# MAPPING SIZE AND DIVERSITY OF INFORMAL ECONOMY

#### Marty Chen Harvard University WIEGO

The Working Poor in the Informal Economy

Street vendors in Mexico City; push-cart vendors in New York city; rickshaw pullers in Calcutta; jitney drivers in Manila; garbage collectors in Bogotá; and roadside barbers in Durban. Those who work on the streets or in the open-air are the more visible occupational groups in the informal economy. The streets of cities, towns, and villages in most developing countries – and in many developed countries – are lined by barbers, cobblers, garbage collectors, waste recyclers, and vendors of vegetables, fruit, meat, fish, snack–foods, and a myriad of non–perishable items ranging from locks and keys to soaps and detergents, to clothing. In many countries, head–loaders, cart pullers, bicycle peddlers, rickshaw pullers, and camel, bullock, or horse cart drivers jostle to make their way down narrow village lanes or through the maze of cars, trucks, vans, and buses on city streets.

But the informal economy includes activities and workers that are less visible and, even, invisible. Less visible informal workers work in small shops and workshops. On the street corners of most cities, towns, or villages, even in residential areas, are countless small kiosks or stalls that sell goods of every conceivable kind. Down the crowded lanes of most cities, towns, or villages are small workshops that repair bicycles and motorcycles; recycle scrap metal; make furniture and metal parts; tan leather and stitch shoes; weave, dye, and print cloth; polish diamonds and other gems; make and embroider garments; sort and sell cloth, paper, and metal waste; and more.

The least visible informal workers, the majority of them women, sell or produce goods from their homes: garment makers; embroiderers; incense–stick rollers; cigarette–rollers; paper bag makers; kite makers; hair band makers; food processors; and others. These least visible workers are not confined to developing countries. Home-based workers are to be found around the world, including: garment workers in Toronto; embroiderers on the island of Madeira; shoemakers in Madrid; and assemblers of electronic parts in Leeds. Some of these home-based workers work on their own account, while others work on a piece-rate basis for a contractor or a firm.

Other categories of informal work that are common in both developed and developing countries: casual workers in restaurants and hotels; sub-contracted janitors and security guards; casual or day labourers in construction and agriculture; and piece-rate workers in

and sweatshops. Most workers in all of these categories of work are informally employed, without secure contracts, worker benefits, or social protection.

#### The Informal Economy

Broadly defined, the informal economy includes the *self-employed in informal enterprises* (i.e., small and unregulated) as well as the *wage employed in informal jobs* (i.e., unregulated and unprotected) in both urban and rural areas (ILO 2002, Chen *et al* 2005). So defined, informal labour markets encompass *rural self-employment*, both agricultural and non-agricultural; *urban self-employment* in manufacturing, trade, and services; and various forms of *informal wage employment* (including casual day labourers in construction and agriculture, industrial outworkers, and more).

2

In developed countries, relatively few labour statisticians, economists, or other observers use the concepts of informal sector or informal employment. Rather, the more common concept and term for forms of work that have been flexibilised or informalized is "non-standard work". Non-standard work refers to forms of work that do not – or no longer - conform to regular, year-round, full-time employment with a single employer. The most commonly-cited categories of non-standard work in developed countries, for which official data are readily available, are self-employment, part time work, and temporary work. It is important to note that, in addition to self-employment, two categories of informal employment - day labour and domestic work - are fairly common in developed countries. Also, some part-time and temporary workers in some developed countries are not covered by legal or social protections and could, therefore, be considered as informally employed.

#### **Developing Countries**

To date, relatively few developing countries have measured informal employment broadly defined and fewer still have measured trends in informal employment over time. This is because the expanded concept of "informal employment" was ratified only in 2003. However, an indirect measure of informal employment can be - and has been - used to estimate the size of informal labour markets and the informalization of labour markets over time: namely, estimating informal employment as the difference between *total* employment (estimated by labour force surveys or population censuses) and *formal* employment (estimated by enterprise surveys or economic censuses).

What follows is a summary of findings regarding the size of the informal economy in 25 developing countries (ILO 2002) and changes in informal employment over time in 20 of these countries (Heintz and Pollin 2003): official national data were used to estimate

<sup>&</sup>lt;sup>1</sup> This broad definition of the informal economy, developed by the ILO Statistics Bureau and the WIEGO network, was official endorsed by the 2002 International Labour Conference, the 2003 International Conference of Labour Statisticians, and the International Expert Group on Informal Sector Statistics (the Delhi Group). At present, the ILO Statistics Bureau, the Delhi Group, and the WIEGO network on preparing a manual on surveys to measure informal employment so defined.

informal employment in each of the countries using the indirect measure noted above.<sup>2</sup> Findings on labour force segmentation and average earnings are based on two recent reviews of available data (Chen *et al* 2004, 2005).

#### Informal Employment

Informal employment broadly defined comprises one-half to three-quarters of *non-agricultural* employment in developing countries: specifically, 47 per cent in the Middle East and North Africa; 51 per cent in Latin America; 71 per cent in Asia; and 72 per cent in sub-Saharan Africa. If South Africa is excluded, the share of informal employment in non-agricultural employment rises to 78 per cent in sub-Saharan Africa; and if comparable data were available for countries, other than India, in South Asia, the regional average for Asia would likely be much higher.

Some countries include informal employment in *agriculture* in their estimates. This significantly increases the proportion of informal employment: from 83 per cent of *non-agricultural* employment to 93 per cent of *total* employment in India; from 55 to 62 per cent in Mexico; and from 28 to 34 per cent in South Africa.

The main segments of informal employment, classified by employment status, are as follows:

#### Self-Employed:

- *employers*: owner operators of informal enterprises who hire others;
- *own account workers*: owner operators in single-person units or family businesses/farms who do not hire others;
- *unpaid contributing family workers*: family workers who work in family businesses or farms without pay.

#### Wage Workers:

- *informal employees*: unprotected employees with a known employer: either an informal enterprise, a formal enterprise, a contracting agency, or a household;
- casual wage workers: wage workers with no fixed employer who sell their labour on a daily or seasonal basis; and
- *industrial outworkers*: sub-contracted workers who produce for a piece-rate from their homes or small workshops.

#### Composition -

\_

<sup>&</sup>lt;sup>2</sup> This summary is based on recent analyses of available national data, as indicated, as well as earlier summaries of these analyses in Chen *et al* 2004 and 2005. The authors of ILO 2002 as well as Heintz and Pollin (2003) analyzed a common set of official national data collected and compiled by Jacques Charmes.

Informal employment is comprised of both self-employment in informal enterprises (i.e., small and/or unregistered) and wage employment in informal jobs (i.e., without secure contracts, worker benefits, or social protection). In all developing regions, self-employment comprises a greater share of informal employment (outside of agriculture) than wage employment: specifically, self-employment represents 70 per cent of informal employment in sub-Saharan Africa, 62 per cent in North Africa, 60 per cent in Latin America, and 59 per cent in Asia. Excluding South Africa, where black-owned businesses were prohibited during the apartheid era and have only recently begun to be recognised and reported, the share of self-employment in informal employment increases to 81 per cent in sub-Saharan Africa.

Self-employment represents nearly one-third of *total* non-agricultural employment worldwide. It is less important in developed countries (12 percent of total non-agricultural employment) than in developing countries where it comprises as much as 53 per cent of non-agricultural employment in sub-Saharan Africa, 44 per cent in Latin America, 32 per cent in Asia, and 31 per cent in North Africa.

Informal wage employment is also significant in the developing world: comprising 30 to 40 per cent of informal employment (outside of agriculture) Informal wage employment is comprised of employees of informal enterprises as well as various types of informal wage workers who work for formal enterprises, households, or no fixed employer. These include casual day labourers, domestic workers, industrial outworkers (notably homeworkers), undeclared workers, and part-time or temporary workers without secure contracts, worker benefits, or social protection.

Non-standard wage employment, much of which is informal, is significant in the developed world. In 1998, part-time work represented 14 per cent of total employment for the OECD countries as a whole and more than 20 per cent of total employment in eight of these countries. In the countries of the European Union, temporary work comprises 11 per cent of total employment. Comparable data on other categories of non-standard wage work that are even more likely to be informal in nature – namely, contract work, industrial outwork, and casual day labour - are not available.

Home-based workers and street vendors are two of the largest sub-groups of the informal workforce: with home-based workers the more numerous but street vendors the more visible of the two. Together they represent 10-25 per cent of the non-agricultural workforce in developing countries and over 5 per cent of the total workforce in developed countries.

#### Segmentation –

While average earnings are higher in formal jobs than in informal employment, there is also a hierarchy of earnings within informal employment. In Tunisia, for example, informal employers earn four times the minimum wage and over two times (2.2) the formal wage. Their employees earn roughly the minimum wage, while industrial outworkers – mostly women homeworkers – earn less than one-third (30%) of the

minimum wage. In Columbia and India, informal employers earn 4-5 times the minimum wage, while own account operators earn only 1.5 times the minimum wage (analysis of national data by Jacques Charmes, cited in Chen *et al* 2004).

In brief, within informal labour markets, there is a marked segmentation in terms of average earnings across the different employment statuses outlined above. Research findings suggest that it is difficult to move up these segments due to structural barriers (state, market, and social) and/or cumulative disadvantage. Many workers, especially women, remain trapped in the lower-earning and more risky segments. To statistically test whether there are structural barriers to mobility across the different segments will require better data on key variables – such as education or assets – across these different segments.

## Informalization of Labour Markets

As noted earlier, there is a widespread assumption that the informal economy is countercyclical: that is, it expands during economic down turns and contracts during periods of economic growth. However, recent analyses of data over time from different developing countries suggest a more complex and dynamic picture with substantial variation in patterns of informalization across countries. As might be expected, sharp economic downturns are associated with a rise in informal employment. But in some countries, steady rates of economic growth are associated with an increase in informal employment. This is because certain forms of informal employment expand during downturns in the economy: such as survival activities and sub-contracted and outsourced activities linked to formal firms trying to cope with recession; while other forms of informal employment expand during upturns in the economy: such as the more entrepreneurial small firms as well as sub-contracted and outsourced activities linked to the global production system.

Consider the findings from 20 countries in Asia, Africa, and Latin America at two points in time – generally in the 1980s and the 1990s. For each of the countries, the rate of change in informalization is compared to the rate of growth in average per capita GDP over the same time period (Heintz and Pollin 2003). Most of the countries (14 out of 20) experienced growth in informalization; four experienced a decline; and two experienced little, if any, change. What is interesting to note, and which goes against the common assumption, informalization increased in three countries with respectable per capita growth rates (>2 %) and declined in two countries with poor per capita growth rates (<1 %). "These patterns suggest that informal employment has been increasing faster than formal employment, even in countries with strong rates of growth" (Heintz 2006:17). The authors conclude that "(h)igher rates of growth are generally associated with smaller increases in the rate of informalization. At very high levels of growth, informalization may decline." (Ibid:18). But they also note that such cross-country comparisons do not include all types of informal employment: this is because the available data often exclude own account production and informal wage employment, especially industrial outwork (Heintz 2006b). High levels of growth driven by export production may be associated with increases in certain types of informal employment: notably, industrial outwork for global supply chains (see evidence from Tunisia below).

6

#### **Developed Countries**

Few labour statisticians, economists, and other observers in developed countries use the concepts of informal sector or informal employment: the more common concept is that of "non-standard" work. And the most common categories of non-standard work for which official data are available are: self-employment, part-time work, and temporary work. Although not all part-time workers and temporary workers are informally employed, in the sense of being unprotected, many receive few (if any) employment-based benefits or protection.<sup>3</sup> Comparable data on other categories of employment that are even more likely to be informal in nature – namely, contract work, industrial outwork, and casual day labour - are not readily available in developed countries.

In North American, European Union, and other OECD countries, available evidence suggests that the workforce has become flexibilized or informalized. In these regions, statisticians and researchers use the concept "non-standard" work for the forms of work that are flexible or informalized. The term "non-standard work" as commonly used includes a) jobs that entail an employment arrangement that diverges from regular, year round, full time employment with a single employer without secure; and b) self-employment with or without employees (Carré and Herranz 2002). The common categories of non-standard wage work are temporary work, fixed-term work, and part-time work. Increasingly, inter-firm sub-contracted work in the service sector (such as janitorial services and home care) and in the manufacturing sector (such as garment making and electronic assembly) is also included. Unlike the concept of informal employment as used in developing countries, the concept of "non-standard work" as commonly used in developed countries does not include the following: informal wage work for informal enterprises (employees of the self-employed), for households (domestic workers), or for no fixed employer (casual day labourers).

What follows is a brief summary of trends in three categories of non-standard work - part-time work, temporary work, and self-employment – in Europe (Carré and Herranz 2002, Carré 2006).

Part-Time Work - Since the early 1970s, there has been a marked growth in the proportion of part-time workers in total employment. By 1998, part-time workers accounted for 16 per cent of total employment in European Union (EU) countries and 14 per cent of total employment in Organization of Economic Cooperation and Development (OECD) countries.

Temporary Employment - For the EU as a whole, and in a majority of EU nations, the share of workers in temporary employment, including both direct hire and agency hire,

<sup>3</sup> It should be noted that part-time work is often not informal (i.e. unprotected). In the Nordic countries, part-time work is often long-term with social protection. In the USA, however, part-time workers are offered very few benefits: in the mid-1990s, less that 20 per cent of regular part-time workers had employer-sponsored health insurance or pensions (Hudson 1999).

increased from the mid-1980s to the late 1990s. By 1998, temporary employment accounted for around 10 per cent of total employment in EU countries.

7

Self-Employment - Self-employment, including both employers and own account workers, has increased in many OECD countries over the past 25 years. Indeed, outside of agriculture, self-employment has grown at a faster rate than total employment in 14 (out of 24) OECD countries where data were available. Also, as self-employment has been growing, so has the share of own account self-employment within total self-employment. As a result, in OECD countries today, more self-employed persons are own account workers than employers.

#### **Gendered Patterns**

Informalization of Labour Markets by Sex

The last two decades have seen a marked increase in women's labour force participation: most significantly in the Americas and Western Europe and more modestly in Sub-Saharan Africa, Southeast Asia, and East Asia (UNRISD 2005, Heintz 2005). Only in two regions - Eastern Europe and South Asia – has women's labour force participation rate actually fallen. The marked increase in women's labour force participation worldwide has given rise to the notion of the "feminization of the labour force". But this notion has been defined and used in two distinct ways. First, to refer to the situation is which the ratio of women's labour force participation rate to men's labour force participation rate increases over time. Second, to refer to a situation in which the structure of the labour force itself is "feminized": that is, when jobs take on features associated with women's work such as low pay, drudgery, uncertainty, and precariousness (Heintz 2005).

Whether or not there is a causal link between the increase in women's labour force participation and the growing precariousness or informality of work is not clear – and has been hotly debated. Are the expansion of women's labour force participation and the informalization of labour markets over the past two decades linked in some way, or do they represent parallel but distinct processes? The pervasive segmentation of labour markets by gender, which we will discuss below, suggests that women's labour did not simply substitute for men's labour. Rather, that there has been some parallel process at work creating low-paid and poor quality informal employment opportunities for (primarily) women (Ibid.).

<sup>&</sup>lt;sup>4</sup> Statisticians distinguish three main sub-categories of self-employment: 1) "employers", the self-employment hire others; 2) "own account workers", who do not hire others; 2"; and 3) "unpaid contributing family workers". However, many statistical analyses, such as those by the OECD reported by Carre 2006, exclude unpaid family members because they are considered "assistants", not "entrepreneurs". Since the majority of unpaid family workers in most contexts are women, this exclusion understates the real level of women's labour force participation and entrepreneurship (Carre 2006).

Estimates of changes over time in the degree of informalization within the female and male labour force are not available. However, a recent analysis of trends in the Tunisian labour market, with a special focus on informal employment, suggests the kind of analysis required and the trends that might be found elsewhere.

Between 1975 and 1997, informal employment in Tunisia grew at a very fast rate. During the economic slump of the 1980s, the share of informal employment increased: accounting for almost 40 per cent of non-agricultural employment by 1989. This trend confirmed the conventional notion that the informal economy is counter-cyclical, expanding during economic down-turns and shrinking during economic growth. However, during the rapid economic growth and trade liberalization of the 1990s, the share of informal employment grew even faster: accounting for over 47 per cent of non-agricultural employment by 1997. In brief, while informal employment grew at an annual rate of over 5 per cent in the late 1970s and 1980s, it grew at an annual rate of 7.5 per cent between 1989 and 1997 (Charmes and Lakehal 2006).

How can this apparent contradiction be explained? The authors make the case, with supporting data, that the distinction between informal employment *inside* the informal sector (i.e. small non-registered enterprises) and informal employment *outside* the informal sector is behind this seeming contradiction. During the late 1970s and 1980s, it was largely informal employment *inside* the informal sector that grew. While during the economic growth of the 1990s, it was largely informal employment *outside* the informal sector that grew: notably, informalized and sub-contracted labour for larger enterprises, most of it undeclared. By 1997, less than half of the informal workforce (46%) was employed in small informal enterprises (i.e., the informal sector) while over half (54%) was employed as *undeclared informal workers* for both formal and informal enterprises: most of whom are women outworkers for export-oriented firms. In brief, the evidence from Tunisia suggests that while employment inside the informal sector may be countercyclical, informal employment outside the informal sector may be pro-cyclical (Ibid.).

The Tunisian example confirms what the cross-country analysis, summarized above, suggests: namely, that certain forms of informal employment – notably, sub-contracted work linked to the global production system – expand during periods of economic growth, especially when growth is driven by trade and financial liberalization. What is important to note is that women workers tend to be overrepresented in global production systems, at least in the early stages of trade liberalization when a premium is placed on export-oriented light manufacturing and low-skilled (and low-paid) workers (Chen *et al* 2005).

#### Informal Employment in Developing Countries by Sex

Informal employment is generally a larger source of employment for women than for men in the developing world. Other than in the Middle East and North Africa, where 42 per cent of women workers (and 48% of male workers) are in informal employment, 60 per cent or more of women non-agricultural workers in the developing world are informally employed. Among non-agricultural workers, in sub-Saharan Africa, 84 per

cent of women workers are informally employed compared to 63 per cent of men workers; in Latin America, 58 per cent of women workers compared to 48 per cent of men; and in Asia, 73 per cent of women workers compared to 70 per cent of men workers.

9

Segmentation of Informal Employment in Developing Countries by Sex

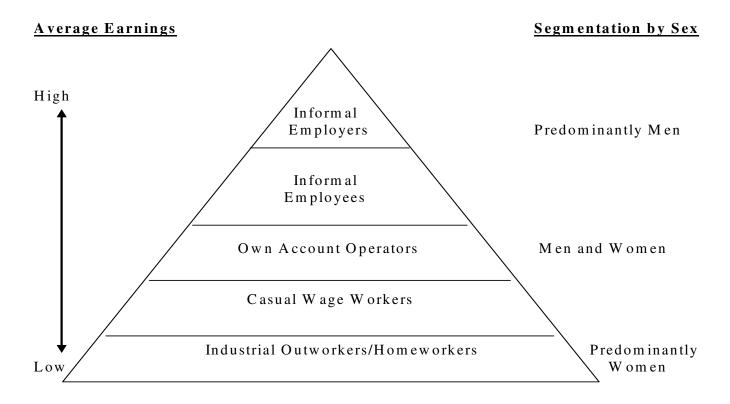
Available evidence from several developing countries suggests that, as a general rule, relatively high shares of informal employers are men and relatively high shares of industrial outworkers are women. In India, for example, 6 per cent of informal employers, 19 per cent of own account operators, 16 per cent of informal wage workers, and 59 per cent of industrial outworkers are women.<sup>5</sup>

In brief, men tend to be over-represented in the top segments of the informal economy; women tend to be over-represented in the bottom segment; and the relative shares of men and women in the intermediate segments vary across sectors and countries. Available evidence also suggests that there are significant gaps in earnings within the informal economy: informal employers have the highest earnings on average; followed by their employees and informal employees of formal firms; then own account operators, casual wage workers, and industrial outworkers. These two stylized facts are depicted graphically in Figure 1.

\_

<sup>&</sup>lt;sup>5</sup> These figures were computed by Jeemol Unni using the individual records of the Employment and Unemployment Survey, 1999-2000, 55th Round of the National Sample Survey Organisation, New Delhi.

Figure 1 Segmentation of Informal Employment by Average Earnings and Sex



Note: The informal economy may also be segmented by race, ethnicity, caste, or religion.

The available data on poverty risk – that is, the likelihood that a worker from a given segment of the labour force is from a poor household – indicate a similar hierarchy. Workers in the formal economy, particularly in public sector formal jobs, are less likely than workers in the informal economy to be from a poor household. Within the informal economy, informal employees are more likely than their employers to be from poor households, own account operators are more likely than informal employees to be from poor households, and so forth down the segmentation pyramid illustrated above (Chen *et al* 2005). However, analysing the poverty risk of workers, as opposed to their average earnings, is complicated by whether or not a worker is the sole earner, the primary bread winner, or a supplemental earner in her household. For example, because their earnings are so low, women industrial outworkers are likely to be supplemental earners in households with male earners. Whether or not an industrial outworker is from a poor households depends on whether the earnings of the whole household, including her earnings, fall below or above the poverty threshold. However, if she is the sole or

primary breadwinner, the household of a women industrial outworker is very likely to be poor (Ibid.).

An additional fact, not captured in Figure 1, is that there is gender segmentation and earning gaps within these broad employment status categories. Women tend to work in different types of activities, associated with different levels of earning, than men—with the result that they typically earn less even within specific segments of the informal economy. Some of this difference can be explained by the fact that men tend to embody more human capital due to educational discrimination against girls, especially in certain societies (e.g., in North India and Pakistan). This difference can also be explained by the fact that men tend to have better tools of the trade, operate from better work sites/spaces and have greater access to productive assets and financial capital. In addition, or as a result, men often produce or sell a higher volume or a different range of goods and services. For instance, among street vendors in many countries, men are more likely to sell non-perishables while women are more likely to sell perishable goods (such as fruits and vegetables). In addition, men are more likely to sell from push-carts or bicycles while women are more likely to sell from baskets, or simply from a cloth spread on the ground.

In sum, there is a significant range of average earnings and poverty risk within the informal economy by employment status with a small entrepreneurial class (comprised of most informal employers and a few own account operators) and a large working class (comprised of most informal employees, most own account operators, all casual workers, and all industrial outworkers). There is also gender segmentation within informal labour markets resulting in a gender gap in average earnings with women over-represented in the lowest-paid segments and earning less on average than men in most segments.<sup>6</sup>

### Non-Standard Work in Developed Countries by Sex

Part-Time Work - In virtually all EU and OECD countries, the incidence of part-time work is much higher among women than men: in some countries it is twice as high. By 1998, women represented 82 per cent of all part-time workers in EU countries. Further, rates of part-time work are high for women, but not men, in their prime working years.

Temporary Employment - Temporary employment, like part-time work, is primarily a female phenomenon, although there is wide variation among EI countries. In all countries except Austria, the incidence of temporary employment among female workers is higher than among all workers. And, like part-time work, temporary employment is concentrated in the service-producing industries. Interestingly, in regard to temporary agency employment, women account for the majority of agency temps in countries where such employment concentrates in services while men account for the majority of agency temps in countries where such employment concentrates in manufacturing and construction: that

<sup>&</sup>lt;sup>6</sup> For a detailed analysis of available statistics on the gender segmentation of the informal economy and the linkages between working in the informal economy, being a woman or man, and being poor, see Chen *et al* 2004, 2005.

is, "the gender composition of employment mirrors that of the sectors in which temporary agency assignments take place" (Carré 2006: 13).

Self-Employment - In 1997, women comprised one in three self-employed persons in OECD countries and this proportion is growing. For EU countries as a whole, the incidence of own account work is greater for men (11%) than for women (7%). But, in some countries, a higher proportion of women than men are own-account work. Age is a factor in own account work: with workers aged 45 and above more likely than younger workers to be own account workers (Ibid.).

## REFERENCES: For more details, see the following references on which the summary above is based:

- Chen, M. A., J. Vanek, and M. Carr (2004). *Mainstreaming Informal Employment and Gender in Poverty Reduction: A Handbook for Policy-Makers and Other Stakeholders*. London: Commonwealth Secretariat.
- Chen, M. A., J. Vanek, F. Lund, J. Heintz with R. Jhabvala and C. Bonner (2005). *Progress of the World's Women 2005: Women, Work, and Poverty.* New York: UNIFEM.
- Heintz, J. (2006) "Growth, Employment, and Poverty Reduction." Discussion paper prepared for the workshop "Growth, Employment, and Poverty Reduction," held at the Department for International Development, March 17th, 2006.
- \_\_\_\_\_. (2005.) "Globalization, Economic Policy and Employment: Poverty and Gender Implications." *Employment Strategy Paper*, No. 6. Geneva: Employment Policy Unit, Employment Strategy Department, ILO.
- Heintz, J. and R. Pollin. (2003). "Informalization, Economic Growth and the challenge of Creating Viable Labor Standards in Developing Countries." *Political Economy Research Institute Working Paper*, No. 60. Amherst, MA: Political Economy Research Institute, University of Massachusetts Amherst.

International Labour Office. (2002). *Women and Men in the Informal Economy: A Statistical Picture*. Geneva: International Labour Office. Available online at: http://www.ilo.org/public/english/ employment/gems/download/women.pdf

Please note that the ILO 2002 and the Chen et al 2005 (Chapter 3) are recognized worldwide as the preeminent sources of data on *employment* in the informal economy.