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Explaining participation in informal employment: a social contract perspective

Abstract

This paper adopts a new way of conceptualising and explaining informal employment by representing participation in such work as a violation of the social contract between the state and its citizens, and as arising when the norms, values and beliefs of citizens (social morality) do not align with the codified laws and regulations of a society's formal institutions (state morality). Drawing upon evidence from 1,027 face-to-face interviews conducted in France during 2013, this paper reveals that the more citizens social morality deviates from state morality, the greater is their propensity to participate in informal employment, and that the social contract between the state and its citizens is weakest amongst men, single people as well as the divorced and separated, and those living in rural areas and the south-west and Mediterranean regions of France. The paper concludes by discussing the implications of these findings for theorising and tackling informal employment.

Keywords: informal sector; shadow economy; social contracts; tax morale; institutional theory; France.

Introduction

It has been estimated that some 60 per cent of the global labour force have their main employment in the informal sector (Jütting and Laiglesia, 2009). Although the share of jobs in the informal sector is larger in the developing world (ILO, 2013), such employment is not some minor remnant persisting only in a few marginal corners of the advanced economies. Indeed, it remains a sizeable feature of advanced industrial nations equivalent to some 13 per cent of Gross Domestic Product (European Commission, 2013; OECD, 2012; Schneider, 2013; Williams, 2014a,b). As such, understanding informal employment lies at the very heart of the study of industrial relations. Unless it is tackled, the result will be not only a lack of control over the quality of working conditions, weakened trade union and collective bargaining and pressure on formal businesses to evade regulatory compliance due to the unfair competition they confront but also significant public revenue losses, meaning that less money is available for spending on social protection and other aspects of social cohesion (Andrews et al., 2011; ILO, 2014; OECD, 2014; TUC, 2008).

The aim of this paper is to propose and evaluate a new way of conceptualising, explaining and tackling participation in informal employment. Using the lens of institutional theory (Baumol, 1990; Baumol and Blinder, 2008; North, 1990; Williams and Shahid, 2015), participation in informal employment is here conceptualised as representing a violation of the social contract that exists between the state and its citizens, and as arising when the norms, values and beliefs of citizens (social morality) do not align with the codified laws and regulations of a society's formal institutions (state morality). The proposition is that the wider is the gap between state morality and social morality, the greater is the likelihood of participation in informal employment. If correct, then this has significant consequences for how informal employment is tackled. Rather than pursuing the currently dominant approach of increasing penalties for participation in informal employment and the risk of detection, it suggests that emphasis should instead be on developing policy measures to reduce the gap between social morality and state morality. To evaluate this new way of conceptualising, explaining and tackling informal employment, this paper will consider its validity in relation to France, a country chosen because its institutional infrastructure for tackling informal employment is one of the most advanced in the world, but its informal economy nevertheless remains equivalent to some 11 per cent of GDP (Schneider and Williams, 2013).

In the first section, therefore, a brief review is provided of previous ways of explaining informal employment along with their major shortcomings. We then set out a social contract approach for explaining participation in informal employment and the proposition that the greater is the breach of the social contract between the state and its citizens, reflected in the asymmetry between state morality and social morality, the greater is the propensity to participate in informal employment. The second section then sets out the methodology and data used to evaluate this, namely an ordered logistic regression analysis of the asymmetry between state morality using a 2013 survey conducted in France involving 1,027 face-to-face interviews with a representative sample of the population. The fourth section then evaluates the findings regarding the validity of this social contract approach and the fifth section concludes by discussing the theoretical and policy implications along with the limitations of the study and avenues for future research.

Before commencing however, informal employment must be defined. Castells and Portes (1989: 15) define informal employment as 'a specific form of income generating production... unregulated by the institutions of society in a legal and social environment in which similar activities are regulated'. Although this defines informal employment from the viewpoint of both the formal ('legal') and informal ('social') institutions in a society, the problem with this definition is that it fails to recognise firstly, that although informal employment is unregulated by formal institutions, it is regulated by the rules of informal institutions and secondly, that although informal employment is deemed 'illegal' from the viewpoint of formal institutions, it is regarded as 'legitimate' from the viewpoint of informal institutions (Siqueira et al., 2014; Webb et al., 2009). Here, therefore, and mirroring the consensus in the literature, informal employment is defined as socially legitimate activity which is formally legal in every respect except that it is not declared to the authorities for tax, social security or labour law purposes (European Commission, 2007; OECD, 2012; Williams, 2014a,b). If an economic activity is not legal and legitimate in every other respect, it is not here deemed to be informal employment.

Explaining informal employment: a social contract perspective

To explain informal employment, most studies have adopted one of three competing theoretical perspectives (see Williams, 2013, 2014a,c). First, 'modernisation' theory has explained informal employment as resulting from the lack of economic development and modernisation of state bureaucracies (Geertz, 1969; ILO, 2013; Lewis, 1959), second, 'neo-liberal' theory has explained informal employment as resulting from high taxes and overburdensome rules and regulations (De Soto, 2989, 2001; Nwabuzor, 2005) and third and finally, 'political economy' theory has explained it to be a consequence of inadequate state intervention resulting in a lack of social protection for workers (Castells and Portes, 1989; Dau and Cuervo-Cazurra, 2014; ILO, 2014; Meagher, 2010; Slavnic, 2010; Wiliams et al., 2013). The problem with these explanations however, is that they all focus upon country-level conditions and cannot explain why some individuals participate in informal employment and others do not.

Recently however, empirical studies have begun to take such agency into account by examining how the acceptability of participating in informal employment varies across individuals and populations (Aliyev, 2015; Cummings et al., 2009; Hodosi, 2015; Khan and Quaddus, 2015; McKerchar et al, 2013). The finding of this 'tax morale' literature is that participating in informal employment is deemed more acceptable by men, single people, the unemployed and self-employed, and its acceptability reduces with religiosity, age, social status and income but increases with years spent in formal education (Alm and Torgler, 2006; Cannari and D'Alessio, 2007; Daude and Melguizo, 2010; Daude et al., 2013; Kastlunger et al., 2013; Lago-Peñas and Lago-Peñas, 2010; Martinez-Vazquez and Torgler, 2009; Williams

and Martinez, 2014a,b). Indeed, these empirical studies recognise a close relationship between attitudes and behaviour across individuals and populations. The greater is the acceptability of participation in informal employment, the higher is actual level of participation in informal employment, with Pearson r values between -0.46 and -0.66 (Alm and Torgler, 2006; Alm et al., 2006, Halla, 2010; Riahi-Belkaoui, 2004; Richardson, 2006; Torgler, 2011; Torgler and Schneider 2009). Indeed, Alm and Torgler (2006) focusing on Europe and the United States find a strong negative correlation (Pearson r = -0.460) significant at the 0.05 level.

Here therefore, we propose a new explanation for participation in informal employment by theorising these empirical findings through the lens of an institutional approach (Baumol and Blinder, 2008; Helmke and Levitsky, 2004; North, 1990). Institutions prescribe the norms regarding the acceptability of activities (Denzau and North 1994; Mathias et al., 2014). All societies have not only formal institutions (i.e., codified laws and regulations) that define the legal rules of the game (prescribing what is 'state morality') but also 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), prescribing what is 'social morality'.

Social morality can be either 'complementary' if it reinforces state morality or 'substitutive' if its rules are incompatible with state morality (Helmke and Levitsky, 2003; North, 1990; Williams and Vorley, 2014). When social morality complements state morality and they are in symmetry with each other, informal employment will be largely absent. However, when there is asymmetry between state morality and social morality, such as due to a lack of trust in government, participation in informal employment will be higher. From this perspective therefore, participation in informal employment represents a violation of the social contract that exists between the state and its citizens regarding the declaration of remunerated work for tax, social security and labour law purposes, and arises when the norms,

values and beliefs of citizens (social morality) do not align with the codified laws and regulations of a society's formal institutions (state morality). To evaluate this new social contract explanation for participation in informal employment therefore, the following proposition can be tested:

Social contract violation thesis: the greater the violation of the social contract between the state and its citizens, measured by the gap between state morality and social morality, the greater will be the likelihood of participation in informal employment.

Here, we evaluate thesis in relation to France. Much of the literature on participation in informal employment in France was written some three decades ago (Barthe, 1985, 1988; Foudi et al., 1982). The only contemporary studies evaluating participation in informal employment are the 2007 and 2013 special Eurobarometer surveys. The problem with these surveys however, is that these surveys of a representative sample of some 1,000 respondents identify only 60 and 45 respondents respectively who report participating in informal employment (European Commission, 2007, 2013b). As such, it is not possible to evaluate who engages in informal employment. Measuring the degree of asymmetry between social and state morality however, may well provide a useful proxy indicator of who participates in informal employment in France. To determine whether this is the case, attention now turns towards an evaluation of the social contract violation thesis in France.

Data and Methodology

To analyse the thesis that the greater is the violation of the social contract between the state and its citizens, measured by the gap between state morality and social morality, the greater is participation in informal employment, along with whose social morality significantly differs from state morality, data from special Eurobarometer survey no. 402, which involved 1,027 face-to-face interviews conducted in 2013 in France, is reported. This used a multi-stage random (probability) sampling methodology to ensure that so far as gender, age, region and locality size, a representative sample of the population was surveyed. For the multivariate analysis therefore, no weighting scheme is used. Indeed, this reflects the dominant viewpoint in the majority of the literature on whether weighting schemes should be applied when conducting multivariate regression analysis (Pfefferman, 1994; Sharon and Liu, 1994; Solon et al., 2013; Winship and Radbill, 1994).

The face-to-face interviews first asked participants attitudinal questions regarding their views on the acceptability of various types of informal employment, followed by questions on whether participants had purchased from the informal economy and finally, whether they had participated in informal employment over the past year. Here, the focus is upon firstly, the attitudinal questions on the acceptability of participation in informal employment, which measure the degree to which there is adherence to the social contract between the French state and its citizens, and secondly, the questions on whether they had participated in informal employment.

To measure the degree of adherence to the social contract between the French state and its citizens, and thus the degree of symmetry between state morality and social morality in relation to informal work, participants were asked to rank whether they view six types of informal employment as acceptable using a 10-point Likert scale (where 1 means absolutely unacceptable and 10 means absolutely acceptable). These six types of informal employment were: an individual is hired by a household for work and s/he does not declare the payment received to the tax or social security authorities even though it should be declared; a firm is hired by a household for work and it does not declare the payment received to the tax or social security authorities; a firm is hired by another firm for work and it does not declare its activities to the tax or social security authorities; a firm hires an individual and all or a part of the wages paid to him/her are not officially declared; someone receives welfare payments without entitlement, and someone evades taxes by not declaring or only partially declaring their income. An aggregate 'social contract adherence' index for each individual is then created by collating participants' responses to each of the six questions. The Cronbach's Alpha coefficient is 0.85 which displays an excellent internal consistency of the scale (Kline, 2000). The lower the index value, the greater is their adherence to the social contract.

The dependent variable is therefore the aggregate social contract adherence index. As the dependent variable is a 10-point Likert scale index, we here employ an ordered logistic regression analysis. To evaluate whether adherence to the social contract, and thus symmetry between social morality and state morality, is associated with participation in informal employment, we include a variable measuring this, namely,

• Participation in informal employment: a dummy variable with recorded value 1 for persons who answered "yes" to the question, "Have you yourself carried out any undeclared paid activities in the last 12 months?" and with recorded value 0 otherwise.

Drawing upon the above discussed studies which reveal how gender, age, marital status, social class, occupation, income level and area can influence the size of the gap between social morality and state morality, the independent variables selected are:

- Gender: a dummy variable with value 1 for men and 0 for women.
- Age: a numerical variable for the exact age of the respondent.
- Marital Status: a categorical variable for the marital status of the respondent with value 1 for married/ remarried individuals, value 2 for cohabiters, value 3 for singles, value 4 for those separated or divorced, and value 5 for widowed and other.

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- Social class: a categorical variable for the respondent perception regarding their social class with value 1 for the working class of society, value 2 for the middle class of society, and value 3 for the higher class.
- Household composition aged 15+: a categorical variable for the number of people 15+ years old in respondent's household (including the respondent) with value 1 for one person, value 2 for two persons, value 3 for three persons, and value 4 for four persons or more.
- Number of children: a categorical variable for the number of children up to 14 years old in the household, with value 1 for individuals with no children, value 2 for the presence of children less than 10 years old living in the respondent's household, value 3 for the presence of children aged 10 to 14 years old living in respondent's household, and value 4 for the presence of children less than 10 years than 10 years old and children aged 10 to 14 years old living in respondent's household.
- Occupation: a categorical variable for the occupation of the respondent with value 1 for self-employed, value 2 for employed, and value 3 for not working.
- Difficulties paying bills: a dummy variable for the respondent's difficulties in paying bills with value 1 for having difficulties and value 0 for not having difficulties in paying bills.
- Urban/rural area: a categorical variable for the area where the respondent lives with value

 for rural area or village, value 2 for small or middle sized town, and value 3 for large
 town.
- French region: a categorical variable for the region of France where the respondent lives with value 1 for Bassin Parisien, value 2 for Ile de France, value 3 for Nord-Pas-de-Calais, value 4 for Est, value 5 for Ouest, value 6 for Sud-Ouest, value 7 for Centre-Est, and value 8 for Mediterranee.

To analyse the results, firstly a descriptive analysis of the gap between social morality and state morality (i.e., the level of adherence to the social contract) is provided, secondly, a simple bivariate regression of the relationship between the level of adherence to the social contract and participation in informal employment (not least to evaluate whether this is a useful proxy measure for evaluating who engages in informal employment), and third and finally, an ordered logistic regression analysis. On the one hand, this tests the hypothesis that there is an association between the level of adherence to the social contract and level of participation in informal employment when other independent control variables are introduced and held constant. On the other hand, it identifies whether any socio-demographic, socio-economic and spatial variables are strongly associated with lower adherence to the social contract adherence is weak and participation in informal employment may be more likely.

Findings

Examining the overall social contract adherence index for France, which measures the acceptability of participating in informal employment and thus degree to which social morality adheres to state morality, the finding is that the mean score across the 1,027 respondents is 2.14 (where 1 is totally unacceptable and 10 totally acceptable). The codified laws and regulations of formal institutions (state morality) and the norms, values and beliefs of the informal institutions (social morality) therefore, are not wholly aligned.

Interestingly, some forms of informal employment are viewed as more socially acceptable than others by the French population. On the whole, and as Figure 1 displays, the social acceptability of informal employment differs according to whether a firm or individual is participating. The French view it as less socially acceptable for firms to participate in informal practices and more acceptable for individuals to do so. The mean score for a firm hiring an informal worker is 2.08 and 2.10 for a firm doing informal work for a household, and is even lower (1.77) for firms doing informal work for another firm (i.e., the lower the score, the less socially acceptable is the activity). Meanwhile, the French are more tolerant of individuals participating in informal employment. The mean score for a person partially or completely concealing their income from the state for tax, social security and labour law purposes is 2.19 and 2.98 for a person who engages in informal employment for a household. The exception to this general rule is those who claim benefits without entitlement, such as whilst working informally. This is the least acceptable of all behaviours, scoring 1.54, doubtless because such individuals are viewed by French citizens as 'taking our money' rather than seeking to 'keep their own money'. These views of the French population surveyed regarding the social acceptability of different types of informal employment are similar to the views in the EU15 and also the new member states of the European Union. The main difference between France and the EU15 and new member states, is that the social morality of its population more closely adheres to state morality. Whereas the overall level of social acceptability of informal employment in France is 2.14, this figure is 2.22 in the EU15 and 2.75 in the new member states.

INSERT FIGURE 1 ABOUT HERE

Is it the case therefore, that there is a relationship between the level of adherence to the social contract and likelihood of participation in informal employment? To evaluate this, we can first test whether the gap between state morality and social morality of those participating in informal employment is greater than those not participating in the informal economy. Given that the distribution of social contract adherence is non-parametric, a Wilcoxon Rank Sum test, also known as the Mann-Whitney two-sample statistic, is used. The finding is a strong

statistically significant difference in the median level of adherence to the social contract of those participating in informal employment, which is 4, compared with those not engaging in informal employment, whose median score is 2. Those participating in informal employment thus have significantly lower adherence to the social contract than those not participating in informal employment. This provides some initial support for the social contract violation thesis.

To determine whether this association between the level of adherence to the social contract and participation in informal employment remains significant when other characteristics are taken into account and held constant, Table 1 reports the results of an ordered logistic regression analysis. The first row in models 1-3 reveals that lower adherence to the social contract remains strongly associated with participation in informal employment across all models, whether socio-demographic variables alone are analysed, or whether socio-economic and/or spatial characteristics are added and held constant. This further positively confirms the social contract violation thesis; the greater is the non-alignment of state morality and social morality, the higher is participation in informal employment.

INSERT TABLE 1 ABOUT HERE

This ordered logistic regression analysis also identifies the socio-demographic, socioeconomic and spatial groups significantly less likely to adhere to the social contract when all other characteristics are taken into account and held constant. As model 1 in Table 1 reveals, when other socio-demographic factors are held constant, men are significantly more likely to have lower adherence to the social contract than women, as are younger age groups and those who are single, and divorced or separated. Interestingly however, there are no significant variations in adherence to the social contract across social class. When socio-economic characteristics are added in model 2, the same socio-demographic variables remain significant. However, employment status does not significantly influence one's adherence to the social contract. For example, the unemployed are not significantly more likely to have a lower adherence to the social contract than the employed. Those having difficulties paying the household bills however, do have lower adherence to the social contract than those without difficulties. Finally, when model 3 adds the spatial characteristics, the same socio-demographic variables continue to be significant and the additional finding is that French people living rural areas have a lower adherence to the social contract than those in more urban areas, suggesting that participation in informal employment may well be higher in such areas. It is also the case that regional variations exist with the populations living in South-West and Mediterranean regions having a lower adherence to the social contract compared with those living in the Paris Basin.

Discussion and Conclusions

This paper has proposed a new way of conceptualising informal employment as representing a violation of the social contract that exists between the state and its citizens, and explains informal employment as arising when the norms, values and beliefs of citizens (social morality) do not align with the codified laws and regulations of a society's formal institutions (state morality). The proposition is that the wider is the gap between state morality and social morality, the greater is the likelihood of participation in informal employment.

Evaluating the validity of this social contract violation thesis using data on France, the above analysis positively confirms this thesis. It reveals that the greater is the asymmetry between state morality and social morality, the higher is the propensity to participate in informal employment, and this remains strongly significant when other socio-demographic, socio-economic and spatial variables are introduced and held constant. This French survey thus confirms that informal employment results from a violation of the social contract between the state and its citizens, and arises when the norms, values and beliefs of citizens (social morality) do not align with the codified laws and regulations of a society's formal institutions (state morality).

This view that informal employment represents a violation of the social contract that exists between the state and its citizens, and as arising when social morality does not align with state morality, has direct implications for how informal employment is tackled. According to institutional theory, two basic mechanisms exist for tackling institutional asymmetry: disincentives (sticks) to prevent socially legitimate but illegal activities, or incentives (carrots) to encourage desirable legal activities (Matthias et al., 2014; North 1990).

Conventionally, the French government when tackling informal employment, akin to other western governments, has used disincentives to ensure that the cost of being caught and punished is greater than the pay-off from participating in the informal economy (Allingham and Sandmo, 1972; Dekker et al., 2010). First, penalties and sanctions have been raised and/or second, the likelihood of detection improved such as by increasing workplace inspections and by improving data sharing and matching to identify individuals engaged in informal employment (e.g., Hasseldine and Li, 1999; Williams, 2014a). To achieve this in France, a highly organised and coordinated approach has been adopted. Under the auspices of the Délégation Nationale à la lutte contre les fraudes (DNLF), annual national action plans have been produced implemented. These have focused upon adopting ever more severe administrative and penal sanctions, the exclusion of firms that use illegal workers from government contracts, supply chain liability, heavy fines and even closure of companies using informal workers, along with improvements to the effectiveness of the inspection control system (Ministry of Labour, Social Relations, Family Affairs, Solidarity and Urban Affairs, 2014). The problem with this dominant disincentives approach however, is that introducing

tougher sanctions and improving detection reduces voluntary compliance because it undermines respect for the fairness of the system and leads to greater rather than less informal employment (Chang and Lai, 2004; Murphy, 2005; Murphy and Harris, 2007).

Hence, a different policy approach is needed if informal employment is to be tackled. Two possibilities exist. First, incentives to behave legally can be offered, such as direct and indirect tax incentives to either suppliers or consumers of informal employment to encourage them to operate in the formal economy. This has been widely pursued in recent years in France, as exemplified by the chèque emploi-service universel (CESU) which provides consumers with financial incentives to use formal rather than informal employment when sourcing paid labour to do domestic cleaning and caring work (Windebank, 2006, 2007). The problem nevertheless, is that such incentives are in effect bribes offered to citizens by the state precisely because they would not otherwise comply with the codified laws and regulations (i.e., state morality). The argument here is that the medium- to long-term approach should be to align social morality with state morality, which will long term be a far more effective and cost-efficient means of tackling the problem of informal employment. Here, therefore, a second and rather different policy approach to providing incentives to behave legally is advocated.

To reduce participation in informal employment, what is required is a policy shift away from the currently dominant approach of detecting and punishing those participating in informal employment and towards an approach that seeks to reduce the gap between social morality and state morality. On the one hand, this requires policies that change social morality so as to re-align it with state morality. Such measures include education and awareness raising campaigns regarding the importance and benefits of paying taxes, such as by providing information on the public goods and services paid for by taxation. For example, 'your taxes are paying for this' signs can be prominently positioned in hospitals, schools, on ambulances and around other public sector construction projects. Until now, the French government has not sought to do this. These education and awareness raising campaigns, moreover, and as Table 1 reveals, could be usefully targeted at those populations whose social morality least adheres to state morality, namely men, younger people, single people and the divorced or separated, those living in rural areas and the South-West or Mediterranean regions.

On the other hand, an alignment of social morality and state morality also requires changes in formal institutions. Drawing inspiration from a large body of research at the organisational level where there has been a shift from 'hard' to 'soft' HRM, and from bureaucratic to post-bureaucratic management (Legge 1995; Thompson and Alvesson 2005; Watson 2003), a similar shift is here advocated at the societal level when tackling participation in informal employment. In other words, a policy shift is advocated away from the conventional low commitment, low trust and adversarial 'hard' policy approach, which has sought compliance using tight rules, close supervision and monitoring, prescribed procedures and centralised structures. Rather, and replicating how behaviour change is being elicited at the organisational level, a high trust, high commitment 'soft' policy approach could be instead pursued which nurtures self-regulation through internalised commitment. At the societal-level, this requires a shift away from a 'cops and robbers' approach which treats citizens as criminals and towards a customer service-oriented approach which treats citizens as clients. To move towards this, enhancements in the procedural and redistributive justice and fairness of formal institutions are required so that citizens believe that the authorities are treating them in a respectful, impartial and responsible manner, believe that they pay their fair share and believe that they receive the goods and services they deserve (Molero and Pujol, 2012; Murphy, 2005).

This paper, therefore, has not only provided a new conceptualisation and explanation for tackling informal employment in France but also a new policy approach. Nevertheless, there are limitations to this paper. The major limitation is that although the above quantitative analysis displays the importance of aligning social morality with state morality, it has not been able to identify the reasons for the social morality of the French population deviating from the codified laws and regulations (i.e., state morality). Future qualitative research is therefore required to identify the reasons, such as whether it is due to a perception that tax rates are too high, a lack of understanding of the taxation system and how taxes are used, a lack of acceptance of what taxes are spent on or the tax, social security and labour law regulations. This will then enable an identification of what policy approaches are required in order to better align social morality with state morality.

In sum, this paper has outlined a new explanation for participation in informal employment and policy approach for tackling the informal sector. Whether this is valid in other European countries and global regions now requires evaluation. If this paper thus inspires such evaluations, it will have achieved one of its objectives. However, if governments also start recognising that informal employment arises when a gap exists between social morality and state morality and begin exploring policy measures to close this gap, rather than persisting with the detection and punishment of those participating in informal employment, then this paper will have achieved its broader objective.

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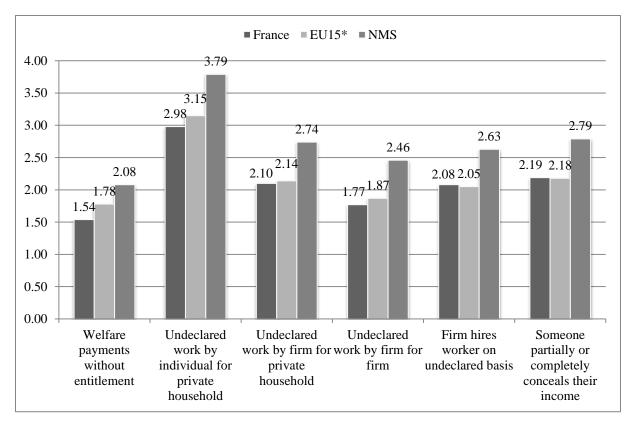
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Notes: New Member States – Bulgaria, the Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovenia, Slovakia, Croatia

EU15* (France excluded.) – Austria, Belgium, Denmark, Germany, Greece, Finland, Ireland, the Netherlands, Italy, Luxembourg, Portugal, Spain, Sweden, United Kingdom.

Figure 1 Acceptability of different types of informal employment, a comparison of average scores for France, EU15 and new member states

Gender (Women) Men $0.256**(0.126)$ 0.266 Age (exact age) (0.00514) (0.00514) Marital status (Re/Married) (0.00514) (0.00514) Single living with partner $0.502**(0.207)$ 0.491 Single iving with partner $0.502**(0.207)$ 0.491 Single iving with partner $0.643***(0.237)$ 0.522 Divorced or separated $0.441*(0.244)$ 0.3 Widow and other $0.214(0.261)$ 0.1 Social class (The working class of society) The middle class of society $0.00776(0.135)$ 0.08 The higher class/Other/None $0.147(0.294)$ 0.2 $0.24000070(0.206)$ -0.095 The or more $-0.0470(0.206)$ -0.095 $-0.233(0.243)$ -0	odel 2	Model 3
Engaged 1.722*** (0.287) 1.7144 Gender (Women) 0.256** (0.126) 0.266 Age (exact age) -0.0226*** -0.0226*** Marital status (Re/Married) Single living with partner 0.502** (0.207) 0.491 Single living with partner 0.502** (0.207) 0.491 Single living with partner 0.643*** (0.237) 0.522 Divorced or separated 0.441* (0.244) 0.3 Widow and other 0.214 (0.261) 0.1 Social class (The working class of society) 0.00776 (0.135) 0.08 The higher class/Other/None 0.147 (0.294) 0.2 Household composition aged 15+ (One) Two -0.0470 (0.206) -0.06 Three -0.233 (0.243) -0.3 -0.14 Number of children (No children) Children -0.0745 (0.261) -0.1 Number of children (No children) 0.0144 (0.236) -0.0007 Children <10 years		
Gender (Women) Men 0.256^{**} (0.126) 0.266 Age (exact age) -0.0226^{***} (0.00514) Marital status (Re/Married) Single living with partner 0.502^{***} (0.237) 0.491 Single living with partner 0.502^{***} (0.237) 0.491 Single 0.643^{***} (0.237) 0.522 Divorced or separated 0.441^{*} (0.244) 0.32 Widow and other 0.214 (0.261) 0.135 Social class (The working class of society) The middle class of society 0.00776 (0.135) 0.08 The middle class of society 0.00776 (0.135) 0.08 0.08 The middle class of society 0.00776 (0.266) -0.05 Thre indel class of society 0.0470 (0.206) -0.05 Three -0.233 (0.243) -0.3 Four or more -0.0745 (0.261) -0.1 Number of children (No children) -0.0953 (0.239) -0.1 Children <10 years	4*** (0.289)	1.676*** (0.305
Men 0.256^{**} (0.126) 0.266 Age (exact age) -0.0226^{***} -0.0226^{***} -0.0226^{***} -0.0226^{***} -0.0226^{***} -0.0226^{***} -0.0226^{***} -0.0226^{***} -0.0226^{***} -0.0226^{***} -0.0250^{***} -0.0250^{***} -0.041^{**} 0.0277 0.441^{**} (0.237) 0.522^{**} Divorced or separated 0.441^{**} (0.244) 0.50^{***} 0.502^{**} 0.643^{***} 0.0231 0.00776^{**} 0.0231^{**} 0.0231^{***} 0.502^{***} 0.0231^{****} $0.0231^{*******}$ $0.00776^{*******}$ $0.0077^{**********************************$	· · /	× ×
Age (exact age) -0.0226*** -0.002514) Marital status (Re/Married) (0.00514) Single living with partner 0.502** (0.207) 0.491 Single living with partner 0.643*** (0.237) 0.522 Divorced or separated 0.441* (0.244) 0.3 Widow and other 0.214 (0.261) 0.1 Social class (The working class of society) 0.00776 (0.135) 0.08 The middle class of society 0.00776 (0.135) 0.08 Household composition aged 15+ (One) Two -0.0470 (0.206) -0.09 Three -0.233 (0.243) -0.3 Four or more -0.0745 (0.261) -0.1 Number of children (No children) Children 10-14 years -0.0184 (0.236) -0.0070 One or more < 10 years and 10-14	69** (0.127)	0.261** (0.130
	-0.0234***	-0.0251***
Marital status (Re/Married) 0.502** (0.207) 0.491 Single living with partner 0.502** (0.207) 0.522 Divorced or separated 0.441* (0.244) 0.522 Widow and other 0.214 (0.261) 0.1 Social class (The working class of society) 0.00776 (0.135) 0.08 The higher class/Other/None 0.147 (0.294) 0.2 Household composition aged 15+ (One) Two -0.0470 (0.206) -0.09 Three -0.233 (0.243) -0.2 Four or more -0.0745 (0.261) -0.1 Number of children (No children) Children (10 years -0.0184 (0.236) -0.0007 Children 10 years -0.0184 (0.236) -0.0007 One or more < 10 years and 10-14	(0.00543)	(0.00565
Single living with partner $0.502^{**} (0.207)$ 0.491 Single $0.643^{***} (0.237)$ 0.522 Divorced or separated $0.441^* (0.244)$ 0.3 Widow and other $0.214 (0.261)$ 0.1 Social class (The working class of society) $0.214 (0.261)$ 0.1 The middle class of society $0.00776 (0.135)$ 0.08 Household composition aged 15+ (One) Two $-0.0470 (0.206)$ -0.09 Three $-0.233 (0.243)$ -0.3 $For or more$ $-0.0745 (0.261)$ -0.1 Number of children (No children) Children < 10 years	(0000000)	(
Single $0.643^{***} (0.237)$ 0.522 Divorced or separated $0.441^* (0.244)$ 0.3 Widow and other $0.214 (0.261)$ 0.1 Social class (The working class of society) $0.00776 (0.135)$ 0.08 The middle class of society $0.00776 (0.135)$ 0.08 The middle class of society $0.00776 (0.135)$ 0.08 The middle class of society $0.00776 (0.206)$ -0.095 Household composition aged 15+ (One) Two $-0.0470 (0.206)$ -0.095 Three $-0.233 (0.243)$ -0.3 -0.3 Four or more $-0.0745 (0.261)$ -0.1 Number of children (No children) $-0.0184 (0.236)$ -0.007 Children 10 years $-0.0184 (0.236)$ -0.007 One or more < 10 years and 10-14	91** (0.207)	0.475** (0.213
Divorced or separated $0.441*(0.244)$ 0.3 Widow and other $0.214(0.261)$ 0.1 Social class (The working class of society) $0.00776(0.135)$ $0.00776(0.135)$ The middle class of society $0.00776(0.135)$ $0.00776(0.135)$ Household composition aged 15+ (One) $0.0147(0.294)$ $0.214(0.236)$ Two $-0.00470(0.206)$ $-0.0745(0.261)$ -0.11 Number of children (No children) $0.0776(0.236)$ $-0.0745(0.261)$ $-0.0745(0.261)$ Number of children (No children) $0.0705(0.261)$ $-0.0745(0.261)$ $-0.0745(0.261)$ Children < 10 years	22** (0.250)	0.495* (0.257
Widow and other $0.214 (0.261)$ 0.1 Social class (The working class of society) $0.00776 (0.135)$ 0.0075 The middle class of society $0.00776 (0.135)$ 0.0075 The higher class/Other/None $0.147 (0.294)$ 0.2 Household composition aged 15+ (One) Two $-0.0470 (0.206)$ -0.095 Three $-0.233 (0.243)$ -0.35 $Four or more$ $-0.0745 (0.261)$ -0.16 Number of children (No children) Children < 10 years).349 (0.251)	0.431* (0.256
Social class (The working class of society) 0.00776 (0.135) 0.08 The middle class of society 0.00776 (0.135) 0.08 The higher class/Other/None 0.147 (0.294) 0.2 Household composition aged 15+ (One) Two -0.0470 (0.206) -0.095 Three -0.233 (0.243) -0.3 Four or more -0.0745 (0.261) -0.1 Number of children (No children) Children 10 years -0.0184 (0.236) -0.0000 Children 10-14 years -0.0184 (0.236) -0.0000 -0.020 Occupation (Self-employed) Employed -0.1 Not working 0.022 Difficulties paying bills last year (Not having difficulties) Having difficulties 0.223 Area respondent lives (Rural area or village) Small/middle town Large town Region (Bassin Parisien) Ile de France Nord - Pais-de-Calais Est Ouest Sud-Ouest Centre-Est Mediterranee Constant cut1 -0.923** (0.431) -0.92 Constant cut3 1.201*** (0.442) 1.187 Constant cut4 2.1975*** (0.474) 2.9364 Constant cut4 2.975*** (0.474)).144 (0.270)	0.252 (0.276
The middle class of society $0.00776 (0.135)$ 0.08 The higher class/Other/None $0.147 (0.294)$ 0.2 Household composition aged 15+ (One) Two $-0.0470 (0.206)$ -0.09 Three $-0.233 (0.243)$ -0.3 Four or more $-0.0745 (0.261)$ -0.1 Number of children (No children) Children <10 years	(0)	
The higher class/Other/None $0.147 (0.294)$ 0.2 Household composition aged 15+ (One) Two $-0.0470 (0.206)$ -0.09 Three $-0.233 (0.243)$ -0.3 Four or more $-0.0745 (0.261)$ -0.1 Number of children (No children) Children 10-14 years $-0.0184 (0.236)$ -0.0007 One or more < 10 years and 10-14	0815 (0.140)	0.0922 (0.143
Household composition aged 15+ (One) Two -0.0470 (0.206) -0.09 Three -0.233 (0.243) -0.3 Four or more -0.0745 (0.261) -0.1 Number of children (No children) Children <10 years -0.280 (0.196) -0.2 Children 10-14 years -0.0184 (0.236) -0.0007 One or more <10 years and 10-14 -0.0953 (0.239) -0.1 years Occupation (Self-employed) Employed -0.1 Not working 0.02 Difficulties paying bills last year (Not having difficulties) Having difficulties 0.23 Area respondent lives (Rural area or village) Small/middle town Large town Region (Bassin Parisien) Ile de France Nord - Pais-de-Calais Est Ouest Sud-Ouest Centre-Est Mediterranee Constant cut1 -0.923** (0.431) -0.9 Constant cut2 0.241 (0.432) 0.2 Constant cut3 1.201*** (0.464) 2.1664 Constant cut4 2.189*** (0.464) 2.1664 Constant cut5 2.975*** (0.474) 2.9364 Constant cut6 3.784*** (0.499) 3.751* Constant cut7 4.654*** (0.577) 4.624* Constant cut7 4.654*** (0.577) 4.624* Constant cut7 4.654*** (0.577) 4.624* Constant cut8 5.763*** (0.490) Log likelihood -1327.7393	0.264 (0.308)	0.266 (0.330
Two -0.0470 (0.206) -0.095 Three -0.233 (0.243) -0.3 Four or more -0.0745 (0.261) -0.1 Number of children (No children) -0.0184 (0.236) -0.0007 Children 10 years -0.0184 (0.236) -0.007 One or more 10 years and 10-14 -0.0953 (0.239) -0.1 years -0.0184 (0.236) -0.007 One or more 10 years and 10-14 -0.0953 (0.239) -0.1 years -0.1 Not working 0.02 Difficulties paying bills last year (Not having difficulties) -0.12 -0.12 Having difficulties 0.22 -0.23 -0.12 Area respondent lives (Rural area or village) Small/middle town -0.23 -0.23 Large town Region (Bassin Parisien) Ile de France -0.923** (0.431) -0.92 Nord - Pais-de-Calais Est -0.21 -0.22 -0.22 Constant cut1 -0.923** (0.431) -0.92 -0.92 -0.92 Constant cut2 0.241 (0.432) 0.25 -0.22 Constant cut3 1.201*** (0.442)		0.200 (0.000
Three -0.233 (0.243) -0.3 Four or more -0.0745 (0.261) -0.1 Number of children (No children) -0.184 (0.236) -0.0007 Children 10-14 years -0.0184 (0.236) -0.0007 One or more < 10 years and 10-14	0918 (0.212)	-0.0426 (0.220
Four or more $-0.0745 (0.261)$ -0.1 Number of children (No children) $-0.280 (0.196)$ -0.2 Children 10-14 years $-0.0184 (0.236)$ -0.0007 One or more < 10 years and 10-14	0.300 (0.251)	-0.249 (0.265
Number of children (No children) Children < 10 years -0.280 (0.196) -0.2 Children 10-14 years -0.0184 (0.236) -0.0007 One or more < 10 years and 10-14 -0.0953 (0.239) -0.1 years Occupation (Self-employed) Employed -0.1 Not working 0.02 Difficulties paying bills last year (Not having difficulties) Having difficulties 0.23 Area respondent lives (Rural area or village) Small/middle town Large town Region (Bassin Parisien) Ile de France Nord - Pais-de-Calais Est Ouest Sud-Ouest Centre-Est Mediterranee Constant cut1 -0.923** (0.431) -0.9 Constant cut2 0.241 (0.432) 0.2 Constant cut3 1.201*** (0.442) 1.187 Constant cut4 2.189*** (0.464) 2.166 ⁴ Constant cut5 2.975*** (0.474) 2.936 ⁴ Constant cut6 3.784*** (0.499) 3.751 ⁴ Constant cut7 4.654*** (0.577) 4.624 ⁴ Constant cut7 4.654*** (0.577) 4.624 ⁴ Constant cut8 5.763*** (0.808) 5.735 ⁸ N 976 Pseudo R ² 0.0490 Log likelihood -1327.7393	0.133 (0.266)	-0.0552 (0.272
$\begin{array}{c c} \mbox{Children} < 10 \mbox{ years} & -0.280 \ (0.196) & -0.2 \mbox{Children} & 10-14 \mbox{ years} & -0.0184 \ (0.236) & -0.0007 \mbox{One or more} < 10 \mbox{ years and } 10-14 & -0.0953 \ (0.239) & -0.1 \mbox{ years} & 0 \mbox{Cupation} \mbox{(Self-employed)} & & & & & & & & & & & & & & & & & & &$	(0.200)	0.00002 (0.272
$\begin{array}{c c} \mbox{Children 10-14 years} & -0.0184 (0.236) & -0.0007\\ \mbox{One or more} < 10 years and 10-14 & -0.0953 (0.239) & -0.1\\ \mbox{years} & & & & & & & & & & & & & & & & & & &$	0.278 (0.197)	-0.278 (0.203
One or more < 10 years and 10-14-0.0953 (0.239)-0.1years	0744 (0.238)	-0.0313 (0.239
years Occupation (Self-employed) Employed -0.1 Not working 0.02 Difficulties paying bills last year (Not having difficulties) Having difficulties 0.23 Area respondent lives (Rural area or village) Small/middle town Large town Region (Bassin Parisien) Ile de France Nord - Pais-de-Calais Est Ouest Sud-Ouest Centre-Est Mediterranee Constant cut1 $-0.923**(0.431)$ -0.5 Constant cut2 $0.241(0.432)$ 0.2 Constant cut3 $1.201***(0.442)$ 1.187 Constant cut3 $1.201***(0.442)$ 1.187 Constant cut4 $2.189***(0.464)$ 2.1664 Constant cut5 $2.975^{***}(0.474)$ 2.936^{*} Constant cut6 $3.784^{***}(0.499)$ 3.751^{*} Constant cut7 $4.654^{***}(0.577)$ 4.624^{*} Constant cut7 $4.654^{***}(0.577)$ 4.624^{*} Constant cut8 $5.763^{***}(0.808)$ 5.735^{*}).151 (0.257)	-0.168 (0.257
Occupation (Self-employed)-0.1Employed-0.1Not working0.02Difficulties paying bills last year (Not having difficulties)-0.1Having difficulties0.23Area respondent lives (Rural area or village)Small/middle townLarge town-0.1Region (Bassin Parisien)Ile de FranceNord - Pais-de-Calais-0.1Est0uestSud-Ouest-0.23** (0.431)Centre-Est-0.241 (0.432)Mediterranee0.241 (0.432)Constant cut1-0.923** (0.431)Constant cut31.201*** (0.442)Constant cut42.189*** (0.464)Constant cut52.975*** (0.474)Constant cut63.784*** (0.499)Constant cut74.654*** (0.577)Constant cut85.763*** (0.808)Constant cut85.763*** (0.808)Constant cut85.735*N976Pseudo R ² 0.0490Log likelihood-1327.7393	(0.207)	0.100 (0.20)
Employed-0.1Not working0.02Difficulties paying bills last year (Not having difficulties)0.23Having difficulties0.23Area respondent lives (Rural area or village)0.23Small/middle town0.23Large town0.23Region (Bassin Parisien)11Ile de France0.04Nord - Pais-de-Calais0.24Est0Ouest0.241 (0.431)Sud-Ouest0.241 (0.432)Constant cut1-0.923** (0.431)Constant cut20.241 (0.432)Constant cut31.201*** (0.442)Constant cut42.189*** (0.464)Constant cut52.975*** (0.474)Constant cut63.784*** (0.499)Constant cut74.654*** (0.577)Constant cut85.763*** (0.808)S.735*NN976Pseudo R ² 0.0490Log likelihood-1327.7393		
Not working 0.02 Difficulties paying bills last year (Not having difficulties) 0.02 Having difficulties 0.23 Area respondent lives (Rural area or village) 0.23 Small/middle town 0.23 Large townRegion (Bassin Parisien)Ile de France 0.02 Nord - Pais-de-Calais 0.02 Est 0.02 Ouest 0.02 Sud-Ouest 0.02 Centre-Est 0.02 Mediterranee $0.241 (0.432) = 0.22$ Constant cut1 $-0.923** (0.431) = -0.92$ Constant cut2 $0.241 (0.432) = 0.22$ Constant cut3 $1.201*** (0.442) = 1.187$ Constant cut4 $2.189*** (0.464) = 2.166*$ Constant cut5 $2.975*** (0.474) = 2.936*$ Constant cut6 $3.784*** (0.499) = 3.751*$ Constant cut7 $4.654*** (0.577) = 4.624*$ Constant cut8 $5.763*** (0.808) = 5.735*$ N 976 Pseudo R ² 0.0490 Log likelihood -1327.7393).156 (0.376)	-0.145 (0.390
Difficulties paying bills last year (Not having difficulties) Having difficulties 0.23 Area respondent lives (Rural area or village) Small/middle town Large town Region (Bassin Parisien) Ile de France Nord - Pais-de-Calais Est Ouest Sud-Ouest Centre-Est Mediterranee Constant cut1 $-0.923*(0.431)$ $-0.923*(0.442)$ 1.187 Constant cut2 $0.241(0.432)$ 0.241 Constant cut3 $1.201***(0.442)$ 1.187 Constant cut4 $2.189***(0.464)$ $2.166*(0.999)$ $3.751*(0.999)$ Constant cut5 $2.975***(0.474)$ $2.936*(0.999)$ Constant cut7 $4.654***(0.577)$ $4.624*(0.999)$ Constant cut8 $5.763***(0.808)$ $5.735*(0.999)$ Log likelihood -1327.7393	0200 (0.383)	0.0200 (0.396
Having difficulties 0.23 Area respondent lives (Rural area or village)Small/middle townLarge townRegion (Bassin Parisien)Ile de FranceNord - Pais-de-CalaisEstOuestSud-OuestSud-OuestConstant cut1 $-0.923**(0.431)$ $-0.923**(0.431)$ Constant cut2 $0.241(0.432)$ $0.223**(0.431)$ Constant cut3 $1.201***(0.442)$ $1.187**(0.442)$ Constant cut3 $2.975***(0.474)$ $2.936***(0.474)$ Constant cut5 $2.975***(0.474)$ $2.936***(0.474)$ Constant cut6 $3.784***(0.499)$ $3.751****(0.474)$ Constant cut7 $4.654***(0.577)$ $4.624****(0.577)$ Constant cut8 $5.763****(0.808)$ $5.735*****(0.808)$ N 976 Pseudo R ² 0.0490 Log likelihood -1327.7393 -1327.7393	(,	
Area respondent lives (Rural area or village) Small/middle town Large town Region (Bassin Parisien) Ile de France Nord - Pais-de-Calais Est Ouest Sud-Ouest Centre-Est Mediterranee Constant cut1 -0.923^{**} (0.431) Constant cut2 0.241 (0.432) Constant cut3 1.201^{***} (0.442) Constant cut4 2.189^{***} (0.464) Constant cut5 2.975^{***} (0.474) Constant cut6 3.784^{***} (0.499) Constant cut7 4.654^{***} (0.577) Constant cut8 5.763^{***} (0.808) Stant cut8 5.735^{**}	239* (0.136)	0.212 (0.138
Small/middle town Large town Region (Bassin Parisien) Ile de France Nord - Pais-de-Calais Est Ouest Sud-Ouest Centre-Est Mediterranee Constant cut1 $-0.923**(0.431)$ Constant cut2 $0.241(0.432)$ Constant cut3 $1.201***(0.442)$ Constant cut3 $1.201***(0.442)$ Constant cut4 $2.189***(0.464)$ Constant cut5 $2.975***(0.474)$ Constant cut6 $3.784***(0.499)$ Constant cut7 $4.654***(0.577)$ Constant cut8 $5.763***(0.808)$ N 976 Pseudo R ² 0.0490 Log likelihood -1327.7393	· · /	, , , , , , , , , , , , , , , , , , ,
Large town Region (Bassin Parisien) Ile de France Nord - Pais-de-Calais Est Ouest Sud-Ouest Centre-Est Mediterranee Constant cut1 -0.923^{**} (0.431) Constant cut2 0.241 (0.432) Constant cut3 1.201^{***} (0.442) Constant cut4 2.189^{***} (0.464) Constant cut5 2.975^{***} (0.474) Constant cut6 3.784^{***} (0.577) Constant cut7 4.654^{***} (0.577) Constant cut8 5.763^{***} (0.808) State 5.763^{***} (0.808) Log likelihood -1327.7393		-0.268* (0.141
Region (Bassin Parisien) Ile de France Nord - Pais-de-Calais Est Ouest Sud-Ouest Centre-Est Mediterranee Constant cut1 $-0.923^{**}(0.431)$ Constant cut2 $0.241(0.432)$ Constant cut3 $1.201^{***}(0.442)$ Constant cut3 $1.201^{***}(0.444)$ Constant cut4 $2.189^{***}(0.464)$ Constant cut5 $2.975^{***}(0.474)$ Constant cut6 $3.784^{***}(0.499)$ Constant cut7 $4.654^{***}(0.577)$ Constant cut8 $5.763^{***}(0.808)$ S.735* N 976 Pseudo R ² 0.0490 Log likelihood Log likelihood -1327.7393		-0.00882 (0.197
Ile de France Nord - Pais-de-Calais Est Ouest Sud-Ouest Centre-Est Mediterranee Constant cut1 $-0.923^{**}(0.431)$ Constant cut2 $0.241(0.432)$ Constant cut3 $1.201^{***}(0.442)$ Constant cut3 $1.201^{***}(0.442)$ Constant cut4 $2.189^{***}(0.464)$ Constant cut5 $2.975^{***}(0.474)$ Constant cut6 $3.784^{***}(0.499)$ Constant cut7 $4.654^{***}(0.577)$ Constant cut8 $5.763^{***}(0.808)$ Strate cut8 $5.763^{***}(0.808)$ Strate cut8 5.735^{**}		(
Nord - Pais-de-Calais Est Ouest Sud-Ouest Centre-Est Mediterranee Constant cut1 -0.923** (0.431) Constant cut2 0.241 (0.432) 0.23 Constant cut3 1.201*** (0.442) 1.89*** (0.464) 2.189*** (0.464) 2.189*** (0.464) Constant cut4 2.189*** (0.464) Constant cut5 2.975*** (0.474) 2.936* Constant cut6 3.784*** (0.499) 3.751* Constant cut7 4.654*** (0.577) 4.624* Constant cut8 5.763*** (0.808) 5.735* N 976 Pseudo R ² 0.0490 Log likelihood -1327.7393		0.0611 (0.217
Est Ouest Sud-Ouest Centre-Est Mediterranee Constant cut1 $-0.923^{**}(0.431) -0.923^{**}(0.431) -0.923^{**}(0.431) -0.923^{**}(0.431) -0.923^{**}(0.431) -0.923^{**}(0.431) -0.923^{**}(0.431) -0.923^{**}(0.431) -0.923^{**}(0.931) -0.923^{**}(0.431) -0.923^{**}(0.931) -0.923^{**}(0.431) -0.923^{**}(0.931) -0.923^{**}(0.431) -0.923^{**}(0.931) -0.923^{**}(0.431) -0.923^{**}(0.931) -0.923^{**}(0.431) -0.923^{**}(0.923) -0.923^{**}(0.431) -0.923^{**}(0.923) -0.923^{**}(0.431) -0.923^{**}(0.923) -0.923^{**}(0.431) -0.923^{**}(0.923) -0.923^{**}(0.431) -0.923^{**}(0.923) -0.923^{**}(0.431) -0.923^{**}(0.923) -0.923^{**}(0.431) -0.923^{**}(0.923) -0.923^{**}(0.431) -0.923^{**}(0.923) -0.923^{**}(0.431) -0.923^{**}(0.432) -0.92$		0.263 (0.367
Ouest Sud-Ouest Sud-Ouest Centre-Est Mediterranee $-0.923^{**}(0.431)$ Constant cut1 $-0.923^{**}(0.431)$ Constant cut2 $0.241(0.432)$ Constant cut3 $1.201^{***}(0.442)$ Constant cut4 $2.189^{***}(0.464)$ Constant cut5 $2.975^{***}(0.474)$ Constant cut6 $3.784^{***}(0.499)$ Constant cut7 $4.654^{***}(0.577)$ Constant cut8 $5.763^{***}(0.808)$ Strate cut8 $5.763^{***}(0.808)$ Log likelihood -1327.7393		-0.205 (0.234
Sud-Ouest Centre-Est Mediterranee $-0.923**(0.431)$ $-0.923**(0.431)$ Constant cut1 $-0.923**(0.431)$ $-0.923**(0.431)$ Constant cut2 $0.241(0.432)$ $0.223**(0.431)$ Constant cut2 $0.241(0.432)$ $0.223**(0.431)$ Constant cut3 $1.201***(0.442)$ $1.187*$ Constant cut4 $2.189***(0.464)$ $2.166**$ Constant cut5 $2.975***(0.474)$ $2.936**$ Constant cut5 $2.975***(0.474)$ $2.936**$ Constant cut6 $3.784***(0.499)$ $3.751**$ Constant cut7 $4.654***(0.577)$ $4.624**$ Constant cut8 $5.763***(0.808)$ $5.735**$ N 976 976 Pseudo R ² 0.0490 Log likelihood Log likelihood -1327.7393 -1327.7393		-0.0452 (0.212
Centre-Est Mediterranee Constant cut1 $-0.923 * (0.431)$ $-0.923 = 0.241$ Constant cut2 $0.241 (0.432)$ $0.223 = 0.241$ Constant cut3 $1.201 * * (0.442)$ 1.1872 Constant cut3 $2.189 * * (0.464)$ $2.1663 = 0.241$ Constant cut4 $2.189 * * (0.464)$ $2.1663 = 0.2412$ Constant cut5 $2.975 * * (0.474)$ $2.9363 = 0.293 = 0.2323$ Constant cut5 $2.975 * * (0.474)$ $2.9363 = 0.2323 = 0.2332$ Constant cut6 $3.784 * * (0.499)$ $3.751 = 0.2332$ Constant cut7 $4.654 * * (0.577)$ $4.624 = 0.2432$ Constant cut8 $5.763 * * (0.808)$ $5.735 = 0.2332$ N 976 Pseudo R ² 0.0490 Log likelihood -1327.7393 -1327.7393		0.416* (0.244
Mediterranee Constant cut1 $-0.923 * (0.431)$ $-0.923 = 0.241$ Constant cut2 $0.241 (0.432)$ $0.223 = 0.241$ Constant cut3 $1.201 * * (0.442)$ 1.1872 Constant cut3 $2.189 * * (0.464)$ $2.166 * 0.241$ Constant cut4 $2.189 * * (0.464)$ $2.166 * 0.2412$ Constant cut5 $2.975 * * (0.474)$ $2.936 * 0.2975 * 0.474$ Constant cut5 $2.975 * * (0.474)$ $2.936 * 0.2975 * 0.474$ Constant cut6 $3.784 * * (0.499)$ $3.751 * 0.2975 * 0.474$ Constant cut7 $4.654 * * (0.577)$ $4.624 * 0.577$ Constant cut8 $5.763 * * (0.808)$ $5.735 * 0.2975 * 0.0490$ Log likelihood -1327.7393 -1327.7393		0.115 (0.242
Constant cut1 $-0.923^{**}(0.431)$ $-0.923^{**}(0.431)$ Constant cut2 $0.241(0.432)$ $0.223^{**}(0.432)$ Constant cut3 $1.201^{***}(0.442)$ $1.187^{**}(0.442)$ Constant cut4 $2.189^{***}(0.464)$ $2.166^{**}(0.474)$ Constant cut5 $2.975^{***}(0.474)$ $2.936^{**}(0.474)$ Constant cut6 $3.784^{***}(0.499)$ $3.751^{**}(0.474)$ Constant cut7 $4.654^{***}(0.577)$ $4.624^{**}(0.577)$ Constant cut8 $5.763^{***}(0.808)$ $5.735^{**}(0.808)$ N 976 Pseudo R ² 0.0490 Log likelihood -1327.7393		0.480* (0.253
$\begin{array}{cccccccccccccccccccccccccccccccccccc$).943 (0.578)	-0.988 (0.621
Constant cut3 1.201^{***} (0.442) 1.187 Constant cut4 2.189^{***} (0.464) 2.166^{**} Constant cut5 2.975^{***} (0.474) 2.936^{**} Constant cut6 3.784^{***} (0.499) 3.751^{**} Constant cut7 4.654^{***} (0.577) 4.624^{**} Constant cut8 5.763^{***} (0.808) 5.735^{**} N 976 Pseudo R ² 0.0490 Log likelihood -1327.7393	0.229 (0.580)	0.197 (0.622
Constant cut4 $2.189^{***}(0.464)$ 2.166^{*} Constant cut5 $2.975^{***}(0.474)$ 2.936^{*} Constant cut6 $3.784^{***}(0.499)$ 3.751^{*} Constant cut7 $4.654^{***}(0.577)$ 4.624^{*} Constant cut8 $5.763^{***}(0.808)$ 5.735^{*} N976Pseudo R ² 0.0490 Log likelihood -1327.7393	87** (0.587)	1.163* (0.628
Constant cut5 2.975^{***} (0.474) 2.936^{*} Constant cut6 3.784^{***} (0.499) 3.751^{*} Constant cut7 4.654^{***} (0.577) 4.624^{*} Constant cut8 5.763^{***} (0.808) 5.735^{*} N 976 Pseudo R ² 0.0490 Log likelihood -1327.7393	6*** (0.597)	2.147*** (0.637
$\begin{array}{ccccc} Constant cut6 & 3.784^{***} (0.499) & 3.751^{*} \\ Constant cut7 & 4.654^{***} (0.577) & 4.624^{*} \\ \hline Constant cut8 & 5.763^{***} (0.808) & 5.735^{*} \\ \hline & N & 976 \\ \hline & Pseudo R^2 & 0.0490 \\ \hline & Log likelihood & -1327.7393 \\ \hline \end{array}$	6*** (0.603)	2.919*** (0.643
$\begin{array}{c} \text{Constant cut7} & 4.654^{***} (0.577) & 4.624^{*} \\ \hline \text{Constant cut8} & 5.763^{***} (0.808) & 5.735^{*} \\ \hline & & & & \\ & & & & \\ & & & & \\ & & & &$	1*** (0.627)	3.737*** (0.666
Constant cut8 5.763*** (0.808) 5.735* N 976 Pseudo R ² 0.0490 Log likelihood -1327.7393	4*** (0.688)	4.609*** (0.729
$\begin{array}{c c} N & 976 \\ Pseudo R^2 & 0.0490 \\ Log likelihood & -1327.7393 \end{array}$	5*** (0.892)	5.717*** (0.929
Pseudo \mathbb{R}^2 0.0490Log likelihood-1327.7393	968	96
Log likelihood -1327.7393	0.0492	0.054
	-1311.683	-1303.801
	136.61	1505.801
χ 150.40 p> 0.0000	0.0000	0.000
Notes: significant at *** p<0.01, ** p<0.05, * p<0.1 (robust standard errors in		

Table 1 Acceptability of informal employment: ordered logistic model