	54.2	55.9	57.7	57.2
Southern and South Eastern Asia			52.9	65.2	69.9		69.7	65.5
Western Asia						43.2		
Transition countries						20.7	25.1*	

Source: Charmes Jacques (2012) 'The informal economy worldwide: trends and characteristics', *Margin—The Journal of Applied Economic Research*, 6:2 (2012): 103–132, updated with new countries.

Note: Figures in italics are based on a too small number of countries to be representative

Northern Africa (table 2), the region where estimates are the most numerous over all four decades, can be taken as an illustration of the counter-cyclical behaviour of employment in the informal economy: it increases when the rate of economic growth is decelerating, and contracts when the rate of growth increases. Tunisia is a good example, starting from a relatively high level (38.4% of total non-agricultural employment), employment in the informal economy drops (down to 35%) in the mid of the 1980s when the implementation of structural adjustment programmes induces its rapid growth until the end of the 1980s (39.3%) and even until the end of the 1990s (47.1%). Then the informal economy drops dramatically (35%) in the mid of the 2000s with the rapid growth of the Tunisian economy and starts growing again until 2007 (36.8%). Surprisingly, it drops again to 33.9% in 2012, following the revolution of 2011, due to the hiring of the unemployed in civil service by the new authorities, a policy which did not last long, and after this short remission the informal economy appears to initiate a more prolonged increase. In Algeria, getting out of an administered and centralised economy, the informal economy has continuously grown up from 21.8% in the mid of the 1970s, up to 45.6% at the end of the 2000s, with a minor and short decrease (41.3%) at the beginning of the 2000s. After a new increase to 45.6% at the end of the 2000s, the authorities launched strong youth employment creation policies that can explain the long and persistent drop observed in the years following (37.3% in 2013). Morocco is also characterised by a continuous increase in the informal economy, from 56.9% at the beginning of the 1980s up to 78.5% at the end of the 2000s, initiating a decrease at the turn of 2010 (69.2% in 2013). Egypt is also experiencing counter-cyclical behaviours in the growth of the informal economy since the end of the 1990s.

On average for the region, the most recent period is characterised by a considerable increase of employment in the informal economy, growing from 47.3% at the beginning of the 2000s to 53.0% at the end of the decade.

Table 2: Share of employment in the informal economy in total non-agricultural employment by 5-year period and by year since 2010 in Northern Africa.

Regions/ Countries/ Years	1975- 79	1980- 84	1985- 89	1990- 94	1995- 99	2000- 04	2005- 09	2010- 14	2011	2012	2013	2014	2015
Northern Africa	39.6		34.1		47.5	47.3	53.0	48.7		48.2			
Algeria	21.8		25.6		42.7	41.3	45.6	37.3	40.7	37.7	37.3		
Morocco		56.9			44.8	67.1	78.5	69.2	70.9	71.5	69.2		
Tunisia	38.4	35.0	39.3		47.1	35.0	36.8	38.8		33.9	37.8	38.8	40.8
Egypt	58.7		37.3		55.2	45.9	51.2	49.6		49.6			

Source: Charmes Jacques (2012) 'The informal economy worldwide: trends and characteristics', *Margin—The Journal of Applied Economic Research*, 6:2 (2012): 103–132, updated with new countries.

Note: Non-weighted averages. Figures in italics refer to employment in the informal sector only.

Table 3 illustrates the share of employment in the informal economy by decade in Sub-Saharan Africa in all non-agricultural employment. It groups Sub-Saharan Africa countries by decade in order to provide more observations for each period (17 countries during the 2000s, seven for the 1980s, and eight for the 1990s). The last decade is characterised by a numerous set of countries (17), but only five of them provided estimates for the previous periods, making it difficult to assess the trend for the region. 25 countries have collected data for the last 5-year period. The figures for the region give an image of a continuously growing informal economy (from more than 60% in the 1970s to more than 70% during the following three decades), until the 2010s, which seem to be characterised by a sharp increase. Even if the share of employment in the informal economy at 73.8% is not representative for all countries of the region, if we compare the 16 countries for which data are available in the 2000s and for the most recent period, the rate of employment in the informal economy has increased from 70.4% to 75.1% between the two periods, or nearly five percentage points.

Table 3: Share of employment in the informal economy in total non-agricultural employment by decade in Sub-Saharan Africa.

Regions/Countries/Years	1975-79	1980-89	1990-99	2000-09	2010-14
Sub-Saharan Africa	63.0	70.0	71.7	71.8	73.8
Benin			92.9	96.3	96.2
Burkina Faso		70.0	77.0	90.5	
Burundi					83.1*
Cameroon				79.5	67.3
Chad			95.2		90.7
Cote d'Ivoire				73.8	81.9
Democratic. Rep. Congo (ex Zaire)		59.6		77.0	71.7
Gambia					83.7
Ghana				65.3	77.7
Guinea		64.4	86.7		
Kenya		61.4	71.6	76.8	
Lesotho				70.7	
Liberia				56.4	60.5
Madagascar				73.7	90.7
Malawi					75.4
Mali	63.1	78.6	94.1	82.7	81.3
Mauritania		80.0			96.0
Mauritius				56.9	
Mozambique			73.5	87.2	
Namibia				43.8	43.9
Niger	62.9			88.8	88.5
Nigeria			42.9	78.6	71.5
Rwanda					56.2
Senegal		76.0			
Seychelles					55.8
Sierra Leone					79.4
South Africa			39.1	32.7	41.4
Sudan					31.9
Tanzania			57.7	76.7	73.1*
Uganda				73.5	93.5
Zambia			58.3	76.3	76.4
Zimbabwe				51.6	85.6

Source: Charmes Jacques (2012) 'The informal economy worldwide: trends and characteristics', *Margin—The Journal of Applied Economic Research*, 6:2 (2012): 103–132, updated with new countries.

Note: Non-weighted averages. Figures in italics refer to employment in the informal sector only. Figures in italics and with * refer to employment in the informal sector and secondary activities. Figures in bold and italics mean that the average is based on a too small set of countries to be representative.

In the most recent period, employment in the informal economy ranges from 41.4% in South Africa (a country with a large base of wage-workers) to 96% in Benin and in Mauritania. In three more countries, the share of employment in the informal economy is higher than 90% (in Uganda and

Madagascar). Generally, the share of employment in the informal economy seems higher in Western and Middle Africa than in Eastern and Southern Africa (table 1).

In Latin America, employment in the informal economy, which has peaked at 59% in the late 2000s, drops from 59.5% at the end of the 2000s to 57.2% in 2013. Shares in non-agricultural employment range from 30.7% in Costa Rica, 33.2% in Uruguay, 36.8% in Brazil to 68.8% in Peru, 73.4% in Honduras, 74.4% in Guatemala and 80.7% in the Dominican Republic.

Table 4: Share of employment in the informal economy in total non-agricultural employment by 5-year period and by year since 2010 in Latin America.

Regions/Countries/Years	1990-94	1995-99	2000-04	2005-09	2010	2011	2012	2013
Latin America	52.5	54.2	55.9	59.5	59.0	57.8	57.9	57.2
Argentina	47.5	53.3	60.8	50.0				
Bolivia	56.9	63.5		75.1				
Brazil	60.0	60.0	51.1	42.2		38.4	38.0	36.8
Chile		35.8						
Colombia		38.4		57.4	61.4	64.4	64.5	63.7
Costa Rica		44.3		48.2	33.8	33.6	32.2	30.7
Dominican Republic		47.6		48.8	47.9	83.8	83.1	80.7
Ecuador		53.5	74.9	53.5	56.4	52.0	49.8	49.3
El Salvador		56.6		68.2	65.8	65.7	66.1	65.4
Guatemala	56.1				75.1	74.6	76.8	74.4
Haiti		92.6		91.4				
Honduras		58.2		75.2	76.4	70.7	72.8	73.4
Mexico	55.5	59.4	50.1	54.3	54.2	54.2	54.6	53.9
Nicaragua				69.4	75.0			
Panama		37.6	49.4	44.0	42.8	39.3	39.5	40.4
Paraguay		65.5		70.7	70.3	65.8	66.5	64.5
Peru			67.9	71.3	70.3	67.5	67.1	68.8
Uruguay			43.4	43.8	37.7	35.5	34.1	33.2
Venezuela	38.8	46.9	49.4	48.1				

Source: Charmes Jacques (2012) 'The informal economy worldwide: trends and characteristics', *Margin—The Journal of Applied Economic Research*, 6:2 (2012): 103–132, updated with new countries.

Note: Non-weighted averages.

In Southern and South-Eastern Asia, employment in the informal economy is stabilised around 70% of non-agricultural employment in the mid-2000s (if the average does not include Mongolia, a country that could be more appropriately classified among the transition economies), ranging from 41.1% in Thailand to 84.2% in India and 86.4% in Nepal.

Countries of Western Asia could be classified with Northern Africa in the Middle East-North Africa region (MENA) as they present many similar characteristics, in particular low female activity rates. Their average share of employment in the informal economy is around 40-50% (43.2% in 2000-04).

Table 5: Share of employment in the informal economy in total non-agricultural employment by 5-year period in Asia.

Regions/Countries/Years	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14
Southern and South Eastern Asia	52.9	65.2	69.9		70.2*	65.5
Bangladesh					76.9	90.8
India	76.2	73.7	83.4		84.2	84.3
Indonesia	39.2		77.9		77.0	
Malaysia						
Mongolia					26.3	
Nepal					86.4	
Pakistan	39.0		64.6	70.0	73.0	73.6
Philippines		70.5	72.0		73.3/ 84.0	
Sri Lanka					62.1	49.1
Thailand	57.4	51.4	51.5		41.1	42.8
Timor Leste					62.0	52.2
Vietnam					68.5	
Western Asia				43.2		
Iran	43.5			48.8		
Lebanon				51.8		
Palestine				43.4	57.2	52.2
Syria		41.7	42.9	30.7	31.4	
Turkey			30.9	33.2	30.6	27.2
Yemen		57.1		51.1		75.1

Source: Charmes Jacques (2012) 'The informal economy worldwide: trends and characteristics', *Margin—The Journal of Applied Economic Research*, 6:2 (2012): 103–132, updated with new countries.

Note: Non-weighted averages. Figures in italics refer to informal sector employment only. (*) Without Mongolia.

Lastly, transition countries are making their way out of their former administered-centralised-wage economies. Their share of employment in the informal economy (still often measured through the concept of informal sector as in Russia and Ukraine) is incrementally increasing from 20.7% at the beginning of the 2000s, up to 25.1% at the end of the decade, with maxima in Kyrgyzstan (59.2% for the informal sector) and Azerbaijan (45.8%) and minima in Ukraine and Russia (9.4% and 12.1% respectively for the informal sector).

Table 6: Share of employment in the informal economy in total non-agricultural employment by 5-year period in transition countries.

Regions/Countries/Years	1995-99	2000-04	2005-09	2010-14
Transition countries		20.7*	25.1	18.0**
Albania				43.0
Armenia			19.8	19.4
Azerbaijan			45.8	
Kyrgyzstan		44.4	59.2	
Macedonia				12.8
Moldova		21.5	41.8	13.6
Romania	5.4	22.0		
Russia		8.6	12.1	12.4
Serbia			6.6	6.6
Slovakia		4.7	6.4	
Ukraine		7.0	9.4	

Source: Charmes Jacques (2012) 'The informal economy worldwide: trends and characteristics', *Margin—The Journal of Applied Economic Research*, 6:2 (2012): 103–132, updated with new countries.

Note: Non-weighted averages. Figures in italics refer to informal sector employment only. (*) Without Slovakia.

Employment in the informal economy represents more than 50% of total non-agricultural employment in all developing regions with the exception of the latter region, which is at its starting point. With upward trends in sub-Saharan Africa, stabilised trends in Asia and slowly increasing trends elsewhere, it seems that there is a kind of convergence between the various regions at the global level.

3.2. Characteristics of the informal economy

As defined, employment in the informal economy is a very broad concept. It is thus interesting and informative to look beyond the macro-picture to examine and understand the breadth of its components.

Table 7 below summarises a few of the main characteristics of employment in the informal economy:

Table 7: Main components and characteristics of non-agricultural employment in the informal economy by region in 2005-2010

REGIONS / Countries	% Informal Sector in Employment in the informal economy	% of informal workers outside Informal sector	% of women in the informal economy	% of self-employed in the informal economy	% of employment in industries in the informal economy
Middle East North Africa	58.7%	41.3%	16.4%	39.9%	41.4%
Sub-Saharan Africa	80.4%	19.6%	51.1%	64.9%	24.2%
Asia	79.4%	20.6%	35.8%	53.3%	41.7%
Latin America	64.6%	35.4%	46.5%	52.1%	26.8%
Transition	50.5%	49.5%	33.2%	32.7%	18.0%

Source: Charmes J. (2011). *A worldwide overview of trends and characteristics of employment in the informal economy and informal sector from a gender perspective*. Contribution to the update of the ILO-WIEGO Women and Men in the Informal Economy.

Employment in the informal sector accounts for more than 80% of total employment in the informal economy in sub-Saharan Africa and slightly less in Asia. This means that in these two regions, informal employment outside the informal sector absorbs only 20% of the workers in the informal economy, against nearly 50% in transition economies, 41% in Middle East North Africa and 35% in Latin America. Contrary to popular belief, it is only in sub-Saharan Africa that women outweigh men (51.1%) in the informal economy. In other regions they are fewer than men in the informal economy (from 46.5% in Latin America to 35.8% in Asia, 33.2% in transition economies and down to 16.4% in Middle East North Africa (MENA). Generally within all regions, women are relatively more numerous in informal employment outside the informal sector, as are employed as domestic workers and as home-based workers for the manufacturing industries. Self-employment represents between 1/3 (transition economies followed by MENA), half (Latin America and Asia) and 2/3 (sub-Saharan Africa) total employment in the informal economy. Lastly, industries (manufacturing as well as construction) account for less than ¼ of total employment in the informal economy in transition countries, sub-Saharan Africa and Latin America, but more than 40% in MENA countries and Asia.

Employment in the informal economy is generally assimilated to low productivity, low income and poverty and the fact is that it is negatively related to GDP per capita and to poverty rate, as illustrated on Charts 3 and 4 hereafter.

Chart 3: Employment in the informal economy is negatively related to GDP per capita

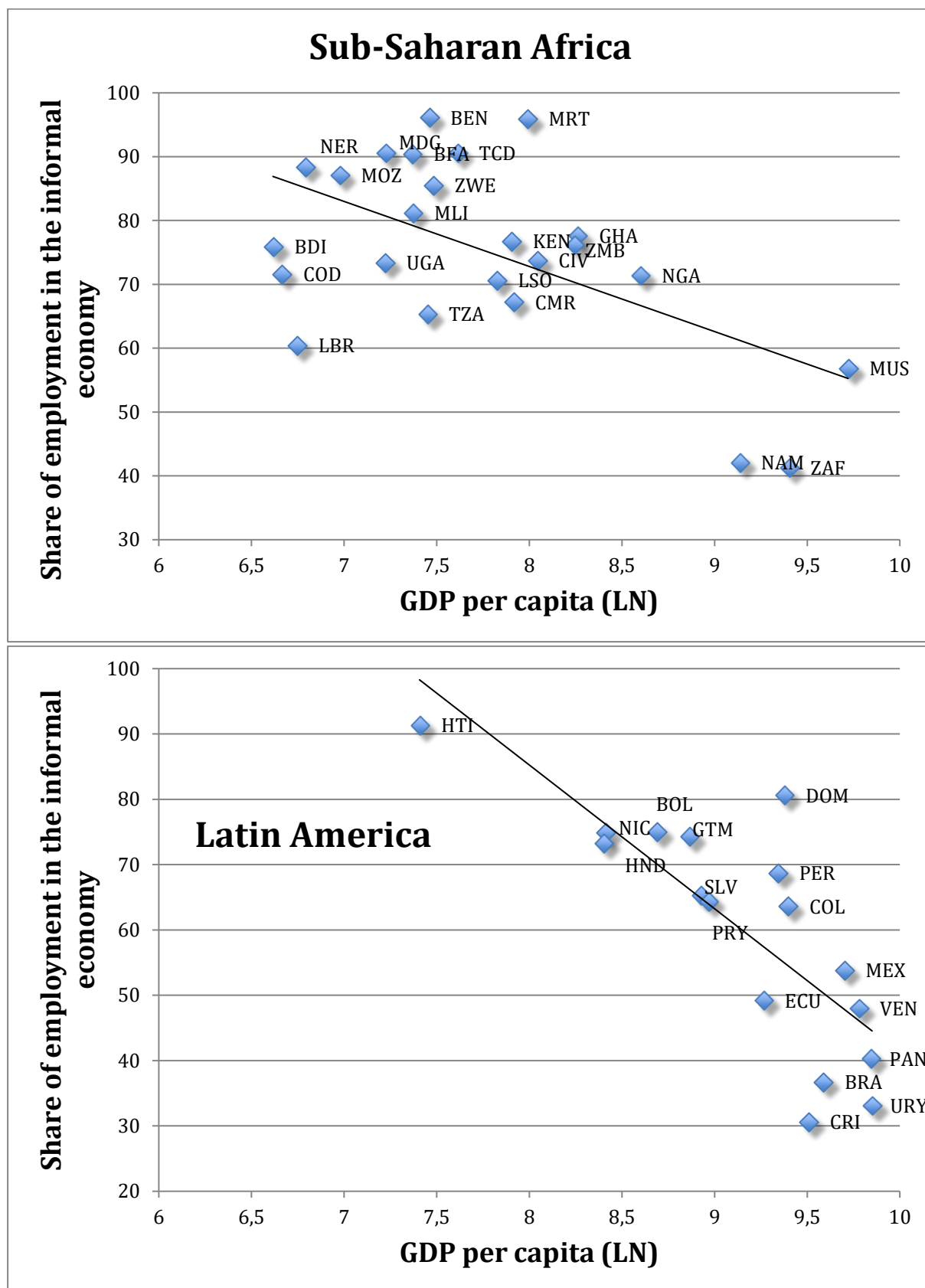
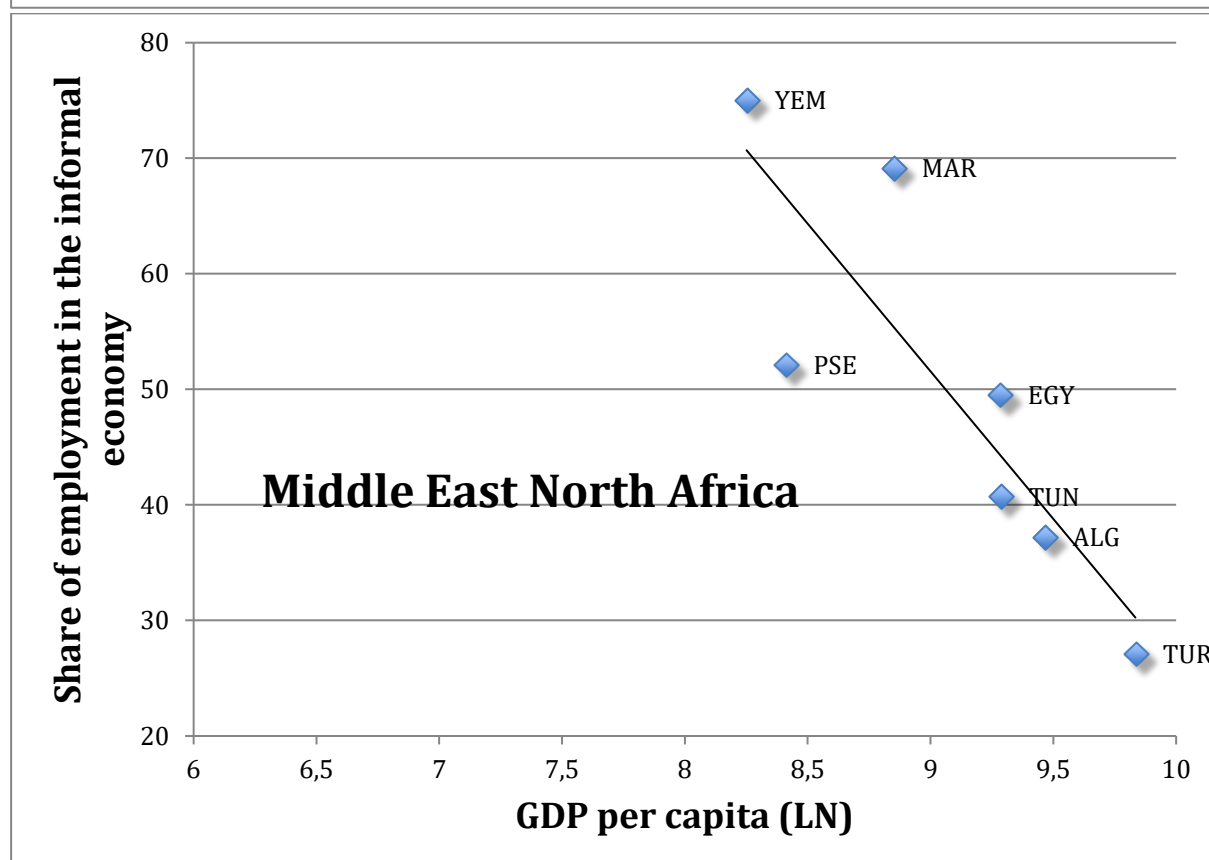
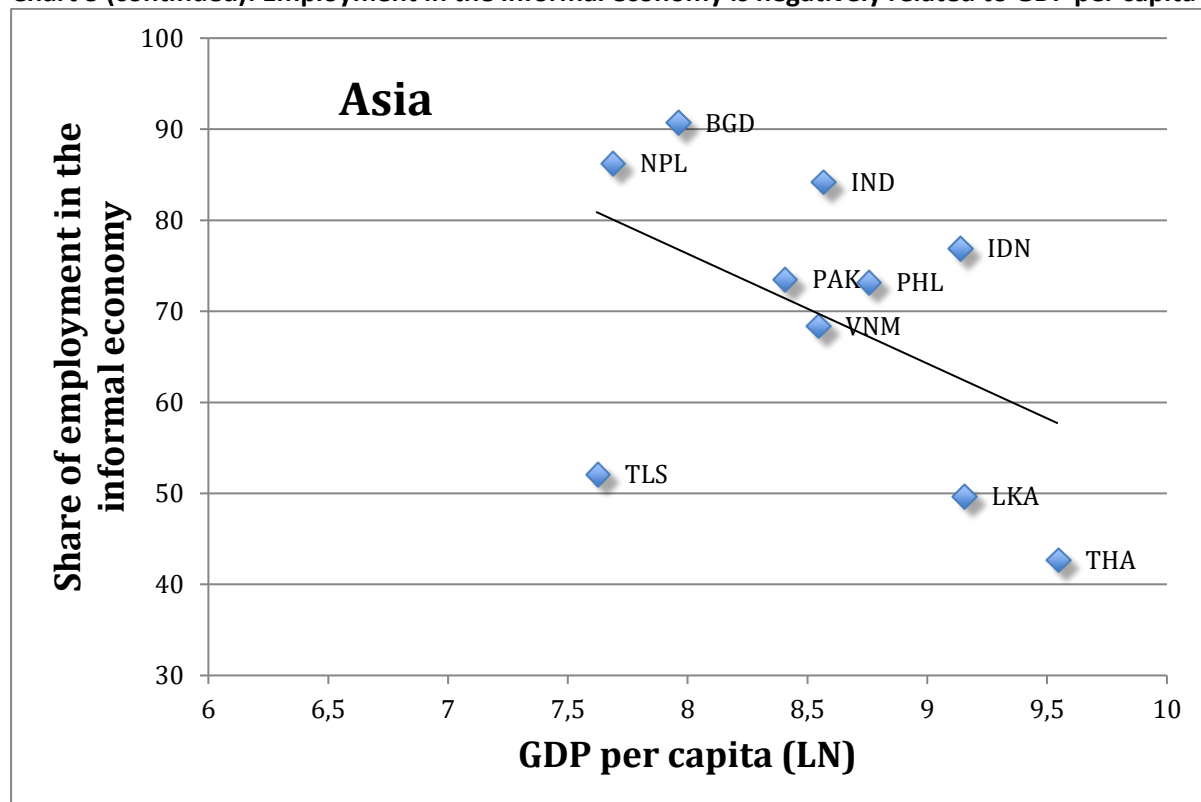
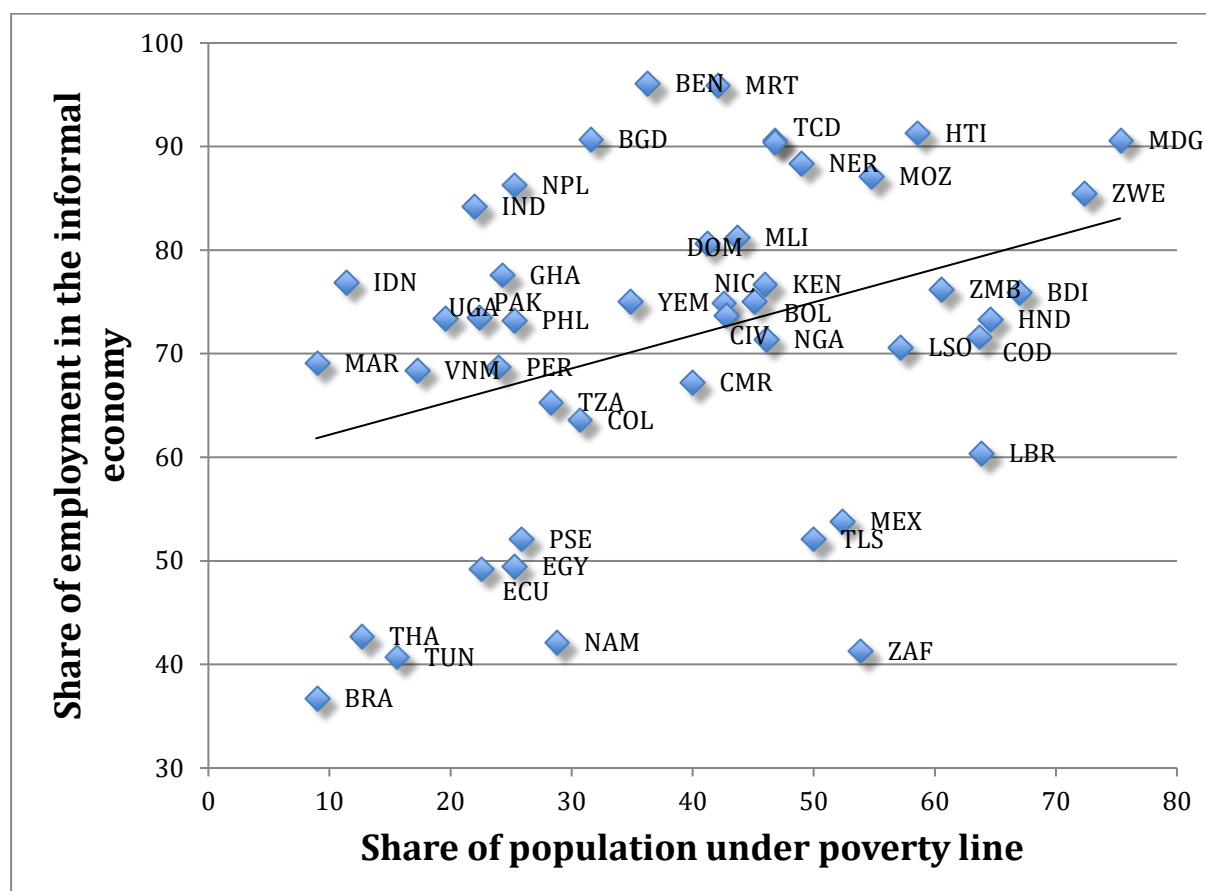


Chart 3 (continued): Employment in the informal economy is negatively related to GDP per capita



Sources: database used for previous tables and Human Development Report for GDP per capita (PPP).

Chart 4: Employment in the informal economy is positively related to poverty



Sources: database used for previous tables and Human Development Report for the proportion of population living under poverty line.

Chart 4 shows that very high proportions of employment in the informal economy are associated with very high shares of population living under the poverty line in Madagascar and Zimbabwe for example, with moderate rate of poverty such as in Benin or Mauritania, or with low poverty rates (Indonesia, Morocco). Relatively low proportions of employment in the informal economy can be associated with low poverty rates in Brazil, Thailand or Tunisia, as well as with high poverty rates as in South Africa.

3.3. Contribution of the informal economy to GDP

As explained in section 2.2 above, the informal sector can clearly be identified as a sub-sector of the unincorporated enterprises of the household institutional sector in the SNA and its contribution to the GDP can be measured relatively easily. This does not hold true for informal employment outside the informal sector, which cuts across all institutional sectors of the SNA and is comprised of: 1) informal workers of the formal sector, 2) domestic workers, and 3) subsistence producers in the primary sector (and in the secondary sector). Whereas paid domestic services and subsistence production for own final use are also components of the household sector and can be identified in the SNA; informal employment in the formal sector is never identified in the SNA. Countries that prepare labour input matrices may estimate this component of total labour inputs, but rarely indicate its contribution to GDP (India is an exception: Kolli and Sinharay, 2011a and b).

Indeed, in the 4th revision of the System of National Accounts (SNA, 1993), and in the 5th revision (SNA, 2008 which dedicates an entire chapter to the informal aspects of the economy: chapter 25), the informal sector was defined as a sub-sector of the household institutional sector. As such, its contribution to GDP can be measured. Informal employment in the formal sector, on the contrary, is a hidden or non-observed part of the economic units constituting the other institutional sectors of the system of national accounts. Therefore it cannot be easily distinguished from the formal units and estimates are rarely available.

The estimation of the underground economy through econometric modelling (see for instance Schneider, 2000; Schneider and Enste, 2002, Schneider et al., 2010) is indeed interesting, however interpreting the comparison of its results with current GDP is particularly difficult as the national accounts already include a part of the underground and illegal economy. The fact that private incorporated and public enterprises employ informal workers does not mean that the contribution of these workers is not taken into account in the output of the firms (unless the goods or services produced are illegal by nature). However, it has an impact of the value added: supply and use tables by products are the instrument by which national accountants attempt to balance production and its uses (consumption, investment), as well as the reconciliation of the three GDP estimates on the production side, expenditure side and income side. A part of the hidden economy - supposedly the major part – which does not show up on one side, may show up in one or two of the other sides and justify adjustments in the volume or the value of output.

A tentative estimate of the informal sector contribution can be made for those countries which prepare the household sector accounts. The availability of the household accounts is not sufficient, however, and the distribution of gross value added by industry is also required, because production for own final use (not transiting through the market) must be excluded as it is not part of the international definition of the informal sector. This can be addressed by excluding the agricultural and related activities. Other exclusions are the imputed rents and paid domestic services (which never go beyond 1 or 2 percentage points of total GDP), without forgetting that – depending on national definitions – some unincorporated firms may belong to the formal sector within the household sector, but the necessary data are rarely available. Consequently, the results presented in table 5 remain proxies, but these proxies are acceptable. It is therefore necessary to isolate the informal sector by using the table of national accounts cross-classifying the gross value added by industry and institutional sectors. If all countries distinguish the various institutional sectors in their national accounts, not all of them present the accounts of the institutional sectors in details, especially by industries. The compilation of the UN statistics division (United Nations, 2004 and 2014) and its regular updating allows identifying the countries with detailed accounts of the household institutional sector. Table 8 hereafter is based on these compilations, as well as on national sources

and a special report by Afristat (1999) on the national accounts of the West Africa Economic and Monetary Union countries. As far as it has been possible, “imputed rents” and “private households employing persons” have been subtracted.

In the 2000s (Table 8) in sub-Saharan Africa, the informal sector, including the agricultural household sector, contributes to nearly 2/3 of the GDP (63.6% in arithmetical non-weighted mean), with a maximum in Niger (72.6%) and a minimum in Senegal (51.5%). Excluding agriculture, the share of informal sector in GDP represents approximately 1/3 of total GDP (31.3%) with a maximum in Cameroon (36.0%) and a minimum in Burkina Faso (21.7%). Moreover, the non-agricultural informal sector is as high as 50% of the non-agricultural Gross Value Added (50.2%) with a maximum in Benin (61.8%) and a minimum in Burkina Faso (36.2%).

During the 2010s (Table 9) the share of informal sector (including agriculture) dropped to 55%, its share excluding agriculture in total GDP to 25.1% and to 41.7% of non-agricultural GVA.

In the Middle East North Africa region (MENA) and for the same period, the contribution of the informal sector including agriculture is equivalent to slightly more than 1/3 of total GDP (36.2%) and a little bit more than ¼ (26.2%) if the agricultural household sector is excluded. Finally the non-agricultural informal sector represents 29.2% of total non-agricultural Gross Value Added. The minima are observed in Egypt for the three indicators (27.8, 14.7 and 16.9% respectively) and the maxima in Tunisia (respectively 41.8, 29.8 and 33.4%) and Palestine (with the non-agricultural informal sector at 34.1% of total GDP).

In India the informal sector (including agriculture) contributes to 54.2% of total GDP (2008) and still to 38.4% if agriculture is excluded. With 46.3% of total non-agricultural Gross Value Added, the informal sector *stricto sensu* is the highest contributor to non-agricultural GVA among all countries reviewed in all regions.

Table 8: Contribution of informal sector to GDP in various developing countries: 2000s

Countries (years)	Informal sector (including agriculture) in % of total GDP	Informal sector (excluding agriculture) in % of non agricultural GVA	Informal sector (excluding agriculture) in % of total GDP
Northern Africa	35.8%	27.1%	23.9%
Algeria (2003)	37.9%	30.4%	27.1%
Egypt (2008)	27.8%	16.9%	14.7%
Tunisia (2004)	41.8%	34.1%	29.8%
Sub-Saharan Africa	63.6%	50.2%	31.3%
Benin (2000)	71.6%	61.8%	33.6%
Burkina Faso (2000)	55.8%	36.2%	21.7%
Cameroon (2003)	57.6%	46.3%	36.0%
Niger (2009)	72.6%	51.5%	29.0%
Senegal (2000)	51.5%	48.8%	35.1%
Togo (2000)	72.5%	56.4%	32.2%
India (2008)	54.2%	46.3%	38.4%
Latin America	29.2%	25.2%	24.0%
Brazil (2006)	21.6%		
Colombia (2006)	37.5%	32.3%	29.4%
Guatemala (2006)	36.9%	34.0%	30.2%
Honduras (2006)	31.5%	18.1%	20.8%
Mexico (2009)	30.9%		
Venezuela (2006)	17.0%	16.3%	15.7%
Transition countries	19.5%	13.9%	10.7%
Armenia (2008)	27.5%	19.5%	15.5%
Azerbaijan (2008)	17.8%	13.1%	12.4%
Belarus (2008)	6.7%	3.7%	3.4%
Bulgaria (2006)	21.6%	16.5%	15.1%
Estonia (2008)	10.7%	10.1%	9.8%
Kazakhstan (2009)	23.0%	20.0%	18.7%
Kyrgyzstan (2008)	45.2%	27.5%	20.3%
Latvia (2007)	11.3%	10.2%	9.9%
Lithuania (2008)	14.1%	11.8%	11.8%
Macedonia (2008)	22.5%	14.0%	12.4%
Moldova (2008)	20.0%	12.3%	11.0%
Russia (2009)	10.6%	8.6%	8.2%
Serbia (2008)	25.0%		
Slovenia (2005)	19.5%		
Ukraine (2008)	16.4%	12.9%	11.9%

Source: Charmes Jacques (2012) 'The informal economy worldwide: trends and characteristics', *Margin—The Journal of Applied Economic Research*, 6:2 (2012): 103–132.

Note: Non-weighted averages by region.

Table 9: Contribution of informal sector to GDP in various developing countries: Years 2010s

Countries (years)	Informal sector (including agriculture) in % of total GDP	Informal sector (excluding agriculture) in % of non agricultural GVA	Informal sector (excluding agriculture) in % of total GDP
Northern Africa	32,3%	24,1%	20,6%
Algeria (2013)	43,5%	39,4%	33,8%
Egypt (2012)	21,1%	9,2%	7,5%
Tunisia (2012)		23,8%	20,5%
Sub-Saharan Africa	55,0%	41,7%	25,1%
Benin (2012)	57,8%	53,5%	35,5%
Burkina Faso (2012)	49,1%	29,5%	17,6%
Cameroon (2009)	52,4%	44,2%	31,4%
Mali (2013)	64,4%	44,9%	28,4%
Niger (2013)	58,0%	55,1%	22,2%
Togo (2011)	48,1%	23,0%	15,5%
India (2013)	41,6%	34,1%	25,9%
Latin America	29,6%	26,0%	21,8%
Guatemala (2012)	35,4%	32,6%	29,1%
Honduras (2011)	26,3%	22,0%	17,4%
Nicaragua (2011)	40,0%	32,2%	25,3%
Venezuela (2007)	16,5%	17,1%	15,2%
Transition countries	18,0%	15,6%	12,7%
Armenia (2012)	29,3%	15,6%	11,3%
Azerbaijan (2012)	22,3%	19,7%	17,5%
Belarus (2013)	8,3%	7,5%	6,2%
Bulgaria (2011)	15,8%	16,3%	13,4%
Estonia (2014)	7,9%	8,8%	7,4%
Kazakhstan (2013)	23,6%	23,6%	20,9%
Kyrgyzstan (2013)	33,5%	26,3%	19,4%
Latvia (2012)	12,0%	13,3%	11,2%
Lithuania (2013)	10,8%	10,1%	8,8%
Macedonia (2011)	19,2%	13,9%	10,7%
Moldova (2013)	15,6%	11,5%	8,3%
Romania (2013)	24,8%	25,0%	20,7%
Russia (2013)	8,4%	7,9%	6,5%
Ukraine (2013)	19,8%	19,3%	15,2%

Source: Our compilations of UN (2015) and national sources for Africa.

Note: Non-weighted averages by region.

In Latin America, there are six estimates available, but only four countries have detailed their household sector accounts by industries. Only global estimates (including agriculture) can be generated for Brazil and Mexico. The estimates here prepared approximate and assimilate the informal sector to the household sector (minus subsistence agriculture, households with employed

persons and imputed rents), but national methodologies and official definitions may be more complex and in the case of Mexico and emerging economies, the informal sector is only a segment of unincorporated enterprises of the household sector. The informal sector (including agriculture) represents in average 29.2% of total GDP with a maximum in Colombia (37.5%) and a minimum in Venezuela (17.0%). Excluding agriculture, the informal sector contributes on average to 24.0% of total GDP (maximum in Guatemala with 30.2% and minimum in Venezuela with 15.7%) and it contributes to 25.2% of non-agricultural Gross Value Added (34% in Guatemala and 16.3% in Venezuela).

Finally it is for the transition economies that the number of estimates is the greatest with 15 countries. This is not surprising, given that the system of national accounts has been implemented recently in these former socialist countries, which were used to apply a specific system of material balances. Applying a new system, national accountants have tended to strictly follow the rules of the central framework of the SNA 1993. The private sector recently emerged in the transition countries where paid employment in public enterprises was the rule, and it is expected to grow more and more, especially the micro-enterprises of the informal sector, hence the importance of the efforts towards their measurement. With a contribution of 19.5% to total GDP on average, the informal sector (including agriculture) is at a maximum in Kyrgyzstan (45.2%) and a minimum in Belarus (6.7%). When excluding agriculture, the contribution of informal sector drops down to 10.7% in average (20.3% in Kyrgyzstan and 3.4% in Belarus) and to 13.9% of non-agricultural GVA (27.5% in Kyrgyzstan and 3.7% in Belarus).

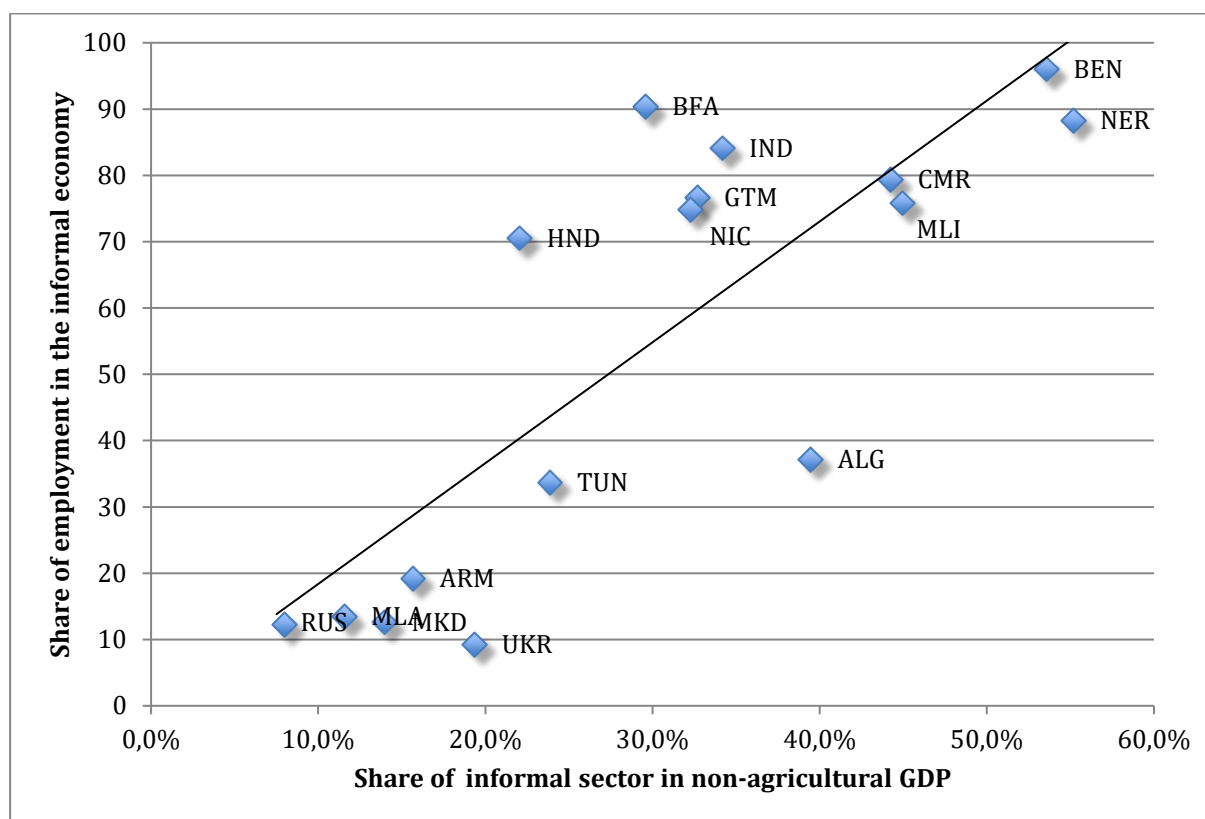
Sub-Saharan Africa is the region with the largest estimates for the contribution of informal sector to GDP: nearly 2/3 including agriculture, 1/3 excluding agriculture and 1/2 of non-agricultural Gross Value Added. It is followed by India with around 50% of total GDP (including agriculture) and 38% excluding it, and 46% of non-agricultural GVA. Then MENA countries with 36%, 26% and 29%, respectively, Latin America (with 29%, 24% and 25%) and lastly transition countries (with 19%, 11% and 14%).

The informal sector (in its broad sense: including agriculture, as well as in its strict sense: excluding agriculture) is the largest contributor to GDP in the regions where agriculture is predominant (Sub-Saharan Africa and Asia).

Assessing trends on the contribution of the informal sector to GDP is more difficult. This is so because changes in values are primarily due to the assumptions of national accountants and the only noticeable changes are structural when a new base year allows radical changes based on updated sources and new surveys. This is the case for data available for the 2010s that have been compiled for new base years. Generally speaking these new data seem to show a slight decrease of the share of informal sector in GDP. This result is consistent with the observed drop in employment in the informal economy in most regions, except sub-Saharan Africa but the differences in the sets of countries cannot allow deeper analyses.

Chart 5 shows the relation between the share of employment in the informal economy and the contribution of the informal sector to GDP. As expected, Niger and Benin are located in the upper right corner, whereas transition countries stand at the lower left corner.

Chart 5: Contribution of the informal sector to GDP and share of employment in the informal economy (2010s).



Sources: database used for previous tables.

To a certain extent, those figures are underestimated because the informal economy in general and the informal sector in particular are usually characterised by weak statistics, despite the recent progress of which the present compilation is an illustration. Furthermore, the contribution of informal sector to GDP does not take into account informal employment outside the informal sector, which is scattered all over the various institutional sectors. The volume of this sub-component of the informal economy can be now estimated in terms of jobs: the question is then to know what value added can be imputed to these jobs. India attempted such an exercise with its labour input matrix (Kolli and Sinharay, 2011a and b) and it estimated at 43.9% informal employment in the public and private corporate sector in 2004-05 and at 21.6% its contribution to the Gross Value Added of these sectors (12.1% in 1990-2000) and 34.7% of non-agricultural activities (including the informal sector). At the same time, these same figures of the contribution of informal sector to GDP may indeed be overestimated as they are based on the assumption that the household sector can be assimilated to the informal sector. If this can be considered as approximately true in regions with large traditional subsistence agriculture and small formal sector, it is not so justified for emerging economies.

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