OUT OF THE MARGINS: EVALUATING THE SCALE OF EMPLOYMENT IN INFORMAL ENTERPRISES IN DEVELOPING AND TRANSITION ECONOMIES

COLIN C WILLIAMS

Sheffield University Management School, University of Sheffield, Conduit Road, Sheffield, S10 1FL, United Kingdom

C.C.Williams@sheffield.ac.uk

ABSTRACT

Purpose – This chapter evaluates the cross-national variations in the proportion of employment that is in informal sector enterprises and evaluates competing theories which view these cross-national variations to result from either economic under-development (modernisation explanation), high taxes, public sector corruption and over-regulation of work and welfare (neo-liberal explanation) or conversely, a lack of intervention in the realm of social protection (political economy explanation).

Design/methodology/approach – To evaluate these competing explanations, the International Labour Organisation’s (ILO) country surveys that investigate the scale of employment in informal sector enterprise in 43 developing and transition economies, along with the World Bank database of development indicators, are here analysed.

Findings – The finding is that lower levels of employment in informal sector enterprises are closely associated with economic 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.

Research implications – This chapter reveals the need to move beyond treating these contrasting representations as competing explanations and to recognise how all are required to more fully explain the prevalence of informal sector entrepreneurship.

Practical/social implications – Tackling employment in informal sector enterprise is shown to require broader economic and social policies associated with the modernisation of economies, tax rates, social protection and poverty alleviation.

Originality/value – One of the first evaluations of the competing explanations for why some countries have higher levels of employment in informal sector enterprises.

Key words: entrepreneurship, enterprise culture; informal sector; underground economy; economic development; post-socialist societies; developing economies.
INTRODUCTION
The starting point of this paper is the widespread belief that most enterprises operate on a wholly legitimate basis and that those which not fully registered and do not declare all of their transactions are a relatively minor proportion of all enterprises. Until now, although there have been many qualitative studies of how enterprises are sometimes not always registered ventures operating on a wholly legitimate basis (e.g., McElwee et al., 2011; Smith and McElwee, 2013), no attempts have been made to evaluate the scale of enterprises that do not operate on a wholly legitimate basis. In this chapter, the intention is to begin to fill that gap. To do this, the aim is to evaluate the cross-national variations in the proportion of employment that is in informal sector enterprises and then to conduct an exploratory analysis of the reasons why such enterprises may be more prevalent in some countries than others.

For Baumol (1990), there are variations between countries in the proportion of entrepreneurs who engage in productive activities and the proportion who engage in unproductive or destructive activities. Such as rent seeking or organised crime. His argument is that this allocation is influenced by the relative pay-offs society offers to such activities (i.e., the rules of the game). In this chapter, therefore, the objective is to first of all provide a measurement of the cross-national variations in the distribution of entrepreneurship between productive (i.e., here taken to mean formal) entrepreneurship and unproductive or destructive (i.e., here taken to mean informal) entrepreneurship and following this, to evaluate the rules of the game which result in greater more entrepreneurs engaging in unproductive or destructive entrepreneurship. This will be done by evaluating critically some contrasting theories about what ‘rules of the game’ need to exist for a greater proportion of entrepreneurs to be engaged in productive (i.e., formal) entrepreneurship.

Indeed, this discussion of the contrasting levels of productive and unproductive entrepreneurship in different economies has come to the fore in the entrepreneurship literature over the past decade or so. A burgeoning literature has emerged on criminal entrepreneurship that builds on earlier scholarship which highlighted how entrepreneurs do not always play by the rulebook (Collins et al., 1964; Kets de Vries, 1977; Bhide and Stephenson, 1990). The result is that numerous qualitative studies are now drawing attention to how entrepreneurs participate in a wide variety of illegitimate activities (Fournier, 1998; Friman, 2001; Rehn and Taalas, 2004; Armstrong, 2005; Sköl and Rehn, 2007; Smith, 2007; Storr and Butkevich, 2007; Bouchard and Dion, 2009; Frith and McElwee, 2008a,b; 2009; Jones and Spicer, 2009; Smith and Christou, 2009) and also how many participating in illegitimate activities, such as drug-dealers (Friman, 2001; Frith and McElwee, 2008, 2009; Bouchard and Dion, 2009), prostitutes and pimps (Smith and Christou, 2009), often display entrepreneurial traits and attributes. In this chapter, one sub-set of this burgeoning literature on criminal entrepreneurship is the focus of attention, namely that which focuses on informal enterprises, by which is here meant unregistered or small private enterprises that are unincorporated as separate legal entities and do not keep a complete set of accounts for tax and social security purposes (ILO, 2012).

In the first section of this chapter, therefore, informal sector enterprises are defined and the state of knowledge on such enterprise is briefly reviewed, focusing upon how the cross-national variations in the scale of employment in such illicit enterprises
(i.e., what might be called unproductive entrepreneurship) has been variously explained in terms of either economic under-development (modernisation explanation), high taxes, public sector corruption and over-regulation of work and welfare (neo-liberal explanation) or conversely, a lack of intervention in the realm of social protection (political economy explanation). Revealing that although these contrasting theoretical explanations about what ‘rules of the game’ lead to higher levels of unproductive entrepreneurship have been evaluated critically when analysing informal enterprise in particular countries, no studies have so far done so when explaining the cross-national variations in the scale of employment in informal sector enterprise, this paper then seeks to fill that gap. To do this, the second section introduces a database, namely the International Labour Organisation’s (ILO) country surveys that investigate the scale of employment in informal sector enterprise in 43 developing and transition economies, along with the World Bank database of development indicators that are here used to select indicators so that the validity of the competing explanations can be evaluated. The third section then reports the descriptive results on the proportion of all non-agricultural jobs that are in informal sector enterprises in these 43 developing and transition economies followed in the fourth section by an exploratory analysis of the validity of the competing explanations for the cross-national variations in the scale of employment in such informal sector enterprises. The fifth and concluding section then summarises the findings regarding the scale of employment in informal sector enterprise and how this varies cross-nationally, and calls for a rejection of the neo-liberal explanation and for a synthesis of the modernisation and political economy explanations in the form of a new ‘neo-modernisation’ explanation. The chapter concludes by discussing the theoretical and policy implications, not least in terms of which ‘rules of the game’ enable entrepreneurs to shift towards engaging in productive rather than unproductive or destructive entrepreneurship.

INFORMAL SECTOR ENTERPRISE: DEFINITIONS AND PERSPECTIVES

Defining informal sector enterprise

To evaluate the proportion of all jobs that are in enterprises that do not operate on a wholly legitimate basis, this paper uses the definitions of informal sector enterprise and employment in such enterprises developed by the 15th and 17th International Conferences of Labour Statisticians (ICLS) (Hussmans, 2005; ILO, 2011, 2012).

At the 15th International Conference of Labour Statisticians in 1993, the ‘informal sector’ was defined as comprised of ‘private unincorporated enterprises that are unregistered or small in terms of the number of employed persons’ (ILO, 2012). An informal sector enterprise, in other words, is either a small or unregistered enterprise that is ‘unincorporated’, by which is meant 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. An enterprise is deemed ‘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). Holding a trade license or business permit under local regulations, nevertheless, does not qualify as registration. An enterprise is considered ‘small’, meanwhile, when its size in terms of employment levels is below a specific
threshold (e.g., five employees) determined according to national circumstances (Hussmans, 2005; ILO, 2011, 2012). Since this definition was adopted in 1993, it has been the main and widely used definition of an informal sector enterprise.

It is important to be aware, therefore, that informal sector enterprises do not only include ‘unregistered’ enterprises. It also includes small businesses but only those that are unincorporated, by which is meant firstly, that the enterprise is not constituted as a separate legal entity independent of the individual (or group of individuals) who owns it, and secondly, that no complete set of accounts must be kept for tax, social security and labour law purposes. This definition of informal sector enterprises as unregistered or small private enterprises that are unincorporated as separate legal entities and do not keep a complete set of accounts for tax and social security purposes, therefore, captures not only enterprises that produce and distribute illegal goods and services but also enterprises that produce and distribute legal goods and services but which are unregistered, unincorporated and fail to keep a complete set of accounts for tax and social security purposes.

Perspectives towards informal sector enterprise

For Baumol (1990), to repeat, there are variations between countries in the proportion of entrepreneurs engaging in productive (formal) activities and the proportion engaging in unproductive or destructive (informal) activities, and this is influenced by the relative pay-offs society offers to such activities (i.e., the rules of the game). What specific rules of the game, therefore, lead a greater proportion of entrepreneurs to engage in productive (formal) activities?

Over the past decade or so, the entrepreneurship literature has recognised that many enterprises operate permanently or temporarily, and wholly or partly, on an off-the-books basis in the informal sector (Valenzuela, 2001; Small Business Council, 2004; Ram et al., 2006; Williams, 2006, 2007a,b; Antonopoulos and Mitra, 2009; Gurtoo and Williams, 2009; Webb et al., 2009; Bureau and Fendt, 2011; Hudson et al., 2012). Until now, this literature on informal sector entrepreneurship has either sought to identify the characteristics of those who operate informal sector enterprises (Aidis et al., 2006; Williams, 2006, 2010; Williams and Round, 2007, 2009; Hudson et al., 2012; Mróz, 2012) or their motives for not operating on a legitimate basis, with a focus upon whether they do so on a voluntary basis or out of necessity (Williams, 2009; Williams et al., 2012a; Chen, 2012).

So far, however, few attempts have been made to quantify the scale of employment in informal sector enterprise along with whether and how this varies across populations (i.e., the cross-national variations in the proportion of entrepreneurs engaged in productive and unproductive activities). Conventionally, the widespread and recurring assumption has been that enterprises which do not operate on a wholly legitimate basis are a relatively minor proportion of all enterprises. Few attempts have been made to evaluate the scale of such enterprise. Although there have been small-scale studies which reveal that enterprises are more likely to operate in the informal sector in deprived and rural localities than in affluent and urban localities (Williams, 2010) and that women entrepreneurs are less likely to operate in the informal sector than men (Williams and Martinez-Perez, 2014a,b), few studies have sought to quantify how the scale of informal enterprise varies between nations. One exception is Williams (2008) who reports surveys
undertaken in Russia, Ukraine and England which find that 96 per cent, 51 per cent and 23 per cent of enterprises operate in the informal economy respectively. Although this begins to suggest that the scale of informal enterprise is larger than previously assumed, the major problem with these studies is that they are based on interviews with just 130 entrepreneurs in England, 331 in Ukraine and 81 in Moscow. The lack of understanding of the cross-national variations in the scale of informal sector enterprise, therefore, is a major gap that needs to be filled.

When explaining the existence of informal enterprise, three contrasting theoretical schools of thought exist which variously posit that such informal or unproductive entrepreneurship is a result of either: economic under-development (modernisation theory); high taxes, public sector corruption and state interference in the free market (neo-liberal theory) or inadequate state intervention to protect workers (political economy theory). Each of these schools of thought on which specific ‘rules of the game’ result in higher levels of productive (formal) entrepreneurship is here considered in turn.

Modernisation theory
Based on the assumption that the formal sector is steadily colonising every nook and cranny of the modern world and that the informal economy is small and fading, informal enterprises were for much of the twentieth century represented as a relic or leftover from a pre-modern mode of production that was gradually disappearing as the modern formal sector took hold. The persistence of informal enterprises was thus seen as a sign of ‘traditionalism’, ‘under-development’ and ‘backwardness’ (Lewis, 1959; Geertz, 1963; Gilbert, 1998; Packard, 2007). Seen through this lens, therefore, the ongoing prevalence of employment in informal sector enterprises is seen to be result of economic under-development which will disappear as economies advance towards becoming modern formal economies. Applying this to explaining the cross-national variations in the scale of employment in informal enterprises, it can be suggested that in less developed economies, measured in terms of GDP per capita, such employment will be higher. To explore the validity of this modernisation theory, therefore, the following hypothesis can be tested:

Modernisation hypothesis (H1): the scale of employment in informal enterprises will be greater in less developed economies measured in terms of their GDP per capita.

Neo-liberal theory
For a group of neo-liberal scholars, however, the scale of employment in informal sector enterprises is a direct product of high taxes, a corrupt state system and too much interference in the free market, which leads entrepreneurs to make a rational economic decision to voluntarily exit the formal economy in order to avoid the time, costs and effort of operating on a legitimate basis (e.g., Sauvy, 1984; De Soto, 1989, 2001; Becker, 2004; London and Hart, 2004; Small Business Council, 2004; Nwabuzor, 2005). For these neo-liberals, therefore, informal entrepreneurship is a rational economic response pursued by entrepreneurs stifled by high taxes and state-imposed institutional constraints (de Soto, 1989, 2001; Small Business Council, 2004; Perry and Maloney, 2007). Given that higher proportions of employment are in informal sector enterprises when there are high taxes, public sector corruption, over-regulation and state interference in the free
market, the resultant solution is to reduce taxes, tackle public sector corruption, deregulation and minimal state intervention. From this viewpoint, in consequence, the scale of employment in informal sector enterprises will be greater in economies with higher taxes and public sector corruption and greater state interference. To explore the validity of this neo-liberal theory, therefore, the following hypothesis can be tested:

Neo-liberal hypothesis (H2): the scale of employment in informal enterprises will be greater in countries with higher tax rates, greater public sector corruption and higher levels of state interference in the free market.

Political economy theory
In stark contrast, and from a political economy theoretical perspective, the prevalence of higher levels of employment in informal sector enterprises is a product of too little rather than too much state intervention. From this perspective, such enterprise is a direct consequence of the emergence of a de-regulated open world economy where outsourcing and subcontracting are a primary way in which informal enterprises have become integrated into contemporary capitalism so as to reduce production costs, which has resulted in a downward pressure on wages along with social protection, with the outcome that such employment further grows in a vicious cycle of ever greater informalisation (Castells and Portes, 1989; Gallin, 2001; Hudson, 2005; Slavnic, 2010; Taiwo, 2013). As Meagher (2010, p. 11) has put it, ‘Informal economic arrangements … have entered into the heart of contemporary economies through processes of subcontracting... and diminishing state involvement in popular welfare and employment’. Employment in informal sector enterprises is thus represented as insecure and low paid survival-driven work undertaken by populations excluded from the formal labour market and is seen to result from a lack of state intervention in work and welfare provision, including social protection and social transfers, and direct by-product of poverty (Castells and Portes 1989; Davis 2006; Gallin 2001; Hudson 2005; Taiwo 2013). Consequently, higher proportions of the workforce will be employed in informal sector enterprises in countries with lower levels of state intervention to protect workers from poverty (Gallin 2001; Davis 2006; Slavnic 2010). To evaluate the validity of this political economy theory, the following hypothesis can be tested:

Political economy hypothesis (H3): the scale of employment in informal enterprises will be greater in countries with lower tax rates and less social protection to protect workers from poverty.

Previous evaluations of the competing theories
Conventionally, most studies that have sought to explain the greater prevalence of employment in informal sector enterprises in some populations rather than others have adopted one or other of these perspectives. For example, Yamada (1996) adopts the neo-liberal perspective arguing that engagement in informal entrepreneurship is a matter of choice whilst Slavnic (2010) adopts the political economy perspective that views it to be due to a lack of choice rather than a matter of choice.

Recently, however, when examining employment in informal sector enterprises at a national or local level, or amongst particular population groups, a more nuanced understanding has emerged that combines these theoretical perspectives. For example, it
has been contested that political economy theory is more relevant to explaining informal sector enterprises in relatively deprived population groups and neo-liberal theory to relatively affluent population groups (Evans et al., 2006; Gurtoo and Williams, 2009; Williams et al., 2012a), that neo-liberal exit rationales are more common in developed economies and political economy exclusion rationales in developing economies (Oviedo et al. 2009) and that women are driven more by political economy exclusion motives and men more by neo-liberal voluntary exit motives (Franck, 2012; Grant, 2013; Williams and Youssef, 2013).

No studies so far as is known, however, have yet evaluated critically the validity of these competing explanations when explaining cross-national variations in employment in informal sector enterprises. This chapter, in consequence, seeks to fill that gap.

METHODOLOGY: EXAMINING VARIATIONS IN THE SCALE OF EMPLOYMENT IN INFORMAL SECTOR ENTERPRISE

To estimate the cross-national variations in the level of employment in informal sector enterprises, an ILO dataset on the level of employment in informal sector enterprises in 47 developing and transition economies is here analysed. The advantage of using this ILO dataset is that the same common broad definition of employment in informal sector enterprise is used across all the developing and transition economies covered and also a similar methodology. For each country, the Bureau of Statistics of the ILO sends a common questionnaire to all statistical offices of each country requesting for the national offices to complete detailed tables on statistics regarding the level of employment in the informal sector and informal employment. To provide this data, either an ILO Department of Statistics questionnaire can be used which is sent to each country or information can be used from their national labour force or informal sector surveys (for further details, see ILO 2012). Here, the resultant findings on the cross-national variations in the commonality of employment in informal sector enterprises are reported for the first time. It is important to state, however, that these ILO surveys only relate to non-agricultural employment (i.e., agriculture, hunting, forestry and fishing is excluded). In all the countries, furthermore, a definition is adopted of employment in informal sector enterprise which conforms to the international definition developed by the ILO discussed earlier, although some minor variations occur across nations due to the national variations in what constitutes ‘small’ (e.g., employing less than five employees) and also what is an unregistered enterprise due to the different national-level laws applying. Throughout this analysis, moreover, persons with more than one job are classified by what they self-report as their main employment. As such, the data evaluated in this chapter can be considered sufficiently comparable between countries.

To identify statistical indicators on the broader economic and social conditions that each theory associates with higher levels of employment in informal sector enterprise, meanwhile, the World Bank development indicators database is here used from which data is reported for the same year in which the survey of the informal sector was conducted in each country (World Bank 2013). The only indicator from a non-official source is on perceptions of public sector corruption, which is taken from Transparency International’s corruption perceptions index again for the relevant year in each country (Transparency International 2013).
To evaluate the modernisation hypothesis (H1), the indicator used is the same as previous studies (Yamada 1996; ILO 2012), namely GNP per capita. To evaluate the validity of the neo-liberal hypothesis (H2) that levels of employment in informal sector enterprise are associated with high taxes, corruption and state interference in the free market, meanwhile, indicators previously used in Europe when assessing this hypothesis in relation to the level of informal employment (Eurofound, 2013; European Commission, 2013; Williams, 2013) 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 tenet of the neo-liberal hypothesis 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 evaluate both the neo-liberal tenet that state interference results in greater levels of employment in informal sector enterprise, as well as the structuralist hypothesis (H3) that it is a product of inadequate levels of state intervention, the indicator used is that previously employed (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.

Finally, and to analyse the political economy tenet that employment in informal sector enterprise is associated with the level of poverty, the variable analysed is the percentage of the population living below the national poverty line.

To analyse this relationship between cross-national variations in the level of employment in informal sector enterprise and the economic and social characteristics each theory asserts 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. Given the non-parametric nature of the data, Spearman’s rank correlation coefficient ($r_s$) is used to do this. Despite this limitation of only using bivariate regression analysis, however, and as will be seen, meaningful findings are produced with regard to the validity of the different hypotheses.

Firstly, therefore, the cross-national variations in the scale of employment in informal sector enterprises across the 43 countries will be reported and secondly, an exploratory evaluation of the hypotheses will be undertaken by examining whether the broader economic and social conditions deemed important in each hypothesis are correlated with higher levels of employment in informal sector enterprises.

RESULTS: EMPLOYMENT IN INFORMAL SECTOR ENTERPRISE IN DEVELOPING AND TRANSITION ECONOMIES

In the 43 developing and transition economies for which data is available on the level of employment in informal sector enterprise, the finding is that the unweighted average is that two in five (40.6 per cent) of the non-agricultural workforce have their main job in informal sector enterprises. Given the variable size of the workforce across these economies, however, a weighted average figure needs to be used, which reveals that just under one in three (31.5 per cent) of the non-agricultural workforce are employed in their main job in informal sector enterprises. A significant proportion of employment, therefore, is in informal enterprises in these developing and transition economies.

However, this overall headline figure hides some marked variations across global regions. The weighted proportion of the non-agricultural workforce whose main employment is in informal sector enterprises ranges from 20.6 per cent of the working population in Europe and Central Asia, through 21.8 per cent in the Middle East and North Africa, 28.6 per cent in South Asia, 33.3 per cent in Latin America and the Caribbean and 33.7 per cent in East Asia and the Pacific, to 38.8 per cent in Sub-Saharan Africa. The share of the working population whose main employment is in the informal economy, therefore, is not evenly distributed globally.

As Table 1 reports, there are also marked cross-national variations in the proportion of the non-agricultural workforce whose main job is in informal sector enterprises, ranging from 73.0 per cent in Pakistan to 3.5 per cent in Serbia. Indeed, in 17 (40 per cent) of the 43 developing and transition economies surveyed, over half of the non-agricultural workforce has their main job in informal enterprises. To graphically represent the relative importance of employment in informal sector enterprises in these developing and transition economies, Figure 1 provides a spectrum along which countries can be positioned according to the share of the non-agricultural workforce which has their main job in informal sector enterprises. As the final column of Table 1 reveals, in no countries are all non-agricultural workers either in formal or informal enterprises, and there are no ‘nearly informal’ and ‘dominantly informal’ economies. However, 8 percent of countries are ‘largely informal’ economies, 9 percent are ‘mostly informal’ economies, 23 percent are ‘semi-informal’ economies, 11 percent are ‘semi-formal’ economies, 19 percent are ‘mostly formal’ economies, 11 per cent are ‘largely formal’ economies, 8 percent are dominantly formal economies and 11 percent are ‘nearly formal’ economies.
Some 2 in 5 of the surveyed countries, therefore, have over half of all non-agricultural employment in informal sector enterprises.

EXPLORATORY ANALYSIS: EVALUATING THE COMPETING THEORIES

To evaluate the competing explanations for the above cross-national variations in the scale of employment in informal sector enterprises, an exploratory analysis of the validity of each of the three hypotheses is here undertaken.

Evaluating the modernisation hypothesis

To evaluate the modernisation hypothesis (H1) which asserts that the scale of employment in informal enterprises will be greater in less developed economies, Figure 2 explores the correlation between cross-national variations in such employment and cross-national variations in GNP per capita across these 43 developing and transition countries. Using Spearman’s rank correlation coefficient due to the nonparametric nature of the data, a strong statistically significant relationship is identified between the level of employment in informal sector enterprise in a country and its GNP per capita ($r_s = -0.584^{**}$). The share of the non-agricultural workforce whose main job is in informal sector enterprise is higher in developing and transition economies with lower levels of GNP per capita. Here, however, the direction of this correlation in terms of any cause-effect relationship cannot be established. This, in consequence, is a limitation. Nevertheless, the modernisation hypothesis is validated that the scale of employment in informal enterprises is greater in less developed economies as measured by GNP per capita.

Evaluating the neo-liberal hypothesis

Figure 3 evaluates the neo-liberal hypothesis (H2) that the scale of employment in informal enterprises is greater in countries with higher tax rates, greater public sector corruption and higher levels of state interference in the free market. Starting with Figure 3a which investigates the tenet that employment in informal sector enterprises 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 statistically significant association at the 95 per cent confidence interval ($r_s = -0.368^*$). Developing and transition economies with higher perceived levels of public sector corruption have greater levels of employment in informal sector enterprises.
Turning to the neo-liberal tenet that employment in informal sector enterprises are a direct product of high taxes which cause entrepreneurs to exit the formal economy, four different taxation measures are here investigated. Starting 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, Figure 3b reveals no statistically significant relationship ($r_s = -.280$). Examining the relationship between the level of employment in informal sector entrepreneurship and the level of taxes on income, profits and capital gains as a proportion of revenue, however, Figure 3c indeed reveals that the higher the level of taxes on income, profits and capital gains, the greater is the scale of informal sector entrepreneurship, and this is statistically significant at the 0.01 level ($r_s = .533^*$). Here, therefore, support for the neo-liberal hypothesis is found that the level of employment in informal sector enterprises is a result of exit from the formal economy due to high tax rates.

When two further measures of tax levels are investigated, however, this is not the case. As Figure 3d shows, there is a strong significantly correlation at the 0.01 level 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 ($r_s = -.589^{**}$). The prevalence of jobs in informal sector enterprises is significantly lower in developing and transition economies where taxes on revenue are a higher proportion of GDP. Similarly, Figure 3e displays a similar strong statistically significant relationship at the 0.01 level between the level of jobs in informal sector enterprises and cross-national variations in the level of tax revenue as a proportion of GDP ($r_s = -.488^{**}$). Again, employment in informal sector enterprises is significantly lower in developing and transition economies where the level of tax revenue as a proportion of GDP is higher.

There is therefore some evidence that cross-national variations in the scale of employment in informal sector enterprises are associated with levels of public sector corruption and thus that informal entrepreneurship is driven by a desire to ‘exit’ the formal economy due to public sector corruption. However, insufficient evidence is found to validate the hypothesis that higher tax rates lead to a greater share of the workforce being employed in informal sector enterprises. If anything, the inverse appears to be the case. Two tax measures reveal a strong statistical significance at the 0.01 level between higher tax levels and lower levels of employment in informal sector enterprises, doubtless because higher tax rates lead to more state revenue for social transfers so as to provide social protection.

**Evaluating the political economy hypothesis**

To investigate this, Figure 4 evaluates the validity of the political economy hypothesis (H3). Starting with the relationship between cross-national variations in employment in informal sector enterprises and the level of social contributions as a percentage of revenue, Figure 4a reveals that as social contributions rise as a share of revenue, there is a decline in informal sector entrepreneurship. This is statistically significant at the 0.05 level ($r_s = -.517^*$), therefore refuting the neo-liberal thesis that state interference leads to greater levels of employment in informal sector enterprises and validating the political economy thesis that employment in informal sector enterprise is associated with too little (rather to much) state intervention in the form of the provision of social protection.
The political economy thesis that the cross-national variations in employment in informal sector enterprises are associated with the level of poverty is also supported. As Figure 4b reveals, a strong statistically significant relationship exists between cross-national variations in the proportion of the population living below the national poverty line and the level of employment in informal sector enterprises ($r_s = .429^{**}$). The greater is the share of the population living below the national poverty line, the higher is the level of employment in informal sector enterprises, suggesting that employment in informal sector enterprises may well be an activity of last resort turned to by populations in the absence of alternative sources of livelihood.

**CONCLUSIONS**

For Baumol (1990), the cross-national variations in the proportion of entrepreneurs engaged in productive (formal) activities and the proportion engaging in unproductive or destructive (informal) activities are influenced by the relative pay-offs society offers to such activities (i.e., the rules of the game). The aim of this chapter has been to start to investigate this by examining the cross-national variations in the level of employment in informal sector (unproductive) enterprises and evaluating various competing theories about what ‘rules of the game’ need to exist for a greater proportion of employment to be in formal (productive) enterprises.

Reporting the results of an ILO dataset on the level of employment in informal sector enterprises conducted in 43 developing and transition economies, the first important finding of this chapter is that just under one in three (31.5 per cent) of the non-agricultural workforce have their main job in informal sector enterprises. This brings informal sector enterprises out of the margins. Such enterprise is not some small segment of the economy of marginal importance. Instead, a significant proportion of the workforce has their main job in informal sector enterprises. Nevertheless, marked cross-national variations exist. Not only does the proportion of the non-agricultural workforce with their main job in informal sector enterprises range from 73.0 per cent in Pakistan to 3.5 per cent 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.

Turning to an exploratory analysis of the reasons for these cross-national variations in the proportion of the non-agricultural workforce who have their main job in informal sector enterprises, three competing explanations have been critically evaluated which argue that higher levels of employment in informal sector enterprises are 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). Examining whether this is the case, this chapter has revealed that although the modernisation and political economy theories tentatively appear to be valid, along with the neo-liberal corruption thesis, the neo-liberal theses that it is a product of high taxes and government interference are not validated. 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
modernisation and political economy theses. Here, in consequence, a new ‘neo-modernisation’ perspective is tentatively advocated that explains lower levels of employment in informal sector enterprises as closely associated with economic 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-modernisation theory now needs to be further evaluated across a broader range of countries, including across countries in the developed world. If correct, it displays the ‘rules of the game’, to use Baumol’s (1990) terminology, that need to be adhered to in order for greater proportions of enterprise and employment to be in the formal economy.

This relationship between the higher proportions of the workforce being employed in informal sector enterprises when there is economic under-development, low tax rates and inadequate state protection to protect workers from poverty also has clear implications for policy. Over the past few decades, the policy debate on tackling informal enterprise has revolved around whether targeted repressive measures and/or targeted incentives are the most effective and efficient means for moving employment in informal enterprises into the formal economy (Dibben and Williams, 2012; Feld and Larsen, 2012; OECD, 2012; Williams and Nadin, 2012; Williams et al., 2012b; Eurofound, 2013; Williams and Lansky, 2013). This chapter, in stark contrast to this conventional policy literature, shows that broader economic and social policy measures are important. The overarching modernisation of economies, tax rates, social protection and poverty alleviation are all closely associated with employment in informal enterprise. Tackling employment in informal sector enterprise, in consequence, requires not only targeted policy measures but also effective broader economic and social policies. Put another way, although targeted policy measures may be necessary for tackling informal enterprise, they appear to be insufficient. Again, whether the same policy implication emerges when a wider range of countries are investigated, as well as whether it remains valid when time-series data is investigated for individual countries, needs to be evaluated in future research.

In conclusion, this chapter has shown that informal sector enterprises employ a sizeable share of the total workforce across these 43 developing and transition economies and that the marked cross-national variations in the share of the workforce employed in these enterprises is associated with the level of GNP per capita, tax rates, level of social contributions and poverty rates. What is now required is for this to be applied longitudinally within countries as well as to a broader range of countries so as to evaluate whether the relationship remains valid. If this chapter stimulates such research and also recognition and investigation of the broader economic and social policies required if informal sector enterprise is to be tackled, then it will have achieved its objective. If it also encourages wider recognition that enterprises not operating on a wholly legitimate basis are not some minor segment of the economy of marginal importance, then this chapter will have achieved its broader intention.

**REFERENCES**


<table>
<thead>
<tr>
<th>Country</th>
<th>Global region (World Bank classification)</th>
<th>Year</th>
<th>% of jobs in informal enterprises</th>
<th>Type of economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>South Asia</td>
<td>2009/10</td>
<td>73.0</td>
<td>Largely informal</td>
</tr>
<tr>
<td>Philippines</td>
<td>East Asia and Pacific</td>
<td>2008</td>
<td>72.5</td>
<td>Largely informal</td>
</tr>
<tr>
<td>Mali</td>
<td>Sub-Saharan Africa</td>
<td>2004</td>
<td>71.4</td>
<td>Largely informal</td>
</tr>
<tr>
<td>Cote d’Ivoire</td>
<td>Sub-Saharan Africa</td>
<td>2008</td>
<td>69.7</td>
<td>Mostly informal</td>
</tr>
<tr>
<td>India</td>
<td>South Asia</td>
<td>2009/10</td>
<td>67.5</td>
<td>Mostly informal</td>
</tr>
<tr>
<td>Zambia</td>
<td>Sub-Saharan Africa</td>
<td>2008</td>
<td>64.6</td>
<td>Mostly informal</td>
</tr>
<tr>
<td>Indonesia</td>
<td>East Asia &amp; Pacific</td>
<td>2009</td>
<td>60.2</td>
<td>Mostly informal</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>Europe &amp; Central Asia</td>
<td>2009</td>
<td>59.2</td>
<td>Semi informal</td>
</tr>
<tr>
<td>Uganda</td>
<td>Sub-Saharan Africa</td>
<td>2010</td>
<td>59.8</td>
<td>Semi informal</td>
</tr>
<tr>
<td>Honduras</td>
<td>Latin America &amp; Caribbean</td>
<td>2009</td>
<td>58.3</td>
<td>Semi informal</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>Latin America &amp; Caribbean</td>
<td>2009</td>
<td>54.4</td>
<td>Semi informal</td>
</tr>
<tr>
<td>El Salvador</td>
<td>Latin America &amp; Caribbean</td>
<td>2009</td>
<td>53.4</td>
<td>Semi informal</td>
</tr>
<tr>
<td>Colombia</td>
<td>Latin America &amp; Caribbean</td>
<td>2010</td>
<td>52.2</td>
<td>Semi informal</td>
</tr>
<tr>
<td>Bolivia</td>
<td>Latin America &amp; Caribbean</td>
<td>2006</td>
<td>52.1</td>
<td>Semi informal</td>
</tr>
<tr>
<td>Madagascar</td>
<td>Sub-Saharan Africa</td>
<td>2005</td>
<td>51.8</td>
<td>Semi informal</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Sub-Saharan Africa</td>
<td>2005/6</td>
<td>51.7</td>
<td>Semi informal</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>South Asia</td>
<td>2009</td>
<td>50.5</td>
<td>Semi informal</td>
</tr>
<tr>
<td>Liberia</td>
<td>Sub-Saharan Africa</td>
<td>2010</td>
<td>49.5</td>
<td>Semi informal</td>
</tr>
<tr>
<td>Lesotho</td>
<td>Sub-Saharan Africa</td>
<td>2008</td>
<td>49.1</td>
<td>Semi informal</td>
</tr>
<tr>
<td>Peru</td>
<td>Latin America &amp; Caribbean</td>
<td>2009</td>
<td>49.0</td>
<td>Semi informal</td>
</tr>
<tr>
<td>Vietnam</td>
<td>East Asia &amp; Pacific</td>
<td>2009</td>
<td>43.5</td>
<td>Semi informal</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Sub-Saharan Africa</td>
<td>2004</td>
<td>41.4</td>
<td>Semi informal</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>Sub-Saharan Africa</td>
<td>2004</td>
<td>39.6</td>
<td>Mostly formal</td>
</tr>
<tr>
<td>Paraguay</td>
<td>Latin America &amp; Caribbean</td>
<td>2009</td>
<td>37.9</td>
<td>Mostly formal</td>
</tr>
<tr>
<td>Ecuador</td>
<td>Latin America &amp; Caribbean</td>
<td>2009</td>
<td>37.3</td>
<td>Mostly formal</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>Latin America &amp; Caribbean</td>
<td>2009</td>
<td>37.0</td>
<td>Mostly formal</td>
</tr>
<tr>
<td>Venezuela</td>
<td>Latin America &amp; Caribbean</td>
<td>2009</td>
<td>36.3</td>
<td>Mostly formal</td>
</tr>
<tr>
<td>Mexico</td>
<td>Latin America &amp; Caribbean</td>
<td>2009</td>
<td>34.1</td>
<td>Mostly formal</td>
</tr>
<tr>
<td>Uruguay</td>
<td>Latin America &amp; Caribbean</td>
<td>2009</td>
<td>33.9</td>
<td>Mostly formal</td>
</tr>
<tr>
<td>Argentina</td>
<td>Latin America &amp; Caribbean</td>
<td>2009</td>
<td>32.1</td>
<td>Mostly formal</td>
</tr>
<tr>
<td>Dominican rep</td>
<td>Latin America &amp; Caribbean</td>
<td>2009</td>
<td>29.4</td>
<td>Largely formal</td>
</tr>
<tr>
<td>Panama</td>
<td>Latin America &amp; Caribbean</td>
<td>2009</td>
<td>27.7</td>
<td>Largely formal</td>
</tr>
<tr>
<td>Brazil</td>
<td>Latin America &amp; Caribbean</td>
<td>2009</td>
<td>24.3</td>
<td>Largely formal</td>
</tr>
<tr>
<td>West Bank &amp; Gaza</td>
<td>Middle East &amp; North Africa</td>
<td>2010</td>
<td>23.2</td>
<td>Largely formal</td>
</tr>
<tr>
<td>China</td>
<td>East Asia &amp; Pacific</td>
<td>2010</td>
<td>21.9</td>
<td>Largely formal</td>
</tr>
<tr>
<td>South Africa</td>
<td>Sub-Saharan Africa</td>
<td>2010</td>
<td>17.8</td>
<td>Dominantly formal</td>
</tr>
<tr>
<td>Russian Fed</td>
<td>Europe &amp; Central Asia</td>
<td>2010</td>
<td>12.1</td>
<td>Dominantly formal</td>
</tr>
<tr>
<td>Armenia</td>
<td>Europe &amp; Central Asia</td>
<td>2009</td>
<td>10.2</td>
<td>Dominantly formal</td>
</tr>
<tr>
<td>Ukraine</td>
<td>Europe &amp; Central Asia</td>
<td>2009</td>
<td>9.4</td>
<td>Nearly formal</td>
</tr>
<tr>
<td>Mauritius</td>
<td>Sub-Saharan Africa</td>
<td>2009</td>
<td>9.3</td>
<td>Nearly formal</td>
</tr>
<tr>
<td>Macedonia</td>
<td>Europe &amp; Central Asia</td>
<td>2010</td>
<td>7.6</td>
<td>Nearly formal</td>
</tr>
<tr>
<td>Moldova Rep</td>
<td>Europe &amp; Central Asia</td>
<td>2009</td>
<td>7.3</td>
<td>Nearly formal</td>
</tr>
<tr>
<td>Serbia</td>
<td>Europe &amp; Central Asia</td>
<td>2010</td>
<td>3.5</td>
<td>Nearly formal</td>
</tr>
</tbody>
</table>

Source: derived from ILO (2012)
Figure 1. Classification of economies: by prevalence of employment in informal sector enterprises

<table>
<thead>
<tr>
<th>Nearly formal</th>
<th>Dominantly formal</th>
<th>Largely formal</th>
<th>Mostly formal</th>
<th>Semi-informal</th>
<th>Semi-formal</th>
<th>Mostly informal</th>
<th>Largely informal</th>
<th>Dominantly informal</th>
<th>Nearly informal</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
</tr>
</tbody>
</table>

Figure 2 Relationship between level of employment in informal enterprises and GNP per capita

\[ R^2 = 0.2744 \]
Figure 3 Evaluation of the neo-liberal hypothesis

Figure 3a Relationship between jobs in informal enterprises and public sector corruption

Figure 3b Relationship between jobs in informal enterprises and taxes on goods and services

Figure 3c Relationship between jobs in informal enterprises and taxes on income, profits and capital gains

Figure 3d Relationship between jobs in informal enterprises and tax revenue as % of GDP

Figure 3e Relationship between jobs in informal enterprises and taxes on revenue (excluding grants) as % of GDP
Figure 4 Evaluation of the political economy hypothesis

Figure 4a Relationship between employment in informal enterprises and social contributions as % of revenue

% of non-agricultural jobs in informal sector enterprises

Social contributions, % of revenue

R² = 0.2822

Figure 4b Relationship between employment in informal enterprises and % of population living below the national poverty line

% of non-agricultural jobs in informal sector enterprises

% of population living below the national poverty line

R² = 0.0016