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**Out of the margins: classifying economies by the prevalence and nature of  
employment in the informal economy**

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# **Out of the margins: classifying economies by the prevalence and nature of employment in the informal economy**

## **Abstract**

Given the commonality of employment in the informal economy, this paper moves beyond classifying nations by the composition of their formal economies and instead classifies countries by the extent and nature of employment in the informal economy. Analysing ILO data on the size and character of employment in the informal economy in 36 developing economies, the outcome is to reveal a significant correlation between cross-national variations in the degree and intensity of informalisation and cross-national variations in GNP per capita, corruption, poverty, taxation and social contribution levels. The paper concludes by discussing the implications for theory and policy.

**Keywords:** informal sector; shadow economy; developing economies; economic development.

## **Introduction**

Until now, classificatory schemas of economies have differentiated countries by the character of their formal economic systems, such as by their levels of Gross Domestic Product (GDP) or Gross National Income (GNI) per capita (World Bank, 2013), whether they are control, market or mixed economies (Arnold, 1996; Rohlf, 1998), or liberal or coordinated varieties of capitalism (Hall and Soskice, 2001). This would be appropriate if the majority of employment globally was in the formal economy. However, this is not the case (Jütting and Laiglesia, 2009; ILO, 2012, 2013; Williams and Lansky, 2013). Consequently, the aim of this paper is to develop a classification of economies according to the commonality and character of employment in the informal economy. The importance of doing this is that it not only brings to the fore the persistence of employment in the informal economy across the world but also draws attention away from the formal labour market in which only a minority of jobs globally are located and towards what is to be done about employment in the informal economy in which the majority of jobs are found.

To do this, the first section will briefly review how employment in the informal economy is defined, provide a typology that classifies economies according to the extent and nature of employment in the informal economy and review the competing explanations for the cross-national variations in the prevalence and character of employment in the informal economy. In the second section, and to begin to classify economies and evaluate critically the competing explanations for the cross-national variations, a data set is then introduced, namely the ILO dataset of country surveys on the informal sector and informal employment, which contains data on the level and nature of employment in the informal economy in 36 developing countries. The third section then reports the descriptive findings on the cross-national variations in the degree and intensity of informalisation followed in the fourth section by a preliminary evaluation of the competing explanations for these cross-national variations. The fifth and final section then concludes by summarising the findings and discussing their theoretical and policy implications.

## **Employment in the informal economy: definition, typology and explanations**

### **Defining employment in the informal economy**

Employment in the informal economy is here defined using the widely accepted enterprise-based definition of the informal sector and jobs-based definition of informal employment

developed by the 15th and 17th International Conference of Labour Statisticians (ICLS) respectively (Hussmans, 2005; ILO, 2011, 2012). As Table 1 graphically displays, taking the enterprise as the unit of analysis results in the informal sector including both formal and informal jobs in informal sector enterprises (A+B), whilst taking jobs as the unit of analysis results in informal employment including informal jobs in both informal and formal enterprises (A+C). In this paper, both units of analysis are used by examining ‘employment in the informal economy’ (A+B+C) which covers all persons who in their main job are employed either in the informal sector (A+B) or in informal employment (A+C), counting only once those persons who are classified in both categories.

INSERT TABLE 1 ABOUT HERE

To define ‘employment in the informal economy’, therefore, firstly, informal enterprises (i.e., the enterprise-based concept of the ‘informal sector’) and secondly, informal jobs (i.e., the jobs-based concept of ‘informal employment’) must be defined. The 15th International Conference of Labour Statisticians in 1993 defined the ‘informal sector’ (i.e., informal enterprises) as private unincorporated enterprises that are unregistered or small in terms of the number of employed persons. An unincorporated enterprise is a production unit 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. An enterprise is unregistered, meanwhile, 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). The issuing of a trade license or business permit under local regulations does not qualify as registration. An enterprise is small, meanwhile, when its size in terms of employment is below a specific threshold (e.g. five employees) determined according to national circumstances (Hussmans 2005; ILO 2011, 2012).

Given that this does not include those in informal jobs in formal enterprises, the 17th ICLS in 2003 adopted the jobs-based definition of ‘informal employment’ to capture such workers. A job is defined as informal employment when it lacks basic social or legal protections or employment benefits and may be found in the formal sector, informal sector or households. Persons in informal employment include the following types: (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. As regards (e), employees have informal jobs if their employment relationship is, in law or in practice, not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits (e.g., advance notice of dismissal, severance pay, paid annual or sick leave). The reasons may be the following: non-declaration of the jobs or the employees; casual jobs or jobs of a limited short duration; jobs with hours of work or wages below a specified threshold; employment by unincorporated enterprises or by persons in households; jobs where the employee’s place of work is outside the premises of the employer’s enterprise; or jobs for which labour regulations are not applied, not enforced, or not complied with for any other reason (ILO, 2011, p. 12).

With these definitions in hand, attention can turn towards how economies can be classified according to the level and character of employment in the informal economy.

### Classifying economies by the degree and intensity of informalization

Any classification of economies that compares the variable size and heterogeneous character of employment in the informal economy across the globe firstly needs to convey the degree of informalization in any economy and secondly, how the nature of the informal sector varies across economies. Figure 1 provides a simple way of classifying the degree of informalization in any economy (i.e., the proportion of the non-agricultural workforce in employment in the informal economy). All economies can be positioned at a point on this spectrum. However, when interpreting the different places economies occupy on this spectrum, care is required. Sometimes a temporal sequencing has been overlaid onto this spectrum by assuming that there is a natural and inevitable temporal trajectory towards the left of the continuum (i.e., formalization) and therefore a 'development queue' portrayed with the more formal economies of the west to the left of the spectrum and the more informal economies of the third (majority) world located at the back (Massey, 2005).

INSERT FIGURE 1 ABOUT HERE

However, the position any economy inhabits on this continuum does not necessarily represent the stage they are at in their trajectory towards formalisation but rather, difference, and as such, a natural and inevitable temporal trajectory in a particular direction should not be assumed. Indeed, the lesson learned from the past few decades is that different economies are moving in different directions along this continuum (Schneider, 2013; Williams, 2007). Denoting formalisation as a universal linear trajectory of economic development not only denies the lived practices of economies but also excludes the distinct possibility of alternative present and future trajectories.

To capture how the character of employment in the informal economy varies across economies meanwhile, any typology needs to outline the different forms of employment in the informal economy in any country. Various options are available. For example, one might chart the share of total employment in the informal economy which is conducted on a waged, own-account or household basis (see Williams and Lansky, 2013). Here however, and using Table 1 earlier, a distinction is drawn between informal employment in informal enterprises (A), informal jobs in formal enterprises (B) and formal jobs in informal enterprises (C). How the character of employment in the informal economy varies cross-nationally can be then classified according to the 'intensity of informalisation', namely the share of all employment in the informal economy which is informal employment in informal enterprises (A). This is here considered a measure of a more intense form of informalisation since both the job and the enterprise is informal, which is not the case with formal jobs in informal sector enterprises (B) and informal employment in formal enterprises (C). Once economies are classified according to the degree and intensity of their informalisation, then these variations need to be explained.

### Explaining employment in the informal economy

In the modernisation thesis, which dominated for most of the twentieth century, employment in the informal economy was widely depicted as a relic from a pre-modern production era and fading as the modern formal economy took hold (Geertz, 1963; Gilbert, 1998; Lewis, 1959; Packard, 2007). As Bromley (2007, p. xv) asserts, from this perspective, employment in the informal economy is 'unimportant and destined to disappear'. Such work is thus portrayed as a product of under-development, and will disappear with economic advancement and modernisation. Cross-national variations in the degree and intensity of informalisation, therefore, are seen to signify the position of a country on a one-dimensional linear trajectory

towards formalisation. Classifying countries using indicators such as GNP per capita, therefore, enable the relative level of economic advancement and modernisation to be measured and for countries to be placed according to their place in the development queue with nations at the fore being 'advanced', 'modern' and 'progressive' and nations at the back of the queue with low levels of formalisation being deemed 'backward', 'traditional' and 'under-developed' (Geertz, 1963; Gilbert, 1998; Lewis, 1959; Packard, 2007).

In recent decades, however, the recognition that the majority of jobs are in the informal economy in many countries and regions (ILO, 2011, 2012, 2013; Jütting and Laiglesia, 2009; Rodgers and Williams, 2009; Schneider et al., 2010) and that employment in the informal economy is widespread and growing in some countries and global regions but smaller and declining in others (Buehn and Schneider, 2012; Feld and Schneider, 2010; Rani et al., 2013; Renooy et al., 2004; Schneider, 2011), has seen the emergence of various competing explanations. Each is here reviewed in turn (for a fuller discussion, see Williams and Lansky, 2013).

For a neo-liberal school of thought, the persistence and even growth of employment in the informal economy is deemed to be a populist reaction to high taxes, a corrupt state system and too much interference in the free market, leading workers to make a rational economic decision to voluntarily exit work in the formal economy in order to avoid the costs, time and effort of formal registration (e.g., Becker 2004; De Soto 1989 2001; London and Hart 2004; Nwabuzor 2005; Perry and Maloney 2007; Sauvy 1984; Small Business Council 2004). As Nwabuzor (2005, p. 126) asserts, 'Informality is a response to burdensome controls, and an attempt to circumvent them'. The consequent solution is to pursue tax reductions, reduce corruption, deregulation and minimal state intervention. From this perspective, therefore, employment in the informal economy should be more pervasive in countries with higher taxes and public sector corruption and greater state interference.

From a political economy perspective, however, this persistence and expansion of employment in the informal economy is conceptualised as a direct by-product of the advent of a de-regulated open world economy (Castells and Portes 1989; Gallin 2001; Hudson 2005; Portes 1994; Sassen 1996; Slavnic 2010; Taiwo, 2013). The increasing functional integration of a single global economic system results in subcontracting and outsourcing becoming a primary means of integrating employment in the informal economy into contemporary capitalism, causing a further downward pressure on wages and the erosion of incomes, social services and benefits, and the growth of yet more employment in the informal economy. Viewed through this conceptual lens, employment in the informal economy is a largely unregulated, low paid and insecure kind of survival-driven employment conducted under 'sweatshop-like' conditions by marginalised populations excluded from formal jobs and formal welfare support who turn to such work as a last resort (Castells and Portes 1989; Davis 2006; Gallin 2001; Hudson 2005; ILO 2002; Sassen 1996). Employment in the informal economy from this perspective will be therefore higher in economies where there is inadequate state intervention to protect workers from poverty.

Until now, most commentators explaining cross-national variations in the level of employment in the informal economy have done so by supporting and validating the tenets of just one of these perspectives. For example, Schneider (2008) seeks to display that various tenets of the neo-liberal perspective are valid such as the need for tax cuts and reducing corruption in order to reduce the prevalence employment in the informal economy, whilst Yamada (1996) argues that such employment is a matter of choice, as argued largely by neo-liberals, rather than a necessity as proposed by political economists. Recently, however, a more nuanced understanding has begun to emerge which views each of these perspectives as more relevant to some forms of informal employment and some contexts than others, and that only by combining them can a richer finer-grained understanding be achieved. For example,

it has been argued that although informality in all contexts is due to a mix of exit and exclusion rationales: the political economy perspective is more applicable when explaining waged work in the informal economy and the neo-liberal perspective when explaining self-employment in the informal economy (Perry and Maloney, 2007; Williams, 2010); the political economy perspective is more relevant to relatively deprived populations and the neo-liberal perspective when explaining the informality of relatively affluent populations within countries (Evans et al., 2006; Gurtoo and Williams, 2009; Pfau-Effinger, 2009; Williams et al., 2012); that exit is more common in developed economies and exclusion in developing economies (Oviedo, Thomas and Karakurum-Özdemir, 2009); and that women are more likely to be driven by exclusion rationales and men more commonly driven by voluntary exit rationales as the neo-liberals assert (Franck, 2012; Grant, 2013; Williams, 2009a,b; Williams and Round, 2009; Williams and Youssef, 2013).

So far, the only study that has evaluated critically the validity of these competing perspectives when explaining the cross-national variations in the level of employment in the informal economy focused upon the member states of the European Union and found evidence to support the tenets of both the modernisation and political economy perspectives but no evidence to support most of the tenets of the neo-liberal perspective (Eurofound, 2013; European Commission, 2013; Williams, 2013). No studies have yet evaluated the validity of these competing explanations in the context of employment in the informal economy in the developing world. This paper therefore seeks to fill that gap. Is it as the conventional 'modernisation' thesis asserts, simply that wealthier developing economies have lower levels of employment in the informal economy than poorer developing economies? Is it as neo-liberals assert that employment in the informal economy is greater in developing economies with greater public sector corruption, higher taxes and more state interference in work and welfare? Or alternatively, is employment in the informal economy more prevalent in developing countries where there is greater poverty and less protection of workers forcing marginalised populations into such endeavour in the absence of alternatives?

### **Methodology: examining employment in the informal economy**

To populate the classification of economies according to the prevalence and character of employment in the informal economy and evaluate the contrasting explanations for the cross-national variations, the ILO surveys conducted on the informal sector and informal employment in 47 developing countries are here analysed. In total, data is available from 36 of the 47 countries on the extent and nature of employment in the informal economy. This is the only cross-nationally comparable data currently available on employment in the informal economy in developing countries that uses a common broad definition across all countries and a similar survey methodology to collect data in the form of an ILO Department of Statistics questionnaire sent to countries (for further details, see ILO, 2012). This survey methodology excludes employment in agriculture, hunting, forestry and fishing. When examining the share of the non-agricultural workforce involved in employment in the informal economy, moreover, it is the self-reported main job of people having more than one job that is counted, not least so as to avoid any small-scale odd-jobs in the informal economy being counted. It is important to be aware at the outset however, that the national figures reported on the prevalence of employment in the informal economy arising out of this ILO data sometimes differ from, and are lower than, individual country level data, such as is the case with India. Although some caution is therefore urged, the advantage of this dataset is that it provides comparative data collected in the same manner using the same definitions.

Until now, despite various reports of the findings of this dataset with regard to the informal sector and informal employment (ILO, 2011, 2012), this dataset has not been used

to derive the results on the cross-national variations in the extent and character of employment in the informal economy and to evaluate critically the competing explanations for these cross-national variations. This paper fills that gap. To select the indicators against which the competing explanations can be evaluated, the approach adopted is that proxy indicators for the various tenets of each theorisation are taken from the World Bank development indicators database for the year in which the survey was conducted in each country (World Bank, 2013). The only indicator taken from a non-official source is on perceptions of public sector corruption, extracted from Transparency International's corruption perceptions index for the relevant year in each country (Transparency International 2013).

To evaluate the modernisation thesis, the indicator employed is that used in previous studies (ILO, 2012; Yamada, 1996), namely GNP per capita (ILO, 2012). To evaluate the neo-liberal thesis that higher levels of informal entrepreneurship result from high taxes, corruption and state interference in the free market, meanwhile, indicators previously used when evaluating the assumptions of neo-liberal thought are employed (Eurofound, 2013; European Commission, 2013; Williams, 2013), namely the World Bank (2013) country-level data 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 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.

In addition, the public sector corruption tenet of the neo-liberal thesis is evaluated using:

- Transparency International's 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 analyse both the neo-liberal thesis that state interference leads to greater levels of employment in the informal economy, and the contrary political economy perspective that it is due to inadequate levels of state intervention, the indicator analysed is that previously used when evaluating these assumptions of neo-liberal and political economy thought (European Commission, 2013; Eurofound, 2013; Williams, 2013), namely:

- Social contributions as a % 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 analyse the tenet of the political economy perspective that employment in the informal economy is correlated with the existence of poverty, the variable analysed is the percentage of the population living below the national poverty line.

To analyse the relationship between cross-national variations in the prevalence and nature of employment in the informal economy and these economic and social characteristics that each theorisation suggests are associated, and given the small sample size of just 36 countries and lack of necessary controls to include in a multivariate regression analysis, it is only possible here to conduct bivariate regression analyses. To do this, Spearman's rank

correlation coefficient ( $r_s$ ) is used due to the non-parametric nature of the data. As will be shown, despite the limitation of only using bivariate regression analysis, some meaningful findings are produced regarding the validity of the different theoretical perspectives.

Below, therefore, firstly the variable prevalence and character of employment in the informal economy across the 36 countries will be reported and secondly, a preliminary analysis of the wider economic and social conditions that each theorisation deem to be associated with higher levels of employment in the informal economy so as to evaluate the competing explanations.

### **Findings: cross-national variations in employment in the informal economy**

Evaluating the findings for the 36 countries on the level of employment in the informal economy, Table 2 reveals that the simple unweighted average is that the majority (57.4 per cent) of the non-agricultural workforce have their main employment in the informal economy. However, a weighted average figure is here used which takes into account the variable workforce size in each country. The finding is that across all 36 countries, three out of every five (59.8 per cent) non-agricultural workers have their main employment in the informal economy. Employment in the informal economy, therefore, is not some minor residue of little importance but a large realm employing the majority of the workforce in these developing countries.

INSERT TABLE 2 ABOUT HERE

However, these overall figures mask some marked variations across global regions. To analyse this, the 36 countries for which data are available are divided, using the World Bank (2013) classification into six regions (see Table 3 below for details). The finding is that the weighted proportion of the non-agricultural workforce whose main employment is in the informal economy ranges from just under one-quarter (24.8 per cent) of the working population in Europe and Central Asia, through to 75.6 per cent in South East Asia. The share of the working population whose main employment is in the informal economy, therefore, is not evenly distributed globally.

As Table 3 reports, there are also marked cross-national variations in employment in the informal economy, ranging from 84.7 per cent of the non-agricultural workforce in Mali to 6.5 per cent in Serbia. Indeed, in 24 (67 per cent) of the 36 nations, over half of the non-agricultural workforce have their main employment in the informal economy. There is, however, significant variation between countries. Using the classificatory schema in Figure 1 above, although no developing countries have all their workforce in either formal or informal employment and none are 'nearly informal' economies (with 90-99 per cent of the workforce in informal jobs), 11 per cent are 'dominantly informal' economies (with 80-89 per cent in informal jobs), 25 per cent are 'largely informal' economies (with 70-79 per cent in informal jobs), 22 per cent are 'mostly informal' economies (60-69 per cent in informal jobs), 8 per cent are 'semi-informal' economies (50-59 per cent in informal jobs), 17 per cent are 'semi-formal' economies (40-49 per cent in informal jobs), none are 'mostly formal' economies (30-39 per cent in informal jobs), 6 per cent are 'largely formal' economies (20-29 per cent in informal jobs), 8 per cent are 'dominantly formal' economies (10-19 per cent in informal jobs) and 3 per cent 'nearly formal' economies (1-9 per cent in informal jobs). These developing countries, in consequence, are heavily clustered in the middle of the continuum towards the informal end of the continuum.

INSERT TABLE 3 ABOUT HERE

There is also a strong correlation between the degree of informalisation of employment (i.e., the proportion of the non-agricultural workforce in employment in the informal economy) and the intensity of informalisation (i.e., the share of all employment in the informal economy which is informal employment in informal enterprises). To see this, columns 4 and 5 of Table 3 report the degree and intensity of informalisation respectively. Examining the intensity of the informalisation of employment, the finding is that across all 36 developing countries, three-quarters (74 per cent) of all employment in the informal economy is informal employment in informal enterprises. Again, however, there are marked cross-national variations, ranging from 85.2 per cent in Mali to 18.8 per cent in Lesotho. To analyse the correlation between the degree and intensity of the informalisation of employment, Figure 2 graphically displays that there is a statistically significant association. The greater is the degree of informalisation in a country, the higher is the intensity of the informalisation (i.e., the more likely is informal employment to be located in informal enterprises). Indeed, using Spearman's rank correlation coefficient ( $r_s$ ) due to the non-parametric nature of the data, the finding is that this is a statistically significant within a 99 per cent confidence interval ( $r_s = .631^{**}$ ).

INSERT FIGURE 2 ABOUT HERE

Given these findings concerning the cross-national variations in the extent and nature of employment in the informal economy, attention now turns towards evaluating critically the competing explanations for these variations.

### **Analysis: evaluating the competing explanations for employment in the informal economy**

To undertake a preliminary analysis of the validity of the three theoretical perspectives that variously explain employment in the informal economy, the association between the cross-national variations in the degree and intensity of informalisation and the cross-national variations in the various characteristics that each perspective deems to be important determinants are here evaluated.

Beginning with the modernisation explanation that the share of employment in the informal economy is greater in less developed economies, the correlation between cross-national variations in the degree of informalisation and cross-national variations in GNP per capita is analysed across these 36 developing economies. Using Spearman's rank correlation coefficient, and as Figure 3 graphically displays, the finding is that there is a strong statistically significant relationship within a 99 per cent confidence interval between the prevalence of employment in the informal economy in a country and its GNP per capita ( $r_s = .520^{**}$ ). The direction of this relationship is that employment in the informal economy is higher in developing economies with lower levels of GNP per capita. There is also a statistically significant association within a 95 per cent confidence interval between the intensity of informalisation and GNP per capita ( $r_s = .351^*$ ). The intensity of informalisation (i.e., the share of all employment in the informal economy which is informal employment in informal enterprises) is greater in developing economies with lower levels of GNP per capita. However, and similar to previous studies that reach the same conclusion (ILO, 2012; Yamada, 1996), it is not possible to here establish the direction of the correlation in terms of any cause-effect relationship. This, in consequence, is a limitation of both this and previous studies.

INSERT FIGURE 3 ABOUT HERE

Turning to the neo-liberal perspective that views informalisation to be an outcome of higher tax rates, public sector corruption and interference by the state in the operation of the free market, the first step is to analyse the neo-liberal tenet that informalisation is greater when public sector corruption is higher because this results in citizens exiting the formal economy so as to seek livelihoods beyond the corrupt public sector officials. The finding is that there is a strong statistically significant association between countries with higher perceived levels of public sector corruption and a greater degree of informalisation ( $r_s = -.502^{**}$ ) and although the association between public sector corruption and the intensity of informalisation is not statistically significant ( $r_s = -.253$ ), the direction of the relationship is that countries with higher perceived levels of public sector corruption have a greater intensity of informalisation.

Analysing the core neo-liberal tenet that higher levels of employment in the informal economy are a product of exit from the formal economy due to high taxes, cross-national variations in the degree and intensity of informalisation are here compared with cross-national variations in tax rates. Beginning with the relationship between the cross-national variations in the degree of informalisation and the level of taxes on goods and services as a percentage of revenue, the finding is that there is a statistically significant correlation ( $r_s = -.430^*$ ). However, its direction is the inverse of what neo-liberals suggest. The degree of informalisation decreases as taxes on goods and services increases. Meanwhile, although the relationship between the intensity of informalisation and the level of taxes on goods and services is not significant ( $r_s = -.216$ ), the direction is that the intensity of informalisation again decreases as taxes on goods and services increases.

Given that these findings begin to contest a core aspect of neo-liberal theory, two further measures of tax levels are here evaluated. Analysing cross-national variations in the level of revenue (excluding grants) as a share of GDP and cross-national variations in employment in the informal economy, a statistically significant association is identified with both the degree of informalisation ( $r_s = -.510^{**}$ ) and intensity of informalisation ( $r_s = -.656^{**}$ ). Again, however, it is in the opposite direction to that suggested by neo-liberal theory. It is similarly the case when the association between cross-national variations in the level of tax revenue as a proportion of GDP and cross-national variations in the degree and intensity of informalisation are analysed. There is once more a strong statistically significant association with both the degree ( $r_s = -.451^*$ ) and intensity ( $r_s = -.679^{**}$ ) of informalisation but again, the association is the inverse of what neo-liberal theory asserts. Across all three measures of tax rates therefore, the degree and intensity of informalisation is lower in nations with higher tax rates. One reason that higher tax levels might be correlated with lower degrees and intensities of informalisation may be that this provides greater state revenue to enable social transfers so that citizens can receive some level of social protection.

To evaluate this along with the neo-liberal argument that state interference in the operation of the market leads to a greater degree and intensity of informalisation, as well as the contrary political economy view that the degree and intensity of informalisation reduces with greater state intervention, the relationship between cross-national variations in the degree and intensity of informalisation and the level of social contributions as a percentage of revenue can be analysed. The finding is that a strong significant correlation is identified between the level of social contributions and degree of informalisation ( $r_s = -.609^{**}$ ) and also the intensity of informalisation ( $r_s = -.582^*$ ). The direction of the relationship is that both the degree and intensity of informalisation reduces as social contributions rise as a share of revenue, intimating support for the political economy explanation. No evidence is therefore found to support the neo-liberal argument that state intervention leads to informalisation. Instead, the political economy tenet is validated that informalisation is correlated with too little state intervention in the form of social protection.

Finally, and turning to the political economy tenet that cross-national variations in the degree and intensity of informalisation are associated with the level of poverty, again, a strong statistically significant relationship is found between cross-national variations in the proportion of the population living below the national poverty line and both the degree of informalisation ( $r_s = -.355^*$ ) but not the intensity of informalisation ( $r_s = .194$ ). The direction of this relationship is that the greater is the share of the population living below the national poverty line, the greater is the degree and intensity of informalisation, intimating that informalisation might well be a last resort turned to by marginalised groups with no other means of livelihood or support, as argued by the political economy explanation.

## **Conclusions**

This paper has provided a typology of economies that places countries on continua in terms of the extent and nature of employment in the informal economy. Analysing the results of the ILO surveys conducted in 36 countries, the finding is that three in five (59.8 per cent) of the non-agricultural workforce have their main employment in the informal sector and just under three in four (74 per cent) of those who have their main employment in the informal sector are in informal employment in informal sector enterprises. Nevertheless, marked cross-national variations exist. Not only does the level of employment in the informal sector range from 84.7 per cent of the non-agricultural workforce in Mali to 6.5 per cent in Serbia, but there are similar variations in the intensity of informalisation. The share of those employed in the informal sector who engage in informal employment in informal sector enterprises ranges from 85.2 per cent in Mali to 18.8 per cent in Lesotho. In 24 (67 per cent) of the 36 countries surveyed nevertheless, over half of the non-agricultural workforce is employed in the informal sector and in 32 (89 per cent) countries over half of this employment in the informal sector is in the form of informal employment in informal sector enterprises. Employment in the informal sector in consequence, is not some small segment of the labour market in these countries of marginal importance. Indeed, in two-thirds of the countries surveyed, it is the formal economy which employs the minority of the workforce and is marginal in terms of employment.

Turning to an exploratory analysis of the reasons for these cross-national variations in the degree and intensity of informalisation, three competing explanations have been critically evaluated which argue that the degree and intensity of informalisation is associated with economic under-development (modernisation thesis), higher taxes, corruption and state interference (neo-liberal thesis) and/or inadequate state intervention to protect workers from poverty (political economy thesis). Evidence has been found to support the modernisation and political economy theses that associate greater informalisation with under-development and inadequate state protection of workers from poverty respectively and the neo-liberal corruption thesis that the degree of informalisation is higher in countries where the perception of public sector corruption is greater. However, no evidence has been found to support the validity of the neo-liberal theses that greater informalisation is associated with higher taxes and more state interference. Instead, quite the opposite has been found. Higher taxes and more state intervention reduce the degree and intensity of informalisation, presumably because of the ability of governments to not only have efficient enforcement regimes but also to make social transfers and thus reduce the necessity of the population to turn to employment in the informal sector as a survival practice.

The theoretical implication of this study therefore, is that a combination of previous explanations is required when explaining the cross-national variations in the degree and intensity of informalisation across developing economies. Akin to the previous finding when studying the degree of informalisation in the advanced economies of the European Union (Williams, 2013), albeit using a data set that is not comparable with this data, the finding is

that greater degrees of informalisation are associated with lower GNP per capita, higher levels of public sector corruption and lower levels of state intervention in the form of lower tax rates and social transfers to protect workers from poverty. The very tentative conclusion therefore, is that the same tenets of each explanation and thus characteristics are valid when explaining a higher degree and intensity of informalisation in both developed and developing countries. A very tentative conclusion in consequence, is that a synthesis of both the modernisation and political economy perspectives is required in the form of a new 'neo-modernisation' thesis that explains the lower degree and intensity of informalisation as associated with development and state intervention in the form of higher tax rates and social transfers to protect workers from poverty. This now requires further evaluation in relation to a wider range of developed and developing economies as well as using time-series data for individual countries and, if possible, multivariate regression analysis on a larger sample size to determine how important each characteristic is to the final outcome whilst controlling for the other characteristics. The major barrier to doing this nevertheless, is the lack of availability of cross-national comparative data on employment in the informal sector to conduct such analyses.

These findings also have policy implications for governments. Currently, the policy debate surrounding employment in the informal economy is over whether targeted repressive measures and/or targeted incentives are the most appropriate for facilitating formalisation (Dibben and Williams, 2012; Eurofound, 2013; Feld and Larsen, 2012; OECD, 2012; Williams and Lansky, 2013; Williams and Nadin, 2012; Williams et al., 2013). This paper, however, displays that wider economic and social policy measures are also important. Importantly however, this paper reveals that the neo-liberal remedy of reducing taxes and de-regulating economies through minimising state intervention in work and welfare is not the way forward. No relationship is found either between lower tax rates and smaller informal economies, or between lower levels of state intervention and small informal economies. Instead, quite the opposite is found to be the case. The degree and intensity of informalisation is lower in modernised economies, with lower levels of public sector corruption, higher tax rates, greater levels of social protection expenditure and lower levels of poverty. Tackling employment in the informal economy, therefore, does not only require the development of targeted policy measures such as effective enforcement regimes but also appropriate wider economic and social policies, which means tackling under-development, public sector corruption and poverty through increasing tax rates and social protection expenditure. In other words, targeted policy measures tailored to facilitating formalisation might be necessary but appear insufficient for tackling employment in the informal economy.

In sum, grounded in the recognition that the majority of the non-agricultural workforce has their main employment in the informal economy, this paper has adopted an alternative analytical framework for classifying economies according to the extent and nature of employment in the informal economy, thus transcending the conventional approach of differentiating economies according to the character of their formal economies. This approach to classifying economies, of course, does not have to be viewed as an alternative to the conventional approach. Indeed, future research might well seek to combine these two approaches to classifying economies. If this paper thus encourages further research on classifying economies by the extent and nature of employment in the informal economy, it will have achieved its intention. If it also leads to scholars to synthesise the conventional approach examining the character of formal economies with this new approach, and encourages greater investigation of both the determinants of informalisation as well as the broader economic and social policy remedies, then it will have achieved its wider objective.

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Table 1 The anatomy of informality

Economic units	Informal jobs	Formal jobs
Informal economic units	A	B
Formal economic units	C	D

Source: ILO (2012)

Figure 1. Typology of economies: by level of employment in the informal economy as % of all non-agricultural employment

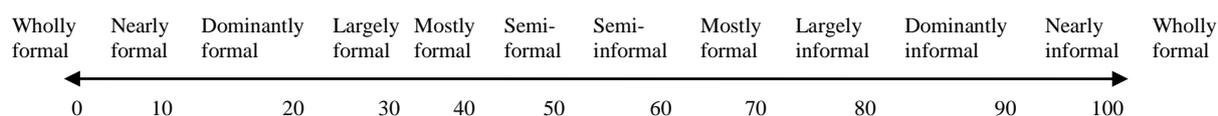


Table 2 Employment in the informal economy as % of non-agricultural employment (unweighted and weighted): by global region

Global region	Total employment in the informal economy as % of non-agricultural employment, unweighted	Total employment in the informal economy as % of non-agricultural employment, weighted	Number of countries
East Asia & Pacific	64.8	47.4	4
Europe and Central Asia	22.8	24.8	4
Latin America & Caribbean	58.2	51.1	16
Middle East & North Africa	59.0	58.5	1
South Asia	75.9	75.6	3
Sub-Saharan Africa	64.8	53.1	8
All global regions	57.4	59.8	36

Source: derived from ILO (2012)

Table 3 Extent and nature of employment in the informal economy as % of non-agricultural workforce

Country	Year	Global region (World Bank classification)	Employment in the informal economy as % of non-agricultural employment (A+B+C)	% of employment in the informal economy that is informal employment in informal enterprises	Type of economy
Mali	2004	Sub-Saharan Africa	84.7	85.2	Dominantly informal
India	2009/10	South Asia	84.3	79.2	Dominantly informal
Philippines	2008	East Asia & Pacific	84.0	69.8	Dominantly informal
Pakistan	2009/10	South Asia	81.3	86.2	Dominantly informal
Zambia	2008	Sub-Saharan Africa	76.3	75.8	Largely informal
Bolivia	2006	Latin America & Caribbean	75.6	68.3	Largely informal
Honduras	2009	Latin America & Caribbean	75.3	75.6	Largely informal
Madagascar	2005	Sub-Saharan Africa	73.7	70.1	Largely informal
Uganda	2010	Sub-Saharan Africa	73.5	75.8	Largely informal
Indonesia	2009	East Asia & Pacific	72.4	83.1	Largely informal
Lesotho	2008	Sub-Saharan Africa	70.7	18.8	Largely informal
Paraguay	2009	Latin America & Caribbean	70.7	53.6	Largely informal
Peru	2009	Latin America & Caribbean	70.7	68.2	Largely informal
Nicaragua	2009	Latin America & Caribbean	69.4	73.1	Mostly informal
Viet Nam	2009	East Asia & Pacific	68.5	63.1	Mostly informal
El Salvador	2009	Latin America & Caribbean	68.2	75.7	Mostly informal
Tanzania	2005/6	Sub-Saharan Africa	66.7	68.5	Mostly informal
Sri Lanka	2009	South Asia	62.1	81.1	Mostly informal
Colombia	2010	Latin America & Caribbean	61.5	82.0	Mostly informal
Ecuador	2009	Latin America & Caribbean	61.3	60.2	Mostly informal
Liberia	2010	Sub-Saharan Africa	60.3	81.6	Mostly informal
West Bank & Gaza	2010	Middle East & North Africa	59.0	36.9	Semi informal
Mexico	2009	Latin America & Caribbean	54.3	61.7	Semi informal
Argentina	2009	Latin America & Caribbean	50.0	63.6	Semi informal
Dominican rep	2009	Latin America & Caribbean	48.8	59.6	Semi formal
Venezuela	2009	Latin America & Caribbean	48.2	74.1	Semi formal
Costa Rica	2009	Latin America & Caribbean	48.2	67.6	Semi formal
Panama	2009	Latin America & Caribbean	44.0	62.5	Semi formal
Uruguay	2009	Latin America & Caribbean	43.7	68.6	Semi formal
Brazil	2009	Latin America & Caribbean	42.3	57.2	Semi formal
China	2010	East Asia & Pacific	34.4	58.4	Largely formal
South Africa	2010	Sub-Saharan Africa	32.7	54.4	Largely formal
Armenia	2009	Europe and Central Asia	19.8	51.5	Dominantly formal
Moldova Rep	2009	Europe and Central Asia	15.9	45.9	Dominantly formal
Macedonia	2010	Europe and Central Asia	12.8	57.8	Dominantly formal
Serbia	2010	Europe and Central Asia	6.5	46.2	Nearly formal

Figure 2 Relationship between level and nature of employment in the informal economy

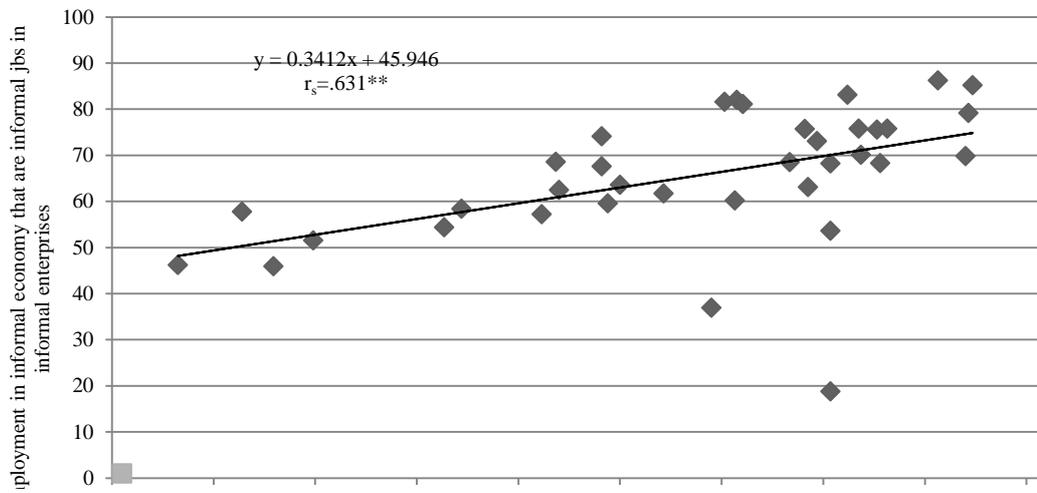


Figure 3 Relationship between degree of informalization and GNP per capita

