Tackling enterprises operating in the informal sector in developing and transition economies: a critical evaluation of the neo-liberal policy approach

Colin C. Williams

Abstract

Over the past decade or so, there has been widespread recognition that a large and growing proportion of the global workforce is employed in informal sector enterprises. To explain this, neo-liberals contend that enterprises operate in the informal sector due to high taxes, public sector corruption and too much state interference in the free market and that the remedy is therefore to reduce taxes, public sector corruption and the regulatory burden via minimal state intervention. To evaluate critically this neo-liberal policy approach, this paper explores whether cross-national variations in the share of the workforce in informal sector enterprises are associated with cross-national variations in the level of tax rates, corruption and state interference. To do this, International Labour Organisation data on the share of the workforce in informal sector enterprises in 43 developing and transition economies is compared with cross-national variations in tax rates, corruption and levels of state intervention using World Bank development indicators. The finding is that there is little or no evidence to support the neo-liberal policy approach that decreasing tax rates, public sector corruption and the regulatory burden via minimal state intervention, reduces the share of the workforce in informal sector enterprises. Instead, higher tax rates and levels of regulation and state intervention are found to be associated with lower (not higher) levels of employment in informal sector enterprise. The paper concludes by discussing the theoretical and policy implications.

Keywords: Informal economy; Entrepreneurship; Public policy; Neo-liberalism; Developing countries; Transition economies; Economic development

Background

Over the past decade or so, there has been growing recognition that enterprises which operate in the informal sector are not some minor residue leftover from a pre-modern mode of production existing in a few marginal enclaves of the global economy (Geertz 1963; Lewis 1959) but are a pervasive and expanding feature of the global economy employing some one-third of the global non-agricultural workforce (Williams 2013). To explain this large and growing share of the workforce in informal sector enterprise, a neo-liberal school of thought has emerged which transcends...
the traditional modernisation perspective depicting such enterprise as pre-modern and a sign of under-development and backwardness and instead argued that enterprises operate in the informal sector due to high taxes, public sector corruption and too much state interference in the free market and that reductions in taxation and corruption along with de-regulation in order to minimise state interference in the market are therefore required (Becker 2004; De Soto 1989, 2001; London and Hart 2004; Nwabuzor 2005). The aim of this paper is to evaluate critically the validity of this neo-liberal perspective.

To achieve this, the first section briefly reviews the neo-liberal explanation for the prevalence of informal sector enterprise and its consequent policy approach for tackling enterprise in the informal sector, along with the other competing explanations. Revealing that there have been no evaluations of the validity of this neo-liberal approach in relation to developing and transition economies, the second section then introduces the methodology here employed to do so. This investigates whether there is a correlation between the cross-national variations in the share of the workforce in informal sector enterprises and cross-national variations in tax rates, corruption and state interference in the market. To do this, cross-nationally comparable International Labour Organisation data on employment in informal sector enterprises in 43 developing and transition economies is compared with various World Bank development indicators on tax rates, corruption and state intervention. The third section then reports the results on the cross-national variations in the share of the non-agricultural workforce in informal sector enterprises while the fourth section conducts a preliminary analysis of the validity of various tenets of the neo-liberal approach. The fifth and final section then draws conclusions regarding both the validity of the neo-liberal approach and tentatively calls for greater rather than less regulation of the economy and state intervention to protect workers in order to reduce the level of informality.

At the outset, however, what is meant by an informal sector enterprise needs to be clarified. Here, the definition of informal sector enterprise is that adopted by the 15th International Conference of Labour Statisticians (ICLS) in 1993 (Hussmanns 2005; ILO 2011, 2012). This defines enterprises in the informal sector as ‘private unincorporated enterprises that are unregistered or small in terms of the number of employed persons’ (ILO 2012: 1). Informal sector enterprises are thus ‘unincorporated’ enterprises that are also either ‘small’ or ‘unregistered’. By ‘unincorporated’ is meant that they are not constituted as a separate legal entity independent of the individual (or group of individuals) who owns it, and for which no complete set of accounts is kept. By ‘unregistered’, meanwhile, is meant that they are not registered under specific forms of national legislation (e.g., factories’ or commercial acts, tax or social security laws, professional groups’ regulatory acts). Holding a trade license or business permit under local regulations does not qualify as registration. An enterprise is ‘small’, moreover, when its size in terms of employment levels is below a specific threshold (e.g., five employees) determined according to national circumstances (Hussmanns 2005; ILO 2011, 2012). Throughout this paper, therefore, informal sector enterprises are defined as private enterprises that are unincorporated as separate legal entities and do not keep a complete set of accounts for tax and social security purposes, and are also either unregistered or small.
During the twentieth century, the common belief was that the modern formal sector was expanding and that the informal sector was a leftover from a pre-modern mode of production and gradually disappearing (Boeke 1942; Geertz 1963; Lewis 1959). From this modernisation perspective, the prevalence of informal sector enterprises in any economy signals its ‘backwardness’ and ‘under-development’. As such, there is little reason to pay much attention to the informal sector since such enterprises will naturally and inevitably disappear with economic advancement and modernisation as the formal sector becomes ever more totalising and hegemonic.

Over the past decade or so, however, this conventional modernisation perspective has come under heavy criticism as it has been recognised that the informal sector is a pervasive and expanding sphere in many global regions (Buehn and Schneider 2012; Feld and Schneider 2010; ILO 2011, 2012, 2013a; Jütting and Laiglesia 2009; OECD 2012; Rodgers and Williams 2009; Schneider and Williams 2013; Williams 2014). Given this, informal sector enterprises are no longer seen as some remnant, relic or residue from a pre-modern period, resulting in the emergence of new explanations for its persistence, prevalence and pervasiveness.

One explanation to have replaced the conventional modernisation perspective is a political economy perspective which depicts enterprises operating in the informal sector not as prior to or discrete from, but as an integral aspect of, modern-day capitalism, providing a channel for flexible production, profit and cost reduction. Informal sector enterprises from this political economy perspective are therefore seen to be a core component of the new sub-contracting and outsourcing arrangements emerging under de-regulated global capitalism, as well as a means of livelihood for marginalised populations confronting no alternative sources of support (Castells and Portes 1989; Davis 2006; Gallin 2001; Sassen 1996; Slavnic 2010; Taiwo 2013). Viewed through this lens, employment in informal sector enterprises result from a lack of state intervention in work and welfare to protect workers and such employed is seen as ‘sweatshop-like’ dependent employment and/or ‘false’ self-employment undertaken by workers out of necessity (Ahmad 2008; Geetz and O’Grady 2002; Ghezzi 2010).

Over the past decade or so, however, this political economy perspective has been questioned, as it has been recognised that a large proportion of work in the informal sector is conducted on a self-employed basis often as a matter of choice (Cross 2000; Cross and Morales 2007; De Soto 1989, 2001; ILO 2002; Neuwirth 2011; OECD 2012; Small Business Council 2004; Snyder 2004; Venkatesh 2006; Williams 2007 a,b, 2009 a,b; 2010; Williams and Gurtoo 2011; Williams and Martinez-Perez 2014; Williams and Round 2007, 2009). Based on this recognition, a neo-liberal explanation has come to the fore which views enterprise in the informal sector to be a direct result of over-regulation rather than under-regulation (Becker 2004; De Soto 1989, 2001; London and Hart 2004; Nwabuzor 2005; Small Business Council 2004). More specifically, the level of employment in informal sector enterprises is viewed to result from high taxes, a corrupt state system and too much interference in the free market, which leads entrepreneurs and enterprises to make a rational economic decision to exit the formal economy in order to avoid the time, costs and effort of operating in the formal sector (e.g., Becker 2004; De Soto 1989, 2001; London and Hart 2004; Nwabuzor 2005; Sauvay 1984; Small Business Council 2004). From this neo-liberal perspective, in consequence, operating in the informal sector is a rational economic decision taken by entrepreneurs stifled by high taxes, a corrupt public sector and state-
imposed institutional constraints (de Soto 1989, 2001; Perry and Maloney 2007; Small Business Council 2004). Informal workers voluntarily choose to operate in the informal sector and are depicted as heroic figures throwing off the shackles of burdensome regulations (e.g., Sauvy 1984; De Soto 1989). Such enterprise is thus seen as a form of popular resistance to over-regulation and informal workers portrayed as a political movement that can construct a rational competitive market economy (De Soto 1989).

Viewed through this neo-liberal lens, the level of employment in informal sector enterprises will be greater in countries with higher taxes, public sector corruption and greater state intervention and the resultant remedy is for these countries to reduce tax rates, tackle public sector corruption and pursue deregulation and minimal state intervention. As Nwabuzor 2005 (26) asserts, ‘Informality is a response to burdensome controls, and an attempt to circumvent them’, or as Becker 2004(10) puts it, ‘informal work arrangements are a rational response by micro-entrepreneurs to over-regulation by government bureaucracies’.

Just because neo-liberals celebrate enterprises operating in the informal sector does not mean that they advocate their promotion. Instead, they seek to eradicate informal enterprises akin to political economists but for neo-liberal, this is to be achieved by reducing taxes, corruption in the public sector and freeing up the state interference that increases labour costs, prevents flexibility and acts as a disincentive to those wishing to enter the formal sector. By decreasing the regulatory burden and state interference in work and welfare arrangements, the goal is to erase the distinction between the formal and informal sectors since such activity will be conducted in the manner now called ‘informal’, even if it will be ‘formal’ since it will not be breaking any rules.

Consequently, the neo-liberal approach is to reduce tax rates, tackle corruption, deregulate and give the market free reign by preventing state interference in economic affairs and reducing state welfare provision. Akin to the political economists, neo-liberals thus represent the welfare state and the economy as adversaries but the difference is that while political economists are supportive of the welfare state and portray free market capitalism as preventing social equality, neo-liberals support the free market and oppose any intervention that constrains it. Whilst political economists depict state intervention in the economy and social protection as necessary for efficiency and growth, therefore, neo-liberals represent state interference in the economy and welfare provision as interfering with the ability of the market to optimise the efficient allocation of scarce resources. The neo-liberal approach is thus largely negative regarding the benefits of social protection due to its negative effects on economic performance. Instead, competitive self-regulatory markets are viewed as superior allocation mechanisms (Lindbeck 1981; Okun 1975).

To evaluate critically the validity of this neo-liberal explanation, therefore, each of its tenets can be tested by evaluating the following hypotheses:

- **Tax rates hypothesis (H1):** the share of the workforce in informal enterprises will be greater in countries with higher tax rates;
- **State corruption hypothesis (H2):** the share of the workforce in informal enterprises will be greater in countries with higher levels of public sector corruption; and
- **State intervention hypothesis (H3):** the share of the workforce in informal enterprises will be greater in countries with higher levels of state interference in the workings of the free market.
Here, the intention is to evaluate critically these hypotheses in relation to 43 developing and transition economies in order to investigate the validity of this neo-liberal school of thought.

Methods
To evaluate the neo-liberal perspective, firstly, the cross-national variations in the share of the workforce in the informal sector is evaluated using an International Labour Organisation (ILO) dataset that uses the same common broad definition of informal sector enterprise across all 43 developing and transition economies covered and also the same survey 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 is used to undertake a survey or information can be used from their national labour force or informal sector surveys already conducted (for further details, see ILO 2012).

In each country, the same ILO definition of informal sector enterprise is used as discussed above, although there are minor variations across countries due to the national variations in what constitutes ‘small’ (e.g., employing less than five employees) and what constitutes an unregistered enterprise due to the different national-level laws applying. Furthermore, in all countries, persons with more than one job are classified by what they self-report as their main employment and only non-agricultural employment is evaluated (i.e., agriculture, hunting, forestry and fishing is excluded). As such, the data evaluated can be considered sufficiently comparable between countries.

Meanwhile, the World Bank development indicators database is here used to identify indicators of cross-national variations in tax rates, corruption and state interference. For each indicator, 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 (Transparency International 2013), again for the relevant year in each country.

To evaluate the neo-liberal tax rates hypothesis (H1), therefore, the following World Bank (2013) country-level indicators are used:

- Taxes on goods and services as a percentage of revenue. This covers 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. This includes taxes on the actual or presumptive net income of individuals, the profits of corporations and enterprises, and capital gains on land, securities and other assets.
- Taxes on revenue (excluding grants) as a percentage of GDP. Revenue includes cash receipts from taxes, social contributions and other revenues (e.g., fines, fees, rent and income from property or sales).
- Tax revenue as a percentage of GDP. Tax revenue covers compulsory transfers to central government for public purposes. 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.

- **Total tax rate as percentage of commercial profits.** This covers the taxes and mandatory contributions payable by businesses after allowable deductions and exemptions as a share of commercial profits. Taxes withheld (e.g., personal income tax) or collected and remitted to tax authorities (e.g., value added taxes, sales taxes or goods and service taxes) are excluded.

Meanwhile, the neo-liberal corruption hypothesis (H2) is evaluated using three measures:

- Transparency International’s Corruption Perceptions Index (CPI), which is a composite index of perceptions of public sector corruption from 14 expert opinion surveys. It scores nations on a 0–10 scale, with zero indicating high levels and 10 low levels of perceived public sector corruption (Transparency International 2013).
- The percentage of firms making informal payments to public officials, and
- The percentage of firms expected to give gifts in meetings with tax officials.

Finally, the neo-liberal state interference hypothesis (H3) is evaluated using the following measures:

- Time required (in days) to obtain an operating license;
- The cost of business start-up procedures, as a percentage of GNI per capita;
- The time required (in days) to start a business;
- Social contributions as a % of revenue. This includes social security contributions by employees, employers and self-employed individuals, and other contributions whose source cannot be determined, as well as actual or imputed contributions to social insurance schemes operated by governments;
- State revenue as a % of GDP; and
- The expense of government, as a % of GDP.

To analyse this relationship between cross-national variations in the share of the workforce in informal sector enterprises and the economic and social characteristics each hypothesis asserts are associated, and given the small sample size of just 43 countries and lack of necessary controls to include in a multivariate regression analysis, only bivariate regression analyses is here conducted. Given the non-parametric nature of the data, Spearman’s rank correlation coefficient (r_s) is employed to do this. Despite this limitation of only using bivariate regression analysis, however, and as will now be seen, the findings that result are meaningful regarding the validity of the different hypotheses.

**Results and Discussion**

In the 43 developing and transition economies for which ILO data is available on the share of the workforce in informal sector enterprises, 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. This, however, does not take into account the variable size of the workforce across these economies. When this is done by taking the weighted average, the finding is 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 in these developing and transition economies. This, therefore, refutes the modernisation perspective by displaying that a large share of the workforce in developing and transition economies are employed in informal enterprises.

However, marked variations exist across global regions and also cross-nationally in the share of the workforce in informal enterprises. Examining the variations across global regions, the weighted proportion of the non-agricultural workforce in informal sector enterprises ranges from 20.6 per cent 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. Similarly, there are marked cross-national variations in the proportion of the non-agricultural workforce in informal sector enterprises, ranging from 73.0 per cent in Pakistan to 3.5 per cent in Serbia (see Table 1).

To represent the relative importance of employment in informal sector enterprises in these developing and transition economies, Figure 1 graphically does so by providing a spectrum along which the countries can be located 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 is the whole workforce 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’, 23 percent are ‘semi-informal’, 11 percent are ‘semi-formal’, 19 percent are ‘mostly formal’, 11 per cent are ‘largely formal’, 8 percent are ‘dominantly formal’ and 11 percent are ‘nearly formal’ economies. Some 2 in 5 of the surveyed countries, therefore, have over half of the workforce in informal sector enterprises.

Given these marked cross-national variations in the share of the non-agricultural workforce in informal sector enterprises, attention now turns towards evaluating critically the tenets of the neo-liberal approach. To do this, an exploratory analysis of the validity of each of the three neo-liberal hypotheses is here undertaken.

**Evaluating the tax rates hypothesis (H1)**

To evaluate the neo-liberal hypothesis that the share of the workforce in informal enterprises is greater in countries with higher tax rates, the relationship between cross-national variations in tax rates and cross-national variations in the share of the workforce in informal enterprises is here analysed using five different measures of tax rates.

Starting with the association between the cross-national variations in tax rates and cross-national variations in the share of the workforce in informal enterprises and the level of taxes on goods and services as a percentage of revenue, and using Spearman’s rank correlation coefficient due to the nonparametric nature of the data, no statistically significant relationship is identified ($r_s = -.181$). Neither is any significant association identified when comparing cross-national variations in the share of the workforce in informal sector enterprise and cross-national variations in the total tax rate ($r_s = .227$).

However, examining the relationship between the share of the workforce in informal sector enterprises and the level of taxes on income, profits and capital gains as a proportion of revenue, a significant relationship is identified at the 0.05 level ($r_s = .414^*$). As Figure 2a reveals, the direction of this relationship is that as tax rates rise, the share of the workforce in informal sector enterprises increases, thus validating the neo-liberal
| Country         | Global region (World Bank classification) | Year | % of workforce in informal enterprises | Type of economy       |
|-----------------|------------------------------------------|------|---------------------------------------|-----------------------|
| Serbia          | Europe & Central Asia                    | 2010 | 3.5                                   | Nearly formal         |
| Moldova Rep     | Europe & Central Asia                    | 2009 | 7.3                                   | Nearly formal         |
| Macedonia       | Europe & Central Asia                    | 2010 | 7.6                                   | Nearly formal         |
| Mauritius       | Sub-Saharan Africa                       | 2009 | 9.3                                   | Nearly formal         |
| Ukraine         | Europe & Central Asia                    | 2009 | 9.4                                   | Nearly formal         |
| Armenia         | Europe & Central Asia                    | 2009 | 10.2                                  | Dominantly formal     |
| Russian Fed     | Europe & Central Asia                    | 2010 | 12.1                                  | Dominantly formal     |
| South Africa    | Sub-Saharan Africa                       | 2010 | 17.8                                  | Dominantly formal     |
| China           | East Asia & Pacific                      | 2010 | 21.9                                  | Largely formal        |
| West Bank & Gaza| Middle East & North Africa               | 2010 | 23.2                                  | Largely formal        |
| Brazil          | Latin America & Caribbean                | 2009 | 24.3                                  | Largely formal        |
| Panama          | Latin America & Caribbean                | 2009 | 27.7                                  | Largely formal        |
| Dominican rep   | Latin America & Caribbean                | 2009 | 29.4                                  | Largely formal        |
| Argentina       | Latin America & Caribbean                | 2009 | 32.1                                  | Mostly formal         |
| Uruguay         | Latin America & Caribbean                | 2009 | 33.9                                  | Mostly formal         |
| Mexico          | Latin America & Caribbean                | 2009 | 34.1                                  | Mostly formal         |
| Venezuela       | Latin America & Caribbean                | 2009 | 36.3                                  | Mostly formal         |
| Costa Rica      | Latin America & Caribbean                | 2009 | 37.0                                  | Mostly formal         |
| Ecuador         | Latin America & Caribbean                | 2009 | 37.3                                  | Mostly formal         |
| Paraguay        | Latin America & Caribbean                | 2009 | 37.9                                  | Mostly formal         |
| Zimbabwe        | Sub-Saharan Africa                       | 2004 | 39.6                                  | Mostly formal         |
| Ethiopia        | Sub-Saharan Africa                       | 2004 | 41.4                                  | Semi formal           |
| Vietnam         | East Asia & Pacific                      | 2009 | 43.5                                  | Semi formal           |
| Peru            | Latin America & Caribbean                | 2009 | 49.0                                  | Semi formal           |
| Lesotho         | Sub-Saharan Africa                       | 2008 | 49.1                                  | Semi formal           |
| Liberia         | Sub-Saharan Africa                       | 2010 | 49.5                                  | Semi formal           |
| Sri Lanka       | South Asia                               | 2009 | 50.5                                  | Semi informal         |
| Tanzania        | Sub-Saharan Africa                       | 2005/6 | 51.7                                 | Semi informal         |
| Madagascar      | Sub-Saharan Africa                       | 2005 | 51.8                                  | Semi informal         |
| Bolivia         | Latin America & Caribbean                | 2006 | 52.1                                  | Semi informal         |
| Colombia        | Latin America & Caribbean                | 2010 | 52.2                                  | Semi informal         |
| El Salvador     | Latin America & Caribbean                | 2009 | 53.4                                  | Semi informal         |
| Nicaragua       | Latin America & Caribbean                | 2009 | 54.4                                  | Semi informal         |
| Honduras        | Latin America & Caribbean                | 2009 | 58.3                                  | Semi informal         |
| Uganda          | Sub-Saharan Africa                       | 2010 | 59.8                                  | Semi informal         |
| Kyrgyzstan      | Europe & Central Asia                    | 2009 | 59.2                                  | Semi informal         |
| Indonesia       | East Asia & Pacific                      | 2009 | 60.2                                  | Mostly informal       |
| Zambia          | Sub-Saharan Africa                       | 2008 | 64.6                                  | Mostly informal       |
| India           | South Asia                               | 2009/10 | 67.5                                 | Mostly informal       |
| Cote d’Ivoire   | Sub-Saharan Africa                       | 2008 | 69.7                                  | Mostly informal       |
| Mali            | Sub-Saharan Africa                       | 2004 | 71.4                                  | Largely informal      |
| Philippines     | East Asia and Pacific                    | 2008 | 72.5                                  | Largely informal      |
| Pakistan        | South Asia                               | 2009/10 | 73.0                                 | Largely informal      |

Source: derived from ILO (2012).
hypothesis. When two further tax rate measures are analysed, however, this is not the case. Examining the association between cross-national variations in the share of the workforce in informal sector enterprise and cross-national variations in the level of taxes on revenue and level of tax revenue as a share of GDP, significant associations are identified at the 0.01 level ($r_s = -0.604^{**}$ and $r_s = -0.585^{**}$ respectively). In both cases, as Figures 2b and c reveal, the direction of this relationship is that as the level of taxes rises, the share of the workforce in informal sector enterprises falls.

Of the five tax rate measures analysed, therefore, the neo-liberal hypothesis is only confirmed in one of these measures and even then it is a relatively weak association. In both cases where there is a strong statistically significant correlation between cross-national variations in tax rates and the share of the workforce in informal enterprises, the direction of the association is in the opposite direction to that suggested in neo-liberal discourse. As tax rates rise, the share of the workforce whose main job is in informal sector enterprises falls, displaying how countries with higher social transfer levels have smaller shares of the workforce in informal sector enterprises, presumably because their populations are less dependent on the informal economy as a survival tactic. This finding in developing and transition economies reinforces recent studies in the advanced economies of Europe which identify little or no support for the neo-liberal tax rates hypothesis and some support for the view that higher tax rates, and thus presumably social transfers, reduce employment in the informal sector (Vanderseypen et al. 2013; Williams 2013, 2014).

Evaluating the state corruption hypothesis (H2)

To evaluate this neo-liberal corruption hypothesis that the share of the workforce in informal enterprises is greater in countries with higher levels of public sector corruption, three different measures of corruption are analysed.

Starting with Transparency International’s perceptions of public sector corruption index, a significant association at the 0.05 level is found between cross-national variations in the share of the workforce in informal sector enterprises and perceptions of public sector corruption ($r_s = -0.368^*$). As Figure 3 reveals, the direction of the relationship is that higher shares of the workforce have their main job in informal sector enterprises in countries with greater perceived levels of public sector corruption, thus intimating that enterprises exit the formal economy when they perceive high levels of public sector corruption to exist. This, therefore, validates the neo-liberal public sector corruption hypothesis. Nevertheless, this measure refers only to perceptions of corruption. It does not analyse whether they have actually had to deal with public sector corruption.

When two measures of whether enterprises have actually dealt with instances of public sector corruption are analysed, a different finding emerges. Comparing cross-national
variations in the proclivity of firms to report that they have made informal payments to public officials with the cross-national variations in the share of the workforce in informal sector enterprises, no significant association is found ($r_s = .185$). Neither is there any statistically significant association when cross-national variations in the propensity of enterprises to state that they are expected to give gifts in meetings with tax officials and cross-national variations in the proportion of the workforce employed in informal enterprises ($r_s = .207$). As such, even if one composite indicator of perceptions of public sector corruption provides some weak evidence to support
the neo-liberal public sector corruption hypothesis, measures of whether businesses have actually suffered such corruption do not reveal any significant association.

Evaluating the state intervention hypothesis (H3)

To evaluate the neo-liberal state interference hypothesis which asserts that the share of the workforce in informal enterprises is greater in countries with higher levels of state interference in the workings of the free market, a variety of measures of different forms of state intervention are here evaluated.

Starting with the impact of the regulatory burden on the propensity of employment to be in the informal sector, cross-national variations in the time required in days to start a business can be analysed. No significant association is identified ($r_s = -.128$). Neither is a significant correlation found between cross-national variations in the share of the workforce in informal sector enterprises and cross-national variations in the time required to obtain an operating license ($r_s = -.276$). However, and as Figure 4a reveals, there is a strong statistically significant association between cross-national variations in the share of the workforce employed in informal enterprises and cross-national variations in the cost of business start-up procedures as a percentage of GNI per capita ($r_s = .528^{**}$). The share of the workforce employed in informal sector enterprises is higher in countries where the cost of business start-up procedures is relatively higher, thus supporting the neo-liberal state intervention hypothesis.

However, it is important not to extrapolate from this one measure of the burdensome regulatory environment for business start-ups and to conclude that all forms of state intervention lead to greater levels of employment in informal sector enterprise. Take, for example, the issue of whether state interference in welfare provision increases the share of the workforce in informal sector enterprises as neo-liberals assert or reduces the share as political economists argue. Analysing the association between cross-national variations in the share of the workforce in informal sector enterprises and the level of social contributions as a percentage of revenue, the finding is that there is a significant association ($r_s = -.517^*$). As Figure 4b reveals, the direction of this relationship is that the share of the workforce in informal sector enterprises is lower in countries which spend a larger share of revenue on social contributions. This refutes the neo-liberal state intervention hypothesis and supports the political economy standpoint that greater state intervention to protect citizens from poverty reduces the share of the workforce in the informal economy.
Figure 4 (See legend on next page.)
Indeed, this is further reinforced when the relationship between the cross-national variations in the share of the workforce in informal sector enterprises and cross-national variations in the proportion of the population living below the national poverty line is examined. As Figure 4c displays, there is a strong statistically significant relationship at the 0.01 level ($r_s = .429^{**}$). The greater is the share of the population living below the national poverty line, the higher is the share of the workforce in informal sector enterprises, thus supporting the political economy perspective that turning to informal sector enterprise is more an activity of last resort undertaken by marginalised populations in the absence of alternative sources of livelihood, rather than a voluntarily chosen endeavour as asserted by the neo-liberal approach.

The neo-liberal thesis regarding state interference is further refuted, and the political economy perspective further reinforced, when another proxy indicator of the degree to which governments intervene in work and welfare arrangements is analysed. Examining cross-national variations in the expense of government as a share of GDP and the share of the workforce in informal sector enterprises, and as Figure 4d reveals, a strong statistically significant association is identified at the 0.01 level ($r_s = -.548^{**}$). Countries which spend a greater proportion of GDP on government have a smaller share of the workforce in informal sector enterprises. This, therefore, again refutes the neo-liberal state intervention hypothesis and provides support for the political economy explanation.

Indeed, there is evidence not only to support the political economy perspective but also the modernisation perspective which argues that the share of the workforce in informal sector enterprises is lower in developed modern economies, As Figure 5 displays, there is a strong statistically significant correlation at the 0.01 level between cross-national variations in the share of the workforce in informal sector enterprises and cross-national variations in GNP per capita ($r_s = -.584^{**}$). The direction of this relationship is that the share of the non-agricultural workforce in informal sector enterprises is greater in countries with lower levels of GNP per capita, thus supporting modernisation theory.

**Conclusions**

Reporting ILO data on the share of the workforce in informal sector enterprises across 43 developing and transition economies, the finding is that just under one in three (31.5%) have their main job in informal sector enterprises. The informal sector, therefore, employs a significant proportion of the workforce in developing and transition economies. Nevertheless, marked cross-national variations exist in the share of the workforce in informal sector enterprises and this paper has evaluated critically the neo-liberal explanation that a higher share of the workforce is in informal enterprises in countries with higher tax rates, greater public sector corruption and higher levels of state intervention in work and welfare arrangements and therefore that tax reductions, tackling corruption and pursuing minimal state intervention are the way forward.
Evaluating the validity of this neo-liberal approach in relation to developing and transition economies, little evidence is found to support the neo-liberal tax rates hypothesis (H1) that the share of the workforce in informal sector enterprises is higher in nations with high tax rates. Only one of the five tax rate measures analysed supports this neo-liberal tax rates hypothesis, and even this is a weak association at the 0.05 level. Three of the four tax rate measures displaying a significant correlation with the share of the workforce in informal enterprises, and both tax rate measures showing a strong significant association at the 0.01 level, find the opposite to the neo-liberal tax rates hypothesis, namely the share of the workforce in informal enterprises falls as tax rates increase. Similarly, the neo-liberal state corruption hypothesis (H2) that the share of the workforce in informal enterprises is greater in countries with higher public sector corruption levels, is only confirmed when one composite measure of perceptions of public sector corruption is analysed. Measures of state corruption which uncover whether enterprises have confronted public sector corruption in practice find no significant correlation. Examining the neo-liberal state intervention hypothesis (H3), meanwhile, although evidence is found that the share of the workforce in informal enterprises is greater in countries where the cost of starting a business is higher, this state interference hypothesis is not supported when one extends analysis beyond the regulatory burden for business start-ups to broader measures of state intervention in work and welfare arrangements. In sum, little or no evidence is found to support the neo-liberal approach that the share of the workforce in informal sector enterprises is greater in countries with higher tax rates, corruption levels and greater state interference, and that the solution is therefore to reduce tax rates, deal with state corruption and pursue minimal state intervention.

However, support is found for the political economy approach which views the share of the workforce in informal sector enterprises to be greater in countries with lower levels of state intervention to protect workers from poverty. Not only are cross-national variations in the share of the workforce in informal enterprises strongly correlated with the level of poverty, but also higher tax rates, higher levels of social protection and bigger government. This is doubtless because this diminishes the need for marginalised populations to turn to employment in informal enterprises as a survival practice of last resort in the absence of alternatives. Indeed, this study of the cross-national variations in the share of the workforce in informal sector

![Figure 5 Relationship between share of workforce in informal enterprises and GNP per capita.](image-url)
enterprises in developing and transition economies not only provides support for the political economy approach but also the modernisation perspective since it reveals that the share of the workforce in informal enterprises is lower in more developed modern economies as measured by GNP per capita.

This preliminary analysis, therefore, has both theoretical and policy implications. Starting with the theoretical implications, the validity of the neo-liberal approach is not supported that higher proportions of the workforce are in informal enterprises due to higher tax rates, corruption and state interference and thus that tax reductions, combating corruption and decreasing the regulatory burden and state intervention is the way forward. Instead, tentative support is found for both the modernisation approach which views higher shares of the workforce in informal enterprises result from an under-regulation (not over-regulation) of economies and a lack of state intervention to protect workers from poverty. Consequently, if cross-national variations in the share of the workforce in informal sector enterprises are to be explained, a synthesis of the modernisation and political economy schools of thought is required which explains lower levels of employment in informal sector enterprises to be associated with economic under-development and the political economy approach which argues that higher levels of the workforce in informal enterprises result from an under-registration (not over-registration) of economies and a lack of state intervention to protect workers from poverty. Consequently, if cross-national variations in the share of the workforce in informal sector enterprises are to be explained, a synthesis of the modernisation and political economy schools of thought is required which explains lower levels of employment in informal sector enterprises to be associated with economic under-development, higher tax rates and thus social transfers, smaller shares of the population in poverty and greater levels of social protection. The validity of this new ‘neo-modernisation’ explanation now needs to be evaluated using time-series data for individual nations. It might also be useful to explore a wider range of economic and social conditions associated with state intervention in, and regulation of, work and welfare provision (e.g., the quality of state governance, labour market policy interventions to protect vulnerable groups, the financial and managerial capabilities/level of education of enterprise owners) in order to develop a more nuanced theoretical approach regarding what state interventions reduce the share of the workforce in informal enterprises and which do not. Indeed, the influence of the quality of governance in particular requires more detail investigation. In fragile environments for example, it may not be taxation itself but the level of corruption of state officials and the perceived procedural and redistributive fairness of the state that is the burden. It may also be that some environments with high quality governance may be entrepreneur-friendly and other environments entrepreneurship-unfriendly, and this will influence the number pushed into informality. This needs to be investigated in future studies. Taxation, moreover, also requires more detailed investigation. It may not be tax rates themselves but actual taxes collected that is important since high tax rates may be a direct product of the ineffectiveness of tax collection and the low levels of collection of taxes owed. These issues require further testing in future studies.

The above findings also have implications for policy. During the past few decades, there has been a policy shift away from eradicating informal sector enterprises and towards facilitating their formalisation as it has been recognised that the intention in tackling such enterprise is to promote growth of the formal economy, decent work, fuller employment and tax revenue to support wider societal objectives (Chen 2012; ILO 2013b; Williams and Lansky 2013). Based on this desire to facilitate formalisation, the policy debate has revolved around whether repressive measures and/or incentives are the most effective means of achieving formalisation (Dibben and Williams 2012; Eurofound 2013; Feld and Larsen 2012; ILO 2013b; OECD 2012; Williams and Nadin 2012). In this paper, however, and in stark contrast to the narrow conventional policy
debate, the finding is that broader economic and social policy measures are also important. The overarching modernisation of economies and reducing poverty through higher taxes, and thus greater social transfers, and also higher levels of social protection, are all revealed to be close associated with the level of employment in informal sector enterprises. Tackling the share of the workforce in informal enterprises, therefore, appears to require not only a mix of targeted policy measures but also the introduction of broader economic and social policies involving the greater provision of social transfers and social protection. Whether this is confirmed when time-series data is examined for individual countries, needs to be evaluated in future research.

In sum, this paper has evaluated for the first time in the context of developing and transition economies the validity of the neo-liberal approach that advocates tax rate reductions, tackling state corruption, de-regulation and minimal state intervention when tackling employment in informal enterprises. It has found little evidence to support this neo-liberal policy approach. If this paper thus stimulates a wider questioning of the validity of governments adopting this neo-liberal policy approach to tackle informal sector enterprise, then it will have fulfilled one of its goals. If it also encourages a rethinking of whether greater state intervention to protect workers from poverty might be the way forward in tackling the informal sector in developing and transition economies and beyond, then it will have fulfilled its broader intention.

Competing interests
The authors declared that they have no competing interests.

Received: 17 March 2014 Accepted: 5 May 2014
Published: 20 May 2014

References
Ahmad, AN (2008). Dead men working: time and space in London’s (‘illegal’) migrant economy. Work, Employment and Society, 20(2), 301–318.
Becker, KF (2004). The informal economy. Stockholm: Swedish International Development Agency.
Böckoe, JH (1942). Economies and economic policy in dual societies. Harlem: Tjeenk Willink.
Buehn, A & Schneider, F (2012). Shadow economies around the world: novel insights, accepted knowledge and new estimates. International Tax and Public Finance, 19(1), 139–171.
Castells, M & Portes, A (1989). World underneath: the origins, dynamics and effects of the informal economy. In A. Portes, M. Castells, & L. Benton (Eds.), The informal economy: studies in advanced and less developing countries (pp. 19–41). Baltimore: John Hopkins University Press.
Chen, MA (2012). The informal economy: definitions, theories and policies. Manchester: WIEGO Working Paper No. 1, WIEGO Council, SB (2004). Small Business in the Informal Economy: making the transition to the formal economy. London: Small Business Council.
Cross, JC (2000). Street vendors, modernity and postmodernity: conflict and compromise in the global economy. International Journal of Sociology and Social Policy, 20(1), 29–51.
Cross, J & Morales, A (2007). Introduction: locating street markets in the modern/postmodern world. In J. Cross & A. Morales (Eds.), Street entrepreneurs: people, place and politics in local and global perspective (pp. 1–20). London: Routledge.
Davis, M (2006). Planet of slums. London: Verso.
De Soto, H (1989). The other path. London: Harper and Row.
De Soto, H (2001). The Mystery of Capital: why capitalism triumphs in the West and fails everywhere else. London: Black Swan.
Dibben, P & Williams, CC (2012). Varieties of capitalism and employment relations: informally dominated market economies. Industrial Relations: a Review of Economy and Society, 51(51), 563–582.
Eurofound. (2013). Tackling undeclared work in 27 European Union member states and Norway: approaches and measures since 2008. Dublin: Eurofound.
Feld, LP & Larsen, C (2012). Undeclared work, deterrence and social norms: the case of Germany. Berlin: Springer Verlag.
Feld, L & Schneider, F (2010). Survey on the shadow economy and undeclared earnings in OECD Countries. German Economic Review, 11, 109–149.
Gallin, D (2001). Propositions on trade unions and informal employment in time of globalisation. Antipode, 19(4), 531–549.
Geertz, C (1963). Old Societies and New States: the quest for modernity in Asia and Africa. Glencoe, IL: Free Press.
Geertz, S & O’Grady, B (2002). Making money: exploring the economy of young homeless workers. Work, Employment and Society, 16(3), 433–456.
Ghezzi, S (2010). The fallacy of the formal and informal divide: lessons from a Post-fordist regional economy. In E Marcelli, CC Williams, & P Joassart (Eds.), Informal Work in Developed Nations (pp. 141–160). London: Routledge.
Hussmanns, R (2005). Measuring the informal economy: from employment in the informal sector to informal employment. Geneva: Working Paper no. 53, ILO Bureau of Statistics.
