
The phenomenon of tax evasion and undeclared work in Greece. Causes and the role of control mechanisms

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Abstract: The purpose of this paper is to investigate tax evasion through undeclared work incidents. It examines low taxation ethics observed from citizens and relates them to evasion levels connected to undeclared work. The research introduces a number of factors including different business sectors, a country's economic, sociological and political conditions. Furthermore, it investigates the phenomenon compared to inadequacies in state taxation and auditing mechanisms, as well as undeclared work's different types. The research was conducted in the second biggest industrial and economic centre of Greece in public administration organisations and accounting offices. The sample responded to closed questions questionnaire and the results showed that the low insurance and taxation ethics levels demonstrating by citizens are related most variables mentioned above. Overall, the study makes several

important contributions, although of the most interesting results was the strong correlation between undeclared work and socio-political factors. Research findings contribute to the existing but limited literature, providing evidence for southern European countries and developing countries.

Keywords: undeclared work; social security contribution evasion; contribution evasion; low insurance; tax morality; Greece.

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1 Introduction

As a phenomenon, undeclared economy results in poorer quality working conditions for employees and causes unfair competition for legitimate businesses. Tackling the undeclared economy has become a grave issue on the policy agendas of supra-national agencies and governments. The importance of coping with this practice is evident when witnessing its results in lost public revenues, worsening working conditions, and unfair competition for legitimate businesses (Williams and Horodnic, 2018).

In 2003, the European Council established guidelines for the employment policies of member states. One of the guidelines mentions that European Union should develop and implement integrated measures to cope with and eliminate undeclared work incidents. It further proposed simplifications on business environments, suppression of deterrents, and provision of suitable solutions for tax and social security systems, while at the same time legislature improvements.

The countries of southern Europe are lacking a cohesive strategic approach of the public administration to tackle undeclared work (Comaniciu, 2014; Balladares, 2017; Bejaković, 2017; Williams and Bezeredi, 2017). Nevertheless, most services are charged with a set of different objectives directed to different forms of undeclared work. This strategy however resulted into a struggle in terms of key performance indicators competitiveness between services. Thusly, a confusing taxation environment is created, troubled with inefficiencies regarding undeclared work reduction rates. In the case of Greece is noticed a series of state and public offices responsible for combating undeclared work. However, the lack of a central body responsible for ensuring the coordination of actions and strategies is evident.

Social security treasury's income is received either through fixed amounts from employers and insured citizens, separate taxation or deductions depending on the country. Insurance costs cover healthcare, pension, benefits but at the same time create certain obligations (Lanaras, 2017). Insurance contribution evasion, results in non-timely or appropriate payment of insurance funds in relation to the actual employment levels.

Most researches propose a variety of approaches for identifying informal working relationships using, 'legalistic', 'de facto', or 'productive' definitions (Henley et al., 2009; Perry et al., 2007; OECD, 2009; Pfau-Effinger, 2009). However, there have been international guidelines for informal, statistical definition of undeclared employment (ILO, 2003; Hussmanns, 2004b). 'Legalistic' definitions refer to social security contributions or employment status (e.g., self-employment) and rarely to employment contracts. De facto definitions looks at various cases when labour regulations are not applied, enforced, or complied. 'Productive' definitions, rely on characteristics of the employer or self-employed, (e.g., corporation size). It is worth mentioning that combination of these approaches is common practice (Hazans, 2011).

The purpose of this paper is to investigate the phenomenon of tax evasion through undeclared work in a developing country, and highlight the various implications. It aims to identify whether insurance evasion practices are related to lack of taxation ethics, observed in citizens and corporations. It tries to investigate whether undeclared work appears more usual depending on different market sectors. Furthermore, it goes through undeclared work levels generated from low taxation ethics regarding a country's adverse economic conditions, the state's inefficient mechanisms, as finally connects it to other adverse sociological and political factors.

After a literature review, this research demonstrates its hypothesis and presents the methodology used. It goes on with the statistical analysis, while in the discussion and conclusion sections analyses the findings and also some limitations that should be taken into account. Finally, it proposes certain managerial and theoretical implications as well as certain issued for further research.

2 Literature review

Most research regarding EU members argue a high relation between undeclared work and a state's difficulty of utilising modernised government systems, protecting vulnerable social groups and demonstrating high levels of corruption (Eurofound, 2013). According to Williams and Bezeredi (2017) in countries of the northern Balkan region, undeclared work is a socially acceptable, widespread practice in southeastern Europe.

Data from the European Social Survey (ESS) (2004–2009), for the investigation of informal employment in 30 countries, showed that the total degree of legality is decreasing in southern and eastern regions of Europe. The fact was also argued by Ambrosini (2001) and Flaquer and Escobedo (2009). Furthermore, according to Hazans (2011), an average of one out of six people of the European workforce has worked informally. As for other factors that could influence or hinder tax evasion practices, in Rachmawati et al.'s (2019) study, interpreting the factors affecting the complementary level of financial and tax aggressiveness, the diversity of cost and benefit faced by firms was considered important. The level of detection risk was found country-based and included aspects such as the law enforcement capabilities. They argued that new, more comprehensive measures of financial constraint could be implemented. Furthermore as deduced from their research, firm and country factors influence decisions to present financial statements and tax reporting.

Developing countries, as found in Hbaieb and Omri's (2019) research about solid and proper tax management; reduces the possibility of tax fraud, as the two demonstrate 'a non-complementary relationship'. Their work is consistent with Abid and Salha's (2013) arguing about the informal and formal economy of Tunisia. It is also a function of corporate culture difficult to mould and change promptly. Shareholders and lenders were found more capable factors, than regulation, for achieving such changes. They also concluded in the auditors' importance, regulatory oversights, policy prescriptions and frameworks in order to achieve transparency in developing countries. It is understood that in order to achieve a feasible integration of the world market, the specific characteristics of each participant be it a country or firm should be taken in consideration. This would allow each participant time to implement modifications and harness its assets.

In retrospect to a CEO's characteristics, Aliani (2014) mentioned that can influence tax planning and that new tax contexts could be developed. This study in the USA could possibly be reflected in cases of developing countries that are coping to extend their procedures, and mechanics in business towards innovation, disclosure and conformity with the market's prerequisites. Aliani (2014) further argued that in order to formulate a proper tax strategy CEO's educational levels and specialty is of grave importance since they significantly influence the procedure as to be expected. The phenomenon however was not found to be affected by factors such as experience, seniority or age.

While there are many studies dealing with the issue of undeclared work in Europe, for cases of southern Europe research is limited and not nearly focused. Specifically, studies

refer to undeclared work depending on the business sector (Pedersen, 2003; Riedmann and Fischer, 2008; Williams and Renooy, 2008), while others correlate it on tax rates (Friedman et al., 2000; Ihrig and Moe, 2000; Schneider, 2012; Vanderseypen et al., 2013; Williams and Horodnic, 2016). At the same time, Ambrosini (2001) and Flaquer and Escobedo (2009) try to correlate undeclared work to migratory flows. On the other hand, Averett (2001), Guariglia and Kim (2006) and Sarzalska and Szydłowski (2007) looked into the increasing rate of contributions from insurance evasion in cases where employees hold multiple positions in different employers.

Undeclared work rates were found increased in cases where the state fails to match and communicate its own morality and ethics to that of citizens. The failures described above result in citizens adopting what is considered illegal behaviour by the state, as socially acceptable (ILO, 2016). In some cases, employers claim that uninsured work was proposed by the employee himself either for thrifty reasons, or because the phenomenon is considered as common notion. In Greece, undeclared work is a widespread practice which has been incorporated into both the employer's and employees' perception and actions.

Finally, an important finding of the Eurofound (2013) report on participation in undeclared work in Greece is that the amount of expected sanctions and the detection risks showed no important deterrent effects. This finding strengthens the low taxation morality incurred insurance of citizens.

2.1 Undeclared work depending on business sectors

The effect of working capital management on a firms profitability in Charitou et al.'s (2010, 2012) work makes evident the importance of the cash conversion cycle. It is however evident as noticed from the Artemis Operational Plan (2017) that some business sectors demonstrated higher rates of illegitimate practices towards uninsured labour. At the same time, according to Anagnostopoulos et al. (2015), public bodies and authorities such as the Unified Social Security Fund, the Labor Inspectorate and the Manpower Employment Organization carry out regular or random on-the-spot checks, focusing on sectors and cases considered of high delinquency. Of course, it is worth mentioning that there are sectors that could give overwhelmingly high rates of undeclared work, however is practically difficult to audit, such as agriculture and household services (Kapsalis, 2015).

Older studies on undeclared work (Pedersen, 2003; Riedmann and Fischer, 2008) reveal that construction, household, trade and hospitality services have on average the highest rates of uninsured employment rates. However, depending on the region there are small sector differences. In particular, Williams and Renooy (2008) report that construction activities account for only 3% of undeclared work in southern Europe, while in the Nordic countries, this figure reaches 27%.

Finally, Hazans (2011) research agreeing with the ESS report argue that construction, trade, car repairs, hotels, catering, and household services are the common sectors that jointly represent 40% to 70% of uninsured work in all countries except Belgium and France. Thusly, the first hypothesis is formed:

H₁ Low taxation ethics and undeclared work are statistically related and dependent of different market's sectors.

2.2 *Adverse economic conditions*

The adverse economic conditions favoured the increase of unemployment, which has been on the rise since 2009 (OECD, 2011). Similar results were found at Lois et al.'s (2019) research regarding levels of tax compliance during fiscal recession periods. At the same time, according to the OECD (2011) data, Greece is among the countries with the highest non-wage labour costs, which account for about 35% of total labour costs. Coupled with the frequency and scope of controls for proper implementation of insurance and labour law, seemed to have increased undeclared work rates in Greece.

At the same time, Kapsalis (2015) argues that the progressivity of tax rates and insurance contributions also encourage undeclared work in Greece. The relationship between taxation, undeclared work and the shadow economy is a particularly complex issue (Schneider, 2012). In the International Labor Conference (June 2015) was argued that high tax rates are responsible for the level of undeclared work in Greece.

In Rossi's (2014) research contrary to expectations, taxes were found negatively related to debt. Furthermore, in 2015, Rossi et al. argued about the difficulty of applying fiscal theory to SMEs considering they are less likely to be profitable and therefore less likely to use debt as a means for acquiring tax shields, as found to Pettit and Singer's (1985) research. More importantly, another important theory of capital structure was mentioned. Trade-off theory (TOT) is based on the idea that a company chooses how much debt finance and how much equity finance to use by balancing the costs and benefits. TOT considers capital structure, in which Rossi included also its shortcomings from the viewpoints of financial distress and agency theory. These results coincide with the fact that higher tax rates are not significantly related to higher levels of undeclared work (Friedman et al., 2000; Ihrig and Moe, 2000; Williams and Horodnic, 2016; Vanderseypen et al., 2013).

In some countries, social security contributions are collected together with income taxes and it is impossible to separate them. In this case, the causes of tax evasion can be examined along with contribution evasion (Bailey and Turner, 2001). Finally, according to Bailey and Turner (1997), employers, depending on their economic situation, determine the total or partial avoidance of payments, leading to the categorisation of social security contributions as low priority costs for them.

Thusly, the second hypothesis relates undeclared work to an adverse economic condition:

H₂ Low taxation ethics and undeclared work are statistically related to the adverse economic conditions (high taxation, high insurance contributions, high unemployment rate, etc.).

2.3 *Inadequacy of the state mechanism*

Policy measures used by governments, ensuring the cost of undeclared work are higher than its benefits and by building trust between the citizens but also the latter and government (Horodnic and Williams, 2018a) is a vital procedure safeguarding disclosure and tax morality.

An important level of contribution to tax evasion is also given in a state's tolerance or inability to cope with the phenomenon of undeclared work (Bailey and Turner, 1997). The inefficiency state mechanisms, coupled with complex legislation ignored by

employers and employees, further hinders proper disclosure (Gheorghiu, 2012). From Drogalas et al. (2019), it can be derived that depending on the situation informal interactions, related to state mechanisms, could further hinder transparency.

At the same time, according to Kapsalis (2015), the state should pay more attention to employers and employees comments and suggestions in order to strengthen control mechanisms rather than exhausting their rigor by imposing high fines. It is therefore necessary to empower the relevant departments involved with suitable number of auditors.

According to Williams (2018), governments and social partners should pilot and experiment with different types of awareness campaigns, utilising practices developed in other member states and tailored to develop a repository of good practices. Horodnic and Williams (2018a) mention the different elements of a preventative approach towards undeclared work including evaluation service vouchers and awareness raising campaigns. It is insufficient simply to detect and punish those engaged in undeclared work. If it is to be tackled, then there is also a need for greater emphasis on improving trust (Horodnic and Williams, 2018b).

Finally, evasion is a dynamic social phenomenon in which employers, employees and government mechanisms are actively involved. The structure and magnitude of the undeclared work phenomenon depend on incentives and disincentives as well as the ability of public administration to impose and control the correct application of labour law (Bailey and Turner, 2001). Thusly, the third hypothesis is formed:

H₃ Low taxation ethics and undeclared work are statistically related to the inefficiency of state mechanisms (inadequate staffing of control mechanisms, bureaucracy, multiplicity of laws, etc.).

2.4 Types of undeclared work

According to a series of studies, it is understood that undeclared work can manifest in different types. Kapsalis (2015) research was based in non-issuance of vouchers implying undeclared or partially declared work, whereas Ambrosini (2001) and Flaquer and Escobedo (2009) focused on migrants without work permits as one of the catalytic factors. Informal employment represents nearly 10% of the labour force in northern Europe, 14% in the west and the east and 25% in southern Europe.

According to a study for undeclared work in southeastern Europe (Williams and Bezeredi, 2017), it turns out that contrary to the common belief, it is not always the employer who proposes or forces the employee to provide undeclared work. In almost one third of the cases of dependent work in the geographical area concerned, the worker took the initiative, something also found in Kapsalis (2015) research (38% employers state that the uninsured work was proposed by the employee). In this latter research, employers accepted to hire an uninsured employee either for economic reasons or regarding the phenomenon as a common practice. There are many evidences and competing arguments on whether firms that exhibit more or less tax management and tax fraud in their financial reporting (Hbaieb and Omri, 2019).

Motta and Rossi's (2019) research argues that the government can tax consumption, as alternative to labour income taxes. They showed that the optimal share of government spending is higher under consumption taxation than with labour income taxation. Laczó and Rossi (2019) studied the optimal tax mix from a perspective of efficiency. An

important task for future research is to analyse distributional impacts of different tax instruments in a model of heterogeneous households, including an imposed balanced-budget requirement on the policy-maker. On the other hand, Cappelen and Muriaas (2018) argue that immigration enhances and creates new reasons for participating in undeclared work. In particular, they highlight how undeclared work is not just an effect of labour market dynamics, but also of social integration.

In some countries, social security contributions are collected together with income taxes and it is impossible to separate them. In this case, the causes of tax evasion can be examined along with contribution evasion (Bailey and Turner, 2001). Furthermore, Elek and Köllő (2017) explained the differences regarding permanent and transitory undeclared work.

The fourth hypothesis relates undeclared work rates to the different manifestations of the phenomenon:

H₄ Low taxation ethics and undeclared work are statistically related to the different types of undeclared work (fully uninsured work, under-declared work, non-issuance of vouchers, etc.).

2.5 *Adverse socio-political factors*

A large number of informal sector activities or work positions are undertaken as secondary jobs (Husmanns, 2004a). Workers with social security coverage in their main job may see little benefit in contributing through insurance costs coverage in their second job (OECD, 2008). This is usually the case because the employees consider the benefits received will not cover taxation (Kapsalis, 2015). At the same time, another socio-political factor is the low level of trust to the official institutions of a state, something found particularly in cases of minorities and migrants (Flaquer and Escobedo, 2009).

According to Bitzenis et al. (2016), improving the quality of governance and reducing corruption in the public sector are key means of reducing undeclared economy. At the same time, in context of evaluating policy measures to tackle evasion and undeclared work, Greece focuses on the implementation of preclusion measures while adopting a small number of policy incentives, unlike the countries of the European economic area.

According to the European Commission's Small Business Act, small and medium-sized enterprises dominate Greek economy (ILO, 2016). In particular, very small enterprises with 1 to 9 employees account for 96% of all enterprises in Greece, employing 55% of the workforce (compared to about 30% in the EU-28). Also, unlike other European countries, undeclared work in Greece is a problem mainly related to self-employment in very small and small enterprises.

Gheorghiu (2012) argues that the key factor in the spread of undeclared work is ignorance of legislation as well as the lack of legislative harmonisation on flexible forms of employment and worker protection. Finally, Bourlos (2010) described the absence of social security consciousness on the part of both employees and employers, as a key determinant on contribution evasion.

The fifth hypothesis relates the low taxation ethics incurred undeclared work to the adverse socio-political factors:

- H₅ Low taxation ethics and undeclared work are statistically related to the adverse socio-political factors (lack of retributions, political will and trust in official institutions, etc.).

3 Research methodology

3.1 Research sample – questionnaire

The sample of the survey consists of Inspectors of the Central Labor Inspectorate, auditors of the Regional Audit Center of Insurance of Central Macedonia, as well as employees and owners of accounting firms and offices, selected by random sampling. The sample was considered as the highly representational and appropriate to measure the correlations between taxation, insurance policies and undeclared work practices. The questionnaire was distributed by the researchers to the public administration bodies in printed form and to the employees and the self-employed accountants via email.

Items were based on literature as well as to a series of interviews with labour inspectors and insurance auditors. The questionnaire used closed questions in order to avoid controversial interpretations, achieve easier coding and facilitate statistical analysis.

The first part included four demographic questions (sex, age, level of education and occupational status), while the other three sections multiple choice, Likert-scale questions (five-level scale). In particular, the second section (15 questions) examined the causes of insurance contribution evasion through undeclared work. In the third section (seven questions), respondents expressed their opinion on ways insurance income evasion is achieved, as well as the degree in which different business sectors, demonstrate higher rates of undeclared work or general opposition to taxation. These questions were significantly base on literature and public operational plans established in Greece (Project Artemis-2017) aiming to tackle undeclared work.

3.2 Model

Six variables derived from literature. The first is measures low insurance rates affiliated with taxation ethics, named ‘ethical insurance degradation’ (Questions 5, 6 and 9 from the second part of the questionnaire) and used as dependant variable. The first independent variable measured the extent of whether undeclared work is related to different ‘business sector’ (Question 26 from Part 3) and named ‘undeclared work sectorisation’. This followed by the ‘economic environment recrudescence’ variable, which measures the increases, adverse economic conditions have on undeclared work rates (Questions 10, 11, 12 and 13 of second part). The third independent variable (Section 2 – Questions 14, 17, 18 and 19) measured the difficulty public officials and mechanisms deal with undeclared work and were name ‘state mechanism inefficiencies’. The fourth independent variable dealt with the different manifestations, forms and mechanisms used to avoid insurance costs and name ‘undeclared-work practices diversifications’ (Part 3 – Questions 21, 22, 23, 24 and 25). Finally, the socio-political effects on undeclared work were measure through ‘socio-political environment recrudescence’ (Questions 7, 8, 15 and 16 from the second part of the questionnaire and Question 20 from the third part).

The analysis and visualisation of the results were made using descriptive statistics and regression analysis. Multiple regression analysis was performed to estimate the magnitude of the effect of the independent variables. The regression multiplication equation, which describes how the variables are interrelated, is in the form of:

$$y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5$$

The variables used are as follow (Table 1).

Table 1 Dependant and independent variables

<i>Factor</i>		
y	Ethical insurance degradation	EID
x1	Undeclared work sectorisation	UWS
x2	Economic environment recrudescence	EER
x3	State mechanism inefficiencies	SMI
x4	Undeclared-work practices diversifications	UPD
x5	Socio-political environment recrudescence	SER

4 Results

4.1 Descriptive statistics

4.1.1 Generally

From the sample, the ages of the participants range between 18 to 65 years, with 49.0% consisted from ages of 40–50, whereas 28.0% between 30 and 40. The majority (58%) were university or technical school graduates while it is worth mentioning that 24.0% of the respondents hold a postgraduate title. Finally, as far as their occupation is concerned, 51% are civil servants, 23.0% self-employed and 26.0% private sector employees.

4.1.2 Undeclared work causality and determinants

Through the descriptive statistics analysis the different causes, determinants and magnitudes of undeclared work were measured. It was found that low insurance ethic of employers is a considered a major factor (almost 73% of the respondents). Furthermore, 61% consider the lack of taxation ethics found in employees as an almost equally important factor. The belief found in citizens, that the benefits achieved from social security are not rewarding enough or proportionate to their contributions was approximately near 78%. It was also found that there is little confidence in state official institutions, since 75% believed it to be one of the important factors regarding undeclared work. Public belief that undeclared work is a widespread practice, further affects the phenomenon but to a lesser degree (39.7%).

According to 41.5% of the respondents, the high rates of unemployment and the insurance costs greatly affect undeclared work and as an extension evasion rates. Increased taxation rates also significantly affect the phenomenon (77%). The economic hardship of employers, due to the fiscal recession, made difficult to manage insurance costs (70%), while the complexity and ambiguity of legislation regarding provisions

offered played an important, however lessened role. Furthermore, the lack of political will to eliminate the phenomenon is a factor that influence the phenomenon of tax evasion related to undeclared work to a 68.3%.

Regarding the existence of a large number of small business entities, family businesses and self-employed people, 32% of respondents stated that influence 'to a moderate extent', while 27.2% 'to a small extent'. The inadequacy of the insurance/labour control systems (i.e., the lack of integrated and 'friendly' information systems, time-consuming control procedures) affects 'to a great extent' the phenomenon (45.6%). Nearly 70% considered that audit mechanisms are understaffed and this issue related to undeclared work rates. Finally, the organisational inefficiency of public administration offices due to bureaucracy, lack of coordination and cooperation is a major factor, according to most of respondents (78.9%).

4.1.3 Estimation of magnitude and forms of manifestation of the phenomenon

The analysis proceeds with the estimations of the magnitude and forms the phenomenon. Specifically, the seven questions of this section examined the level of agreement of participants in a series of proposals related to undeclared work estimated occurrences in certain sectors of the economy.

Citizens were found informed about the magnitude of the phenomenon and its implications to social security insurances 'to a moderate extent' according to 40.1% and 'to a small extent' according to 36.7% of the sample. In addition, 36.1% and 29.9% of the respondents, believe that the workers who voluntarily provide uninsured labour belong to specific categories of citizens (pensioners, subsidised unemployed, illegal migrants and multiple employees) 'to a great extent' and 'very much', respectively. According to 68% of the respondents there is an agreement between an employer and an employee to provide undeclared work.

The second section of the questionnaire examines how different types of businesses or employers evade insurance costs, through nine sub-questions. From the sample, 46.9% believe that commercial companies are evading insurance costs 'to a moderate extent'. Most of the respondents (57.8%), believes that restaurant and catering sectors are the ones that evade contributions, while companies of the manufacturing industry are evading insurance costs 'to a moderate extent' (35.4%), and the hotel industry to 33.3%.

As far as the construction sector is concerned, 40.8% of the respondents believe that this sector evades contributions 'to a moderate extent'. Transportation companies evade 'to a moderate extent' to 36.7%, while farmers and livestock companies 'to a great extent' and 'very much' according to 30.6% and 32.7% of the respondents, respectively. Finally, 68.7% and 20.4% of the respondents respectively believe that employers with home-based staff (household cleaning, childcare, private lessons) evade contributions 'very much' and 'to a great extent', respectively.

4.2 Regression analysis

A strong positive correlation was found between the dependent and the independent variables, validating the results. Through ANOVA the significance of the model was estimated and the linear relationship between variables was determined. Specifically, the model contributes significantly to the prediction of the dependent change (sig. < 0.001).

Regression analysis is shown in Table 2, where it examines the B-value for the regression coefficient for each independent variable and shows the variation of the mean value of the dependent variable when one unit of each of the independent variables increases, given that all other parameters remain constant.

Table 2 Regression analysis

<i>Model</i>		<i>Coefficients^a</i>				
		<i>Unstandardised coefficients</i>		<i>Standardised coefficients</i>	<i>tκ</i>	<i>Sig.</i>
		<i>B</i>	<i>Std. error</i>	<i>Beta</i>		
1	EID (constant)	.881	.566		1.556	.122
	UWS	.118	.086	.103	1.371	.172
	EER	-.270	.091	-.233	-2.975	.003
	SMI	.200	.087	.189	2.301	.023
	UPD	.271	.103	.207	2.627	.010
	SER	.423	.113	.294	3.739	.000

Note: ^aDependent variable: low insurance/tax morality.

Thusly, H2, H3, H4 research hypotheses are accepted at a statistical significance level of 0.05 (sig. < 0.05), H5 research hypothesis is accepted at a statistical significance level of 0.001 (sig. < 0.001), whereas research hypothesis H1 is rejected.

5 Discussion

The results of the questionnaire confirm to a degree the theoretical framework derived from literature. The respondents consider a key determinant of evasion regarding undeclared work low taxation ethics rates demonstrated by citizens. However, of great interest is the fact that cases of undeclared work are treated as common practice.

Furthermore, interesting was the finding regarding the lack of confidence citizens demonstrate towards public officials and organisations to achieve disclosure and maintain transparency. On the other hand, it can be derived that citizens do not consider the benefits of moral and ethical taxation and insurance related behaviour as significantly rewarding compared to the illegitimate alternatives. At the same time, citizens are not aware of the full sociological and economical effects of the phenomenon, and to a country's development.

In this research, the multiple regression analysis showed that the first independent variables, the extent of evasion generated income rates per business sector are not statistically significant. This translates to a low correlation of uninsured income to undeclared work rates and taxation ethics demonstrated by citizens that was not expected. On the other hand, the remaining four independent variables regarding adverse economic conditions, the inadequacy of the state mechanism, the various sociological and economic forms of the phenomenon and the adverse socio-political factors are statistically significant and affect the dependent variable of the survey.

It could be implied that morality and taxation ethics play a smaller role in the mind of citizens as an instigator of undeclared work. Rather, it is the socio-economic factors and the states fault for the high rates of the lack of insurance disclosure. In particular, the results show and the relevant literature confirms that increasing the inadequacy of the state mechanism, the difficulty of certain socio-political factors and the increase in the intensity of various forms of the phenomenon lead to the strengthening of the low tax morality of the citizens. However, in literature, it can be found that low taxation ethics are demonstrated through a series of arguments diminishing and splitting blame for someone's actions toward different factors only to parry with the phenomena and avoid responsibility.

It is worth mentioning that another negative correlation was found between the lack of taxation ethics and adverse economic conditions. Literature debates whether the latter has a solid causality relationship with undeclared work. While in some cases, researchers argue that undeclared work could be explained as a mean of resistance to excessive government intervention, data had yet to found robust results on the integrity of this claim (ILO, 2016).

6 Conclusions

It was derived from data that a citizen's or business ability to demonstrate ethical tax behaviour is not related to a particular sector of the marker, but rather can be traced in different aspects of the economy and society. Moreover, it was found that low taxation ethics could be traced in sociological and political factors. Specifically, an important finding of this study is that cases where state fails to build trust on its public organisations and officials seems to deteriorate significantly the will of citizens to act according to legislature and not turn to undeclared work merits. Furthermore, it is understood that businesses and citizens would not object to legislature, if it was not for high levels of cost benefit uncertainty. They seem to doubt the state's ability to safeguard their rights and cope with unethical issues, including undeclared work. This thought is strengthened by the effect that harsh economic conditions, lack of efficient state procedures and the different variations of undeclared work have on taxation ethics.

7 Managerial implications

The results show that businesses are not opposed to the idea of a law-abiding tactic as long as it can be implemented en masse. This positive conclusion shows that if a state can apply simple but not excessive tactics, it can have the majority of citizens and businesses satisfied. So raises the question of where the problem lies. Perhaps, bureaucracy and delays of proceedings, hinder to a great extent the state's relations with its citizens. Changing the legislation thus into a form of clear misdemeanour presentations would help to speed up the execution of procedures and eliminate doubts about both penalties and enforcement. It is therefore possible to apply measures against undeclared work and to levy revenue on the State Treasury.

8 Theoretical implications

This research adds to the existing literature on perceptions of tax ethics. At the same time, it exhibits different methods of insurance by country, as well as their advantages or disadvantages. An important finding, however, is that the social factors that influence a person's behaviour in tax matters do not adversely affect a geographical area or business sector. The maturity or capability of a population towards insurance and ethical behaviour has been found to be significantly improved in a developing country environment.

9 Research limitations

There are some limitations on our study, which should be taken into account when interpreting our results. To start with, the survey was conducted in a single geographical area of the country and is based on a limited sample. Furthermore, the sample of the survey specialised in the sector, i.e., they were people who inspect or insure the employees, following directions from employers and do not include answers from the insured population. Finally, using a questionnaire can threaten the internal validity of the research.

10 Future research

Clearly, the lack of confidence in the capabilities of the state shows that more data need to be put under study, as it is possible that a factor based on corruption levels may be necessary. At the same time, it is considered necessary to incorporate the technology factor into the study, including its use by both government agencies and businesses. Finally, as the current research was carried out within a European Union country, the relationship between central European administration and the state mechanism should be taken into consideration in the case of broadening the sample.

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Appendix

Six variables derived from literature. The first is measures low insurance rates affiliated with taxation ethics, named 'ethical insurance degradation' (Questions 5, 6 and 9 from the second part of the questionnaire) and used as dependant variable. The first independent variable measured the extent of whether undeclared work is related to different 'business sector' (Question 26 from Part 3) and named 'undeclared work sectorisation'. This followed by the 'economic environment recrudescence' variable, which measures the increases, adverse economic conditions have on undeclared work rates (Questions 10, 11, 12 and 13 of second part). The third independent variable (Section 2 – Questions 14, 17, 18 and 19) measured the difficulty public officials and mechanisms deal with undeclared work and were name 'state mechanism inefficiencies'. The fourth independent variable dealt with the different manifestations, forms and mechanisms used to avoid insurance costs and name 'undeclared-work practices diversifications' (Part 3 – Questions 21, 22, 23, 24 and 25). Finally, the socio-political effects on undeclared work were measure through 'socio-political environment recrudescence' (Questions 7, 8, 15 and 16 from the second part of the questionnaire and Question 20 from the third part).

Table 1 Dependant and independent variables

<i>Factor</i>		
y	Ethical insurance degradation	EID
x1	Undeclared work sectorisation	UWS
x2	Economic environment recrudescence	EER
x3	State mechanism inefficiencies	SMI
x4	Undeclared-work practices diversifications	UPD
x5	Socio-political environment recrudescence	SER

Table 2 Regression analysis

<i>Coefficients^a</i>						
<i>Model</i>	<i>Unstandardised coefficients</i>			<i>Standardised coefficients</i>	<i>t_K</i>	<i>Sig.</i>
	<i>B</i>	<i>Std. error</i>	<i>Beta</i>			
1 EID (constant)	.881	.566			1.556	.122
UWS	.118	.086	.103		1.371	.172
EER	-.270	.091	-.233		-2.975	.003
SMI	.200	.087	.189		2.301	.023
UPD	.271	.103	.207		2.627	.010
SER	.423	.113	.294		3.739	.000

Note: ^aDependent variable: low insurance/tax morality.

A strong positive correlation was found between the dependent and the independent variables, validating the results. Through ANOVA, the significance of the model was estimated and the linear relationship between variables was determined. Specifically, the model contributes significantly to the prediction of the dependent change (sig. < 0.001). Regression analysis is shown in Table 2, where it examines the B-value for the regression coefficient for each independent variable and shows the variation of the mean value of the dependent variable when one unit of each of the independent variables increases, given that all other parameters remain constant. Thusly, H2, H3 and H4 research hypotheses are accepted at a statistical significance level of 0.05 (sig. < 0.05), H5 research hypothesis is accepted at a statistical significance level of 0.001 (sig. < 0.001), whereas research hypothesis H1 is rejected.