BEYOND THE FORMAL ECONOMY: EVALUATING THE LEVEL OF EMPLOYMENT IN INFORMAL SECTOR ENTERPRISES IN GLOBAL PERSPECTIVE

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The aim of this paper is to evaluate the varying level of employment in informal sector enterprises across the globe and to undertake an exploratory analysis of the wider economic and social conditions associated with greater levels of informalization. Examining International Labor Organization surveys conducted in 43 countries, the finding is that the main job of just under one in three (31.5 percent) non-agricultural workers is in an informal sector enterprise. Conducting an exploratory analysis of the correlation between countries with higher levels of employment in informal sector enterprises and economic under-development (‘modernization’ thesis), higher taxes, corruption and state interference (‘neo-liberal’ thesis) and inadequate state intervention to protect workers from poverty (‘structuralist’ thesis), the finding is that there is a need to synthesize various tenets from all three perspectives. The outcome is a tentative call for a ‘neo-modernization’ perspective, which posits that higher levels of employment in informal sector enterprises are associated with economic under-development, public sector corruption and inadequate state intervention to protect workers from poverty.

Keywords: Informal economy; shadow economy; underground sector; entrepreneurship; enterprise development; economic development.

1. Introduction

For much of the twentieth century, the dominant view was that the informal sector was a leftover from a previous mode of production, which was gradually fading from view with the advent of the modern formal economy (Geertz, 1963; Gilbert, 1998; Lewis, 1959; Packard, 2007). However, over the past decade or so, there has been a growing recognition that the informal sector remains a prominent feature of many economies across the world and that a significant proportion of employment is in informal sector enterprises (Antonopoulos and Mitra, 2009; Bureau and Fendt, 2011; Dibben and Williams, 2012; Gurtoo and Williams, 2009; Hudson et al., 2012; Ram et al., 2006; Small Business Council, 2004; Valenzuela, 2001; Webb et al., 2009; Williams, 2007; Williams and Nadin, 2010, 2013;
Williams and Round, 2007). The result has been a burgeoning literature that has begun to
document the characteristics of informal enterprises and employment in informal enter-
prises (Aidis et al., 2006; Mróz, 2012; Williams, 2010) as well as what might be done
about such enterprises (Barbour and Llanes, 2013; Dellot, 2012; Williams and Nadin,
2012). Despite this rapidly growing literature on informal sector enterprise, little or no
attempt has been made to evaluate the proportion of global employment in informal sector
enterprises and how this varies across global regions and countries. This paper fills that
gap. Indeed, it is important to evaluate the proportion of jobs that are in informal sector
enterprises. Unless the level of employment in these types of enterprises is evaluated, it
will not be known whether such enterprises are merely a leftover of marginal importance
and relevance, or whether such enterprises constitute a sizeable realm that requires more
attention by the entrepreneurship literature. Therefore, the aim of this paper is to evaluate
for the first time to date, the varying level of employment in informal sector enterprises
across the world and following this, to undertake a preliminary analysis of the reasons for
the cross-national variations in the share of jobs in informal sector enterprises.

To achieve this, the next section will briefly review both the state of knowledge on the
prevalence of informal sector enterprises as well as how the cross-national variations in the
scale of the informal sector have been explained in terms of either economic under-
development (‘modernization’ explanation), higher taxes, corruption and state interference
(‘neo-liberal’ explanation) or inadequate state intervention to protect workers from poverty
(‘structuralist’ explanation). Finding that evaluations of the level of employment in
informal sector enterprises are notable by their absence, the third section will then intro-
duce a database, namely the International Labor Organization’s (ILO) country surveys on
the informal sector and informal employment, along with the development indicators here
used to evaluate critically the validity of the rival explanations for the cross-national
variations in the level of employment in informal sector enterprises. The following section
then reports the descriptive results on the varying share of all non-agricultural jobs in
informal sector enterprises across these 43 countries followed in the fourth section by a
preliminary analysis of the validity of the competing explanations for the prevalence of
employment in informal sector enterprises. The final section then draws some conclusions
by summarizing the findings about the share of jobs in informal sector enterprises and how
this varies cross-nationally, and call for a rejection of the neo-liberal thesis and the
adoption of a synthesis of the tenets of the modernization and structuralist theses in the
form of a new ‘neo-modernization’ perspective.

2. Employment in Informal Sector Enterprises: Definitions,
Measurements and Explanations

2.1. Defining informal sector enterprise

This paper adheres to the widely agreed definition of informal sector enterprise developed
by the International Conference of Labor Statisticians (ICLS) (Hussmanns, 2005; ILO,
2011, 2012). Informality can be defined using either enterprises or jobs as the unit of
observation. As Table 1 displays, if enterprises are the unit used, then the result is to define
informality in terms of ‘employment in the informal sector’ (A+B) while if jobs are used, informality is defined in terms of ‘informal employment’ (A+C).

Therefore, the definition of employment in informal sector enterprise (A+B) adopted here is that agreed at the 15th International Conference of Labor Statisticians in 1993. This defines the ‘informal sector’ as comprised of private unincorporated enterprises that are unregistered or small in terms of the number of employed persons. An unincorporated enterprise is a production unit that is not constituted as a separate legal entity independently of the individual (or group of individuals) who owns it, and for which no complete set of accounts is kept. Meanwhile, an enterprise is unregistered when it is not registered under specific forms of national legislation (e.g., factories’ or commercial acts, tax or social security laws, professional groups’ regulatory acts). Holding a trade license or business permit under local regulations does not qualify as registration. Furthermore, an enterprise is considered small when its size in terms of employment levels is below a specific threshold (e.g. five employees) determined according to national circumstances (Hussmanns, 2005; ILO, 2011, 2012).

However, employment in informal sector enterprises is not always by definition informal employment. As Table 1 displays, employment in informal sector enterprises can be either formal or informal. Therefore, the definition of ‘informal employment’ adopted by the 17th ICLS in 2003 is adopted here, which distinguishes five categories of informal employment: (a) own-account workers and employers employed in their own informal enterprises; (b) members of informal producers’ cooperatives (not established as legal entities); (c) own-account workers producing goods exclusively for own final use by their household (if considered employed given that the production comprises an important contribution to the total household consumption and is included in the national definition of employment); (d) contributing family workers in formal or informal enterprises; and (e) employees holding informal jobs in formal enterprises, informal enterprises, or as paid domestic workers employed by households. Employment is defined as ‘informal’ if the employees are not covered by social security or are not entitled to other employment benefits (ILO, 2011, 2012). This definition enables informal and formal employment in informal sector enterprises to be distinguished as well as the proportion of informal employment that is ‘entrepreneurship,’ namely category (a), and the proportion which is waged work, namely categories (b), (c), (d) and (e).

### 2.2. Measurements of the level of employment in informal sector enterprises

Reviewing the literature on informal sector enterprise, it becomes quickly apparent that the vast majority of research has focused on identifying the characteristics of informal
enterprises, the motives of the informal sector entrepreneurs who establish these enterprises and/or what needs to be done in policy terms about such enterprises (Aidis et al., 2006; Antonopoulos and Mitra, 2009; Gurtoo and Williams, 2009; Hudson et al., 2012; Jones et al., 2007; Mróz, 2012; Ram et al., 2006; Small Business Council, 2004; Valenzuela, 2001; Webb et al., 2009; Williams and Nadin, 2012, 2013). Until now, there has been little attempt to evaluate the level of employment in informal sector enterprises.

Despite this lack of focus on measuring the scale of employment in informal sector enterprises, methods are available for doing so as are datasets. Commencing with the measurement methods, the methods available for measuring the informal sector range from direct surveys to indirect measurement methods using proxy indicators and/or seeking statistical traces in data collected for other purposes (OECD, 2002, 2012; Ram and Williams, 2008). Indirect methods seek to uncover evidence of the prevalence of informal sector enterprise in macroeconomic data collected and/or constructed for other purposes using either monetary indicators (e.g., the number of large denomination notes in circulation) or non-monetary proxies (e.g., the number of very small enterprises). Until now, however, indirect methods have not been used.

Neither have direct surveys on the whole so far been used to measure the scale of informal sector enterprises. One notable exception is the work of Williams (2008), which reports the results of three direct surveys conducted in Russia, Ukraine and England. This finds that 96, 51 and 23 percent of nascent entrepreneurs operate in the informal sector in each of these respective countries. However, socio-spatial variations exist. Williams and Nadin (2010) and Williams (2010) reveal that the preponderance to operate in the informal sector is greater among enterprises in English deprived and rural localities. In English affluent and urban districts some 58 and 62 percent of nascent enterprises trade in the informal sector, but 84 and 87 percent in deprived urban and rural localities. Williams (2009a) also identifies variations between enterprises owned by men and women in England; 30 percent of women had started-up a business, but just 11 percent of men, had not registered and traded in the informal sector. In Ukraine, similarly, 60 percent of women but only 43 percent of men had started-up without registering and trading in the informal sector (Williams, 2009b). The same tendencies are identified in Moscow (Williams and Round, 2009) and India (Williams and Gurtoo, 2011). However, these results are the result of interviews with only 130 enterprise owners in England, 331 in Ukraine and just 81 in Moscow.

Although few studies have sought to calculate the share of jobs in informal sector enterprises, there are two major datasets available from which such estimates can be derived. First, the World Bank’s Doing Business, Enterprise, Micro-Enterprise and Informal Enterprise surveys are available, from which estimates can be derived of the scale of informal sector enterprise globally (World Bank, 2013b). However, there have so far been no attempts to derive such global and cross-national estimates from these World Bank datasets, the only known exception being Hudson et al. (2012) who calculate the scale and impacts of informal sector enterprise in South-East Europe using these datasets. Second, the International Labor Organization has conducted surveys of the informal sector and informal employment in 47 countries (ILO, 2011, 2012). These collect data on the
share of total employment in informal sector enterprises, the proportion of this employment that is formal and informal and the proportion that is composed of entrepreneurship and waged employment. Therefore, it is this dataset that will be analyzed here to calculate the level and nature of employment in informal sector enterprises across the globe. Future academic research might usefully do the same with the World Bank datasets. However, the two datasets cannot be combined because they used different definitions and methodologies to measure the prevalence of informal sector enterprise.

Before turning to an introduction to this ILO data and its findings however, it is necessary to outline how the cross-national variations in the scale of informal sector enterprise have been so far explained because the intention in this paper is to provide not only a first estimate of the scale of informal sector enterprise, but also the wider economic and social conditions associated with greater levels of such enterprise.

2.3. Explaining variations in the level of employment in informal sector enterprise

Until now, three competing perspectives have sought to explain the variations in the level of employment in informal sector enterprises. These view greater levels of employment in informal sector enterprises to be a result of either economic under-development (‘modernization’ perspective), high taxes, public sector corruption and state interference in the free market (‘neo-liberal’ perspective) or inadequate state intervention to protect workers from poverty (‘structuralist’ perspective). Each is here considered in turn.

2.3.1. Modernization perspective

Over the course of much of the twentieth century, the widespread assumption was that the informal sector was a legacy of a previous mode of production and was small and gradually disappearing as the modern formal sector took hold and became ever more hegemonic and totalizing. Therefore, employment in informal sector enterprises was widely portrayed as a relic from an earlier mode of production and fading away. Seen through this conceptual lens, extensive informal sectors are seen to be a signal of ‘traditionalism,’ ‘under-development’ and even ‘backwardness,’ while extensive formal sectors are viewed as representing ‘progress,’ ‘development’ and ‘advancement’ (Geertz, 1963; Gilbert, 1998; Lewis, 1959; Packard, 2007). The result is that informal sector enterprises are depicted as an expression of under-development that will fade away with economic advancement and modernization. Nevertheless, over the past few decades, a range of competing explanations have emerged.

2.3.2. Neo-liberal perspective

For neo-liberal commentators, people operate informal sector enterprises because of high taxes, a corrupt state system and too much interference in the free market. Therefore, establishing enterprises in the informal rather than formal sector is a rational economic decision people make to voluntarily exit the formal sector to avoid the costs, time and effort of formal registration (e.g., Becker, 2004; De Soto, 1989, 2001; London and Hart, 2004; Nwabuzor, 2005; Sauvy, 1984; Small Business Council, 2004). As Becker (2004)
asserts, “informal work arrangements are a rational response by micro-entrepreneurs to over-regulation by government bureaucracies.” Therefore, for this group of neo-liberal commentators, the creation of informal enterprises is a rational economic strategy pursued by those operating enterprises whose spirit is stifled by high taxes and state-imposed institutional constraints (De Soto, 1989, 2001; Perry and Maloney, 2007; Small Business Council, 2004). Therefore, the ongoing prevalence, and even growth of informal sector enterprises, is a product of high taxes, corruption, over-regulation and state interference in the free market. The resultant remedy is seen to be to pursue tax reductions, reduce corruption, deregulate and minimal state intervention. From this neo-liberal perspective, therefore, employment in informal sector enterprises should be more extensive in countries with higher taxes, public sector corruption and state interference in the workings of the free market.

2.3.3. Structuralist perspective

For a loose group of scholars who adopt a structuralist perspective in contrast, the ongoing extensiveness and growth of employment in informal enterprises is viewed as a direct by-product of the emergence of a deregulated open world economy (Castells and Portes, 1989; Gallin, 2001; Hudson, 2005; Portes, 1994; Sassen, 1996; Slavnic, 2010). The emergent functional integration of a single global economic system has resulted in subcontracting and outsourcing becoming a key vehicle for integrating informal enterprises into late capitalism, leading to further downward pressure on wages and the erosion of incomes, social services and benefits, and the growth of yet more informal sector enterprises. As Fernandez-Kelly (2006) states, “the informal economy is far from a vestige of earlier stages in economic development. Instead, informality is part and parcel of the processes of modernization.” Indeed, for Davis (2006), such “primitive forms of exploitation… have been given new life by postmodern globalization.”

Viewed from this perspective, employment in informal enterprises is a largely unregulated, poorly paid and insecure type of survival-driven work carried out under ‘sweatshop-like’ conditions by marginalized populations who are excluded from employment in the formal sector (Castells and Portes, 1989; Davis, 2006; Gallin, 2001; Hudson, 2005; Sassen, 1996). Therefore, employment in informal sector enterprises is necessity-driven and participants are pushed into this sector by their inability to find formal employment (e.g., Castells and Portes, 1989; Gallin, 2001; ILO, 2002). In the new post-Fordist and post-socialist era, those operating and working in informal sector enterprises are the unwilling pawns in an exploitative global economic system cast into this realm as a survival mechanism.

2.3.4. Evaluations of the competing perspectives

Most commentators who have sought to explain the persistence of the informal sector and employment in informal sector enterprises have done so by adopting one of these perspectives or ‘logics.’ For example, the ILO (2012) adopts the modernization perspective that the preponderance of informal sector enterprise decreases as GDP per capita grows,
while Schneider (2008) has largely sought to display the validity of various tenets of the neo-liberal perspective such as the need to reduce taxes and the level of public sector corruption so as to decrease the scale of employment in the informal sector. Yamada (1996) similarly argues that the owners of informal sector enterprises choose to enter the informal sector out of choice, as argued largely by neo-liberals, rather than out of necessity as argued by the structuralist perspective.

Few scholars have sought to evaluate critically the competing explanations. When such evaluations have been conducted, the finding has been that no one perspective is universally valid. It has been contended, for example, that structuralist explanations are more valid regarding waged work in the informal sector and the neo-liberal perspective more valid when explaining those who operate informal sector enterprises (Perry and Maloney, 2007; Williams, 2010), or that the structuralist perspective is valid when explaining the participation of relatively deprived populations but the neo-liberal perspective when explaining informality in relatively affluent populations (Evans et al., 2006; Gurtoo and Williams, 2009; Pfau-Effinger, 2009). Studies have similarly argued that the structuralist explanation is more valid when explaining women’s necessity-driven work in the informal sector and the neo-liberal explanation to the voluntary exit rationales that characterize men’s engagement (Franck, 2012; Grant, 2013; Williams, 2009a,b; Williams and Round, 2009).

Until now, however, no studies to date have evaluated critically the validity of these perspectives when explaining the cross-national variations in the level of employment in informal sector enterprises. It is to filling this gap in the literature that attention now turns. Is it simply that ‘developed’ economies have lower levels of employment in informal sector enterprises than less ‘developed’ economies, as the conventional ‘modernization’ perspective asserts? Is it that employment in informal sector enterprises is greater in economies with higher taxes and greater public sector corruption as neo-liberals contend? Or alternatively, is it the case that employment in informal sector enterprises is more prevalent in economies where there is greater poverty and less protection of workers forcing marginalized populations to conduct such endeavors as a last resort in the absence of alternatives, as structuralists assert?

3. Methodology: Examining Variations in the Level of Employment in Informal Sector Enterprises

To estimate the variations in the level of employment in informal sector enterprises across countries and global regions, the ILO surveys on the informal sector and informal employment carried out in 47 countries are here analyzed. The main advantage of using these surveys is not only that they are one of the few datasets available but they use the same common broad definition of employment in informal sector enterprises and employ a similar survey methodology — collecting data on the extent of the informal sector and informal employment using either an ILO Department of Statistics questionnaire sent to countries or information from national labor force or informal sector surveys (for further details, see ILO, 2012).
Although the ILO (2012) provides brief statistical portraits of the size of the informal sector and informal employment, this paper will focus for the first time on the overall aggregate findings regarding employment in informal sector enterprises, how this varies cross-nationally and across global regions, and the characteristics of the employment in these informal sector enterprises. Nevertheless, it is important to state at the outset that the findings reported here relate solely to non-agricultural employment. Employment in agriculture, hunting, forestry and fishing is excluded. Moreover, all the country surveys reported have used the same broad definition of the informal sector and informal employment, albeit with some minor variations across nations in terms of what constitutes ‘small’ (e.g., employing less than five employees) and also what is meant by unregistered because of the different national-level laws applying. Consequently, the country-level data reported in this paper can be treated as sufficiently comparable between countries. It is also important to note that throughout this paper ‘employment’ refers to what they self-report as their main job if the person has more than one job.

To analyze the characteristics each theoretical perspective associates with higher levels of employment in informal sector enterprises, indicators have been used from the World Bank database of development indicators for the year in which the survey of the informal sector and informal employment was conducted in each country (World Bank, 2013a). The only indicator taken from a non-official source related to perceptions of public sector corruption, which has been taken from Transparency International’s corruption perceptions index for the relevant year in each country (Transparency International, 2013).

To evaluate the validity of the modernization perspective, the indicator used is the same as previous studies (ILO, 2012; Yamada, 1996), namely GNP per capita (ILO, 2012). To evaluate the validity of the neo-liberal perspective that higher levels of employment in informal sector enterprises are the product of high taxes, corruption and state interference in the free market, indicators previously used by Eurofound (2013) and the European Commission (2013) when assessing the assumptions of the neo-liberal perspective are used, namely the World Bank (2013) country-level indicators on:

- Taxes on goods and services as a percentage of revenue, which includes general sales and turnover or value added taxes, selective excises on goods, selective taxes on services, taxes on the use of goods or property, taxes on extraction and production of minerals and profits of fiscal monopolies;
- Taxes on income, profits and capital gains as a percentage of revenue, which includes taxes on the actual or presumptive net income of individuals, on the profits of corporations and enterprises and on capital gains, whether realized or not, on land, securities and other assets. Intra-governmental payments are eliminated in consolidation.
- Taxes on revenue (excluding grants) as a percentage of GDP. Revenue is cash receipts from taxes, social contributions and other revenues such as fines, fees, rent and income from property or sales. Grants are also considered as revenue but are excluded here.
- Tax revenue as a percentage of GDP. Tax revenue refers to compulsory transfers to the central government for public purposes. Certain compulsory transfers such as fines,
penalties and most social security contributions are excluded. Refunds and corrections of erroneously collected tax revenue are treated as negative revenue.

Meanwhile, the corruption assertion of the neo-liberal perspective is assessed using:

- Transparency International’s 2007 Corruption Perceptions Index (CPI) (Transparency International, 2013). This is a composite index of perceptions of public sector corruption that draws on 14 expert opinion surveys and scores nations on a 0–10 scale, with zero indicating high levels and 10 low levels of perceived public sector corruption.

To evaluate both the neo-liberal perspective that states interference results in greater levels of employment in informal sector enterprises, as well as the structuralist perspective that it is a product of inadequate levels of state intervention, the indicator used is that previously employed in reports by the European Commission (2013) and Eurofound (2013) when assessing the assumptions of the neo-liberal and structuralist perspectives, namely:

- Social contributions as a percent of revenue. Social contributions include social security contributions by employees, employers and self-employed individuals, and other contributions whose source cannot be determined. They also include actual or imputed contributions to social insurance schemes operated by governments.

Meanwhile, and to analyze the structuralist assertion that employment in informal sector enterprises is associated with the level of poverty, the variable analyzed is the percentage of the population living below the national poverty line (ILO, 2012).

To analyze the relationship between cross-national variations in the level of employment in informal sector enterprises and these economic and social characteristics each perspective contends are associated, and given the small sample size of just 43 countries for which data are available and lack of necessary controls to include in a multivariate regression analysis, it is only possible here to conduct bivariate regression analyses. Here, Spearman’s rank correlation coefficient \( r_s \) is used because of the non-parametric nature of the data. As will become apparent, however, despite the limitation of only using bivariate regression analysis, meaningful findings are produced regarding the validity of the different theoretical perspectives.

Therefore, the variable level of employment in informal sector enterprises across the 43 countries for which data are available is reported below followed by a preliminary analysis of the wider economic and social conditions each perspective deems to be correlated with higher levels of employment in informal sector enterprises to evaluate the competing theoretical perspectives.

4. Findings: Employment in Informal Sector Enterprises in the Global Perspective

Examining the findings for the 43 countries for which informal sector enterprise data is available, Table 2 reveals that the simple unweighted average is that two in five (40.6
of the non-agricultural workforce have their main job in informal sector enterprises. This is a significant proportion of the non-agricultural workforce. However, and given the variable size of the workforce across countries, a weighted average figure is here employed that takes into account the variable size of the workforce in each country. The finding is that across all 43 countries, just under one in three (31.5 percent) of the non-agricultural workforce are employed in their main job in informal sector enterprises. Therefore, this type of employment is not some minor residue of little importance that resides in the margins of the economic landscape. As the main occupation of 1 in 3 of the non-agricultural labor force, this is a large sphere that employs a significant share of the workforce in these countries.

However, these overall figures mask some marked variations across global regions. To analyze this, the 43 countries for which data are available are divided, using the World Bank (2013a) classification into six regions, namely East Asia and the Pacific (China, Indonesia, Philippines and Vietnam), Europe and Central Asia (Armenia, Kyrgyzstan, FYR Macedonia, Moldova, Russian Federation, Serbia and Ukraine), Latin America and the Caribbean (Argentina, Bolivia, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela), the Middle East and North Africa (West Bank and Gaza), South Asia (India, Pakistan and Sri Lanka) and sub-Saharan Africa (Cote d’Ivoire, Ethiopia, Liberia, Lesotho, Madagascar, Mali, Mauritius, South Africa, Tanzania, Uganda and Zambia, Zimbabwe).

Analyzing the variations in employment in informal sector enterprises across these global regions, the finding is that the weighted proportion of the informal non-agricultural workforce as their main job ranges from one in five (20.6 percent) in Europe and Central Asia to nearly two in five (38.8 percent) in sub-Saharan Africa. Therefore, the share of the informal sector working population in their main job is not distributed evenly globally.

The variations between countries within each of these global regions, nevertheless, are as marked as the variations between global regions. As Table 3 displays, the

<table>
<thead>
<tr>
<th>Global Region</th>
<th>% of Non-agricultural Workforce in Informal Sector Enterprises, Unweighted</th>
<th>% of Non-agricultural Workforce in Informal Sector Enterprises, Weighted</th>
<th>No of Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Asia &amp; Pacific</td>
<td>49.5</td>
<td>33.7</td>
<td>4</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>15.6</td>
<td>20.6</td>
<td>7</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>40.6</td>
<td>33.3</td>
<td>16</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>23.2</td>
<td>21.8</td>
<td>1</td>
</tr>
<tr>
<td>South Asia</td>
<td>63.7</td>
<td>28.6</td>
<td>3</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>48.0</td>
<td>38.8</td>
<td>12</td>
</tr>
<tr>
<td>All global regions</td>
<td>40.6</td>
<td>31.5</td>
<td>43</td>
</tr>
</tbody>
</table>

*Source:* derived from ILO (2012).
Table 3. Non-agricultural employment in informal sector enterprises, 43 countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>% of jobs in Informal Sector Enterprises</th>
<th>Own-account Workers and Employers as % of All Employed in Informal Sector Enterprises</th>
<th>Formal Jobs as % of All Jobs in Informal Sector Enterprises</th>
<th>Global Region (World Bank Classification)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>2009/10</td>
<td>73.0</td>
<td>45.1</td>
<td>4.0</td>
<td>South Asia</td>
</tr>
<tr>
<td>Philippines</td>
<td>2008</td>
<td>72.5</td>
<td>37.0</td>
<td>19.2</td>
<td>East Asia and Pacific</td>
</tr>
<tr>
<td>Mali</td>
<td>2004</td>
<td>71.4</td>
<td>81.9</td>
<td>1.3</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>Cote d’Ivoire</td>
<td>2008</td>
<td>69.7</td>
<td></td>
<td></td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>India</td>
<td>2009/10</td>
<td>67.5</td>
<td>47.0</td>
<td>1.0</td>
<td>South Asia</td>
</tr>
<tr>
<td>Zambia</td>
<td>2008</td>
<td>64.6</td>
<td>53.6</td>
<td>10.5</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2009</td>
<td>60.2</td>
<td>47.1</td>
<td>0.0</td>
<td>East Asia &amp; Pacific</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>2009</td>
<td>59.2</td>
<td></td>
<td></td>
<td>Europe &amp; Central Asia</td>
</tr>
<tr>
<td>Uganda</td>
<td>2010</td>
<td>59.8</td>
<td>61.7</td>
<td>6.9</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>Honduras</td>
<td>2009</td>
<td>58.3</td>
<td>62.8</td>
<td>2.4</td>
<td>Latin America &amp; Caribbean</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>2009</td>
<td>54.4</td>
<td>61.0</td>
<td>6.8</td>
<td>Latin America &amp; Caribbean</td>
</tr>
<tr>
<td>El Salvador</td>
<td>2009</td>
<td>53.4</td>
<td>62.7</td>
<td>3.4</td>
<td>Latin America &amp; Caribbean</td>
</tr>
<tr>
<td>Colombia</td>
<td>2010</td>
<td>52.2</td>
<td>72.6</td>
<td>3.4</td>
<td>Latin America &amp; Caribbean</td>
</tr>
<tr>
<td>Bolivia</td>
<td>2006</td>
<td>52.1</td>
<td>62.2</td>
<td>1.0</td>
<td>Latin America &amp; Caribbean</td>
</tr>
<tr>
<td>Madagascar</td>
<td>2005</td>
<td>51.8</td>
<td>51.7</td>
<td>0.2</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>Tanzania</td>
<td>2005/6</td>
<td>51.7</td>
<td>80.3</td>
<td>1.0</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>2009</td>
<td>50.5</td>
<td>40.8</td>
<td>0.2</td>
<td>South Asia</td>
</tr>
<tr>
<td>Liberia</td>
<td>2010</td>
<td>49.5</td>
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Source: derived from ILO (2012).
The proportion of the informal non-agricultural workforce ranges from 73.0 percent in Pakistan to 3.5 percent in Serbia. Indeed, in 17 of the 43 nations, over half of the non-agricultural workforce has their main job in informal enterprises either as informal entrepreneurs or employees. Consequently, these enterprises are not some small segment of the economy of limited importance. In 39.5 percent of the countries surveyed, it is the formal economy that employs under half the workforce and informal sector enterprises employ the majority. Indeed, Table 3 also includes data on the proportion of all employment in informal sector enterprises that is composed of own-account workers and employers, and also the proportion of jobs in informal sector enterprises that are formal jobs.

Furthermore, using Fig. 1, which positions countries on a spectrum with employment ranging from wholly formal to wholly informal with many variations in-between, the finding is that although no countries have all employees either in formal or informal enterprises, and there are no ‘nearly informal’ and ‘dominantly informal’ economies, 7 percent of countries are ‘largely informal’ economies, 9 percent are ‘mostly informal’ economies (60–70%), 23 percent are ‘semi-informal’ economies, 11 percent are ‘semi-formal’ economies, 19 percent are ‘mostly formal’ economies, 11 percent are ‘largely formal’ economies, 7 percent are dominantly formal economies and 11 percent are ‘nearly formal’ economies. Therefore, just under 2 in 5 (39.5 percent) of the surveyed countries have over half of all non-agricultural employment in informal sector enterprises.

Those countries where a greater proportion of employment in informal enterprises is composed of employers and own-account workers (e.g., 90.6 percent in Panama) signify that these informal sector entrepreneurs employ relatively few employees, while those where employers and own-account workers are a lower share of total employment in informal sector enterprises (e.g., 5.5 percent in Lesotho) signify that these entrepreneurs employ a larger number of employees. However, the proportion of the non-agricultural workforce employed in informal sector enterprises is not significantly correlated with either the proportion who are own-account workers and employers, and neither is it correlated with the share who are in formal jobs in informal sector enterprises.

If there is no association between the level of employment in informal sector enterprises and these characteristics of such employment, is it nevertheless the case that there is an association between the level of employment in informal sector enterprises and the various economic and social conditions in countries identified by the various theoretical perspectives? It is to this attention now turns.
5. Analysis: Evaluating the Competing Theoretical Perspectives

To explain the above cross-national variations in the level of employment in informal sector enterprises, a preliminary analysis of the validity of each of the three theoretical perspectives is conducted. First, to evaluate the validity of the modernization perspective that the share of employment in informal sector enterprises is lower in ‘developed’ wealthier economies and greater in ‘less developed’ economies, the correlation between such employment and GNP per capita is analyzed across these 43 countries. As Fig. 2 reveals, and using Spearman’s rank correlation coefficient because of the nonparametric nature of the data, there is a strong significant relationship between the level of employment in informal sector enterprises in a country and its GNP per capita ($r_s = -0.584^{**}$). The direction of this relationship is that the share of the non-agricultural workforce employed in informal sector enterprises is greater in countries with lower levels of GNP per capita. This is akin to previous findings (ILO, 2012; Yamada, 1996). Similar to this survey, nevertheless, these studies cannot establish the direction of the correlation in terms of any cause-effect relationship. This, in consequence, is a limitation of both the current and previous studies.

To evaluate the neo-liberal perspective, whether the cross-national variations in the level of employment in informal sector enterprises are correlated with taxes, corruption and state interference are analyzed. Commencing with the neo-liberal argument that employment in informal sector enterprises is more prevalent where there is greater public sector corruption because this results in citizens exiting the formal economy to pursue livelihood beyond the reach of the corrupt public sector, Fig. 3 reveals that countries with greater perceived levels of public sector corruption have higher levels of employment in informal sector enterprises ($r_s = -0.368^*$). Therefore, some support is found for this neo-liberal thesis.

Is it also the case that the level of employment in informal sector enterprises is a product of ‘exit’ from the formal sector because of high taxes? Given the centrality of this argument to neo-liberal arguments, four measures of taxation levels are analyzed here. Commencing with the relationship between the cross-national variations in the level of employment in informal sector enterprises and the level of taxes on goods and services as a percentage of revenue, Fig. 4 reveals the inverse to the neo-liberal argument. The level of...
employment in informal sector enterprises increases as taxes on goods and services decreases. However, this is not a statistically significant correlation ($r_s = -0.280$).

However, when examining the relationship between the level of employment in informal sector enterprises and the level of taxes on income, profits and capital gains as a proportion of revenue, a rather different finding emerges. As Fig. 5 displays, the higher the level of taxes on income, profits and capital gains, the greater is the level of employment in informal sector enterprises, and this is statistically significant at the 0.01 level ($r_s = 0.533**$). Therefore, support is found for the neo-liberal thesis that informal sector entrepreneurship is a result of exit from the formal economy because of high tax rates.

Nevertheless, this is not the finding when two further measures of tax levels are analyzed. As Fig. 6 displays, there is a strong, significant correlation between cross-national variations in the level of taxes on revenue (excluding grants) as a share of GDP and the level of employment in informal sector enterprises ($r_s = -0.589**$). The scale of employment in informal sector enterprises is significantly lower in countries where taxes on revenue are a higher proportion of GDP. Similarly, Fig. 7 displays a similar strong, statistically significant relationship between the scale of employment in informal sector enterprises and public sector corruption.

Fig. 3. Relationship between employment in informal enterprises and public sector corruption.

Fig. 4. Relationship between employment in informal sector enterprise and taxes on goods and services.
enterprises and cross-national variations in the level of tax revenue as a proportion of GDP ($r_s = -0.488**$). Again, employment in informal sector enterprises is significantly lower in countries where the level of tax revenue as a proportion of GDP is higher.

When reviewing the neo-liberal explanation although there is some evidence that cross-national variations in the level of employment in informal sector enterprises is associated

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**Fig. 5.** Relationship between employment in informal enterprises and taxes on income, profits and capital gains.

**Fig. 6.** Relationship between level of employment in informal enterprise and taxes on revenue (excluding grants) as % of GDP.

**Fig. 7.** Relationship between scale of informal entrepreneurship and tax revenue as % of GDP.
with levels of public sector corruption and is driven by a desire to ‘exit’ the formal economy because of public sector corruption, there is insufficient evidence to validate the neo-liberal thesis that higher tax rates result in exit from the formal economy into employment in informal sector enterprises. If anything, the inverse is the case. On three of the four tax indicators analyzed, higher tax levels are correlated with lower levels of employment in informal sector enterprises, presumably because this provides greater state revenue for social transfers so citizens can receive social protection.

To evaluate whether the neo-liberal argument is valid that greater state interference results in higher levels of employment in informal sector enterprises or whether it reduces with greater state intervention, as the structuralists posit, Fig. 8 explores the relationship between cross-national variations in the level of employment in informal sector enterprises and the level of social contributions as a percentage of revenue. The finding is that as social contributions rise as a share of revenue, there is a steep decline in employment in informal sector enterprises, intimating support for the structuralist thesis. This is statistically significant ($r_s = -0.517^*$). The neo-liberal argument is thus refuted that state interference leads to greater employment in informal sector enterprises and instead, support is found for the structuralist argument that such employment in informal sector enterprises is associated with too little state intervention in the form of the provision of social protection.

The structuralist argument that the cross-national variations in employment in informal sector enterprises are associated with the level of poverty is also supported. As Fig. 9 reveals, a strong statistically significant relationship exists between cross-national variations in the proportion of the population living below the national poverty level and the level of employment in informal sector enterprises. The greater is the share of the population living below the national poverty level, the higher is the level of employment in informal sector enterprises ($r_s = 0.429^{**}$), suggesting that employment in informal sector enterprises may well be a last resort turned to by marginal populations with no other option, as the structuralists posit.

![Fig. 8. Relationship between employment in informal enterprises and social contributions as % of revenue.](image-url)
6. Conclusions

This paper has produced the first estimate of the cross-national variations in the level of employment in informal sector enterprises and undertaken a preliminary exploratory analysis of the broader economic and social conditions correlated with higher levels of such employment. Analyzing the results of ILO surveys conducted in 43 countries, the finding is that the main job of just under one in three (31.5 percent) of the non-agricultural workforce is in informal enterprises as either informal sector entrepreneurs or employees. Nevertheless, marked cross-national variations exist. Not only does the level of informal employment range from 73.0 percent of the non-agricultural workforce in Pakistan to 3.5 percent in Serbia, but in 17 of the 43 nations, over half of the non-agricultural workforce has their main job in informal enterprises either as informal entrepreneurs or employees. Consequently, informal sector enterprises are not some small segment of the economy of limited importance. In 39.5 percent of the countries surveyed, it is the formal economy that employs the minority of the workforce and informal sector enterprises employ the majority.

The three competing explanations for the cross-national variations in the level of employment in informal sector enterprises have then been evaluated. These argue that higher levels of such employment are associated with economic under-development (‘modernization’ perspective), higher taxes, corruption and state interference (‘neo-liberal’ perspective) and/or inadequate state intervention to protect workers from poverty (‘structuralist’ perspective). The finding is that although the modernization perspective tentatively appears to be valid that employment in informal enterprises is a product of ‘under-development’ and the neo-liberal assumption that it is a product of corruption appears validated, the neo-liberal tenets that employment in informal sector enterprises is a product of higher taxes is not validated. Instead, not only is there some tentative support for the structuralist view that high taxes and social transfers reduce the level of employment in informal sector enterprises because these reduce the necessity to engage in such work in the absence of other means of support and livelihood, but also for the view informal employment is closely associated with the level of poverty in a society.

Fig. 9. Relationship between employment in informal enterprises and % of population living below the national poverty level.
The outcome is a tentative call for a synthesis of the neo-liberal tenet that public sector corruption is associated with higher levels of such employment and the modernization and structuralist perspectives. Consequently, a new ‘neo-modernization’ perspective can be advocated that explains lower levels of employment in informal sector enterprises as associated with development, lower levels of public sector corruption and state intervention in the form of higher tax rates and social transfers to protect workers from poverty. This neo-modernization thesis now needs to be further evaluated in terms of whether it holds both across a broader range of countries using for example the World Bank dataset, as well as when time-series data is examined for individual nations.

Furthermore, this relationship between the level of employment in informal sector enterprises and under-development, public sector corruption, lower tax rates and inadequate state protection to protect workers from poverty has practical policy implications. In stark contrast to previous policy literature, which has focused on whether repressive measures need to be introduced and/or incentives to encourage formalization (Feld and Larsen, 2012; OECD, 2002), this paper has displayed that wider economic and social policies associated with the overarching modernization of economies, state bureaucracies and social protection are important. Again, whether similar findings emerge when a broader range of nations are investigated, as well as when time-series data is analyzed or individual nations, now needs to be evaluated. Moreover, if a broader range of countries are analyzed such as by using the World Bank Doing Business, Enterprise, Micro-Enterprise and Informal Enterprise surveys (World Bank, 2013b), multivariate regression analysis might also be employed to determine how important each characteristic is to the final outcome while controlling for other characteristics. This would then overcome a limitation of this paper, which is based on just 38 nations.

In conclusion, this paper has displayed that informal sector enterprises employ a sizeable share of the total workforce across these 43 countries and that marked cross-national variations exist in the proportion employed in informal sector entrepreneurship enterprises, which is associated with the level of GNP per capita, public sector corruption, tax rates, level of social contributions and poverty rates. This now needs to be applied longitudinally within nations and to a wider range of countries, using more refined multivariate regression analysis, to evaluate whether the relationship holds as well as which characteristics are most significantly correlated with employment in informal sector enterprises. If this paper begins to encourage such research as well as recognition of the type of modernization of economies and societies needed, then it will have achieved its intention. If it also stimulates a broader view of enterprises and entrepreneurship that recognizes the centrality of entrepreneurship and enterprises in the informal sector, then it will have achieved its broader objective.

References


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