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# **Explaining and tackling envelope wages in the Baltic Sea region: an institutional perspective**

## **Abstract**

### **Purpose**

The aim of this paper is to advance a new way of explaining and tackling the illegitimate wage practice where employers pay their employees an undeclared (envelope) wage in addition to their formal salary. Drawing upon institutional theory, it is here proposed that envelope wages result from the lack of alignment of a society's formal institutions (i.e., the codified laws and regulations) with its informal institutions (i.e., the socially shared unwritten understandings which reflect citizens' norms, values and beliefs).

### **Methodology**

To evaluate this, data is reported from a 2013 Eurobarometer survey involving 1,738 face-to-face interviews with formal employees in four Baltic countries, namely Estonia, Latvia, Lithuania and Poland.

### **Findings**

The finding is that the greater is the asymmetry between the formal and informal institutions (i.e., the level of disagreement of citizens with the codified laws and regulations of formal institutions), the higher is the propensity to pay envelope wages. This is the case at both the individual- and country-levels.

### **Practical implications**

To reduce the prevalence of envelope wages, the resultant argument is that the values of employers and employees need to be aligned with the formal institutions. This requires alterations not only in the informal institutions, using measures such as tax education, awareness raising campaigns and normative appeals, but also changes in formal institutions so as to improve trust in government by fostering greater procedural justice, procedural fairness and redistributive justice.

### **Originality/value**

This is the first paper to apply institutional theory to explaining and tackling envelope wages in the Baltic Sea region.

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

## **Introduction**

In the Baltic Sea region and beyond, a small but burgeoning literature identifies that many employers evade their full tax and social payment liabilities and reduce their labour costs by paying their employees two wages, an official declared salary and an additional undeclared (envelope) wage (Kapelyushnikov et al., 2012; Kukk and Staehr, 2014; Meriküll and Staehr, 2010; Morris and Polese, 2014; Rodgers and Williams, 2009; Putniņš and Sauka, 2011; Sasunkevich, 2014; Sauka and Putniņš, 2011; Surdej and Ślęzak, 2009; Williams, 2009a,b, 2010, 2014b; Williams et al., 2013). This illegitimate wage arrangement is important to study because firstly, money is being lost by governments which could otherwise pay for social protection and wider social cohesion projects, secondly, it results in a decrease in the quality of working conditions and thirdly, it represents unfair competition for legitimate enterprises thus putting pressure on them to also flout the laws and regulations and pay envelope wages (Andrews et al., 2011; ILO, 2014; TUC, 2008). For employees, meanwhile, it is important to study not only because under-reporting their wages reduces their entitlement to credit, pensions and social protection, but it also results in employers imposing conditions on employees such as that the employee will not take their full holiday entitlement and that they will work longer hours than is specified in their formal contract in return for receiving this additional undeclared (envelope) wage (Chavdarova, 2014; Williams, 2014a).

Until now, the prevalence of envelope wages has been explained 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 identifying such country-level structural conditions as the causes of envelope wages, however, is that this fails to explain why some employers and employees in a country engage in such practices and others do not. In other words, it fails to take agency into account.

Here therefore, the aim is to advance a new way of explaining and tackling envelope wages in the Baltic Sea region. Drawing upon institutional theory (Baumol and Blinder, 2008; Helmke and Levitsky, 2004; North, 1990; Webb et al., 2009), envelope wages are here viewed as arising from the lack of alignment of a society's formal institutions (i.e., the codified laws and regulations) with its informal institutions (i.e., the norms, values and beliefs of its citizens regarding tax compliance). This applies both at the individual- and country-level. When individual morality (the norms and beliefs of individual citizens) is not aligned with the rules of formal institutions, employers and employees will be more likely to engage in envelope wage practices. This is similarly the case on a national 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, there will be a greater propensity to engage in envelope wage practices.

The intention in this paper is to advance and evaluate this new institutional theory explanation. In section 2 therefore, we briefly review the previous literature on envelope wages and propose a set of hypotheses regarding the relationship between the likelihood of paying envelope wages and the degree of institutional asymmetry. Section 3 then introduces the data set used to test these hypotheses, namely a 2013 survey involving 1,738 face-to-face interviews with formal employees in four Baltic Sea region countries (Estonia, Latvia, Lithuania and Poland), followed in the fourth section by the results on the relationship between the prevalence of envelope wages and the degree of institutional asymmetry. The fifth section then discusses the theoretical and policy implications before the final section draws some conclusions.

## **Explaining envelope wages: an institutional approach**

Over the past decade or so, a small but growing literature has shown 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. Interestingly, this illegitimate wage arrangement has been mostly studied in relation to Baltic Sea countries such as Estonia (Meriküll and Staehr, 2010), Latvia (Meriküll and Staehr, 2010; Sedlenieks, 2003; Žabko and Rajevska, 2007) and Lithuania (Karpuskiene, 2007; Meriküll and Staehr, 2010; Woolfson, 2007), although studies have also been conducted in other Central and East European nations such as Bulgaria (Chavdarova, 2014), Romania (Neef, 2002), Russia (Williams and Round, 2007) and Ukraine (Williams, 2007). Indeed, one earlier study conducted in 2007 reveals that in the Baltic Sea region, some one in eight formal employees had received an envelope wage from their formal employer during the year prior to the survey (Williams, 2009a). This is not therefore some minor practice. Employers pay a significant proportion of their employees an envelope wage so as to decrease their labour costs.

The way in which this practice usually operates is that 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 reach a verbal unwritten agreement regarding an additional undeclared (envelope) wage (Chavdarova, 2014; Williams, 2009b; Woolfson, 2007). This verbal unwritten agreement might be simply that the employee receives a higher wage than in the formal written contract. However, that is unusual. More commonly, conditions are attached to receiving the additional envelope wage. For example, employees have to agree not to take their full holiday entitlement, to work longer hours than stipulated in the formal contract (taking them over the maximum hours in the working hours directive or

resulting in them being paid less than the minimum wage), or to do different tasks to that specified in their formal written contract (Chavdarova, 2014; Williams, 2014a). The shared understanding between the employer and employee nevertheless, is that this verbal agreement about the terms and conditions of employment supersedes what is written in the formal contract. In other words, this verbal agreement represents the unwritten ‘psychological contract’ regarding the terms and conditions of their employment (Rousseau, 1995). Although verbal agreements are not by definition illegitimate and in many countries holds the same weight in law as a written contract, this particular verbal contract to pay an envelope wage is by definition illegitimate. This is because it is an agreement to fraudulently under-report the wage earned by the employee in order to evade the full tax and social security payments owed by the employee and employer. Although not a violation of the psychological contract between the employer and employee (Shore and Barksdale, 1998; Janssens et al., 2003), this fraudulent under-reporting of wages to evade the full tax and social security payments owed is however a violation of the psychological contract between the state and its tax payers. Employers and employees that is, are breaching their obligations to the state to pay the full taxes they owe.

Here, the argument is that institutional theory provides a useful lens for explaining this type of illegitimate wage arrangement (Baumol and Blinder, 2008; Helmke and Levitsky, 2004; North, 1990). Institutions represent “the rules of the game”; they prescribe the norms regarding the acceptability of activities (Denzau and North 1994; Mathias et al., 2014; North, 1990). Every society has formal institutions (i.e., codified laws and regulations) that set out the formal rules of the game. Indeed, many studies have identified how the existence of “formal institutional voids”, such as the lack of modernised governance and the consequent existence of public sector corruption, results in a greater propensity to work in the informal economy (Puffer et al. 2010; Sutter et al. 2013). All societies however, also have informal

institutions which can be defined as ‘socially shared rules, usually unwritten, that are created, communicated and enforced outside of officially sanctioned channels’ (Helmke and Levitsky, 2004: 727). These reflect the norms, values and beliefs of citizens. The norms, values and beliefs of these informal institutions are ‘complementary’ if they agree with the codified laws and regulations of the formal institutions or ‘substitutive’ if their rules are not compatible with the formal institutions (Helmke and Levitsky, 2003; North, 1990; Williams and Vorley, 2014). The proposition advanced in this paper, therefore, is that when formal and informal institutions are wholly in symmetry, envelope wages will be largely absent because individual morality (i.e., the socially shared norms, values and beliefs of informal institutions) will be aligned with the codified laws and regulations of formal institutions. However, when formal and informal institutions are not aligned, such as when there is a lack of trust in government, the proposition advanced in this paper is that envelope wages will be more prevalent.

Indeed, envelope wages exemplify what happens when formal and informal institutions are not symmetrical. Envelope wages are a direct result of employers and employees flouting the codified laws and regulations of formal institutions and reaching a shared understanding based on a verbal unwritten agreement to evade the full tax and social security payments owed. In the case of illegitimate wage arrangements such as paying envelope wages, this non-alignment of formal and informal institutions can be measured by examining the level of tax morality of a person or population, which is their intrinsic motivation to pay taxes owed or put another way, the degree to which their attitudes align with the formal institutions (McKerchar et al., 2013; Schneider and Williams, 2013; Torgler, 2011; Torgler and Schneider, 2007). Using the level of tax morality to measure the degree to which formal and informal institutions are aligned, we propose the following hypotheses to test this at both the societal-level as well as at the individual-level:

Society-level formal and informal institutional asymmetry hypothesis (H1): envelope wages will be more prevalent in countries where tax morality is lower (i.e., the asymmetry between formal and informal institutions is higher).

Citizen-level formal and informal institutional asymmetry hypothesis (H2): envelope wages will be more prevalent amongst citizens with lower tax morality (i.e., the less their beliefs regarding tax compliance align with the formal rules).

Indeed, analyses of previous surveys reveal that smaller businesses and those in the construction sector display a greater propensity to pay their employees envelope wages, and that men, younger persons and the lower paid are most likely to receive such envelope wages (Eurofound, 2013; Williams, 2014a). Until now however, whether these business types and employee groups with the greatest prevalence of envelope wages also have a lower tax morality, has not been evaluated. This can be here tested by evaluating the validity of this second hypothesis.

By testing these hypotheses therefore, the objective is to evaluate whether there is an association between the prevalence of envelope wages and level of institutional asymmetry not only at the individual level of employers and employees but also at the country level. Until now, this has not been tested. To fill this gap therefore, we report how this has been evaluated in the Baltic Sea region along with the findings.

## **Methodology**

To analyse the relationship between the prevalence of envelope wages and the degree of asymmetry between formal and informal institutions, data is here reported from a 2013 special Eurobarometer survey involving 4,036 face-to-face interviews (of which 1,738 were



with formal employees) in the four Baltic countries of Estonia, Latvia, Lithuania and Poland. In addition, we compared the 2013 data on the relationship between an employee's propensity to receive envelope wages and the level of tax morality to data from a 2007 Eurobarometer survey involving 1,600 face-to-face interviews with employees in these Baltic Sea states. Both Eurobarometer surveys employ the same methodology. In all four Baltic nations, a multi-stage random (probability) sampling methodology ensured that on the issues of gender, age, locality and region, each nation as well as each level of the sample was representative in proportion to its population size with regard to these demographics. To ensure that on the issues of gender, age, locality and region, each nation as well as each level of the sample was representative in proportion to its population size with regard to these demographics, sampling points were drawn systematically from each "administrative regional units", after stratification by individual unit and type of area. They thus represent the whole territory of the countries surveyed according to the Eurostat NUTS II (or equivalent) and according to the distribution of the resident population of the respective nationals in terms of metropolitan, urban and rural areas. In each selected sampling point, a starting address was then drawn at random. Further addresses (every Nth address) were selected by standard "random route" procedures from the initial address. In each household, the respondent was drawn at random (following the "closest birthday rule"). All interviews were conducted face-to-face in people's homes and in the appropriate national language.

Here in consequence, for univariate analysis we use the sample weighting scheme recommended in both the wider literature (Sharon and Liu, 1994; Solon et al., 2013; Winship and 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, 1994; Sharon and Liu, 1994; Solon et al., 2013; Winship and Radbill, 1994).

The face-to-face interviews covered firstly a set of attitudinal questions about undeclared work 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, the focus is upon the questions on envelope wages. Firstly, the 1,738 participants in these four Baltic countries reporting that they were formal employees were asked whether they had received an envelope wage from their employer in addition to their declared salary in the past year, secondly, whether this envelope wage was received for their regular work, as payment for overtime hours, or for both and, thirdly, the proportion of their gross annual income from employment received as an envelope wage.

To evaluate the above hypotheses, the dependent variable is whether employees received envelope wages 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 the relationship between the prevalence of envelope wages and degree of institutional incongruence, the first step was to develop a tax morality index for each survey participant and country using the attitudinal questions. To do this, the responses of the employees regarding how acceptable they viewed six non-compliant tax behaviours were examined using a 10-point scale (where 1 means ‘absolutely unacceptable’ and 10 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 Cronbach’s Alpha coefficient of the scale is 0.85 which shows a good internal consistency of the scale (Kline,

2000). Therefore, the tax morality index for each individual and nation was then calculated using the mean score across these six attitudinal questions. This enabled the relationship between the prevalence of envelope wages and the degree of institutional asymmetry to be calculated.

Meanwhile, and to evaluate the prevalence of envelope wages across different businesses and employees, the following independent variables were examined:

- Firm size: a categorical variable for the number of people that the participant's employer employs with value 1 for firms with 1 to 4 employees, value 2 for firms with 5 to 9 employees, value 3 for firms with 10 to 19 employees, value 4 for firms with 20 to 99 employees, and value 5 for firms with 100 or more than 100 employees.
- Occupation: a categorical variable grouping employed participants by their occupation with value 1 for managers, value 2 for other white collars, and value 3 for manual workers.
- Gender: a dummy variable with value 1 for men and 0 for women.
- Age: a categorical variable for the age of the participant with value 1 for those aged 15 to 24 years old, value 2 for those aged 25 to 39, value 3 for those aged 40 to 54 and value 4 for those aged 55 and over.
- Age formal education ended: a dummy variable for the age the participant stopped full time education with value 0 for 19 years old and under and value 1 for 20 years old or over.
- Difficulties paying bills: a categorical variable for whether the participant has difficulties paying bills with value 1 for having difficulties most of the time, value 2 for occasionally, and value 3 for almost never/ never.

Unfortunately, no data was collected in the 2013 Eurobarometer survey regarding the sector in which these employees worked.

The analytical procedures employed to evaluate these hypotheses were as follows. To evaluate the society-level formal and informal institutional asymmetry hypothesis (H1), and given the non-parametric nature of the data, a Spearman's bivariate correlation is used to determine whether there is a statistically significant relationship between cross-national variations in the prevalence of envelope wages and cross-national variations in tax morality. To test the citizen-level formal and informal institutional asymmetry hypothesis (H2), meanwhile, and again given the nonparametric nature of the data, a two-sample Wilcoxon rank-sum (Mann-Whitney) test determines whether the median tax morality score of those receiving envelope wages significantly differs to the median score of those not receiving envelope wages. Following this, a logistic regression analysis is employed to test whether the relationship between the dependent variable which measures the prevalence of envelope wages and the level of tax morality remains statistically significant when other independent variables are introduced and held constant. This logistic regression analysis also allows an evaluation of whether the prevalence of envelope wages amongst various businesses types and employee groups remains statistically significant when other independent variables are held constant. Below, the findings are reported.

## **Findings**

Of the 4,036 face-to-face interviews conducted in 2013 across the four Baltic countries, 1,738 were conducted with formal employees, of whom one in 20 (5 per cent) reported that they had received envelope wages from their employer in the past year, receiving on average about 40 percent of their gross annual salary as an envelope wage (see Table 1). The share of employees in these Baltic Sea countries receiving envelope wages is larger than in the EU15 and EU27 and this applies in both 2013 and 2007, displaying that envelope wages are more widely used by employers in these Baltic countries than the rest of the EU as a strategy for

reducing their labour costs. There has also been a decrease in the reporting of envelope wage payments between 2007 and 2013. Evidence that this is due to a decrease in the willingness to report such a wage arrangement in Baltic nations is that whilst the level of excellent cooperation reported by the interviewers increased in the wider EU (from 63 per cent to 67 per cent for EU27 and from 64 per cent to 71 per cent for EU15), for Baltic nations the level of excellent cooperation reported by interviewers decreased from 58 to 53 percent. This decline in cooperation explains the decrease in the percentage reporting that they received envelope wages, even though tax morality worsened between 2007 and 2013 in these Baltic Sea nations.

As Table 1 reveals nevertheless, envelope wages are not evenly distributed across the four Baltic countries surveyed. For example, in Latvia, 11 per cent of formal employees receive an additional envelope wage and 6 per cent in Lithuania. In order to test whether there is a relationship between the cross-national variations in the prevalence of envelope 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 these four Baltic nations (where 1=totally unacceptable and 10=totally acceptable across six tax non-compliance behaviours). This reveals that the level of tax morality differs across these Baltic nations. The adherence of the population to the codified laws and regulations of formal institutions (i.e., level of tax morality) is lowest in Latvia and Lithuania, whilst individual morality is better aligned with the formal institutions in Poland and Estonia. Indeed, putting them in ranked order by the degree to which the tax morality of the population adheres to the codified laws and regulations of the formal institutions, Estonia comes top, followed by Poland, and Lithuania, with Latvia 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.

## INSERT TABLE 1 ABOUT HERE

To evaluate whether the cross-national variations in the prevalence of envelope wages are significantly associated with cross-national variations in the level of institutional asymmetry (measured by tax morality), we conducted a Spearman's bivariate analysis which reveals a strong statistically significant association ( $p < 0.001^{***}$ ). The direction of the relationship is that the lower the level of tax morality in a country, the greater is the prevalence of envelope wages. Therefore, the society-level formal and informal institutional asymmetry hypothesis (H1) is supported; the prevalence of envelope wages is greater in nations where there is a greater asymmetry between formal institutions and individual morality.

Table 1 also reports whether all businesses and employee groups are equally likely to engage in this wage practice. This is not the case. Smaller businesses are more likely to pay envelope wages, particularly those employing less than 20 employees. Larger businesses employing over 100 employees, although paying envelope wages to 1 in 50 of their employees, are less likely to engage in this wage practice. Furthermore, although only 10 per cent of employees are in small firms with less than 5 employees, 17 per cent of employees receiving envelope wages are in such firms. Conversely, while 27 per cent of interviewed employees work for firms with more than 100 employees, only 9 per cent of employees receiving envelope wages are in these larger firms. This concentration of envelope wages 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 and Mayson, 2007; Benmore and Palmer, 1996; Kitching and Marlow, 2013). The result 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 more widely prevail.

Analysing the employee groups more likely to receive envelope wages, the finding is that this practice is more prevalent amongst manual workers (7 per cent) and men (7 per cent). So too are younger people more likely to receive envelope wages, amongst whom joblessness is much higher (European Commission, 2013), as are those with fewer years in formal education more likely to receive envelope wages along with those who have difficulties paying the household bills most of the time. The emergent picture therefore, is that it is weaker and more vulnerable employees that are more likely to be targeted by employers, doubtless because they are easier to persuade to accept additional terms and conditions when taking a job.

In addition, they are perhaps due to their relatively subjugated 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. Examining the level of tax morality of different employee groups, the finding is that some have a lower tax morality than others. Older workers have a higher tax morality than younger workers. Similarly, managers are less tolerant of non-compliance 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 prevalence of envelope wages, Table 2 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 4.50 than those not receiving envelope wages who have a median tax morality score of 2.67 (where 1= totally unacceptable and 10= totally acceptable

across six tax non-compliance behaviours). This validates the citizen-level formal and informal institutional asymmetry hypothesis (H2) which posits that the prevalence of envelope wages is greater in populations expressing lower levels of tax morality.

INSERT TABLE 2 ABOUT HERE

To determine whether this association remains significant when other characteristics are taken into account and held constant, Table 3 reports the results of a logistic regression analysis. This reveals in the first row that the prevalence of envelope wages remains strongly associated with lower levels of tax morality when the other individual-level characteristics are introduced and held constant. The conclusion is that a strong association thus exists between tax morality and the likelihood of engaging in envelope wages. The direction of the association is that as tax morality improves, and thus the asymmetry between the formal rules and individual morality decreases, the likelihood of envelope wages significantly declines. As such, this further validates the institutional asymmetry theorisation advocated in this paper that portrays envelope wages as resulting from the lack of alignment between the formal institutions (i.e., the codified laws and regulations) and the informal institutions (i.e., the socially shared understandings regarding tax compliance).

INSERT TABLE 3 ABOUT HERE

Moreover, Table 3 also examines whether the business types and employee groups identified in the descriptive statistics as more likely to participate in such a practice remain significantly more likely to do so when other characteristics are introduced and held constant. This reveals that envelope wages are significantly more likely amongst men, younger and less educated



employees. There is also good evidence that envelope wages are more prevalent among those who have difficulties most of the time in paying their household bills. This further reinforces the view that envelope wages are 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 tax morality, doubtless because they believe them as made for others rather than them, and thus have a greater disregard for them. Interestingly moreover, occupation is not significantly associated with a greater propensity to receive envelope wages. However, firm size is important. Small firms are significantly more likely to pay envelope wages to their employees than larger firms, even when other characteristics are introduced and held constant.

## **Discussion**

This analysis reveals a strong association between the prevalence of envelope wages and institutional asymmetry as measured by tax morality. Not only is the prevalence of envelope wages higher amongst those whose beliefs regarding tax compliance are more at odds with the formal rules, but also in countries where the degree of institutional asymmetry is greater, and this remains strongly significant when other individual-level variables are introduced and held constant. In consequence, the greater is the non-alignment of the formal and informal institutions, the higher is the likelihood of envelope wages both at an individual- and country-level.

To tackle envelope wages, it thus appears necessary to decrease this institutional asymmetry. This necessitates a different policy approach towards envelope wages than has been previously adopted. Conventionally, Baltic Sea region governments have employed direct controls to ensure that for employers and employees, the cost of being caught and punished is greater than the benefits of engaging in envelope wage practices, and this has

been largely achieved by increasing the actual and perceived risks and costs associated with participation (see Allingham and Sandmo, 1972; Williams, 2014a). More recently moreover, greater attention has started to be paid to making the full declaration of salaries more beneficial by offering a range of encouragement and incentives to employers to fully declared their employees' wages, such as amnesties (Williams, 2014a). The above findings nevertheless, cast doubt over this as the way forward.

Envelope wages in Baltic Sea countries result from employers and employees not adhering to the formal rules and adopting unwritten verbal agreements, and the prevalence of this increases as the degree of institutional asymmetry increases. What is thus required is a focus upon reducing the asymmetry between formal and informal institutions. Drawing inspiration from the organisational level where a shift has taken place 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. Instead of pursuing compliance using prescribed procedures, tight rules, close supervision and monitoring and centralised structures within the context of a low trust, low commitment and adversarial culture in which a 'cops and robbers' approach is adopted, what is perhaps required is a high trust, high commitment culture that aligns individual morality with the formal institutions so as to elicit self-regulated control.

This requires firstly changes in individual morality so that it conforms to the codified laws and regulations of the formal institutions. Given the widespread distrust in government and the rule of law in the Baltic Sea region however, there is also a need for formal institutions to change so that the formal rules and individual morality can become more aligned.

To change the socially shared norms of the informal institutions across Baltic Sea states which result in employers and employees flouting the codified laws and regulations and

engaging in envelope wage practices, at least three policy measures need to be introduced.

Firstly, tax education is required targeted at both employers and employees so as to align their values with the formal rules to facilitate greater self-regulation. Taxes, after all, are the prices Baltic citizens pay for the public goods and services they receive. Until now nevertheless, it has been rare for Baltic governments to educate citizens such as by informing them explicitly of the public goods and services they receive for the taxes paid (Saeed and Shah, 2011). An example of good practice on such tax education is ‘SMARTS – a game for those who are in education’ organised by the Free Trade Union Confederation of Latvia that sought to educate younger people about the benefits of paying tax (Karnite, 2013).

Secondly, advertising campaigns (targeting the groups identified above with low tax morality such as those who have difficulties paying bills) are needed to inform employees and employers of the costs and risks of envelope wages and/or benefits of fully declaring salaries (OECD, 2013). An advertising campaign in 2011 in Estonia, “Unpaid Taxes Will Leave a Mark”, whose main message was that the maintenance of the state is the responsibility of all citizens, is an example of good practice. Some 65 per cent of citizens surveyed asserted that the commercial had increased their awareness about the importance of paying taxes (Nurmela, 2013). And third and finally, normative appeals to employers and employees are needed (Lill and Nurmela, 2009). For example, signs stating ‘your taxes are paying for this’ in hospitals and outside schools is one way forward.

If the psychological (social) contract between governments and its citizens is to improve however, formal institutions also need to change. Employers and employees will not improve their tax morality if a low level of trust in government and perception of extensive public sector corruption remains, as is the case in the Baltic Sea region (European Commission, 2014a,b). A modernisation of governance is therefore required which necessitates at least three forms of change. Firstly, procedural justice in Baltic governments

must be improved, which means the authorities treating employers and employees in a respectful, impartial and responsible manner and thus moving away from a ‘cops and robbers’ approach and towards a customer service-oriented approach when dealing with their clients (Leventhal,1980; Murphy, 2005). Secondly, procedural fairness must be improved which means employers and employees believing that they pay their fair share compared with others (Molero and Pujol, 2012; Wenzel, 2006) and third and finally, redistributive justice requires improvement which relates to employers and employees believing that they receive the goods and services they deserve based on the taxes they pay (Kirchgässner, 2010).

## **Conclusions**

In this paper, a new way of explaining and tackling envelope wages has been proposed and evaluated. Drawing upon institutionalist theory, it has been here shown that when there is asymmetry between the formal and informal institutions, the practice of paying envelope wages emerges embedded in unwritten rules that are ‘illegitimate’ in terms of the formal written rules. The greater is the asymmetry between the formal and informal institutions, the greater is the level of envelope wages. This has been here shown to be the case for both the individuals engaged in such activity and for the countries with a greater prevalence of envelope wages.

To reduce the prevalence of envelope wages, it has been thus argued that a shift away from direct controls which detect and punish these practices is required and a move towards eliciting a high trust high commitment culture where the values of employers and employees become aligned with the formal institutions. This requires changes not only in the informal institutions, using measures such as tax education, awareness raising campaigns and normative appeals, but also importantly, alterations in formal institutions in order to enhance trust in government by developing greater procedural justice, procedural fairness and

redistributive justice.

Whether this institutional approach is also relevant when explaining and tackling the undeclared economy more generally in the Baltic Sea region now needs to be evaluated. If this paper thus stimulates such evaluations, then it will have achieved one of its intentions. However, if it also encourages Baltic governments to begin to realise that envelope wages in particular and undeclared work more generally are a product of this asymmetry between formal and informal institutions and they begin to explore how this can be tackled, rather than persist with simply seeking to detect and punish such practices, then this paper will have achieved its wider objective.

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Table 1. Distribution of envelope wages in Baltic nations: by business size, employee group and country

N=1,738 (2013) N=1,600 (2007)	% of employees receiving envelope wages in last 12 months		% of gross salary received as envelope wage (median)	% of all those receiving envelope wages	% of all employees surveyed	Tax morality index (where 1 = totally unacceptable and 10 = totally acceptable)	
	2007	2013	2013	2013	2013	2007	2013
EU-27	5	3	25	--	--	2.48	2.33
EU-15	3	2	15	--	--	2.38	2.21
All Baltic nations	11	5	40	100	100	2.89	3.01
Firm size:							
1 - 4 employees	--	9	25	17	10	--	3.07
5 - 9	--	8	50	17	12	--	3.21
10 - 19	--	12	50	33	16	--	3.95
20 - 99	--	4	30	24	35	--	2.74
100 or more	--	2	35	9	27	--	2.59
Occupation:							
Managers	5	6	50	24	20	2.77	2.98
Other white collars	5	2	25	10	26	2.76	3.03
Manual workers	17	7	40	66	54	3.00	3.01
Gender:							
Man	15	7	40	71	54	3.09	3.07
Woman	7	3	30	29	46	2.66	2.94
Age:							
15-24	20	5	40	9	10	2.96	3.55
25-39	12	6	25	47	46	3.01	3.04
40-54	9	6	49	36	34	2.79	2.96
55+	1	4	70	8	10	2.36	2.47
Age formal education ended:							
<19	15	7	50	79	58	2.81	3.23
20+	6	3	20	21	42	3.01	2.68
Difficulties paying bills:							
Most of the time	--	7	45	4	3	--	3.35
From time to time	--	9	50	50	31	--	3.57
Almost never/never	--	4	20	46	66	--	2.74
Country:							
Latvia	17	11	50	9	5	3.67	3.95
Lithuania	11	6	20	8	7	3.29	3.09
Estonia	8	5	40	3	3	2.65	2.82
Poland	11	5	20	80	85	2.80	2.96

Table 2. Two-sample Wilcoxon rank-sum (Mann-Whitney) test

	Obs.	rank sum	expected
People not receiving envelope wages	1403	1027029	1058563.5
People receiving envelope wages	105	110757	79222.5
Combined	1508	1137786	1137786

unadjusted variance      18524861

adjustment for ties      -97539.963

adjusted variance      18427321

Ho: Tax morality (People not receiving envelope wages) = Tax morality (People receiving envelope wages)

$$z = -7.346$$

Prob> |z| = 0.0000

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Note: In order to calculate the tax morality index, the answers to all six non-compliant behaviours were requested. Where an answer to one of these questions was missing, the index could not be calculated. Therefore, the number of observations is different for the multivariate analysis compared with the descriptive univariate analysis. We chose not to use multiple imputations in order to keep the bias at the minimum level.

Table 3. Logistic regressions of the propensity to receive envelope wages

	$\beta$	se( $\beta$ )	Exp( $\beta$ )
Tax morality (Centred)	0.295	0.052 ***	1.343
Gender (Female)			
Male	0.613	0.232 ***	1.845
Age (Centred)	-0.038	0.010 ***	0.963
Formal education (19 years old and under)			
20 years old and over	-0.550	0.258 **	0.577
Difficulties paying bills last year (Most of the time)			
From time to time	-0.213	0.325	0.808
Almost never/never	-0.871	0.344 **	0.418
Occupation (Managers)			
Other white collars	0.059	0.347	1.061
Manual workers	-0.118	0.304	0.888
Firm size (1-4 employees)			
5 - 9	-0.312	0.387	0.732
10 - 19	-0.809	0.365 **	0.445
20 - 99	-0.973	0.348 ***	0.378
100 or more	-1.781	0.421 ***	0.168
Constant	-1.518	0.492 ***	0.219
N		1377	
Pseudo R <sup>2</sup>		0.1624	
Log likelihood		-293.8549	
$\chi^2$		113.96	
p>		0.0000	

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

Notes: All coefficients are compared to the benchmark category, shown in brackets. Indicators were centred to the mean obtained using weighting scheme.

N= individuals for which data on each and every independent variable is available (don't know/ refusal excluded)

## APPENDIX

**Table A1.** Variables used in the analysis: definitions and descriptive statistics

Variables	Definition	Mode or mean	Min / Max
Envelope wages (dependent variable)	Dummy variable of envelope wages paid by employers for all or part of the salary or the remuneration, in cash and without declaring it to tax or social security authorities, in the last 12 months	No envelope wages (94.27%)	0 / 1
Firm size	Number of people that respondent`s employer employ in categories (including both full and part time)	20-99 employees (35.29%)	1 / 5
Occupation	Respondent occupation in categories	Manual workers (53.44%)	1 / 3
Gender	Dummy for the gender of the respondent	Male (54.06%)	0 / 1
Age	Respondent age	38.67 (SD = 11.26)	18 / 76
Age formal education ended	Dummy for the respondent age when stopped full time education	Under 19years old (58.02%)	0 / 1
Difficulties paying bills	Respondent difficulties in paying bills in categories	Almost never/never (65.61%)	1 / 3
Tax morality index	Constructed index of self-reported tolerance towards tax non-compliance	3.01 (SD= 1.90)	1 / 10

Note: For the categorical variables we used dummy coding in the regression analysis