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Evaluating the prevalence of employees without written terms of employment in the European Union

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Abstract

Purpose

Until now, there has been scant evidence on the proportion and characteristics of employees working without a written contract or terms of employment. To begin to fill this gap, the aim of this paper is to evaluate the prevalence and distribution of employees without written contracts or terms of employment in the European Union (EU), examining whether they are unevenly distributed across countries and EU regions, and whether it is vulnerable population groups who are more likely to be without such written contracts.

Methodology

To do this, a 2013 Eurobarometer survey comprising 11,025 face-to-face interviews with employees in the 28 member states of the European Union (EU-28) is reported.

Findings

The finding is that it is less socio-demographic and socio-economic characteristics, and more firm size, institutional environment and spatial factors that are important in explaining the prevalence of employment without a written contract. Thus, governments should address not individuals but rather, the formal institutional failings and asymmetry between civic and state morality, in order to reduce the level of employment without a written contract, and focus their attention on smaller firms, larger towns and Southern European countries, especially Cyprus, Malta and Portugal.

Research limitations

Future research needs to evaluate whether and how the conditions of employment (e.g., wage rates, health and safety conditions, holiday entitlements) of employees without written contracts or terms of employment differ to their equivalents who have written contracts or terms of employment. This will reveal the implications of workers not being issued with written contracts or terms of employment.

Originality/value

This is one of the first extensive evaluations of the prevalence and distribution of employees without written contracts or terms of employment.

Keywords: undeclared work; informal economy; employee relations; European Union

Introduction

The aim of this paper is to evaluate the prevalence and distribution of employees without written formal contracts or terms of employment. This is an issue that lies at the very heart of the study of employee relations. Although such a practice is not everywhere an illegal practice, it is widely believed that those without written contracts or terms of employment suffer poorer quality working conditions, that such a practice weakens collective bargaining and puts pressure on legitimate businesses to also adopt such a practice due to the unfair competition facing them (Andrews et al. 2011; ILO 2015; Williams, 2014). Based on this assumption, not only has the European Commission has since 1991 had a directive calling for all member states to adopt written contracts or terms of employment as a good practice, but legislative initiatives have been pursued in many countries to make it illegal not to offer written contracts or terms of employment to employees. Until now, however, little is known about the prevalence or distribution of employees without written contracts or terms of employment. This paper seeks to begin to fill that gap.

Here, therefore, we advance understanding of those without written contracts or terms of employment in three ways. From an empirical viewpoint, we report Eurobarometer survey data from 28 member states to reveal the prevalence and distribution of this practice, an issue which until now has been subject to very little empirical evaluation. Secondly, and theoretically, we evaluate whether its prevalence and distribution reflects the long-standing marginality thesis which views such informal practices as concentrated among marginalized and vulnerable populations. And finally, and from a policy perspective, we show how it is not individuals who should be targeted but rather, the formal institutional failings and asymmetry between civic and state morality, in order to reduce the level of employment without a written contract, especially in South European countries.

To commence, therefore, the next section provides a brief review of the previous literature, highlighting the legal position regarding this type of employment, followed by a review of the various alternative competing explanations for this practice and what the limited evidence currently available suggests about its prevalence and distribution. To test the resultant hypotheses, the third section then introduces the data used, namely a 2013 Eurobarometer survey comprising 11,025 face-to-face interviews with employees in the 28 member states of the European Union (EU-28), and the analytical methods employed; a staged logistic regression model controlling both for the country- and regional-level fixed effects. The fourth section reports the findings regarding its prevalence and distribution across the European Union, followed in the fifth and final section by a discussion of the implications for theory and policy, along with the limitations of the results and future research required.

Employment without a written contract or terms of employment: literature review and hypotheses

For a quarter of century across the 28 member states of the European Union (EU28), the Employment Information Directive 1991 (91/553/EEC) has stated that every employee (however defined by member state law) has the right to a written statement of the terms and conditions of their employment. Referred to as 'statements of employment particulars', employers are directed to give all employees a written agreement that article 2 of this 1991 directive states must include: the identity of the parties; place of work or employer's domicile; title, grade, category or nature of work, or a brief description of the work; commencement date; for temporary contracts, expected duration; paid leave; periods of notice or method for determining; initial pay; working time, and where appropriate, the collective agreement or joint representation institutions. This information, as article 3 states, has to be in writing and cannot be changed without the agreement of the employee. The only exceptions, as article 1 states, are that this does not need to be applied to those working less than one month or with a working week of less than eight hours, or to jobs of a 'casual and/or specific nature' if this is justified by objective considerations.

Nevertheless, although this directive suggests to member states what should occur, legislation varies across member states in terms of whether there is a legal requirement to provide employees with a written contract or terms of employment (see EURES, 2016). A written employment contract is always required in all East-Central European member states (i.e., Bulgaria, Croatia, Czech Republic, Estonia, Lithuania, Latvia, Romania, Slovakia and Slovenia) except Hungary and Poland, in Nordic countries (Norway and Sweden but not Finland), as well as in Italy and Greece. In all these member states, the contract must be signed in advance or immediately after starting work.

In all other EU member states, although a written contract is not required, the employee must be given written terms of employment and the mandatory content of the terms of employment is specified by law. In West European member states therefore, as well as in Hungary, Poland, and Portugal, a written contract is considered good practice but is legally required either only for 'atypical' employment (e.g., an apprenticeship, fixed-term, seasonal, or part-time jobs), as is the case in Austria, Belgium, France and Portugal, or, the other way around, only for contracts of indefinite duration (Cyprus and Hungary), or is not generally required (Finland, Germany, Ireland, Netherlands, Poland and the UK). Instead, they require only the provision of written terms of employment, which for most employees is widely seen as good as, and indistinguishable from, a written contract.

To understand employers not issuing written contracts or terms of employment, therefore, it is important to recognise that although this is not legally required in some countries for some types of employment (as detailed above), this is not the only instance in which written contracts of terms of employment are not provided. There are also employers who violate the labour laws of their member state and do not issue a written contract even when it is required by national law, and do so in order to evade paying the tax and social contributions owed by them when they formally employ an employee. In the first instance, although it contravenes good practice, it is legal, whilst in the second case it not only contravenes good practice but also labour law and is thus illegal.

Until now, however, little is known about such a form of employment. Not only are there few studies of the prevalence and distribution of employees without a

written contract or terms of employment (with the exception of Hazans, 2011), but neither has there been any attempt to explain or theorise its prevalence and distribution. To do so, therefore, theories used to explain the broader undeclared economy can be used (Williams, 2014, 2015; Williams and Horodnic, 2016). When theorizing the undeclared economy, a marginalization thesis dominates, which argues that the undeclared economy is concentrated among populations marginalized from the formal labour market and social protection. Firstly, modernization theory views such a form of employment as a residue from a previous mode of production that persists in peripheral populations that have not yet modernized, such as uneducated people serving 'bottom of the pyramid' markets (La Porta and Schleifer, 2014). Secondly, political economy theorists see such work as an inherent component of a deregulated global economy in which employers are seeking to reduce labour costs (Castells and Portes, 1989; Davis, 2006; Slavnic, 2010; Taiwo, 2013), and such work as therefore concentrated among those excluded from decent work and with little social protection who are pushed into this work in order to survive (Gallin, 2001; ILO, 2015; Taiwo, 2013).

Until now, some limited evidence exists to support this marginalization thesis when studying the undeclared economy. Studies have shown that it is more prevalent in less affluent global regions (ILO, 2013), nations (Schneider and Williams, 2013; Williams, 2015), and localities (Kesteloot and Meert, 1999; Williams and Windebank, 2001). Similarly, undeclared employment has been shown to be concentrated among those more likely to be excluded from the formal labour market, including the unemployed (Brill, 2011; Slavnic, 2010; Taiwo, 2013; Williams and Nadin, 2014), women (ILO, 2013; Leonard, 1994; Stănculescu, 2004), and those with financial difficulties (Barbour and Llanes, 2013). However, other studies reveal undeclared employment to be more prevalent in affluent regions and localities (Evans et al., 2006; van Geuns et al., 1987; Williams, 2004; Williams and Windebank, 2001), that the unemployed are not more likely to participate (Williams, 2001), that men are more likely to participate (Lemieux et al., 1994; McInnis-Dittrich, 1995) and those with financial difficulties less likely to participate than more affluent population groups (Williams, 2004), and that such an employment relationship is more common in smaller than larger firms (Perry et al, 2007).

Indeed, a recent evaluation of this marginalization thesis in relation to undeclared work across the EU28 reveals that although valid when discussing younger people and those living in peripheral rural areas, it is not when considering those with fewer years in education, women, the unemployed and less affluent European regions (Williams and Horodnic 2015b). Meanwhile, and in relation to under-declared employment (i.e., where formal employees are paid an official declared wage and an additional undeclared 'envelope' wage so that employers evade paying their full tax and social contributions), the finding has been that under-declared employment is more likely among younger persons, men, unskilled manual workers, and those living in East-Central and Southern Europe (Williams and Horodnic, 2016a), suggesting again that some marginal populations are more likely to be engaged in the undeclared economy but not others.

The only known study of the prevalence and distribution of work without contract similarly finds partial support for the marginalization thesis. Hazans (2011) uses European Social Survey data on 30 countries for the period between 2004 and 2009, and finds that the proportion of employees without a contract is 2.7% in Nordic countries compared with 9.5% in Southern Europe, thus finding support for the marginalization thesis at the EU regional level. However, comparing Western and

East-Central Europe, there is little support since just over 5% of employees do not have a contract in both regions. However, support for the marginalization thesis is found when examining some demographic and socio-economic variations. Working without a contract is inversely related to education level, students more likely than other occupational groups, older and younger employees more likely, and women more likely than men to work without a contract. Based on these findings from the study of undeclared work in general, and the one study of work without contract, regarding the relevance of the marginalisation thesis when explaining its prevalence and distribution, we can therefore here test the following propositions:

Socio-demographic marginality hypotheses

H1a: Women are more likely to be employed without written terms of employment than men.

H1b: Younger age groups are more likely to be employed without written terms of employment than older age groups.

H1c: Workers with fewer years in formal education are more likely to be employed without written terms of employment than those who spent longer in formal education.

Socio-economic marginality hypotheses

H1d: Those with difficulties paying the bills are more likely to be employed without written terms of employment than those without difficulties paying the bills.

H1e: Unskilled manual workers are more likely to be employed without written terms of employment than more skilled and professional workers.

H1f: Those employed in small firms are more likely to be employed without written terms of employment than those employed in larger firms.

Spatial marginality hypotheses

H1g: Those employed in rural areas are more likely to be employed without written terms of employment than those in urban areas.

H1h: Those living in East-Central Europe and Southern Europe are more likely to be employed without written terms of employment than those in Western Europe and Nordic countries.

In recent years, nevertheless, the marginalization thesis which views participation in such an employment relationship as concentrated among populations marginalized from decent work and social protection has started to be challenged. Drawing inspiration from institutional theory (North, 1990), a more agency-oriented perspective has started to emerge when explaining undeclared employment (Williams and Horodnic, 2015a,b, 2016a,b). This could also be used to explain work without a written contract or terms of employment. On the one hand, work without a written contract or terms of employment can be viewed as arising from formal institutional failings to adhere to good practice, such as when governments fail to adhere to the 1991 EU directive which calls for all employees to have a written contract or terms of employment.

On the other hand, such work can be viewed as more prevalent when the intrinsic motivation to adhere to the formal labour laws regarding written contracts is low among employers. Here, therefore, importance is attached to whether employers accept the codified laws and regulations of the formal institutions, or whether they

choose to reject them and to offer work without written terms or conditions of employment. Viewed through the lens of institutional theory (Baumol and Blinder, 2008; North, 1990), all societies have formal institutions, which are codified laws and regulations that define the legal rules of the game, and informal institutions, which are the 'socially shared rules, usually unwritten, that are created, communicated and enforced outside of officially sanctioned channels' (Helmke and Levitsky, 2004: 727). Labour law violations, such as not providing written contracts or terms of employment when national legislation requires this, thus arise when there is a gap between the formal institutions (which we here term 'state morale') and informal institutions (here termed 'civic morale'). When this gap is large, the prevalence of employees without written contracts or terms of employment will be higher (Kistruck et al., 2015; Webb et al., 2009). The greater the degree of asymmetry between formal and informal institutions, the more prevalent will be employees without a written contract or terms of employment (cf. Williams and Horodnic, 2015a,b, 2016a,b). Based on this alternative explanation regarding the prevalence of work without a written contract or terms of employment grounded in institutional theory, we therefore here test the following propositions:

H2a: Those living in EU member states failing to adhere to the Employment Information Directive 1991 (91/553/EEC) are more likely to be employed without written terms of employment than those living in EU member states that adhere to this EU directive.

H2b: The greater is the asymmetry between formal and informal institutions, the greater is the likelihood of employment without written terms of employment.

This suggests that public policy cannot tackle the prevalence of employees without a written contract or terms of employment unless it deals with the country-level formal institutional failings to implement this EU directive and/or the asymmetry between formal and informal institutions. Conventionally, however, this has not been the approach when tackling such a form of employment. Instead, a rational economic actor approach has been adopted (Allingham and Sandmo, 1972). This views noncompliance as occurring when the pay-off is greater than the expected cost of being caught and punished. Most governments have thus concentrated on the cost side of the equation by increasing the actual and/or perceived likelihood of detection for employers (e.g., Hasseldine and Li, 1999; Williams, 2014a). However, the evidence that this is effective is less than conclusive. Although some find that increasing the probability of detection reduces non-compliance (Klepper and Nagin, 1989; Varma and Doob, 1998), others reveal that non-compliance increases, not least due to a breakdown of trust between the state and employers (Chang and Lai, 2004; Kirchler et al., 2014; Williams and Horodnic, 2016c). Indeed, the perhaps most telling rebuttal of the rational actor model is that many employers voluntarily comply even when the benefit/cost ratio suggests that they should not (Alm et al., 2010; Kirchler, 2007; Murphy 2008; Murphy and Harris, 2007). As such, this policy approach towards tackling this practice, based on a rational economic actor approach, can be tested using the following hypothesis:

H3: Increasing the risk of detection reduces the prevalence of employees without written terms of employment.

Data and Methodology

Data

To test these hypotheses regarding the prevalence and distribution of employment without written contracts or terms of employment, we here report the results of special Eurobarometer survey no. 402, which involved 27,563 face-to-face interviews conducted in April and May 2013 across the EU-28, of which 11,025 interviews were with employees and examined whether they had a written contract of employment. The sampling frame was adults aged 15 years and older and the interviews were conducted in the national language based on a multi-stage random (probability) sampling methodology, with the number of interviews varying from 500 in smaller countries to 1,500 in larger nations. This methodology ensures that on the issues of gender, age, region and locality size, each country as well as each level of sample is representative in proportion to its population size. Therefore, for the univariate analysis we used sample weighting, as recommended in both the wider literature (Solon et al. 2013; Winship and Radbill 1994) and the Eurobarometer methodology, to obtain meaningful descriptive results. For the multivariate analysis however, debate exists over whether a weighting scheme should be used (Pfefferman 1994; Solon et al. 2013; Winship and Radbill 1994). Reflecting the dominant viewpoint, we decided not to use the weighting scheme. The face-to-face interviews covered attitudes towards undeclared work, followed by questions on their purchase of undeclared goods and services, envelope wages and finally whether they worked undeclared and without a written contract of employment.

Variables

To analyze the above hypotheses, the dependent variable is a dummy variable which is equal to 1 if the employees respond yes to the question: 'Does the following apply to you? You are employed without a formal written contract', and is 0 otherwise.

To analyze the prevalence and distribution of employment without a formal written contract, the following individual-level variables, used in previous studies of the undeclared economy (Williams and Horodnic, 2015a,b, 20`16a,b), are analyzed to test the marginalization thesis hypotheses about the socio-demographic, socio-economic and spatial distribution of work without a written contract or terms of employment:

- Gender: a dummy variable with value one for women and zero for men.
- Age: a categorical variable with value one for individuals between 15 and 24, value two for 25-39, value three for 40-54 and value four for those aged 55 and above.
- Age formal education ended: a categorical variable for age they stopped full time education with value one for those without full-time education, value two for the 15 years old and under, value three for 16-19 years old, and value four for the 20 years old or over.
- Difficulties paying bills: a categorical variable for the difficulties in paying bills with value one for having difficulties almost never/never, value two for occasionally, and value three for most of the time.
- Occupation: a categorical variable grouping employed respondents by their occupation with value one for those employed professionals, value two for those employed in general, middle management and supervisors, value three for those in an employed position at a desk, value four for those in an employed position,

- travelling, value five for those in an employed position in a service job, value six for skilled manual workers and value seven for unskilled manual workers.
- Firm size: a categorical variable for the number of people that respondent's employer employs with value one for firms with one to four people, value two for firms with five to nine people, value three for firms with ten to 19 people, value four for firms with 20 to 49 people, value five for firms with 50 to 99 people, value six for firms with 100 to 499 people and value seven for firms with 500 or more than 500 people.
- Type of community: A categorical variable about the size of the residence. There are three size groups; with value one for the rural area, value two for the middle sized area and value three for the large residency area.
- EU Regional Dummies: EU-28 member states are classified under four EU Regions. Namely; Western Europe (Belgium, Germany, France, Ireland, Luxembourg, The Netherlands, Austria and the United Kingdom), Eastern and Central Europe (Bulgaria, Croatia, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovenia and Slovakia), Southern Europe (Cyprus, Greece, Spain, Italy, Malta and Portugal) and Nordic countries (Denmark, Finland and Sweden).

To evaluate the institutionalist and rational economic actor explanations and policy approaches, meanwhile, the respective indicators analysed are:

- perceived risk of detection, a categorical variable measuring the risk of being detected with recoded value one for very small, value two for fairly small, value three for fairly high and value four for very high;
- attitudes towards non-compliance, measured using an interval variable based on employees' rating the acceptability of six forms of non-compliance using a 10-point Likert scale (1 equals absolutely unacceptable and 10 equals absolutely acceptable). These are: someone receives welfare payments without entitlement; a firm is hired by another firm and does not report earnings; a firm hires a private person and all or part of their salary is not declared; a firm is hired by a household and does not report earnings; someone evades taxes by not or only partially declaring income; and a person hired by a household does not declare earnings when it should be declared. The index for each individual is calculated using Principal Component Analysis (PCA) method, which provided a composite non-compliance index between -1.68 and 9.30. Overall Kaiser-Meyer-Olkin measure of sampling adequacy is around 90%, which shows that the composite index explains a high level of variation in the data. Lower values represent higher tax morale, and vice versa.

Analytical methods

To evaluate the prevalence of employees without a written contract or terms of employment across population groups, we conduct a staged logistic regression analysis across the individual-level variables. We first analyse the role of socio-demographic factors in explaining employment without a contract and, then, incorporate various socio-economic factors into the model. In the third stage, variables related to the formal institutional environment are added to the regression model. Finally, spatial factors are examined in the full model. As there are potential endogeneity issues due to the reverse causality between our dependent variable and various explanatory factors included in the regression models, such as the tax-morale index, one should be cautious that the findings of the econometric analysis suggests not causality but rather association.

Findings

Of the 27,563 face-to-face interviews conducted during 2013 across the EU-28, some 11,025 respondents (42 per cent) were employees. Of these, one in 20 (5 per cent) reported that they did not have a written contract of employment. Extrapolating, this suggests that 10.6 million of the 212 million employees in the EU-28 do not have a written contract or terms of employment despite the existence of the 1991 EU directive calling for such an arrangement.

Employees without a written contract or terms of employment, however, are not evenly distributed across EU regions and member states. As Table 1 displays, 14.2% of all employees in Southern Europe report not having a written contract or terms of employment, but only 4.7% in Western Europe, 3.4% in the Nordic countries and 2.4% in East-Central Europe. Indeed, some 42% of all employees without such a contract are in Southern Europe. This lack of a written contract, moreover, is especially concentrated in Cyprus, Portugal and Malta where 29.9%, 27.6% and 21.8% of all employees do not have a written contract or terms of employment, thus partially confirming H2a that those living in EU member states failing to fully adhere to the 1991 Employment Information Directive are more likely to be employed without written terms of employment than those living in EU member states that adhere to this EU directive. There are also countries in other EU regions, which have a higher percentage share of employees without a written contract than the EU-average, including Ireland (13.4%) and the UK (6.8%) in Western Europe, as well as Lithuania (5.1%) in East-Central Europe.

INSERT TABLE 1 ABOUT HERE

Variations also exist across businesses types as well as demographic and socio-economic groups in the prevalence of work without a written contract. As Table 2 reveals, the larger is the firm size, the smaller is the proportion employed without a contract; 12.3% of employees in firms with a size of 1-4 employees are employed without a written contract, but only 2.1% in firms with more than 499 employees. The outcome is that 22.5% of all employees without a formal contract work in firms with less than 5 employees, despite only 9.1% of all employees being in such microbusinesses. This in part may be a result of the relative absence of dedicated HRM staff and formal HRM practices in smaller businesses (Barrett and Mayson 2007; Benmore and Palmer 1996), meaning that employers can more easily employ employees without a written contract or terms of employment.

INSERT TABLE 2 ABOUT HERE

These descriptive findings also reveal that manual workers are more likely not to be given written contracts or terms of employment compared with employees in other occupations; 9.5% of unskilled manual workers do not have a formal contract compared with 6.2% of skilled manual workers. Indeed, 40.5% of those without a written contract are in manual jobs. In terms of gender and age, there is not a distinctive relationship. Men are slightly more likely to have a job without a written contract. Younger people are also more likely than other age groups, except for those above 65 years old, intimating a U-shaped relationship. It is similarly the case that those with fewer years in education are slightly more likely to have no written terms

of employment. Those whose formal education ended before 15 years old are 7.2% of all employees but 16.3% of those without a formal written contract, whilst those whose education ended aged 20 or older are 42% of the workforce but just 29.9% of those without a written contract.

Turning to the socio-economic and institutional factors, the finding is that there is an association between the difficulties faced in paying bills and the likelihood of working without a written contract; 8.1% of employees having difficulty most of the time in paying bills do not have a written contract. Similarly, those without a written contract also have lower tax morale. We also observe that employees without a written contract are more prevalent in small/middle towns compared with rural areas and large towns. Thus, the tentative picture that emerges is that the prevalence of employees without a written contract is more related to socio-economic and institutional environment characteristics than it is to socio-demographic characteristics.

Although these descriptive statistics are informative about the prevalence of employees without a written contract, there is a need to control for and take into account other variables when analyzing the association. Table 3 therefore presents the empirical results of five different regression models. Model 1 only includes sociodemographic variables. This reveals that socio-demographic factors (i.e., gender, age and educational level) do not have a statistically significant association with the probability of being employed without a written contract (refuting H1a, H1b and H1c). Model 2 incorporates socio-economic factors into the regression model. This shows that although having difficulties paying the bills is not significantly associated with not having a written contract (refuting H1d), and neither is occupational status (refuting H1e), firm size is significantly associated with the likelihood of being employed without a written contract when other socio-demographic and socioeconomic factors are taken into account (confirming H1f). The larger the firm, the lower is the probability of being employed without a written contract. For example, the probability of working without a written contract is 7 percentage points less for employees working in firms with more than 499 employees compared with employees in firms with less than 5 employees.

INSERT TABLE 3 ABOUT HERE

In addition to the socio-demographic and socio-economic factors, Model 3 adds variables related to the formal institutional environment. This reveals that the greater the asymmetry between the formal and informal institutions (i.e., the lower the level of tax morale), the higher the chance of being employed without a written contract (confirming H2b). However, it must be noted that firm size has a greater influence on the prevalence of employment without a written contract than tax morale. Interestingly, nevertheless, a greater perceived risk of detection has no significant association with the prevalence of employees without written terms of employment (refuting H3).

Finally, the importance of the spatial factors is analyzed in Model 4 and Model 5. It can be seen that the probability of being employed without a formal written contract is higher in larger towns compared with smaller/middle sized towns and rural areas (refuting H1h). Employees in large towns have 2% higher probability of being without a written contract compared with those inhabiting rural areas. In addition to locality size, Model 5 also shows the association between EU region and the prevalence of employees without a written contract, when other factors are taken

into account. Confirming the descriptive statistics, this reveals that employees in Southern Europe have a 4.2% greater probability of being employed without a written contract compared with those in Western Europe (partially confirming H1h). Interestingly, employees in East-Central Europe have 3.3% lower probability of working without a written contract compared with West European employees. Although they are not reported in Table 3, the marginal effects for the country dummy variables in the full model (Model 4) reveal that employees in Cyprus have the highest probability of being employed without a formal contract when other factors are taken into account. The second highest probability of employment without a written contract is observed in Malta followed by Portugal and Ireland, thus confirming H2a.

Overall, therefore, firm size, institutional environment and spatial factors are important in explaining the prevalence of employment without a formal contract. Governments should thus address not directly individuals but firms and general institutional environment in order to reduce the level of employment without a formal written contract practice, and focus their attention on larger towns and Southern European countries, especially Cyprus, Malta and Portugal.

Discussion and Conclusions

To evaluate whether employees from marginalized populations are more likely to be without written terms of employment, this paper has revealed that it is less socio-demographic and socio-economic characteristics, and more firm size, institutional environment and spatial factors that are important in explaining the prevalence of employees without a written contract or terms of employment. Thus, governments should address not individuals but rather, the formal institutional failings and asymmetry between civic morality and state morality, in order to reduce the level of employment without a written contract, and focus their attention on smaller firms, larger towns and Southern European countries, especially Cyprus, Malta and Portugal.

Examining the theoretical implications, the outcome is that there is a need to transcend the marginalization thesis when explaining employment without written terms of employment. The prevalence of such work is not associated with groups relatively excluded from decent work and social protection across the EU28. Indeed, few marginalized population groups are significantly more likely to have no written terms of employment. Rather, there is a need for more attention to be paid to the formal institutional failings to fully implement the EU directive across all types of employee, and the asymmetry between state morality and civic morality, which result in a greater likelihood of employment without written contracts or terms of employment. For example, in Cyprus, the country with the highest level of employees without a written contract or terms of employment, a written contract is not required for atypical workers (e.g., apprenticeships, fixed-term, seasonal and part-time workers) and employers are allowed to wait up to one month after employing somebody to provide them with a written contract. In Portugal, meanwhile, a written contract is required only for "atypical" employment, such as fixed-term contracts of employment, contracts of unspecified duration, intermittent, teleworking and parttime contracts (fixed or indefinite); otherwise an oral contract is acceptable. Unless this lack of requirement by employers to issue written terms of employment to all workers is reviewed, employers will not voluntarily provide written terms of employment, exemplified by the current high level of employees without a written contract or terms of employment in countries where it is not necessary.

There are, however, limitations to this study and what is known. Currently unknown is the proportion of employees without written contracts that result from employers not being legally required to provide some groups with written terms of employment, and the proportion of employees without written contracts that result from employers flouting national labour legislation and failing to issue written terms of employment. Neither is there currently any evidence-base about how the conditions of employment of workers without written contracts differ to their equivalents who have written contracts or terms of employment. Until this is evaluated, the evidence-base on the implications of workers not being issued with written contracts or terms of employment will remain unknown. Moreover, it should be noted that this paper evaluates only whether those self-reporting that they are employees have a written contract or terms of employment. It does not investigate whether others who do not report themselves as employees may be dependent employees without a written contract, such as those who self-report themselves as students, the retired and unemployed. This is a potential limitation of the research.

In sum, this paper has revealed for the first time the prevalence and distribution of employees without written contracts or terms of employment in the European Union. What is now required is further investigation of their conditions of employment compared with those who have written contracts or terms of employment such as in terms of wage rates, health and safety conditions, and holiday entitlements. If this paper stimulates such research, then it will have fulfilled one of its intentions. If it is found that working conditions are poorer, and thus action is taken to ensure written contracts or terms of employment across all employee groups in the EU28 and beyond, then this paper will have fulfilled its wider intention.

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Table 1. Cross-national variations in the prevalence of employment without a written contract, by EU member state

Region/ country	Number of employees surveyed	% of employees without a written contract	% of all employees without a written contract	
EU-28	11,025	5		
East-Central Europe	4,670	2.4	20.5	
Latvia	509	3.3	3.1	
Croatia	328	2.1	1.3	
Romania	391	3.1	2.2	
Slovakia	497	0	0	
Bulgaria	442	0.9	0.7	
Hungary	442	4.5	3.6	
Lithuania	414	5.1	3.8	
Czech Republic	502	1.2	1.1	
Estonia	434	2.1	1.6	
Poland	381	3.7	2.5	
Slovenia	330	0.9	0.5	
Southern Europe	1,626	14.2	42.0	
Greece	260	8.8	4.2	
Spain	279	4.3	2.2	
Portugal	312	27.6	15.6	
Cyprus	211	29.9	11.4	
Italy	417	3.6	2.7	
Malta	147	21.8	5.8	
Western Europe	3,548	4.7	30.2	
Belgium	406	4.9	3.6	
Luxembourg	247	1.2	0.5	
Netherlands	384	1.8	1.3	
Austria	520	3.8	3.6	
Ireland	394	13.4	9.6	
United Kingdom	497	6.8	6.2	
France	429	4	3.1	
Germany	671	1.8	2.2	
Nordic nations	1,181	3.4	7.3	
Denmark	423	4.0	3.1	
Finland	342	4.4	2.7	
Sweden	416	1.9	1.4	

Table 2. Prevalence of employment without a written contract in the EU-28, by type of business and employee group

	% of employees without a written contract in prior year among all employees	% of all employees who do not have a written contract	% of all employees
All EU28	5	100	100
Firm size:			
1 - 4 employees	12.3	22.5	9.1
5-9	7.8	16.8	10.8
10 - 19	6.1	16.8	13.9
20 - 49	4.2	14.1	16.9
50 – 99	4.2	10.8	12.8
100 - 499	3.2	10.6	16.5
500 or more	2.1	8.4	19.9
Occupation:			
Professional (doctor, lawyer, accountant,	4.1	5.0	7.0
architect)	4.1	5.3	7.2
Top, middle management, supervisor	3.3	12.7	19.2
Employed mainly at desk	3.8	14.9	19.4
Employed travelling (salesperson, driver)	5.3	8	7.5
Service job not at desk (hospital, restaurant,	5.0	18	170
police, etc.)	5.0	10	17.8
Skilled manual worker	6.2	26.5	21.5
Unskilled manual worker	9.5	14	7.4
Gender:			
Man	5.2	50	47.6
Woman	4.8	50	52.4
Age:			
15-24	6.7	8.4	6.2
25-34	5.6	25.8	22.8
35-44	5.2	28.9	27.5
45-54	4.2	23.3	27.3
55-64	4.0	11.8	14.6
65+	6	1.8	1.5
Age formal education ended:			
No full-time education	0	0	0.2
<15	11.2	16.3	7.2
16-19	5.3	53.8	50.5
20+	3.5	29.9	42.0
Difficulties paying bills:			
Most of the time	8.1	18.0	11.1
From time to time	5.9	37.9	31.5
Almost never/never	3.8	44.0	57.5
Detection risk:			
Very small	6.5	22.9	17.3
Fairly small	3.9	35.2	44.8
Fairly high	5.2	32.2	30.6
Very high	6.5	9.7	7.3
Tax morality index:			
Below mean	5.2	57.4	62.4
Above mean	4.8	42.5	37.6
Type of community:	4.0	72.3	37.0
Rural Area	5	32.1	32.1
Small/middle town	4.4	38.3	33.8
Large town	5.7	29.6	34.1

Table 3. Marginal Effects of the Individual-level predictors for the probability of employment without a written contract

	Model 1	Model 2	Model 3	Model 4	Model 5
Socio-demographic factors:					
Gender (1=Female, 0= Male)	001	001	001	000	001
Age Categories					
(Reference Category: between 15 and 24)					
- between 25 and 39	006	001	.000	.001	.004
- between 40 and 54	015	006	004	004	004
- above 55	020*	011	009	009	005
Education Level					
(Reference Category: No full-time education)					
- before 15	.543	.516	.511	.511	.575
- 16-19	.528	.508	.504	.503	.568
- above 20	.499	.490	.486	.485	.550
Socio-economic factors:					
Difficulties paying bills					
(Reference Category: Almost never/never)					
- From time to time		.002	.000	.000	.005
- Most of the time		003	003	003	.005
Current Occupation					
(Reference Category: Employed Professional)					
- General, middle managers and supervisors		013	013	012	018
- Employed position, at desk		005	004	004	017
- Employed position, travelling		002	002	001	009
- Employed position, service job		.003	.003	.005	002
- Skilled manual worker		.005	.005	.007	.002
- Unskilled manual worker		.016	.017	.018	.011
Firm Size (Reference Category: 1-4 employees)					
- 5-9		016**	016**	015**	018**
- 10-19		020***	020***	020***	023***
- 20-49		033***	032***	032***	036***
- 50-99		034***	033***	033***	034***
- 100-499		047***	046***	046***	048***
- 500 and more		068***	067***	067***	071***
Formal Institutional Environment:					
Perception of Detection Risk			002	001	001
Tax Morality Index			.003***	.004***	.003***
Spatial factors:					
Size of Residence					
(Reference Category: Rural Area)					
- Middle-sized urban				.000	004
- Large urban				.016***	.014**
EU Region Dummies				.010	.011
(Reference Category: Western Europe)					
- Eastern and Central Europe					033***
- Southern Europe					.042***
- Nordic Countries					.004
Country FE	YES	YES	YES	YES	NO NO
Pseudo-R ²	0.1405	0.1663	0.1689	0.1718	0.1041
Number of Observations	8,535	8,535	8,535	8,535	8,535
*** n<0.01. **n<0.05. *n<0.1	0,333	0,333	0,333	0,333	0,333

*** p<0.01, **p<0.05, *p<0.1

NOTES: Missing observations are dropped from the dataset to equalize the sample size across different models in order to make the results comparable. The percentage of the employed without a formal written contract is 4.93% after excluding the missing values. The share of it is 4.99% in the raw data.