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Beyond the formal/informal employment dualism: evaluating individual- and country-level variations in the commonality of quasi-formal employment

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Abstract

Purpose

To transcend the view of employment as either purely formal or purely informal, this paper evaluates the prevalence of quasi-formal employment where formal employers pay formal employees an unreported (“envelope”) wage in addition to their formal reported salary. To explain the individual-level variations in quasi-formal employment, the “marginalisation” thesis is evaluated that this practice is more prevalent among vulnerable groups and to explain the country-level variations, a neo-institutionalist theory is evaluated that it is more prevalent where formal institutional failures lead to an asymmetry between the formal laws and regulations and the unwritten socially shared rules of informal institutions.

Methodology

To evaluate the individual- and country-level variations in the prevalence of quasi-formal employment, a multi-level logistic regression is provided of data from special 2019 Eurobarometer survey 92.1 involving 11,793 interviews with employees across 28 European countries (the 27 member states of the European Union and the United Kingdom).

Findings

Of the 3.5% of employees (1 in 28) who receive under-reported salaries, the marginalisation thesis is supported that it is largely vulnerable population groups. So too is the neo-institutionalist explanation that quasi-formal employment is more common in countries where the non-alignment of formal and informal institutions is greater, with the formal institutional failings producing this identified as lower levels of economic development, less modernised state bureaucracies, and lower levels of taxation and social protection.

Practical Implications

The policy implication is that tackling quasi-formal employment requires not only enforcement authorities to improve the risk of detection of this illegal wage practice but also governments to change wider macro-level structural conditions. These are outlined.

Originality/value

Contemporary new evidence is provided of the prevalence of quasi-formal employment along with how this illegal wage practice can be explained and tackled.

Keywords: informal economy; envelope wages; under-declared employment; marginalisation; institutional theory; public policy; Europe.

INTRODUCTION

A long-standing and widespread view has been that an employee is engaged in either formal or informal employment. Either an employee is reported to the authorities for tax, social security and/or labour law purposes (i.e., they are in formal employment), or they are not (i.e., they are in informal employment) (Williams et al., 2007). The starting point of this paper is a small literature that contests this formal/informal dualism that depicts workers as either purely formal or purely informal by highlighting how formal employers sometimes pay their formal employees two salaries, an official reported salary and an additional unreported (“envelope”) salary (Bignami et al., 2013; Chavdarova, 2014; Franic, 2020; Williams and Horodnic, 2017). To advance understanding of this quasi-formal employment relationship that is neither wholly formal nor wholly informal, the aim of this paper is to evaluate the individual- and country-level variations in the commonality of such quasi-formal employment along with how it can be explained and tackled.

To achieve this, the next section reviews the existent literature on quasi-formal employment. The outcome will be a proposition that individual-level variations in its prevalence might be explained using a “marginalisation” thesis that this practice is more common among vulnerable groups whilst cross-national variations might be explained using a variant of neo-institutionalist theory that it is more prevalent where formal institutional failures lead to an asymmetry between the formal laws and regulations and the unwritten socially shared rules of informal institutions. To evaluate these hypotheses, the third section then reports the data and analytical methods used, namely a multilevel logistic regression of 2019 data from special Eurobarometer survey 92.1 involving 11,793 interviews with employees across 28 European countries (the 27 member states of the European Union and the United Kingdom). The fourth section reports the findings on the individual- and country-level variations in the commonality of quasi-formal employment. The fifth and final section concludes by discussing the theoretical and policy implications along with the limitations of the study and future research required.

EXPLAINING QUASI-FORMAL EMPLOYMENT: LITERATURE REVIEW AND HYPOTHESES

Since the turn of the millennium, a small literature mostly analysing the labour market in East-Central Europe has drawn attention to a quasi-formal employment relationship whereby when formal employers appoint a formal employee, they agree in a formal written contract an official reported salary and at the same time reach an additional unwritten verbal agreement that an extra unreported (“envelope”) salary will be paid (Chavdarova, 2014; Franic, 2020; Hazans, 2005; Sedlenieks, 2003; Williams, 2008, 2009; Woolfson, 2007). Although a verbal agreement is in many countries legal and binding in law, the type of verbal contract discussed here is illegal. It is a fraudulent agreement to under-report the total wage of the employee with the purpose of evading the full tax and social security liabilities of the employee and employer to the state.

There are several reasons for formal employers engaging in this illegal wage practice of paying an additional unreported (“envelope”) wage to their formal employees. The first and principal reason is that by only paying a portion of the wage of the employee officially, the employer can reduce their tax and social security contribution payments and therefore their labour costs. Besides this obvious direct financial benefit for employers, a second set of benefits for employers is that paying envelope wages allows employers to exploit employees by imposing additional conditions to those in their formal written contract. The most common additional conditions include: that they will not take their full statutory entitlement to annual leave; that they work longer hours than the formal contract states, and/or that the tasks and responsibilities are greater than the formal contract states (Williams, 2014). A third and final benefit for employers is that if they can at any time withdraw payment of the envelope wage to force the employee to voluntarily leave without the need for formal redundancy proceedings and severance pay, and they can also threaten to cease or reduce the envelope wage payment to force employees to undertake additional tasks beyond their formal contract (Williams and Padmore, 2013; Woolfson, 2007).

The first wave of scholarship on this illegal wage practice comprised small-scale often qualitative studies in East-Central European nations. These include studies in the Baltic Sea States of Latvia (Meriküll and Staehr, 2010; Putniņš and Sauka, 2017; Sedlenieks, 2003; Žabko and Rajevska, 2007), Lithuania (Karpuskiene, 2007; Meriküll and Staehr, 2010; Woolfson, 2007) and Estonia (Meriküll and Staehr, 2010) as well as in Bulgaria (Chavdarova, 2014), Romania (Neef, 2002), Russia (Kapelyushnikov et al., 2012; Williams and Round, 2007) and Ukraine (Round et al., 2008; Williams, 2007). For instance, Sedlenieks (2003) in Latvia reports 15 face-to-face interviews whilst Woolfson (2007) in Lithuania provides an in-depth case study of one person. In Ukraine, Williams (2007) interviews 600 households but only in three localities, whilst Williams and Round (2007) in Russia interview 313 households in three districts of Moscow. Although none are representative samples, they nevertheless provide some clues regarding its commonality. Meriküll and Staehr (2010) find that in 2002, 9.6%, 11.7% and 22.5% of formal employees in Estonia, Lithuania and Latvia respectively were paid an additional unreported wage, whilst Williams (2007) finds this was 30% in 2005 in Ukraine and Williams and Round (2007) that it was 65% of formal employees in Moscow. Undertaken during the post-socialist transition process, these surveys capture the situation at a specific turbulent historical juncture.

A second wave of scholarship has involved more extensive surveys on representative samples of European citizens. A 2007 Eurobarometer survey which included 11,135 interviews with formal employees across the 27 member states of the European Union (EU) enabled descriptive analyses of the prevalence and distribution of quasi-formal employment in the Baltic Sea region (Williams, 2009c), South-East Europe (Williams et al., 2011), East-Central Europe (Williams and Round, 2008) and the European Union (Williams, 2009). This 2007 Eurobarometer survey was then replicated in 2013, resulting in further descriptive studies in the Baltic Sea region (Williams and Horodnic, 2015a), East-Central Europe (Williams and Horodnic, 2015b) and the European Union (Williams and Horodnic, 2017). In 2007, 5.5% of the formal employees surveyed in the EU received an additional unreported wage, amounting on average to 43% of their gross wage and its prevalence was lower in Western and Nordic nations than in Southern and East-Central Europe, as was the share of the gross wage received as an envelope wage lower (e.g., Williams, 2009). In 2013, meanwhile, 1 in 33 formal employees received an additional unreported wage with similar variations continuing to persist across the EU regions (Williams and Horodnic, 2017).

The 2007 and 2013 surveys identify that younger employees, men, unskilled manual workers, and those who have difficulties paying the bills most of the time are more likely to engage in quasi-formal employment, and that smaller businesses more commonly use this illegal wage practice (Williams and Padmore, 2013; Williams and Horodnic, 2017). Therefore, the finding has been that quasi-formal employment is more prevalent among marginalised populations witnessing poorer access to the formal labour market. There have also been individual-level evaluations of the conventional policy approach that views participants as rational economic actors and believes that increasing the risk of detection reduces informality (Allingham and Sandmo, 1972) and the more recent social actor approach that informality is due to the non-alignment of citizens' attitudes with the formal rules and regulations, measured using tax morale which is the intrinsic motivation to pay taxes owed (McKerchar et al., 2013; Torgler and Schneider, 2007). The finding in 2007 and 2013 has been that increasing the risk of detection reduces engagement in quasi-formal employment and that the greater is the non-alignment of citizens' attitudes with the formal rules, the greater is the likelihood of quasi-formal employment (Franić, 2017, 2019; Williams and Horodnic, 2016). Based on these findings, the following individual-level propositions can therefore be tested:

H1a: Women formal employees are more likely to engage in quasi-formal employment than men.

H1b: Younger formal employees are more likely to engage in quasi-formal employment than older formal employees.

H1c: Formal employees with fewer years in formal education are more likely to engage in quasi-formal employment than those who spent longer in formal education.

H1d: Those having difficulties paying their bills most of the time are more likely to engage in quasi-formal employment than those less frequently having difficulty.

H1e: Unskilled manual formal employees are more likely to engage in quasi-formal employment than formal employees who are more skilled and professional workers.

H1f: Formal employees of smaller businesses are more likely to engage in quasi-formal employment than formal employees of larger businesses.

H1g: Increasing the risk of detection reduces the likelihood of a formal employee receiving an additional unreported wage.

H1h: Formal employees with a higher tax morale are less likely to engage in quasi-formal employment.

Turning to cross-national variations, the finding is that quasi-formal employment is more prevalent in East-Central Europe and Southern Europe than in Western Europe and the Nordic nations (Williams and Horodnic, 2017). To explain national-level variations in the commonality of informality more generally, recent years have seen the emergence of a neo-institutionalist theorisation. Drawing inspiration from a variant of institutional theory (Baumol and Blinder, 2008; Helmke and Levitsky, 2004; North, 1990), this asserts that informality arises from the asymmetry between the codified laws and regulations of a society's formal institutions and the socially shared unwritten rules of its informal institutions (Webb et al, 2009). The greater the institutional

asymmetry, the higher is the likelihood of participation in the informal economy (Williams and Horodnic, 2017).

Viewed from this perspective, quasi-formal employment can be theorised to directly result from individual employers and employees not adhering to the laws and regulations of formal institutions and instead adopting unwritten socially shared rules agreed via a verbal agreement to pay an additional unreported (“envelope”) wage to evade paying the full tax and social security payments owed. At the country level meanwhile, studies of the 2007 and 2013 data reveal that countries where there is greater alignment between the formal and informal institutions, measured in terms of tax morale, have a lower prevalence of quasi-formal employment (Franić, 2017, 2019; Williams and Horodnic, 2017). They also reveal that quasi-formal employment is higher in countries where there is a lack of trust in formal institutions (Franić, 2017). From the perspective of neo-institutionalist theory, therefore, the hypothesis is that:

Neo-institutionalist hypothesis (H2): the prevalence of quasi-formal employment is lower in countries with H2a) higher levels of tax morale, H2b) higher levels of trust in labour inspectors and H2c) higher trust in the legal system,

What, however, causes this asymmetry between the laws and regulations (i.e., formal institutions) and the beliefs, values and norms of the population (i.e., informal institutions)? There are three competing theorisations of the structural conditions that lead to institutional asymmetry and therefore quasi-formal employment.

Firstly, a “modernisation” thesis proposes that informality becomes less prevalent with economic development and the modernisation of government (La Porta and Schleiffer, 2008; Lewis, 1959). Indeed, evaluations of the 2007 and 2013 surveys reveal that countries with a higher GDP per capita have a lower prevalence of quasi-formal employment (Kayaoglu and Williams, 2017), that quasi-formal employment is less common the higher is the quality of government (Williams and Horodnic, 2017) and level of public corruption (Franić, 2017; Kayaoglu and Williams, 2017). From the perspective of modernisation therefore, the hypothesis is that:

Modernisation hypothesis (H3): the prevalence of quasi-formal employment is lower in countries with H3a) higher GDP per capita, H3b) higher quality government H3c) and lower perceptions of public corruption.

Secondly, a “neo-liberal” school of thought has asserted that informality results from high taxes and too much state intervention in the free market and that reducing taxes and state intervention in work and welfare arrangements is the way forward (De Soto, 1989, 2001; Schneider and Williams, 2013). From this viewpoint in consequence, quasi-formal employment would be more common in countries with higher taxes and levels of state intervention in welfare provision. From the perspective of neo-liberal theory, therefore, the hypothesis is that:

Neo-liberal hypothesis (H4): the prevalence of quasi-formal employment is lower in countries with H4a) lower tax rates and H4b) lower levels of social expenditure.

Third and finally, a group of “political economy” scholars have conversely asserted that informality results from inadequate levels of state intervention in work and welfare arrangements which leaves workers less than fully protected. Indeed, previous studies of quasi-formal employment have found that countries quasi-formal employment is lower in countries with higher

levels of taxation of income and wealth (Kayaoglu and Williams, 2017; Williams and Horodnic, 2017), and greater levels of social expenditure as a percentage of GDP (Kayaoglu and Williams, 2017; Williams, 2013, 2015). From the perspective of political economy theory, therefore, the hypothesis is that:

Political economy hypothesis (H5): the prevalence of quasi-formal employment is lower in countries with H5a) higher tax rates and H5b) greater levels of social expenditure.

METHODOLOGY: DATA, VARIABLES AND ANALYTICAL METHODS

Data

To evaluate these hypotheses on the individual- and country-level variations in the prevalence of quasi-formal employment, fresh data is reported from special 2019 Eurobarometer survey 92.1, which involved face-to-face interviews with 11,793 employees in 28 European countries (the 27 European Union member states and the UK) which replicates the 2007 and 2013 Eurobarometer surveys. In all 28 European countries, a multi-stage random (probability) sampling methodology was again employed. This ensured that on the issues of gender, age, region and locality size, each country as well as each level of the sample was representative in proportion to its population size. For the multivariate analysis, a debate exists over whether to use a weighting scheme. Reflecting the dominant viewpoint, the decision was taken not to do so (Solon et al., 2013; Winship and Radbill, 1994).

The face-to-face interviews covered firstly attitudinal questions about participation in undeclared work followed by questions on the purchase of goods and services from the informal economy, whether they received additional unreported (envelope) wages for their formal employment, and whether they participated in wholly undeclared work. In this paper, the focus is upon the questions on quasi-formal employment. Firstly, the 11,793 participants in these 28 countries reporting that they were formal employees were asked whether they had received an unreported (envelope) wage in addition to their official reported wage from their employer in the prior 12 months, secondly, whether this unreported component of their wage was for their regular work, as payment for overtime hours, or for both and, third, what percentage of their gross yearly income from their job was received as an unreported envelope wage.

Variables

The dependent variable measuring engagement in quasi-formal employment is based on the question “Sometimes employers prefer to pay all or part of the salary or the remuneration (for extra work, overtime hours, the amount above the legal minimum wage or bonuses) in cash and without declaring it to tax or social security authorities. Has your employer paid you any of your income in the last 12 months in this way?” with value 1 for yes and value 0 otherwise.

To analyse the individual-level variations in quasi-formal employment to test H1a-h, the following variables are analysed:

- *Gender*: a dummy variable with value one for men and zero for women.
- *Age*: a continuous variable for the exact age of the respondent.
- *Age formal education ended*: a categorical variable for age they stopped full time education with value one for 15 years old and under, value two for 16-19 years old, and value three for 20 years old or over.

- *Difficulties paying bills*: a categorical variable for the difficulties in paying bills with value one for having difficulties most of the time, value two for occasionally, and value three for almost never/ never.
- *Occupation*: a categorical variable grouping employed respondents by their occupation with value one for those in an employed position at a desk, value two for employed professions, value three for general middle management, value four for those in an employed position, travelling, value five for those in an employed position in a service job, value six for supervisors, value seven for skilled manual workers and value eight for unskilled manual workers.
- *Firm size*: a categorical variable for the number of people that respondent's employer employs with value one for micro firms with 1 to 9 people, value two for small firms with 10 to 49 employees, value three for medium firms with 50 to 249 people, value four for large firms with more than 250 people.
- *Detection of risk*: a categorical variable for the responses in question "People who work without declaring income run the risk that tax or social security authorities find out and issue supplementary tax bills and perhaps fines. How would you describe the risk of being detected", taking value of 1 very small, 2- Fairly small, 3-Fairly high, and 4-Very high
- *Tax morale*: an interval variable based on employees' rating the acceptability of five forms of non-compliance using a 10-point Likert scale where "1" means "absolutely unacceptable" and "10" means "absolutely acceptable" for the following question "Now I would like to know how you assess various behaviours. For each of them, please tell me to what extent you find it acceptable or not.
 - A firm hires a private person and all or a part of the salary paid to him or her is not officially declared
 - A firm is hired by another firm and it does not declare its activity to tax or social security authorities
 - A private person is hired by a private household and he or she does not declare the payment received to tax or social security authorities although it should be reported
 - A firm is hired by a private household for work and does not declare the payment received to tax or social security authorities
 - A private person or self-employed person evades taxes by not declaring all or part of their income

The index for each individual is calculated using the mean score across these six attitudinal questions. Lower values represent higher tax morale, and vice versa.

To evaluate the neo-institutionalist hypothesis (H2) that the prevalence of quasi-formal employment is lower in countries with higher levels of lower tax morale (H2a), higher levels of trust in labour inspectors (H2b) and higher trust in the legal system (H2c), the following variables are analysed:

- *Tax morale*: an interval variable based on employees' rating the acceptability of five forms of non-compliance discussed above using a 10-point Likert scale where "1" means „absolutely unacceptable" and "10" means „absolutely acceptable". The index for each country is calculated using the mean score of citizens in each country across these six attitudinal questions. Lower values represent higher tax morale, and vice versa
- *Trust in the labour inspectorate*: taking value 1 if the respondent tends to trust the labour inspectorate and value 0 otherwise.

- *Trust in Legal System: the percentage of “tend to trust” responses on the question “I would like to ask you a question about how much trust you have in certain institutions. For each of the following institutions, the legal system, please tell me if you tend to trust it or tend not to trust it.”*

To evaluate the modernisation hypothesis (H3) that the prevalence of quasi-formal employment is lower in countries where there are lower levels of economic development (H3a), governance (H3b) and corruption (H3c), the following country-level variables are analysed:

- *GDP per capita* (current US\$) 2018 (Eurostat, 2021a)
- *European Quality of Government Index*: focus on both perceptions and experiences with public sector corruption, along with the extent to which citizens believe various public sector services are impartially allocated and of good quality. The index is standardized with a mean of zero, and higher scores implying higher quality of government (Charron et al., 2015).
- *Transparency International’s Corruption Perceptions Index (CPI)*: 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 perceptions of public corruption (Transparency International, 2020).

To evaluate the contrasting views regarding tax of neo-liberal theory (H4a) and political economy theory (H5a), the indicator previously employed when evaluating this perspective in relation to informal employment (European Commission, 2013; Williams, 2013) is used, namely the:

- *Current taxes on income, wealth, etc., as % of GDP* (Eurostat, 2021b), which cover all compulsory, unrequited payments, in cash or in kind, levied periodically by general government and by the rest of the world on the income and wealth of institutional units, and some periodic taxes which are assessed neither on that income nor that wealth.

To evaluate the contrasting views regarding levels of social expenditure of the neo-liberal (H4b) and political economy (H5b) hypotheses meanwhile, the indicator analysed, akin to previous studies on informal employment in Europe (European Commission, 2013; Eurofound, 2013; Williams, 2013), is:

- *Social protection expenditure as % of GDP* (Eurostat, 2021c) contain: social benefits, which consist of transfers, in cash or in kind, to households and individuals to relieve them of the burden of a defined set of risks or needs; administration costs, which represent the costs charged to the scheme for its management and administration; other expenditure, which consists of miscellaneous expenditure by social protection schemes (payment of property income and other). It is calculated in current prices as percentage of GDP.

Analytical methods

To evaluate whether H1a-h remain valid when a range of individual-level variables are introduced and held constant, logistic regression analysis is used. To evaluate the four hypotheses (H2-5) investigating the country-level structural conditions associated with quasi-formal employment and given the significant correlation between these country-level structural conditions, a multi-level logistic regression analysis is employed. Each structural condition is added in turn to the individual-level variables to evaluate whether they are significantly associated with the propensity to pay an additional unreported wage to formal employees.

FINDINGS

As Table 1 displays, 3.5% (1 in 28) of formal employees received an additional unreported wage from their formal employer in the prior 12 months in these 28 European countries, with the unreported portion of their wage amounting on average to 30% of their gross annual salary. This is similar to 2013. Some 31.5% received this additional unreported salary (envelope wage) for their regular employment, 41.4% for extra time/over time that they worked, 24.0% for both their regular employment and extra/overtime worked, and 3.2% either refused to answer or did not know.

Receiving an additional unreported wage is more often reported by men than women, and by younger people and those of retirement age, indicating a U-shaped curve. So too are those with fewer years in full-time formal education and those having difficulties paying the household bills most of the time more likely to receive an unreported additional wage from their employer. Therefore, the tentative picture is that quasi-formal employment is more prevalent amongst vulnerable employees. Manual workers are also more likely to engage in quasi-formal employment; 6.1% of unskilled and 4.8% of skilled manual workers, and those travelling as part of their job (4.4%), who perhaps receive an unreported additional wage as compensation for working extra hours over and above their formal contract of employment. Smaller firms are also more likely to fraudulently under-report salaries, with 6.6% of formal employees in micro businesses (with less than 10 employees) receiving an additional unreported wage compared with only 0.9% of formal employees in large firms (employing 250 or over).

INSERT TABLE 1 ABOUT HERE

Turning to policy measures, the descriptive finding is that the higher the perceived risk of detection, the more unlikely are formal employees to receive an unreported additional wage. Meanwhile, examining the more recent neo-institutionalist social actor approach which asserts that engagement in such activity is due to a lack of alignment of citizens' attitudes with the formal rules and regulations, measured using tax morale, the finding is that quasi-formal employment is less likely among formal employees who have a higher tax morale and trust in the labour inspectorate.

To evaluate firstly, whether the variations across business types and employee groups are significant when other characteristics are taken into account and held constant (H1) and secondly, the validity of the contrasting explanations for the cross-national variations in quasi-formal employment (H2-4), Table 2 reports the results of a staged multi-level logistic regression model. This utilizes the hierarchical nature of the data (individuals within countries).

Given the hierarchical structure of the data, with individuals nested within countries, for the econometric analysis we use a series of multilevel models. As the dependent variable is a binary variable taking a value of 1 if the respondent declared that s/he receives an additional unreported wage, and 0 otherwise, we employ mixed-effects logistic regression. The likelihood-ratio test that there is no cross-country variation in quasi-formal employment can be safely rejected in baseline model as well as in all other models. This means that the mixed-effects logistic regression should be used.

In the first stage of the analysis, a baseline random model (model 1 in Table 2) with no explanatory variables was estimated to test whether a multilevel approach was appropriate. This indicates that around 12% of the variance in quasi-formal employment is accounted for at the country level ($Wald = 74.1, df = 1, p < 0.001$), indicating significant variation between countries in the prevalence of quasi-formal employment. Given this justification for using multilevel mixed-effects logistic regression analysis, the second stage involved constructing a model with first-level

(i.e. individual-level) variables to understand their effect. The third stage then included both first- and second-level (i.e. country-level) variables to understand the effects at both levels.

INSERT TABLE 2 ABOUT HERE

Table 2 reports the results of the multilevel logistic regression analysis. Model 2 and 3 examines whether this association remains significant when purely individual-level characteristics are analyzed, and Models 4-9 when various country-level variables are added.

Model 2 in Table 3 reveals that gender (women as the reference category) has a negative sign and is statistically significant suggesting that men are significantly more likely to receive under-reported salaries than women (refuting H1a). The variable age has a negative sign and is statistically significant suggesting that younger employees (confirming H1b) are more likely to receive under-reported salaries. The results also show that envelope wages are significantly more likely among employees with fewer years in education (confirming H1c) and those who have difficulties most of the time in paying their household bills (confirming H1d). Quasi-formal employment is thus more likely among vulnerable population groups, perhaps reflecting how employers target such groups. Unskilled and skilled manual workers, and those who travel for their jobs are significantly more likely to receive an under-reported wage than those in employed positions at a desk (confirming H1e), all these variables having a positive sign and being highly significant. So too are smaller firms significantly more likely to pay under-reported wages (confirming H1f). This in part may be a result of the relative absence of dedicated human resource management (HRM) staff and formal HRM practices in smaller businesses (Barrett and Mayson 2007; Benmore and Palmer 1996), meaning that employers are more able to introduce unwritten verbal contracts that contravene the employees' formal written contract. Model 2 also reveals that the propensity to receive an under-reported wage is significantly associated with the perceived risk of detection. All variables denoting the risk of detection are positive and highly significant, compared with the reference base category (very small risk). As the perceived risk of detection increases, the likelihood of a formal employee receiving an additional unreported wage declines (confirming H1g).

Model 3 includes two additional variables on tax morale and trust in labour inspectors to test the neo-institutionalist approach. The finding is that the likelihood of engaging in quasi-formal employment is strongly associated with lower levels of tax morale (confirming H1h); the variable denoting tax morale is positive and highly significant. This is the case across all models, whether individual-level characteristics alone are analysed, or country-level structural conditions are added. A strong significant association thus exists between tax morale and the prevalence of quasi-formal employment. As tax morale improves, and thus institutional asymmetry decreases, the prevalence of quasi-formal employment significantly declines (confirming H2a). Trust in labour inspectorates also significantly decreases the prevalence of quasi-formal employment (confirming H2b). These variables both remain statistically significant across all specifications (Model 3-9). Model 9 also reveals that the likelihood of quasi-formal employment is lower in countries where there is greater trust in the legal system (confirming H2c).

Models 4-8 include country-level variables. Five country-level variables evaluate the various tenets of the three competing theories of the structural conditions that explain cross-national variations in quasi-formal employment. Given that these country-level variables are strongly correlated, each indicator is treated in separate models, providing alternative perspectives on the reasons for quasi-formal employment.

To begin with the modernisation thesis (H3a-H3c), model 4 provides good evidence that the prevalence of quasi-formal employment is higher in countries with lower levels of GDP per capita (confirming H3a). The variable GDP per capita has a negative sign and is statistically significant. Model 5 finds that the higher the quality of government, the lower is the propensity to engage in quasi-formal employment (confirming H3b); the variable has a negative sign and is statistically significant. Similarly, model 6 displays that countries with lower scores on the Corruption Perceptions Index have a lower prevalence of quasi-formal employment (confirming H3c). These models thus support the modernisation thesis.

To evaluate the neo-liberal thesis (H4) and political economy thesis (H5), model 7 reveals a positive and statistically significant relationship between quasi-formal employment and taxes on income and wealth as a percentage of GDP. However, this is in the opposite direction to that suggested by the neo-liberal thesis (refuting H4a). The prevalence of quasi-formal employment decreases as tax levels increase, as posited by the political economy thesis (confirming H5a). Similarly, model 8 provides strong evidence that quasi-formal employment is more likely in countries with lower levels of social protection expenditure (confirming H5b and refuting H4b).

DISCUSSION AND CONCLUSIONS

This paper has revealed that in 2019, 3.5% (1 in 28) of formal employees surveyed in these 28 European countries receive an additional unreported wage from their formal employer, amounting to 30 percent of their gross annual salary. This is a decline from 2007 when 1 in 18 formal employees received envelope wages but a slight increase on the 1 in 33 in 2013 (Williams, 2009; Williams and Horodnic, 2017). Examining the individual-level variations, the finding akin to 2007 and 2013 is that formal employers in 2019 continue to mostly target vulnerable employee groups. Those significantly more likely to receive an additional unreported (envelope) wage in 2019 are men, younger employees, those with fewer years in formal education, having difficulties paying the bills most of the time and manual workers, with the only difference from 2007 and 2013 being that in 2019 skilled manual workers as well as unskilled manual workers are now significantly more likely to receive an envelope wage. Akin to 2007 and 2013, smaller firms are significantly more likely to use this illegal wage practice. Analysing the country-level variations, quasi-formal employment in 2019 also continues to be more prevalent in countries with lower levels of economic development, less modernised state bureaucracies, lower tax levels and levels of expenditure on social protection and where the non-alignment of formal and informal institutions is greater. Therefore, there is a strong continuity over time in the findings. Although this provides a reason for confidence in the results, it also displays the lack of progress in resolving this illegal wage practice. Here, the theoretical and policy implications of these findings are discussed.

Theoretically, this paper advances understanding in three ways. Firstly, and at the individual-level, it largely confirms the “marginalisation” thesis that vulnerable employee groups are the most likely to be requested by employers to engage in quasi-formal employment. However, a nuanced understanding is required since exceptions exist. Women, for example, are less likely than men to engage in quasi-formal employment. Secondly, and at the country-level, this study confirms the neo-institutionalist perspective that quasi-formal employment is more prevalent in countries where there is a greater non-alignment of formal and informal institutions, and that the structural conditions that lead to this are lower levels of economic development, less modernised state bureaucracies, and lower levels of taxation and social protection. This institutional

asymmetry thesis, moreover, also explains individual-level variations in the prevalence of quasi-formal employment.

These findings have implications for policy. Conventionally, governments have assumed that employers and employees are rational economic actors and have sought to ensure that the cost of being caught and punished is greater than the pay-off from participating in such a practice. This has been achieved by increasing the actual and perceived risks and costs associated with participation (see Allingham and Sandmo, 1972). This study reveals that increasing the risk of detection does indeed reduce the likelihood of quasi-formal employment. However, it reveals the need for additional policy initiatives. It displays that participants are also social actors engaging in this practice when their beliefs, attitudes and values are not aligned with the formal rules, and that more developed countries more modernised governance, higher tax rates and expenditure on social protection have a lower prevalence of quasi-formal employment.

To improve tax morale and trust in government, therefore, formal institutions need to change. On the one hand, and as models 4, 5 and 6 in Table 2 clearly reveal, to tackle low tax morale and trust in government, economic development is required along with a modernisation of governance and lower public sector corruption. This requires at least three institutional reforms. Firstly, it requires improvements in perceptions of redistributive justice, namely the belief that public goods and services are received that they believe they deserve (Kirchgässner, 2010). Secondly, it requires improvements in procedural justice, namely that institutions treat them respectfully and impartially (Murphy, 2005). And thirdly, it requires improvement in procedural fairness, namely that they are pay their fair share for public goods and services compared with others (Molero and Pujol, 2012). On the other hand, and as models 7 and 8 in Table 2 reveal, the pursuit of greater state intervention is required. Countries with higher tax rates and higher expenditure on social protection have a lower prevalence of quasi-formal employment.

Despite making these advances in theory and policy, this paper nevertheless has its limitations. It has evaluated only 28 European countries. There is a need to evaluate whether quasi-formal employment prevails in other global regions and countries and whether similar explanations are relevant. There is also a need to consider a wider range of country-level variables when considering each theoretical explanation in future studies. For example, GDP per capita as a measure of the level of economic development could be complemented by various other measures such as the Human Development Index (UNDP, 2018) and Social Progress Index (SPI, 2018), and vertical trust in government could examine the formal institutions in which trust is lacking. Finally, given that quasi-formal employment is largely instigated by employers, future research could also survey employers' perceptions in relation to the risk of detection, tax morale and trust in government. Finally, qualitative research with employers and employees could further explore who instigates quasi-formal employment and the additional conditions attached to such a wage relationship.

In sum, if this paper stimulates recognition that employment relationships are not always purely formal or purely informal, further research on the prevalence of quasi-formal employment in other global regions and countries and how to explain and tackle it, then one intention of this paper will have been fulfilled. If it also encourages governments to recognise that enforcement authorities (e.g., labour inspectorates, tax authorities) alone cannot tackle this phenomenon and that other country-level structural conditions need improving, then this paper will have achieved its broader intention.

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Table 1: Prevalence of quasi-formal employment in Europe, by employee group, type of business, and risk perception

Categories	% of formal employees receiving additional unreported wage	% of your gross yearly income received as unreported wage	Unreported additional wage paid for:				
			Regular work	Overtime/extra work	Both regular & overtime work	Refusal	DK
<i>All EU-28</i>	3.5	30.0	31.5	41.4	24.0	2.2	1.0
<i>Gender:</i>							
Men	4.2	30.2	35.3	41.0	21.6	1.7	0.4
Women	2.9	29.8	26.6	41.9	27.2	2.7	1.6
<i>Age:</i>							
15-24	7.7	29.8	29.2	52.1	18.8	0.0	0.0
25-34	4.8	31.8	35.7	40.9	20.0	2.6	0.9
35-44	3.7	27.0	24.3	46.0	26.1	3.6	0.0
45-54	2.8	31.4	32.2	35.6	28.7	1.2	2.3
55-64	2.0	32.2	35.6	33.3	26.7	2.2	2.2
65+	3.1	21.0	50.0	30.0	20.0	0.0	0.0
<i>Education (age education ended):</i>							
<15	4.2	55.9	27.6	41.4	24.1	6.9	0.0
16-19	3.8	27.5	30.8	40.7	24.8	2.3	1.4
20+	3.0	28.2	30.8	42.3	25.0	1.3	0.6
<i>Difficulties paying bills:</i>							
Most of the time	8.8	42.8	28.3	36.7	30.0	5.0	0.0
From time to time	4.8	28.4	30.8	41.3	25.9	1.4	0.7
Almost never/never	2.6	27.8	32.9	42.7	21.1	1.9	1.4
<i>Occupation:</i>							
Employed professional	3.6	31.8	51.7	20.7	20.7	3.5	3.5
General, middle management, etc.	1.6	26.8	30.3	48.5	18.2	0.0	3.0
Employed position, at desk	2.8	25.9	23.9	49.3	23.9	1.4	1.4
Employed position, travelling	4.4	27.0	30.2	44.2	23.3	2.3	0.0
Employed position, service job	3.4	28.0	33.3	40.6	21.7	2.9	1.5
Supervisor	3.8	25.0	90.0	0.0	10.0	0.0	0.0
Skilled manual worker	4.8	31.1	33.3	37.6	25.6	3.4	0.0
Unskilled manual worker, etc.	6.1	41.9	31.8	34.1	34.1	0.0	0.0
<i>Firm size:</i>							
Micro (1 - 9 employees)	6.6	34.4	34.7	38.8	25.2	0.7	0.7
Small (10-49)	4.0	28.3	27.0	50.4	19.9	2.1	0.7
Medium (50-249)	2.5	26.9	36.3	37.5	26.3	0.0	0.0
Large (250 or more)	0.9	13.9	44.4	27.8	27.8	0.0	0.0
<i>Detection risk:</i>							
Very small	5.0	38.6	33.8	32.4	32.4	1.5	0.0
Fairly small	3.6	29.1	29.1	41.8	24.2	4.2	0.6
Fairly high	3.4	25.5	30.9	45.6	21.3	0.7	1.5
Very high	3.1	39.3	57.1	28.6	14.3	0.0	0.0
<i>Trust in labour inspectors</i>							
Yes	2.3	31.6	31.9	41.3	25.4	0.7	0.7
No	4.9	29.0	34.2	41.1	21.2	3.0	0.4
<i>Tax morale (mean = 2.48):</i>							
Below mean	2.0	29.6	31.4	40.0	24.3	2.9	1.4
Above mean	5.7	30.2	31.5	42.0	23.9	1.8	0.7

Source: authors' calculations from special Eurobarometer Survey 92.1, 2019

Table 2: Multilevel logistic regressions of the propensity of formal employees to engage in quasi-formal employment

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Gender (RC: Women)									
Men		0.360*** (0.117)	0.392*** (0.125)	0.399*** (0.125)	0.402*** (0.125)	0.402*** (0.125)	0.402*** (0.125)	0.403*** (0.125)	0.400*** (0.125)
Age		-0.0348*** (0.00486)	-0.0315*** (0.00520)	-0.0314*** (0.00519)	-0.0315*** (0.00519)	-0.0315*** (0.00519)	-0.0315*** (0.00519)	-0.0318*** (0.00519)	-0.0312*** (0.00520)
Formal education (15 and under)									
16-19		-0.250 (0.227)	-0.373 (0.231)	-0.393* (0.231)	-0.413* (0.232)	-0.408* (0.232)	-0.403* (0.232)	-0.421* (0.232)	-0.399* (0.232)
20+		-0.121 (0.244)	-0.232 (0.250)	-0.221 (0.250)	-0.220 (0.250)	-0.212 (0.250)	-0.217 (0.250)	-0.242 (0.249)	-0.220 (0.250)
Difficulties paying bills last year (RC: Most of the time)									
From time to time		-0.566*** (0.184)	-0.366* (0.202)	-0.356* (0.202)	-0.352* (0.202)	-0.351* (0.202)	-0.363* (0.202)	-0.380* (0.202)	-0.361* (0.202)
Almost never/never almost		-0.961*** (0.182)	-0.670*** (0.200)	-0.648*** (0.200)	-0.610*** (0.200)	-0.611*** (0.200)	-0.649*** (0.200)	-0.673*** (0.199)	-0.636*** (0.200)
Occupation (RC: Employed position, at desk)									
Employed professional		0.361 (0.251)	0.380 (0.269)	0.355 (0.268)	0.376 (0.268)	0.378 (0.268)	0.344 (0.269)	0.323 (0.269)	0.369 (0.268)
Employed position, travelling		0.402* (0.218)	0.385* (0.230)	0.380* (0.230)	0.382* (0.230)	0.388* (0.230)	0.384* (0.230)	0.390* (0.230)	0.391* (0.230)
Employed position, service job		0.196 (0.197)	0.210 (0.212)	0.217 (0.212)	0.237 (0.212)	0.241 (0.212)	0.219 (0.212)	0.217 (0.212)	0.225 (0.212)
General, middle management etc.		-0.273 (0.240)	-0.209 (0.251)	-0.202 (0.251)	-0.186 (0.251)	-0.187 (0.251)	-0.211 (0.251)	-0.210 (0.251)	-0.199 (0.251)
Supervisor		0.117 (0.420)	-0.428 (0.541)	-0.415 (0.541)	-0.409 (0.541)	-0.409 (0.541)	-0.420 (0.541)	-0.421 (0.541)	-0.407 (0.541)
Skilled manual worker		0.457** (0.182)	0.468** (0.192)	0.468** (0.192)	0.485** (0.192)	0.489** (0.192)	0.471** (0.192)	0.467** (0.192)	0.475** (0.192)
Unskilled manual worker, etc.		0.569** (0.241)	0.572** (0.260)	0.588** (0.260)	0.609** (0.261)	0.616** (0.261)	0.593** (0.260)	0.581** (0.260)	0.595** (0.260)
Firm size (RC: 1-9 employees)									
Small		-0.506*** (0.132)	-0.451*** (0.141)	-0.444*** (0.141)	-0.434*** (0.141)	-0.433*** (0.141)	-0.448*** (0.141)	-0.456*** (0.141)	-0.439*** (0.141)
Medium		-0.886*** (0.155)	-0.798*** (0.164)	-0.783*** (0.164)	-0.760*** (0.164)	-0.760*** (0.164)	-0.788*** (0.164)	-0.796*** (0.164)	-0.777*** (0.164)
Large		-1.811*** (0.277)	-1.826*** (0.296)	-1.790*** (0.296)	-1.749*** (0.296)	-1.753*** (0.296)	-1.793*** (0.296)	-1.799*** (0.296)	-1.773*** (0.296)
Detection risk (Very small)									
Fairly small		-0.375**	-0.417**	-0.418**	-0.406**	-0.410**	-0.421**	-0.412**	-0.416**

Fairly high		(0.162)	(0.174)	(0.174)	(0.174)	(0.174)	(0.174)	(0.174)	(0.174)
		-0.638***	-0.572***	-0.571***	-0.571***	-0.573***	-0.582***	-0.574***	-0.575***
Very high		(0.168)	(0.181)	(0.181)	(0.181)	(0.181)	(0.181)	(0.181)	(0.181)
		-0.844***	-0.587**	-0.581**	-0.570**	-0.573**	-0.593**	-0.584**	-0.585**
		(0.253)	(0.265)	(0.265)	(0.265)	(0.265)	(0.265)	(0.265)	(0.265)
Tax morale (Centred)			0.233***	0.233***	0.234***	0.235***	0.232***	0.229***	0.232***
			(0.0264)	(0.0263)	(0.0263)	(0.0263)	(0.0264)	(0.0264)	(0.0263)
Trust labour inspectors (1-Yes; 0-No)			-0.388***	-0.372***	-0.351***	-0.352***	-0.377***	-0.385***	-0.359***
			(0.126)	(0.126)	(0.126)	(0.126)	(0.126)	(0.126)	(0.126)
GDP per capita (current US\$) 2018				-8.54e-06*					
				(4.64e-06)					
European Quality of Government Index 2017					-0.0128***				
					(0.00433)				
Corruption Perception Index 2018						-0.0190***			
						(0.00661)			
Tax on income and wealth as % of GDP 2018							-0.0392**		
							(0.0196)		
Expenses on social protection and benefits as % of GDP 2018								-0.0418***	
								(0.0159)	
Trust in Legal System 2018									-0.0123**
									(0.00524)
Constant	-3.517***	-0.406	-1.283***	-1.026**	-0.771*	-0.181	-0.869*	-0.313	-0.758
	(0.141)	(0.402)	(0.440)	(0.457)	(0.468)	(0.580)	(0.483)	(0.568)	(0.492)
Observations	11,793	10,096	9,338	9,338	9,338	9,338	9,338	9,338	9,338
Number of groups	28	28	28	28	28	28	28	28	28
Identity: country (Variance constant)	0.662	0.434	0.364	0.315	0.289	0.290	0.326	0.303	0.330
ICC	0.117	0.054	0.038	0.029	0.032	0.0250	0.031	0.027	0.032
LR Test	74.13***	24.22***	12.59***	8.51***	11.00***	6.99***	9.76***	8.09***	11.00***

Source: authors' calculations from special Eurobarometer survey 92.1, 2019

