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# **Explaining the prevalence of illegitimate wage practices in Southern Europe: an institutional analysis**

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# **Explaining the prevalence of illegitimate wage practices in Southern Europe: an institutional analysis**

## **Abstract**

This paper proposes that the prevalence of illegitimate wage practices in Southern European societies results from the discord between the formal rules (formal institutions) and the socially shared unwritten rules that reflect citizens' beliefs (informal institutions). To evaluate this, a 2013 survey is reported on whether employers in five Southern European countries fraudulently evade tax and social security payments by paying employees a portion of their salary off-the-books. A strong association is revealed between the extent of wage under-reporting and the degree of institutional asymmetry across these societies. The implications for theorising illegitimate wage practices are then explored.

**Keywords:** informal economy; undeclared work; shadow economy; tax evasion; institutional analysis; Southern Europe.

## **Introduction**

In Southern European nations, an emergent literature has begun to pinpoint the multifarious illegitimate wage practices being used by employers to evade paying their full tax and social payments owed to the authorities and thus reduce their labour costs. These illegitimate wage practices range from employing undeclared workers, through outsourcing production to the 'bogus self-employed' to under-reporting the wages of their formal employees (Baric & Williams 2013, Gaspareniene, Kartasova, & Remeikiene 2014, Hudson et al. 2012, Kaitedlidou et al. 2013, Remeikiene, Gasparaeniene & Kartasova 2014, Roberts 2013,

Schneider 2013, Williams 2010a,b, 2012, Williams, Fethi & Kedir 2011, Williams et al. 2013). Indeed, with some estimates suggesting that around one-fifth of national income in Southern European nations is not declared to the authorities and that a similar proportion of employment in Southern Europe is in the undeclared economy, which is higher than in the European Union as a whole (Schneider & Williams 2013), tackling these illegitimate wage practices in Southern Europe is not some minor issue. Addressing these practices is important however, not only because of the relatively greater amounts of money being lost by Southern European governments which could otherwise pay for social protection at a level similar to other European regions. These illegitimate wage practices also lead to a worsening of the quality of working conditions and represent unfair competition for legitimate businesses in Southern Europe and unless they are addressed, they will put mounting pressure on these legitimate businesses to themselves start flouting the formal regulations, thus resulting in a vicious levelling down of working conditions in Southern Europe compared with elsewhere (Andrews, Caldera Sanchez & Johansson 2011, ILO 2014, TUC 2008).

Until now, illegitimate wage practices have been explained largely in terms of country-level structural conditions such as the lack of economic development and modernisation of governance, high taxes and state corruption, or the inadequate levels of state intervention and protection of workers (see Williams 2013). The problem with this approach which highlights such country-level structural conditions as the causes of illegitimate wage practices however, is that they fail to explain why some employers and employees in a country engage in illegitimate practices and others do not. In other words, they fail to take agency into account in their explanations.

Here therefore, the aim is to advance a new way of theorising illegitimate wage practices in Southern Europe. Drawing inspiration from institutional theory (Baumol & Blinder 2008, Helmke & Levitsky 2004, North 1990, Webb et al 2009), illegitimate wage

practices are here theorised as resulting from the lack of alignment of the codified laws and regulations of a society's formal institutions with the norms and values of its citizens that produce socially shared unwritten rules and understandings (i.e., informal institutions). The greater the non-alignment of these formal and informal institutions, the higher is the prevalence of illegitimate wage practices. This applies both at the individual- and country-level. Where there is a lack of alignment of state morality (the rules of formal institutions) and individual morality (the norms and beliefs of citizens), some employers and employees will engage in illegitimate wage practices. This is similarly the case at a country level. When the norms, values and beliefs of a country's population are not aligned with the formal rules expressed in the codified laws and regulations, such as due to the lack of trust in government and the rule of law, the assertion is that there will be a greater propensity to engage in illegitimate wage practices.

The intention in this paper therefore, is to advance and evaluate this new theoretical perspective which understands illegitimate wage practices as resulting from the discord between formal and informal institutions (i.e., state morality and individual morality). To advance and evaluate this institutionalist explanation, the objective here is to evaluate its validity in relation to one specific illegitimate wage practice which is prominent in Southern European nations. This is the practice whereby employers fraudulently reduce their tax and social security payments, and thus their labour costs, by paying their employees two salaries, an official declared salary which is declared to the authorities for tax and social security purposes, and an unofficial ('envelope') wage which is not declared. In section two therefore, we briefly review the previous literature on this illegitimate wage practice of under-reporting wages and propose a hypothesis regarding the relationship between the propensity to under-report wages and the degree of institutional incongruence. Section 3 then introduces the data set used to test this hypothesis, namely a 2013 survey involving 1,626 face-to-face interviews

with formal employees in six Southern European countries (Cyprus, Greece, Italy, Malta, Portugal and Spain), followed in the fourth section by the results on the relationship between the propensity to under-report wages and the degree of institutional incongruence. The fifth and final section then draws conclusions by discussing the theoretical implications of the findings.

### **Illegitimate Wage Practices and Institutional Theory**

In the European Union, there is a clear west/east and north/south divide regarding both the prevalence and character of illegitimate work practices. Such practices are not only more extensively used in Southern than Northern European countries, and in Eastern compared with Western ones (Schneider 2013, Williams 2014b, Williams & Padmore 2013), but so too do the type of illegitimate work practices differ. In Northern Europe, illegitimate work seldom takes the form of waged employment and more often the form of ‘paid favours’ where individuals undertake undeclared tasks on a self-employed basis for other households to help them out, such as babysitting. In Southern Europe, however, illegitimate work is more commonly waged work. Some is wholly undeclared work but the majority involves employers paying their formal employees an undeclared (‘envelope’) wage in addition to their declared salary so as to evade the full tax and social security payments owed to the state and thus reduce their labour costs (Eurofound 2013; Williams 2014a, Williams & Padmore 2013).

Although some one-fifth of national income in Southern European countries is not declared to the authorities (Schneider & Williams 2013), this differs across Southern European countries. For example, in 2013, the proportion of national income not declared to the authorities was estimated to be equivalent to 25.2 per cent of GDP in Cyprus, 24.3 per cent in Malta, 23.6 per cent in Greece, 21.1 per cent in Italy, 19.0 per cent in Portugal and 18.6 per cent in Spain (Schneider 2013). There are also significant variations in the character

of illegitimate work. For example, a 2007 Eurobarometer survey reveals that no employees in Malta reported receiving envelope wages and consequently illegitimate work is entirely composed of wholly undeclared work. In Cyprus however, illegitimate work is on the whole in the form of envelope wages and in Spain, Italy, Greece and Portugal, envelope wages again predominate as the major form of illegitimate work, albeit with a small proportion conducted as wholly undeclared work (Eurofound 2013; Williams 2014a, Williams et al. 2013).

In this paper therefore, and given that paying formal employees an additional ‘envelope wage’ is the most common form of illegitimate work in Southern Europe, the focus is upon explaining this practice. Until recently, this illegitimate work practice received very little attention either in Southern Europe or beyond. Based on a dualistic depiction that viewed employment as either declared or undeclared, the possibility that a job could be at the same time both declared and undeclared was not even recognised.

Since the turn of the millennium, however, a small emergent literature has revealed how formal employers often reduce their tax and social security payments and therefore labour costs by paying their formal employees two salaries; an official declared salary and an additional undeclared (‘envelope’) wage which is hidden from the authorities for tax and social security purposes. Until now, this illegitimate wage practice has been mostly studied in Eastern and Central European countries (Karpuskiene 2007, Meriküll & Staehr 2010, Neef 2002, Sedlenieks 2003, Žabko & Rajevska 2007, Woolfson 2007, Williams 2007). In recent years however, the prevalence of this illegitimate practice has also started to be studied in South-Eastern Europe (Williams 2010a,b,c, Williams, Fethi & Kedir 2011, Williams et al. 2013). These studies reveal that in 2007 prior to the economic crisis, some one in six (16 per cent) formal employees in the South-East European countries of Bulgaria, Cyprus, Greece, Romania and Slovenia received envelope wages from their employers, receiving on average 60 per cent of their gross salary on an undeclared basis. Until now, however, no research has

focused upon this illegitimate wage practice in relation to Southern Europe. This paper therefore fills that gap.

The way in which this illegitimate practice operates is that usually when an employee is appointed, the employer agrees with the employee an official declared salary, which is detailed in a formal written contract, but they also come to a verbal unwritten agreement regarding an additional undeclared (envelope) wage (Chavdarova 2014, Williams 2009, Woolfson 2007). This verbal unwritten agreement might be simply that the employee will be paid a higher wage than is in the formal written contract. This, however, is unusual. Normally, conditions will be attached to receiving this additional undeclared wage. For example, the employee may have to agree not to take their full entitlement to annual leave, to work longer hours (which takes them over the maximum hours in the working hours directive or will result in them being paid less than the minimum hourly wage), or to do a different job to that specified in their formal written contract (Chavdarova 2014, Williams 2014a). In all such cases nevertheless, there is a shared understanding between the employer and employee that this verbal contract supersedes the formal written contract and constitutes the unwritten ‘psychological contract’ regarding their conditions of employment (Rousseau 1995). Such verbal agreements of course are not necessarily illegitimate since in many countries verbal contracts hold the same weight in law as written contracts. However, this particular form of verbal contract is illegitimate because it is an agreement to fraudulently under-report the wage earned by an employee so as to not pay the full tax and social security dues owed by the employee and employer.

Until now, most studies of this illegitimate wage practice have been largely empirical describing its varying prevalence. Few have sought to explain this practice. Indeed, the only known previous attempt is a study by Williams (2013) which draws upon theories of the wider undeclared economy to seek explanations. To do this, the validity of three wider



theories are analysed, namely a ‘modernisation’ school which seeks to explain envelope wages in terms of the lack of economic development and modernisation of governance, a ‘neo-liberal’ school which explains envelope wages as resulting from high taxes, state corruption and too much state interference in the workings of the free market, and a ‘political economy’ school which conversely lays the blame on inadequate state intervention and the lack of protection of workers. Using simple bivariate analyses of whether cross-national variations in the prevalence of envelope wages are correlated with cross-national variations in the structural characteristics each deems important, the finding from an analysis across the 27 member states of the European Union (EU27) is that the neo-liberal thesis is refuted and the modernisation and political economy theories positively confirmed. The result is a call for a neo-modernisation theory which synthesises these two perspectives and views envelope wages to result from economic under-development, a lack of modernisation of government and too little state intervention to protect workers. The problem with all these explanations however, is that although they may explain the cross-national variations in the prevalence of envelope wages, they fail to explain why some individuals facing the same structural conditions participate in this illegitimate wage practice and others do not; in other words, they fail to take agency into account.

In this paper therefore, the aim is to advance the theorisation of illegitimate wage practices by evaluating a new way of explaining them which can take agency into account. We here argue that an institutionalist analysis provides such a theoretical lens (Baumol & Blinder 2008, Helmke & Levitsky 2004, North 1990). Viewing institutions as the cognitive, normative and regulative structures that give meaning to social behaviour (Scott, 1995), institutional theory views all societies as having codified regulations and laws (i.e., formal institutions) that constitute the legal rules of the game. It also recognises that every society has informal institutions which are the ‘socially shared rules, usually unwritten, that are

created, communicated and enforced outside of officially sanctioned channels' (Helmke & Levitsky 2004, p. 727). These, therefore, are the norms, values and beliefs held by citizens which reflect their individual morality about what is right. When the formal and informal institutions in a society are in alignment, and consequently state morality is in symmetry with individual morality, then the proposal here is that illegitimate wage practices will be largely absent because the socially shared norms, values and beliefs of the population will be aligned with the formal rules. However, when there is incongruence between the formal and informal institutions, such as when there is a lack of trust in government and the rule of law, it is proposed that illegitimate wage practices will prevail that are grounded in the socially shared norms of the society, but which are illegitimate so far as the formal rules are concerned.

It is here propounded that the illegitimate wage practice of wage under-reporting represents an exemplar of a practice which reflects the non-alignment of the formal and informal institutions in a society. Wage under-reporting arises as a direct result of individual employers and employees not adhering to the codified laws and regulations of formal institutions and instead adopting unwritten socially shared rules agreed via a verbal unwritten agreement to pay an additional envelope wage in order to evade the full tax and social security payments owed. This applies not only at an individual-level but also at a societal-level. When the formal codified laws and regulations of a country are not aligned with the socially shared norms, values and beliefs of the population, such as when there is a lack of trust in government and the rule of law (European Commission 2014a,b), the prevalence of illegitimate wage practices is likely to be greater. To evaluate whether this is the case, therefore, the degree of institutional incongruence needs to be measured, which can be achieved in the context of illegitimate wage practices by examining the level of tax morality of a person or population, which is their intrinsic motivation to pay taxes owed (McKerchar, Bloomquist & Pope 2013, Torgler 2011, Torgler & Schneider 2007). Using the level of tax

morality as a measure of the degree of institutional asymmetry therefore, we propose the following hypothesis to test this institutional incongruence thesis:

Institutional incongruence hypothesis: the greater is the asymmetry between state and individual morality, the greater will be the propensity to under-report wages.

Indeed, a previous study reveals that smaller businesses and those in the construction sector are more likely to receive envelope wages, as are men, younger persons and the lower paid (Eurofound 2013). Until now however, whether these business types and employee groups engaged in illegitimate wage practices also have a lower tax morality, has not been evaluated. By testing this hypothesis, this can be evaluated. In sum, the intention here is to evaluate whether there is a relationship between the propensity to engage in this illegitimate wage practice and the degree of institutional incongruence. Given that this has not been before evaluated, to fill this gap, we here do so in the context of Southern Europe, which is a region in which there is a greater propensity to engage in such a practice.

## **Methodology**

To analyse the relationship between the likelihood of wage under-reporting and the degree of institutional incongruence, data is here reported from special Eurobarometer survey no. 402 which involved 1,626 face-to-face interviews conducted with employees in 2013 in six Southern European countries, namely Cyprus, Greece, Italy, Malta, Portugal and Spain. In all six Southern European nations, a multi-stage random (probability) sampling methodology was used to ensure that on the issues of age, gender, locality and region, each country as well as each level of the sample was representative in proportion to its population size in relation to these issues. Here therefore, for univariate analysis we employ the sample weighting scheme

as recommended in both the wider literature (Sharon & Liu 1994, Solon, Haider & Wooldridge 2013, Winship & Radbill 1994) and the Eurobarometer methodology, to obtain meaningful descriptive results. For the multivariate analysis however, a debate exists over whether to use a weighting scheme. Reflecting the dominant viewpoint, the decision was taken not to do so (Pfefferman 1993; Sharon & Liu 1994; Solon, Haider & Wooldridge 2013; Winship & Radbill 1994).

These face-to-face interviews covered firstly attitudinal questions about undeclared wage practices followed by questions on whether participants purchased goods and services on an undeclared basis, received envelope wages and participated in undeclared work. In this paper, we focus upon the questions on envelope wages. Firstly, the 1,626 participants in these six Southern European countries who reported that they were formal employees were asked whether they had received an additional undeclared wage from their employer in addition to their official declared wage in the prior 12 months, secondly, whether this envelope wage was for their regular work, as payment for overtime hours, or for both and, thirdly, what percentage of their gross annual income from their employment was received as an additional undeclared wage.

To analyse the above hypothesis, the dependent variable is whether employees received under-reported wages. This is based on their response to the question: Sometimes employers prefer to pay all or part of the salary or the remuneration (for extra work, overtime hours or the part above a legal minimum) in cash and without declaring it to tax or social security authorities. Has your employer paid you any of your income in the last 12 months in this way?. To analyse these hypotheses regarding whether at the individual- and country-level, the propensity to under-report wages is associated with the degree of institutional asymmetry, the first requirement was to develop a tax morality index for each survey participant and country. To do this, the responses of the employees to attitudinal questions in

the survey were analysed about how acceptable the employees view six non-compliant tax behaviours using a ten-point scale (where one means ‘absolutely unacceptable’ and ten means ‘absolutely acceptable’), namely: 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 doesn’t 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 tax morality index for each individual and nation is calculated using the mean score across these six attitudinal questions. This then enabled the two hypotheses regarding whether there is a relationship between the degree of institutional incongruence and the propensity to engage in wage under-reporting to be evaluated.

Meanwhile, and to evaluate which businesses and employees show a greater propensity to engage in wage under-reporting, the following independent variables were included:

- 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 99 people, and value five for firms with 100 or more than 100 people.
- Occupation: a categorical variable grouping employed respondents by their occupation with value one for managers, value two for other white collars, and value three for manual workers.
- Gender: a dummy variable with value one for males and zero for females.
- Age: a categorical variable for the age of the respondent with value one for those aged 15 to 24 years old, value two for those aged 25 to 39, value three for those aged 40 to 54 and value four for those aged 55 and over.

- Age formal education ended: a categorical variable for age of the respondent when stopped full time education with value one for 15 years old and under, value two for 16-19 years old, and value three for 20 years old or over.
- Difficulties paying bills: a categorical variable for the respondent difficulties in paying bills with value one for having difficulties most of the time, value two for occasionally, and value three for almost never/ never.
- Country: a categorical variable for the country where the respondent lives with value one for Italy, value two for Greece, value three for Spain, value four for Portugal, and value five for Cyprus.

Of the 1,626 face-to-face interviews conducted with employees in 2013 across the six South European countries, 1,333 have no missing data on any of the dependent and independent variables and are therefore here analysed. The analytical procedures used to test this hypothesis were as follows. To evaluate the institutional incongruence hypothesis at the cross-national level, and given the non-parametric nature of the data, a Spearman's bivariate correlation is used to determine whether a statistically significant relationship exists between cross-national variations in tax morality and cross-national variations in wage under-reporting. To test the institutional incongruence hypothesis at the level of individuals meanwhile, firstly, and again given the nonparametric nature of the data, a two-sample Wilcoxon rank-sum (Mann-Whitney) test is used to determine whether the median tax morality score of those receiving envelope wages significantly differs from the median score of those not receiving envelope wages. Secondly, and following this, a logistic regression analysis is used to examine on the one hand, whether the relationship between the level of tax morality and propensity to under-report wages and on the other hand, whether the propensity of various businesses types and employee groups to under-report wages, remains statistically significant when the other independent variables are introduced and held constant.

Below we report the findings. Before doing so however, it is briefly necessary to discuss the sincerity and/or willingness of the respondents to give honest answers since they are after all, discussing illegitimate work practices. In this survey, we have interviewed employees rather than their employers who would obviously be less willing to respond honestly. Examining the interviewers' views on the degree of cooperation of these employees when completing the survey, the finding is that 46 per cent of the Southern European participants were viewed by the interviewers as displaying excellent cooperation, 50 per cent good or average cooperation and just 4 per cent poor cooperation. Therefore, it can be tentatively assumed that these employees were cooperative and displayed no hint that they were hiding their engagement in such practices from the interviewer.

### **Findings**

Of the employees interviewed in 2013 across these six South European countries, one in 33 (three per cent) reported that they had received envelope wages from their employer in the prior 12 months, receiving on average 50 per cent of their gross annual salary as an additional undeclared wage. This therefore, is not a minor practice. It appears to be fairly widely used by employers as a strategy for reducing their labour costs in Southern European countries. As Table 1 reveals however, in 2013, there continues to be a clear west/east and north/south divide in the European Union. Envelope wages remain more common in Southern European member states than in Northern countries, and in Eastern member states compared with Western ones.

INSERT TABLE 1 HERE

Compared with 2007 and the pre-economic crisis period nevertheless, there has been a decline in the use of envelope wages both in the EU27 as a whole as well in each European region. This decrease in under-reporting formal salaries during the economic crisis is doubtless the result of a combination of at least three trends, namely: the increased use of wholly undeclared labour; the increased use of more flexible labour (e.g., part-timers and temporary employees), and the macro-level decline in wage and social costs due to austerity measures. The combined effect is that it is no longer so necessary to reduce labour costs by fraudulently paying employees an additional envelope wage so as to avoid the fully tax and social security payments owed. There are now alternative options more readily available to employers to reduce labour costs.

Table 1 also reveals that this illegitimate wage practice is not equally prevalent across all the Southern European countries surveyed. Instead, it is most prevalent in Greece where five per cent of declared employees receive an additional non-reported wage and in Spain where four per cent of formal employees receive under-declared wages. However, it is less prevalent in Cyprus and Italy (two per cent) and Malta, where none of the formal employees report that they receive such an envelope wage. Again, this perhaps reflects how the economic crisis has resulted in some shift away from using envelope wages. Instead, some combination of both wholly undeclared labour and cheaper flexible formal labour is perhaps now being used. Despite this, such wage under-reporting remains common in Southern Europe with one in 33 formal employees receiving an additional envelope wage. Interestingly, Greece is the only Southern European country in which envelope wages have become more common during the economic crisis, signalling the significantly worsening situation in Greece compared with elsewhere.

Is it the case therefore, that the institutional incongruence hypothesis is valid? Here, we test this at the individual, population group and cross-national levels. In order to test the



relationship between the cross-national variations in the propensity to under-report wages and the cross-national variations in the degree of tax morality, the final column of Table 1 reports the level of tax morality in each of the six Southern European nations as well as for the EU27 as a whole as well as each European region. This reveals that the level of tax morality is not the same across these Southern European nations. The level of tax morality (i.e., the adherence of the population to the codified laws and regulations of formal institutions) is lowest in Italy and Portugal, whilst individual morality is better aligned with state morality in Greece, Spain, Malta and Cyprus. Indeed, putting them in ranked order by the degree to which the tax morality of the population adheres to the state morality (i.e., the codified laws and regulations of the formal institutions), Cyprus comes out top, followed by Malta, Greece and Spain, with Portugal and Italy at the bottom of the list with the highest degree of incongruence between the individual morality of the population and the codified laws and regulations of the formal institutions.

To evaluate whether these cross-national variations in the prevalence of wage under-reporting are associated with cross-national variations in the level of institutional asymmetry (measured by tax morality), a Spearman's bivariate analysis across the EU27 reveals a statistically significant strong association ( $\rho=0.667$ ,  $p<0.001^{***}$ ). The direction of the association is that the lower the tax morality is in a country, the greater is the prevalence of wage under-reporting. Therefore, the institutional incongruence hypothesis is supported at a cross-national level; the propensity to under-report wages is greater in countries with higher degrees of asymmetry between state and individual morality.

Turning to whether there is also a relationship at both the individual-level and population group-level between the propensity to engage in wage under-reporting and the level of tax morality, Table 2 reports whether all businesses and employee groups are equally likely to engage in this illegitimate wage practice. The finding is that this is not the case.

Smaller businesses are more likely to pay envelope wages, especially those employing under 20 employees. Larger businesses employing over 20 employees, although paying one in 50 of their employees an under-reported wage, are less likely to engage in this illegitimate wage practice. The concentration of this illegitimate wage practice in smaller businesses is in part doubtless a result of the lack of presence of dedicated human resource management (HRM) staff and formal HRM practices in small businesses (Barrett & Mayson 2007, Benmore & Palmer 1996). The consequence is that small businesses owners and managers are more able to introduce unwritten verbal contracts that contravene the employees' formal written contract than in larger businesses where dedicated HRM staff and formal HRM practices are more widely present.

INSERT TABLE 2 HERE

Examining the employee groups more likely to receive under-reported wages, this illegal wage practice is more prevalent amongst manual workers (four per cent). So too are those with less years in formal education far more likely to receive envelope wages along with those who have difficulties paying the household bills most of the time. The tentative finding that emerges, therefore, is that it appears to be weaker and more vulnerable employees who are more likely to be targeted by employers when engaging in this illegitimate wage practice, doubtless because they are easier to persuade to accept additional terms and conditions when accepting a job. Moreover, they are perhaps due to their economic position more likely to view the formal rules of the game as being for the benefit of others rather than them, thus resulting in less allegiance to these formal rules.

To test the validity of the institutional incongruence hypothesis at the level of population groups, the final column of Table 2 reports the tax morality for different groups of

employees. Again, this reveals that some employee groups have a lower tax morality than other groups. Older workers are less tolerant of illegitimate wage practices and adhere more to the formal rules than younger workers. Similarly, managers are less tolerant of illegitimate wage practices than manual and other white collar workers, women adhere more to the formal rules than men, and both those with more years in formal education and those who have few if any difficulties paying the household bills have a higher tax morality than those with fewer years in education and those who have difficulties paying the bills.

Examining whether there is a statistically significant relationship between the level of tax morality of individuals and the propensity to engage in wage under-reporting, Table 3 reports the results of a Wilcoxon rank sum test. This reveals that those receiving under-reported wages have a lower tax morality with a median of 2.67 than those not receiving envelope wages who have a median tax morality score of 1.50 (where one=totally unacceptable and ten=totally acceptable across six tax non-compliance behaviours). This, therefore, validates the institutional incongruence hypothesis which asserts that the propensity to under-report wages will be greater in populations expressing lower levels of tax morality.

INSERT TABLE 3 ABOUT HERE

To determine whether this association remains significant when other characteristics are taken into account and held constant, Table 4 reports the results of a logistic regression analysis. We here use two additive models. Model 1 includes individual variables only, while model 2 adds the country respondent lives spatial variable. Given that in Malta no respondents declared receiving envelope wages, people from this country are excluded from the second model. To make the results comparable between the models, we here report the results of the first model twice, firstly with the entire sample and secondly, with Malta excluded. These

models reveal in the first row that the propensity to under-report wages remains strongly associated with lower levels of tax morality when the other individual-level characteristics are introduced and held constant as well as when the variable of the country they live in is introduced. The conclusion is that a strong association thus exists between tax morality and the propensity to under-report wages. The direction of the association is that as tax morality improves, and thus institutional asymmetry decreases, the propensity to under-report wages significantly declines. As such, this further validates the institutional incongruence theorisation advocated in this paper that depicts the under-reporting of wages as resulting from the lack of alignment of the codified laws and regulations of formal institutions with the social shared understandings of informal institutions regarding tax compliance.

INSERT TABLE 4 HERE

Moreover, Table 4 further examines the distribution of wage under-reporting. This reveals that many of the differences identified in the descriptive statistics above do not remain statistically significant when analysed in a logistic regression model which holds the other characteristics constant. This illegitimate wage practice is evenly distributed amongst all types of business and there is no statistically significant difference in its distribution by gender, age, years spent in formal education or occupation. There is a statistically significant difference however, in terms of the propensity to receive envelope wages and the financial circumstances of the participant. There is strong evidence that envelope wages are more prevalent among those who have difficulties most of the time in paying their household bills. This reveals that this illegitimate wage practice is largely concentrated amongst weaker and more vulnerable employees who are not only easier to persuade to accept employment contracts based on unwritten verbal agreements but who also lack adherence to the formal

rules, doubtless because they view them as made for others rather than them, and thus display a greater disregard for them.

Model 2 also provides evidence that the practice is not evenly distributed across Southern European countries. There are significant variations in the propensity to receive envelope wages cross-nationally. The changes in the coefficient of tax morality increases when controlled for country from 0.298 to 0.385, showing that tax morality better explains this illegitimate wage practice when we control for countries. This further supports our institutional incongruence hypothesis displaying that the greater is the asymmetry between state and individual morality, the greater is the propensity to under-report wages. This applies not only at the individual and population group levels but also at the cross-national level in Southern Europe.

## **Conclusions**

This paper has advanced a new way of explaining and tackling illegitimate wage practices in general and the under-reporting of salaries in particular in Southern Europe where such a practice is more prevalent than in Nordic and Western European countries. Drawing upon institutionalist theory, it has been here displayed that when formal and informal institutions are not aligned, illegitimate wage practices such as the under-reporting of salaries emerge which are embedded in unwritten socially shared rules that are 'illegitimate' in terms of the formal written rules expressed in the codified laws and regulations of formal institutions. The greater is the institutional asymmetry and thus the gap between state morality and individual morality, the higher is the propensity to engage in such practices. This is the case not only at the level of individuals, but also at the level of population groups and cross-national level in Southern Europe. The greater is the asymmetry between individual morality and state morality at the level of individuals, population groups and countries, the greater is the

likelihood that wages will be under-reported.

Indeed, this analysis reveals that individuals in financial difficulty are those whose individual morality most starkly differs to state morality and who are most likely to engage in this illegitimate wage practice. The concentration of this practice amongst weaker and more vulnerable employees is doubtless because employers find it easier to persuade them to accept such illegitimate employment contracts. Wage under-reporting is similarly more prevalent in countries where the individual morality of the population most markedly varies from state morality, namely Italy, Portugal, Spain and Greece. In countries where there is greater symmetry between individual morality and state morality (e.g., Malta, Cyprus), envelope wages are less prevalent.

In sum, this institutional incongruence thesis appears to explain the varying prevalence of envelope wages at not only the individual level but also across population groups and cross-nationally in Southern Europe. Whether this institutional theorisation is also relevant when explaining other illegitimate wage practices (e.g., bogus self-employment and undeclared work) in Southern European countries as well as beyond now needs to be evaluated. If this paper stimulates such evaluations, then it will have fulfilled its major intention.

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**Table 1** Cross-national variations in the prevalence of wage under-reporting in Southern Europe, by country

Region/ country	Number of formal employees surveyed	% of formal employees receiving under-reported salaries		% of gross income received as envelope wage (median)	Tax morality index
		2007*	2013		
EU-27	8,973	6	3	25	2.32
Western Europe	3,149	2	1	10	2.19
Nordic nations	1,106	2	1	3	1.91
East-Central Europe	3,385	10	6	30	2.86
Southern Europe	1,333	4	3	50	2.29
Greece	226	3	5	20	1.86
Spain	233	5	4	90	2.00
Portugal	245	4	3	90	2.46
Cyprus	190	4	2	50	1.51
Italy	335	6	2	25	2.51
Malta	104	1	0	--	1.64

\* special Eurobarometer no. 284 results, according to Williams & Padmore 2013

**Source:** calculations based on special Eurobarometer survey no. 402 (2013): Undeclared Work in the European Union (European Commission 2013).

**Table 2** Prevalence of wage under-reporting in Southern Europe, by type of business and employee group

N = 1,333	% employees receiving under-reported salaries in prior year	% of gross salary received as envelope wage (mean)	% of all who receive under-reported salaries	% of all employees	Tax morality index
All Southern Europe	3	59	100	100	2.29
Firm size:					
1 - 4 employees	4	56	25	18	2.39
5 – 9	1	79	10	21	2.28
10 – 19	6	62	34	17	2.49
20 – 99	2	22	19	23	2.32
100 or more	2	65	12	21	2.01
Occupation:					
Managers	2	32	7	13	2.01
Other white collars	2	37	23	40	2.35
Manual workers	4	73	70	47	2.31
Gender:					
Man	3	70	53	53	2.32
Woman	3	44	47	47	2.25
Age:					
15-39	3	48	48	49	2.37
40-54	3	67	41	40	2.27
55+	3	72	11	11	1.98
Age formal education ended:					
<15	5	77	31	16	2.29
16-19	2	70	41	52	2.31
20+	3	31	28	32	2.25
Difficulties paying bills:					
Most of the time	5	61	28	16	2.38
From time to time	3	66	46	43	2.56
Almost never/never	2	46	26	41	1.97

**Source:** calculations based on special Eurobarometer survey no. 402 (2013): Undeclared Work in the European Union (European Commission 2013).

**Table 3** Two-sample Wilcoxon rank-sum (Mann-Whitney) test

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	Obs.	Rank sum	Expected
People not receiving envelope wages	1294	856365	863098
People receiving envelope wages	39	32746	26013
Combined	1333	889111	889111

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Unadjusted variance      5610137.00  
Adjustment for ties      -216751.77  
Adjusted variance      5393385.23  
Ho: Tax morality of people not receiving envelope wages = Tax morality of people receiving envelope wages  
     $z = -2.899$   
Prob>  $|z| = 0.0037$

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**Note:** Tax morality median of people not receiving envelope wages: 1.5; tax morality median of people receiving envelope wages: 2.67.

**Source:** calculations based on special Eurobarometer survey no. 402 (2013): Undeclared Work in the European Union (European Commission 2013).

**Table 4** Logistic regressions of the propensity to under-report wages in Southern Europe

	Model 1			Model 1 (Malta excluded)			Model 2		
	$\beta$	se( $\beta$ )	Exp( $\beta$ )	$\beta$	se( $\beta$ )	Exp( $\beta$ )	$\beta$	se( $\beta$ )	Exp( $\beta$ )
Tax morality (Centred)	0.276	0.097 ***	1.317	0.298	0.104 ***	1.347	0.385	0.115 ***	1.470
Gender (Female)									
Male	0.032	0.333	1.033	0.004	0.334	1.004	0.031	0.338	1.032
Age (Centred age: 41)	0.001	0.016	1.001	-0.0001	0.017	1.000	0.004	0.016	1.004
Formal education (15 and under)									
16-19	0.026	0.478	1.026	0.082	0.478	1.085	0.086	0.501	1.090
20+	0.261	0.559	1.298	0.312	0.560	1.366	0.225	0.590	1.253
Difficulties paying bills last year (Most of the time)									
From time to time	-0.968	0.362 ***	0.380	-0.980	0.365 ***	0.375	-0.979	0.376 ***	0.376
Almost never/ never	-1.647	0.528 ***	0.193	-1.593	0.527 ***	0.203	-1.801	0.578 ***	0.165
Occupation (Managers)									
Other white collars	0.537	0.676	1.710	0.391	0.680	1.479	0.577	0.690	1.780
Manual workers	0.531	0.688	1.701	0.432	0.695	1.540	0.368	0.699	1.445
Firm size (1-4 employees)									
5 – 9	-0.552	0.497	0.576	-0.499	0.496	0.607	-0.405	0.500	0.667
10 – 19	-0.156	0.463	0.855	-0.118	0.463	0.889	-0.014	0.472	0.986
20 – 99	-0.696	0.520	0.499	-0.634	0.520	0.530	-0.641	0.528	0.527
100 or more	-0.651	0.560	0.521	-0.574	0.561	0.563	-0.630	0.573	0.532
Country (Italy)									
Greece							1.118	0.583 *	3.058
Spain							1.755	0.591 ***	5.783
Portugal							0.779	0.598	2.179
Cyprus							0.719	0.710	2.053
Constant	-2.930	0.857 ***	0.053	-2.850	0.862 ***	0.058	-3.779	1.013 ***	0.023
N		1333			1,229			1,229	
Pseudo R <sup>2</sup>		0.0844			0.0790			0.1082	
Log likelihood		-161.28955			-159.27234			-154.22625	
$\chi^2$		29.74			27.34			37.43	
p>		0.0051			0.0112			0.0029	

Notes: Significant levels at \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; All coefficients are compared to the benchmark category, shown in brackets. Indicators were centred to the mean obtained using the weighting scheme. We have also controlled for marital status, number of children, self-assessment of their social status and the region the respondent lives. The direction of the associations and the significances does not change.

**Source:** calculations based on special Eurobarometer survey no. 402 (2013): Undeclared Work in the European Union (European Commission 2013).