

THE TAX COMPLIANCE COST FOR BUSINESSES AND ITS KEY DETERMINANTS: EVIDENCE FROM GREEK BUSINESSES

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Abstract

This paper aims to investigate the key determinants of the costs that arise for businesses during the voluntary tax compliance process in accordance with the current tax system's requirements. Essentially, this work seeks to highlight the parameters of a "hidden" cost for businesses given, as seems particularly important, the peculiarities and weaknesses of tax system. Methodologically, the research was conducted using a representative sample of businesses operating in the Greek economy. A questionnaire was employed and the data obtained was processed using factor analysis. The results of the survey revealed that the two main factors that determine the cost of tax compliance are the complexity of the tax system and the level of electronic tax services provided by the tax administration. In practice, the recognition and analysis of these factors will make a decisive contribution to the reduction of businesses' operating costs. This is necessary if businesses are to maintain their sustainability and achieve satisfactory growth rates, and thus be able to compete in the modern economic environment. This study is, to our knowledge, the first to examine the issue of the tax compliance costs in the Greek economy from this perspective, and lays the keystone for monitoring them on a more systematic and regular basis.

Keywords: Tax Compliance Cost, Complexity, E-Government.

JEL Classification: H22, H25, M41

1. INTRODUCTION

The concept of tax compliance essentially refers to the various activities undertaken by taxpayers to fulfil their tax obligations. Since these taxes are paid at the will of the business, based on its submitted tax returns, tax compliance is called voluntary. On the other hand, according to Alm (1999), the illegal and deliberate actions of taxpayers in order to reduce their legal tax obligations constitute the phenomenon of tax evasion. According to the United States' Internal Revenue Service (IRS), which is known for its effectiveness, there are three main obligations for taxpayers: the timely submission of tax returns, the honest and accurate transfer of data for the submitted tax returns, and the payment of the resulting taxes, voluntarily and in a timely manner (Brown & Mazur, 2003). Taxpayers, therefore, comply when they meet these obligations.

The cost of tax compliance refers to the expenses incurred by taxpayers in order to fulfill their tax obligations. In other words, this cost refers to the expenses incurred by taxpayers in order to comply with the requirements of the tax provisions. In particular, the cost of tax compliance, as evidenced by the review of the relevant literature below, includes expenses related to the preparation, drafting, and submission of tax returns, and to the monitoring of relevant tax

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legislation. It is treated as a “hidden” taxation cost (Tran-Nam et al., 2000). Therefore, if the tax system is characterized by excessive complexity, it leads to higher tax compliance costs (Slemrod & Blumenthal, 1996).

The investigation of tax compliance costs faced by businesses and potential solutions to reduce these form a particularly important field of research. Not only can businesses benefit directly from reduced compliance costs (external tax advisors and tax professionals’ fees, equipment, books, subscriptions to tax journals, training seminars, hardware, software, etc.), they can minimize the amount of time that employees in their accounting departments spend on matters that do not produce added value (Eichfelder & Schorn, 2012). These employees could then spend more time on productive work that creates added value for themselves, the businesses that they represent, and the national economy as a whole (Yilmaz & Coolidge, 2013). In addition, tax compliance costs include the psychological costs associated with stress, frustration, and anger caused by tax compliance efforts in highly complex tax environments (Sandford, 1995; Sandford et al., 1989).

While the issue of tax compliance costs for businesses has long occupied the thoughts of economists in developed countries (Coolidge, 2012), it has not yet been explored at both a theoretical and an applied scientific level in relation to Greece. In the context of the assumption that these costs form a significant part of businesses’ total operating costs, this paper seeks to highlight and investigate the issue, given the weaknesses of the Greek tax system. In addition, understanding the relationship between taxes and compliance costs can help us to focus on compliance cost management efforts in areas that have greater impacts (Marcuss et al., 2013).

Based on the above reasoning, the study’s research questions were structured to focus on the non-productive costs incurred by businesses in order to fulfill their tax obligations. These non-productive costs, which deprive businesses of valuable resources, consist mainly of direct labor, office supply, software and machinery, and external professional services (e.g., accountants, tax experts, etc.) costs. Methodologically, the research was carried out using stratified sampling in order to ensure that each category of business, in terms of size, industry and legal form, was included in each sample. Simple random sampling was then applied to each category. Structured questionnaires were also used in the research in order to extract the necessary primary data. The statistical processing and analysis of the data obtained from the questionnaires was performed using factor analysis. The purpose of the research was to capture the main factors that determine tax compliance costs for businesses operating in the Greek economy. At the same time, it sought to decode these factors so that their main components could be analyzed and suggestions for improvement could be made.

This research is innovative based on the fact that it seems, from the review of the relevant literature, that this is the first time that the issue of business tax compliance costs in Greece has been investigated from this point of view. The contribution made by the research is twofold. On the one hand, it aims to fill the observed research gap in terms of theoretical scientific knowledge. On the other hand, in terms of applied scientific knowledge, it aims to draw useful conclusions and propose ways in which business tax compliance costs can be reduced. These conclusions and proposals can be used by the companies themselves and by those responsible for determining tax policy, in order to generate significant benefits for businesses and the entire national economy.

2. LITERATURE REVIEW

Taxpayers' compliance and fulfillment of their tax obligations requires that they incur some compliance costs. These costs are borne by taxpayers in order to meet tax legislation and tax authorities' requirements. According to Sandford (1995), a tax compliance cost is a cost beyond the actual payment of tax and beyond any concept inherent in the nature of the tax—a cost that would disappear if the tax were to be abolished. Tax compliance costs include the fees and expenses of lawyers and accountants, the expenses of the special tax departments that maintain large enterprises, and the time taken and efforts made by taxpayers when organizing their files and preparing tax declarations (Weistroffer et al., 1999). The work required in order to meet tax compliance obligations is performed in the context of tax accounting, which is part of general accounting. Therefore, the cost of this work is borne by a business's accounting department. According to Tran-Nam et al. (2000), the three main cost areas related to tax compliance activities are: a) time spent by taxpayers, unpaid assistants, and internal employees; b) remuneration to external paid tax advisors; and c) non-labor costs associated with taxes on ancillary expenses or general business expenses, such as equipment, computers, stationery, photocopies, postage, telephone, television, electricity, and travel, etc.

While tax compliance costs have long been recognized in theoretical literature, the first empirical study focusing on them was conducted in the United States by Haig in 1935. In the early 1970s, the cost of tax compliance was named the “hidden cost” of taxation (Tran-Nam et al., 2014). It was treated as such for a long time (Chan et al., 1999; Chittenden et al., 2010; Fichtner & Feldman, 2015). The research that has been conducted into tax compliance costs is often overlooked by those who shape tax policy and this results in financial burdens, mainly for small businesses and the self-employed, as a result of unreasonable and burdensome tax regulations (Godwin, 1978). Furthermore, the costs involved in compliance are not disclosed in annual business reports or other publicly available information sources (Eichfelder & Hechtner, 2018).

One feature of the tax system that seems to have a decisive effect on the size of tax compliance costs is the complexity of the tax system. The simplest tax systems are not necessarily the best, but tax system complexity does not necessarily serve a useful purpose (Slemrod & Blumenthal, 1996). The complexity of tax systems seems to correlate positively with tax compliance costs (Evans, 2003; Marcuss et al., 2013). Primarily, tax legislation complexity creates additional compliance costs (Lassila & Murphy Smith, 1997; Mills, 1996; Slemrod & Blumenthal, 1996). Complex tax systems require taxpayers to obtain additional training and to seek external professional advice in order to be compliant (Musimenta, 2020), as the need for tax advice increases (Christian et al., 1993; Eichfelder et al., 2012). The simplification of tax legislation and tax procedures can contribute significantly to cost reductions (Alm, 1996; Marcuss et al., 2013; Slemrod & Yitzhaki, 2002).

In addition, according to Eichfelder and Kegels (2014), the existence of a non-friendly tax administration increases the burden of tax legislation compliance by about 27%. According to Mathieu et al. (2010), there is a positive relationship between total compliance costs and the difficulty of dealing with tax matters, which is unsurprising. This highlights the negative effects of complexity on the cost of tax compliance and reinforces the argument for examining compliance costs when designing tax regimes.

Moreover, the cost of tax compliance has an impact on the voluntary compliance. When facing the disproportionately large costs incurred under a complicated tax system, taxpayers can

become frustrated and dissatisfied with the tax legislation and, ultimately, this can lead to more non-compliance (Erard & Ho, 2003; Slemrod, 1989). The tax administration should avoid addressing the issue of tax non-compliance by increasing the complexity of the tax laws, as this leads to a vicious cycle of growth of tax non-compliance, precisely because of the increased compliance costs faced by taxpayers in order to meet the demands of a complex tax system (Franzoni, 2000).

The use of modern technologies can make a significant contribution to the reduction of business compliance costs (Azmi et al., 2016; Martins & Picoto, 2019). The use of electronic filing systems makes it easier and less time consuming for taxpayers to prepare and file their tax returns, and pay taxes. It also results in fewer calculation errors appearing in tax returns. In addition, it creates a more predictable tax environment, as all the information needed by taxpayers is available online and is easy to find (World Bank & PwC, 2017). At the same time, the simplification and improvement of tax return filing processes can also help to reduce compliance costs.

According to Harju et al. (2019), VAT taxation compliance costs in Finland could be reduced by fully automating the relevant processes and merging VAT reporting forms with the annual income tax filing procedure. Certainly, the reduction in compliance costs as a result of the application of modern technologies, which contributes to the reduction of the complexity of tax system, presupposes an initial investment cost (Marcuss et al., 2013). Essentially, however, the use of technology can help to alleviate complexity at various levels, such as in the tax payment process, by improving the ability of taxpayers to deal effectively with certain types of tax complexity (Goolsbee, 2004). Nevertheless, it is important to reduce the impact of tax administration on compliance costs and minimize opportunities for direct contact with taxpayers wherever possible (Chattopadhyay & Das-Gupta, 2002).

When taxpayers pay tax to the state, the processes involved also generate administrative costs that are borne by the tax administration. The administrative cost relating to the costs incurred by the tax administration to implement tax legislation and to assess and collect taxes is a decisive parameter for the complexity of tax law. In Greece, the administrative cost is very high. The cost of tax revenue collection as a percentage of total tax revenue is much higher in Greece than in other countries. However, this has not had a positive impact on efforts to reduce taxpayers' compliance costs, as these costs are also very high in Greece. According to available estimates, the total administrative cost for the collection of all tax revenues in Greece is 1.61% of total tax revenue, while it is 0.86% in Canada. The administrative cost for collecting income tax in Greece is 2.39% of total income tax collected but is 1.0% in Canada and 0.6% in the United States (Bank of Greece, 2010).

The sum of compliance costs and administrative costs is the total cost associated with the tax compliance of taxpayers. This is often referred to as the operating costs of a tax system. Slemrod (1989), studying the relationship between compliance costs and tax evasion, argued that the overall cost of tax collection (including taxpayers' compliance costs) is an indicator of a tax system's complexity. Moreover, Slemrod (2019), studying the case of the IRS, found that the cost of increased tax administration enforcement includes administrative costs (which appear in the IRS budget), compliance costs (which do not appear in the IRS budget), an additional weight (due to behavioral reactions of all kinds), and the additional uncertainty created in taxpayers.

The estimation of tax compliance costs typically requires painstaking research and involves the collection of large amounts of data that is not available from published sources (Tran-Nam et al., 2000). Nowadays, the necessity of measuring compliance cost burdens is widely accepted as being demonstrated by the implementation of the standard cost model in European countries (Nijssen & Vellinga, 2002) or the business taxpayer burden model in the United States (Guyton et al., 2003). In the relevant studies, the cost of tax compliance is expressed as the amount of time required for a business to meet its obligations so that it complies with the provisions of the tax legislation.

The total time required by each business in European Union countries to prepare, register, and pay taxes is, on average, 166 hours (Steinmo, 2018). However, this varies from country to country. It has been reported that it is 200 hours in Romania and 269 hours in Italy (Steinmo, 2018). According to the World Bank and PwC (2017), it takes, on average, 193 hours a year for a business in Greece to comply with its tax obligations. These hours are divided as follows: 78 on income taxes, 69 on consumption taxes, and 46 on labor taxes. However, the cost of tax compliance remains high in many developed countries with very well-organized tax administrations. According to Evans et al. (2014), “tax compliance costs remain high” and “do not appear to be diminishing over time” in four countries distinguished for the advanced nature of their tax services: Australia, Canada, South Africa, and the United Kingdom (p. 453).

Evidently, the compliance cost burden rises with business size, while the relative cost burden is notably higher for small businesses. However, this increase is not proportional (Stamatopoulos et al., 2017). In addition, according to Slemrod and Venkatesh (2002), tax compliance costs for small and medium-sized enterprises (SMEs) are high in the absolute sense and are higher in proportion to their size than they are for larger businesses in the United States. According to Smulders et al. (2012), taxation compliance costs and basic accounting costs are inversely related to the size of the business, with the tax compliance burden being heavier for smaller businesses.

Citing numerical data, the research carried out in Australia by Evans et al., (2013) found that the tax compliance burden as a percentage of turnover was much higher for micro-businesses (with turnovers under A\$75,000), amounting to A\$75.84 per A\$1,000 of turnover, than for small businesses (with turnovers of A\$75,000-A\$1,999,999) and medium-sized businesses (with turnovers of A\$2 million-A\$50 million), whose tax burdens were A\$14.09 and A\$3.34 per A\$1,000 of turnover respectively. In an earlier survey in the United Kingdom, Sandford et al. (1989) found that the cost of tax compliance for small businesses (with taxable turnovers of up to £100,000) was 0.79% of taxable turnover. The cost of tax compliance for medium-sized businesses (with taxable turnovers of between £100,000 and £1 million) was significantly reduced and amounted to 0.15% of taxable income, while the cost for large businesses (with taxable turnovers of more than £1 million) was even lower, at 0.04% of taxable turnover. Therefore, many surveys in various countries have shown that the cost of tax compliance disproportionately burdens small businesses, which have fewer staff, less experience, and less time to dedicate to handling this situation (Freedman, 2009).

Small businesses with limited resources are forced to allocate some of these to activities that do not offer value, such as tax compliance, and this creates unwanted and unnecessary burdens in terms of tax compliance costs (Matarirano et al., 2019). The compliance burden for the smallest businesses in Australia is, characteristically, about 9 percent of sales revenue (Lignier et al., 2014). However, it should be taken into account that small businesses usually consider all of the costs involved in the preparation of accounting records to be compliance costs. This

perception of small businesses is largely related to the accounting/tax overlap of the activities performed in their accounting departments, as these tasks are performed, on the one hand, to meet the need to provide information to the management and, on the other hand, to fulfill tax compliance requirements (Tran-Nam, 2001). Moreover, this perception is probably related to the excessive burden placed on small businesses when compared to larger businesses in terms of tax compliance costs, as mentioned above. According to Mahangila (2017), the regressive nature of tax compliance costs leads to lower tax compliance rates for SMEs than for large businesses.

In addition, businesses face higher compliance costs as the complexity of tax legislation increases and higher compliance costs burden those with the most complex tax situations (Slemrod & Blumenthal, 1996). Smulders et al. (2017) also argued that, although the legal form, age, use of tax concessions for small businesses, level of education of respondents, and type of accounting system used are statistically significant determinants of tax legislation compliance costs, turnover is the biggest determining factor. In contrast, Lignier et al. (2014) argued that the legal form of a business is not significantly correlated with tax compliance costs. In a study conducted in the Netherlands by Allers (1994), it was found that the size of enterprises (measured by the number of employees) positively correlated with the cost of tax compliance. The results of two surveys from European Union countries regarding the support of external tax advisers were ambiguous. Eichfelder and Schorn (2012) found that small businesses in Germany reduced their tax compliance costs by outsourcing tax processes to tax advisors. In contrast, the results of an earlier survey of small businesses in the United Kingdom, conducted by Hansford et al. (2003), revealed that outsourcing work to tax advisers resulted in increased tax compliance costs. Despite the burden that tax legislation compliance places on businesses, the efforts that they make to comply and the costs involved in this also have a positive side: Businesses record accounting events more accurately and this helps to boost the efficiency of their management (Sandford et al., 1981).

In the Greek economy, the vast majority of businesses are SMEs. Therefore, the finding that this cost is positively correlated with the size of businesses but is a heavier burden for small businesses is of particular importance. In order to reduce tax compliance costs—something that will have a positive effect on all operating businesses, but primarily on SMEs—it is necessary to identify the factors that determine the cost of tax compliance, and to investigate and understand them.

3. METHODOLOGY

The research questions emerged in the context of what was captured from the literature review. They were based on the commonly accepted assumption that there is an urgent need to reduce businesses' operating costs and aimed to identify the key factors that determine the cost of tax compliance. The main goal of the research was to identify the factors that contribute most to the formulation of tax compliance costs and why this happens. In particular, the research questions relate to the following topics:

- The number of provisions in the tax legislation (Eichfelder & Kegels, 2014; Marcuss et al., 2013; Oats & Morris, 2015). In Greece, the tax legislation consists of a variety of laws, clarifying circulars, and decisions. It also includes judicial jurisprudence decisions that are binding for the tax administration, resulting in the excessive expansion of the relevant legal framework.

- The variability of tax legislation. It is a fact that tax provisions change frequently, which makes the current tax framework difficult to interpret (Eichfelder et al., 2011; Rametse and Pope, 2002).
- The uncertainty created by the fact that the tax legislation provisions are difficult to interpret and apply (Marcuss et al., 2013; Sawyer, 2011). The intended meanings of these provisions are not presented in a simple and comprehensible way.
- The complexity of the appeals procedure both at the stage of the administrative examination of disputes and in the administrative courts in order to resolve tax disputes that arise from the way in which tax audits have been conducted (Chattopadhyay & Das-Gupta, 2002).
- The existence of conflicting provisions in tax legislation which is likely to lead to the subjective viewing and interpretation of the current tax legislation by businesses and tax administration employees (Edmiston et al., 2003).
- The extent to which tax provisions are codified in a single text of law by type of tax (Yin, 2018).
- The range and level of the online electronic tax services provided by the tax administration (Chatfield, 2009).
- The degree to which the tax administration's information system and businesses' accounting information systems are interconnected (World Bank & PwC, 2018).
- The degree to which taxpayers need to visit the tax administration's premises in person (Chattopadhyay & Das-Gupta, 2002; World Bank & PwC, 2018).
- The level of electronic tax data exchange between business accounting information systems (Bellon et al., 2019).

The study population included all active businesses in the Greek economy. A sample of 310 small, medium, and large businesses was used. These businesses were selected using stratified and simple random sampling methods. The use of the stratified sampling method ensures that sub-groups in the population are represented in the sample, while the use of simple random sampling gives each respondent in the subgroup a randomized chance of being included in the study. The data concerning the population of businesses operating in the Greek economy, based on their size in terms of the number of employees, their economic activity sector according to the European Union's Statistical Classification of Economic Activities in the European Community (NACE) revision 2, and their legal form was drawn from the Hellenic Statistical Authority's Statistical Businesses Register for 2017. Data from the Ministry of Development and Investment's General Commercial Register was used in order to select businesses for the sample.

The research was conducted using anonymous structured questionnaires in order to extract the necessary primary data, which was then processed. The data was collected in November and December 2019. The questionnaire included closed-ended questions about the subjects of the research developed above. The questionnaire was then checked for reliability and validity through an initial audit of 5% of the sample. The questionnaire was sent to 500 businesses operating in the Greek economy. It was administered and collected in person. Ultimately, 310 questionnaires were completed and the response rate was 62%. The statistical processing and analysis of the questionnaire data was performed using factor analysis, which reduces a large number of variables to a smaller number of significant variables using the correlations observed between them as a criterion. The important variables are called factors, which are thought to reflect the underlying processes that have created the correlations between the variables (Tabachnick & Fidell, 2019). The extraction method used to form the factors was the method of principal components.

The model of factor analysis for n variables and p factors is:

$$F_i = \sum_{j=1}^n W_{ij}Y_j = W_{i1}Y_1 + W_{i2}Y_2 + \dots + W_{in}Y_n$$

for $i = 1, \dots, p$

where:

F_i = the common non-observed factors,

W_{ij} = the coefficients of the factors,

n = the number of the observed variables used,

p = the number of factors extracted.

Each of the observed variables can be attributed as a linear combination of common factors, as follows:

$$Y_j = a_{j1}F_1 + a_{j2}F_2 + \dots + a_{jp}F_p + e_j$$

for $j = 1, \dots, n$

where:

F_i = the common non-observed factors,

a_{jp} = the specific coefficients that burden the factors (loadings),

e_j = the factor for the specific variable.

A pilot survey of 25 businesses was conducted in order to minimize response errors. The questionnaire included demographic characteristics, as well as ten questions concerning the determinants of tax compliance costs. These questions were to be answered using a five-point Likert scale. On this scale, the answer with the number 1 corresponds to the lowest grade, while the number 5 corresponds to the highest grade. A corresponding variable was created for each question.

The following variables were used in the analysis: 1. Length of tax legislation (Lenleg), 2. Changes in tax legislation (Legchang), 3. Legal uncertainty (Uncertleg), 4. Appeals (Appeals), 5. Conflicting provisions (Conprov), 6. Codification of tax legislation (Coditax), 7. Electronic tax services (Eservices), 8. Electronic connection (Econnect), 9. Number of visits (Numvisits), 10. Electronic tax data interchange (ETDI).

4. RESULTS

From the analysis of the sample data based on the descriptive statistic, it emerged that 94.2% (292) of the businesses that responded belonged to the category of very small businesses (0-9 employees), 4.5% (14) belonged to the category of small businesses (10-49 employees), 1% (3) belonged to the category of medium businesses (50-249 employees), and 0.3% (1) belonged to the category of large businesses (250+ employees). In addition, 35.8% (111) of the businesses in the sample were active in the primary sector of the economy (agriculture, mining,

etc.), 9.3% (29) were active in the secondary sector (manufacturing, construction, etc.), while 54.9% (170) were active in the tertiary sector (trade, services, etc.). Finally, by the legal form, 87.7% (272) were sole proprietorships, 7.4% (23) were general or limited partnerships, and 4.9% (15) were legal entities (public limited or limited liability companies).

Data processing with factor analysis showed that the value of the Kaiser-Meyer-Olkin (KMO) measure was 0.843, much higher than the acceptable value of 0.70. This measure shows that several variables are predicted in each factor. The results of the Bartlett's Test of Sphericity showed that the variables are well correlated to provide a basis for factor analysis, since the significance value is less than the value of 0.05. The results of the KMO and Bartlett's tests are presented in detail in Table 1.

Table 1: KMO and Bartlett's Test Results

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.84
Bartlett's Test of Sphericity	Approx. Chi-Square	1,291.70
	df	45
	Sig.	0.00

Communalities measure the rate of variation of each variable, interpreted by all factors. As shown in Table 2, no communality is low and therefore all variables are related to a factor.

Table 2: Communalities

	Initial	Extraction
Lenleg	1.00	0.61
Legchang	1.00	0.55
Uncertleg	1.00	0.61
Appeals	1.00	0.63
Conprov	1.00	0.67
Coditax	1.00	0.62
Eservices	1.00	0.42
Econnect	1.00	0.70
Numvisits	1.00	0.55
ETDI	1.00	0.57

The processing showed that only two of the ten initial factors had eigenvalues higher than value 1. The eigenvalues after varimax rotation, which maximizes the number of variables that have high loadings on each factor, appear in Table 3. The first two factors explain 59.15% of the total variation. In general, a percentage of the total variation greater than 50% is considered satisfactory.

Table 3: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.68	46.37	46.37	4.68	46.37	46.37	3.27	32.68	32.68
2	1.28	12.77	59.15	1.28	12.77	59.15	2.65	26.47	59.15
3	0.79	7.92	67.07						
4	0.74	7.44	74.51						
5	0.64	6.42	80.93						
6	0.58	5.37	86.29						
7	0.47	4.50	90.94						
8	0.38	3.81	94.75						
9	0.29	2.94	97.70						
10	0.23	2.30	100.00						

The scree plot (Figure 1) shows the factors on the horizontal axis and the corresponding eigenvalues on the vertical axis. Given the inclination of the curve, the scree plot confirms that only the first two factors should be included in the analysis.

Figure 1: Scree Plot

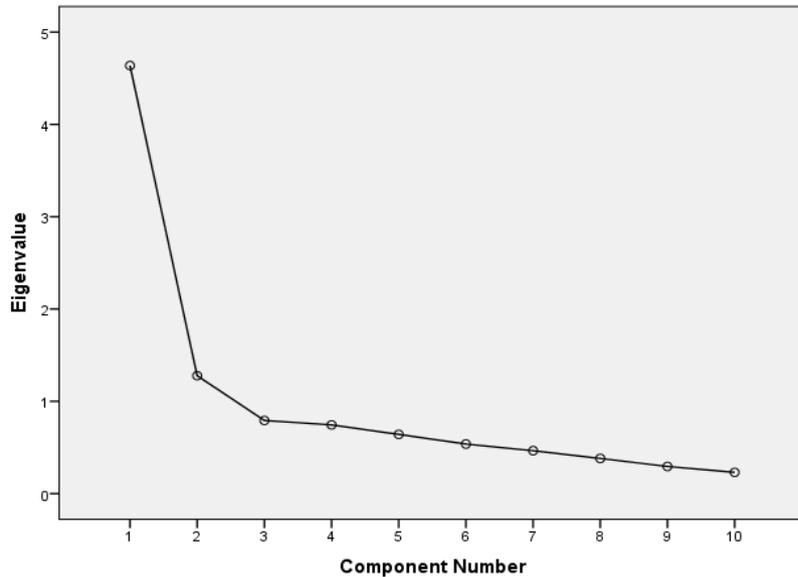


Table 4 shows the component matrix after rotation. Loadings with values greater than 0.6 are considered high, while loadings with values lower than 0.3 are not included in the factor naming process.

Table 4: Rotated Component Matrix

	Component	
	1	2
Lenleg	0.78	0.12
Legchang	0.77	-0.09
Uncertleg	0.72	0.30
Appeals	0.71	0.45
Conprov	0.67	0.40
Coditax	0.61	0.54
Eservices	-0.08	0.78
Econnect	0.27	0.70
Numvisits	0.18	0.62
ETDI	0.41	0.62

The first factor includes six variables: length of tax legislation (Lenleg), changes in tax legislation (Legchang), legal uncertainty (Uncertleg), appeals (Appeals), conflicting provisions (Conprov), and codification of tax legislation (Coditax). The second factor includes four variables: electronic tax services (Eservices), electronic connection (Econnect), number of visits (Numvisits), and electronic tax data interchange (ETDI). Based on the factor analysis, the table shows that the first factor, with high loadings of six variables, could be called “Tax System Complexity”, while the second factor, with high loadings of four variables, could be called “Administration Services”.

The reliability of the factors created was then examined using the Cronbach alpha reliability coefficient. The value of this coefficient was 0.85 for “Tax System Complexity” and 0.66 for “Administration Services”. Given that the above values exceed or approach the value of 0.70, the factors created are considered reliable.

5. DISCUSSION

The results of the survey show that there are two groups of factors that largely determine the cost of tax compliance for businesses operating in the Greek economy. The first group of factors is called “Tax System Complexity” while the second is called “Administration Services”. As can be seen from the literature review, businesses under the Greek tax system are burdened with high tax compliance costs (World Bank & PwC, 2017). This is mainly due to the excessive complexity of the Greek tax system and the unsatisfactory penetration of e-government tax services.

The excessive complexity of the Greek tax system is due to a number of factors, as evidenced by the previous analysis. A key parameter is the large number of tax laws and related interpretative circulars. It is noteworthy that from 1975 to the present, an average of six tax laws have been issued each year. In addition to the provisions of these laws, a very large number of tax provisions have been included in laws that were not purely tax laws. Furthermore, thousands of circulars that interpret the provisions of the laws have been issued.

The overproduction of laws and circulars also causes a further problem that increases the complexity of the tax system to arise. The frequent alternation of laws and circulars means that

there is no stable tax framework. A tax object, such as income tax, may be amended three or even four times in a year, so it may be difficult to identify the provisions that apply each time.

In addition, many of the provisions of the laws and many circulars are difficult to understand. Taxpayers take more time to understand and interpret them, and may need to contact the authorities for clarification. Furthermore, many of the provisions of the laws are in conflict with one another, especially when different tax objects have a common basis. When the government discovers this, it has to issue clarifying circulars.

Another problem relates to the procedures for administrative settlement and the judicial settlement of disputes arising between the tax administration and businesses. These procedures are complex and time consuming, especially in the case of litigation. Decisions issued by administrative courts and by the dispute resolution services are added to the provisions of laws and circulars, and exacerbate the already great confusion. Finally, the complexity of the tax system is increased by the lack of codification in a single text of the current tax legislation by type of tax, as it arises from the provisions of the laws, the clarification circulars, and the decisions made by the administrative dispute resolution services and administrative courts.

With regard to the “Administration Services” group of factors, the research showed that the level of electronic services offered by the tax administration needs further improvement. In particular, there are still several types of tax that are not serviced in the appropriate way or at all by the relevant tax administration websites. In addition, the links between the tax administration’s information system and businesses’ accounting information systems are generally unsatisfactory, and are still at a very early developmental stage in respect of some areas, such as the tax audit process.

The above findings are also confirmed by the relatively high number of in-person visits made by business representatives, and accounting and tax advisors, to the relevant tax authorities’ headquarters to resolve issues that cannot be resolved remotely. Finally, as the research shows, the electronic exchange of tax data across businesses is not yet at a satisfactory level.

The results of the survey show that the reduction of tax system complexity contributes significantly to the reduction of tax compliance costs. This result is consistent with the results of other researchers’ work (Alm, 1996; Marcuss et al., 2013; Slemrod & Blumenthal, 1996; Slemrod & Yitzhaki, 2002). The improvement of e-government services relating to tax administration also makes a significant contribution here.

Since 2014, when broad tax reforms were made, primarily with regard to income tax law, the tax procedure code, and the Greek accounting standards, the Greek tax administration has made progress in terms of tackling the critical issue of reducing tax system complexity, but further efforts are needed. In addition, in the field of e-government, the procedures should be accelerated in order to reduce the cost of tax compliance, as well as administrative costs.

In particular, according to the results of the research, tax compliance costs could be reduced by following the recommendations below:

- The continuous issuance of tax laws and circulars should be limited in order to build a stable tax environment.
- Tax legislation should be simplified further so that it is easy to interpret, does not contain conflicting provisions, and is not subject to frequent changes.

- The process of resolving disputes, both at the administrative and judicial levels, should be simplified.
- Tax legislation needs to be codified in order to create a single text per tax object.
- The process of integrating e-government with tax services should be accelerated.
- The electronic interconnections across business accounting information systems and tax administration systems should be strengthened.
- Electronic interconnections between businesses, in terms of accounting and tax matters (e.g. electronic invoicing, electronic file exchanges, etc.), should be enhanced.

In order to encourage businesses to invest in new technologies that would reduce the cost of tax compliance, tax incentives in the form of increased deductions of the cost of the investment from gross income could be offered. The reduction of compliance costs could, in some cases, increase the tax authority's administrative burden, which means that these reforms must be carefully implemented in order to reduce overall costs and increase economic efficiency (Harju et al., 2019).

This study contributes to the research by exploring this issue in the context of Greece, which has chronic problems with regard to widespread tax evasion, complexity of tax legislation, and excessive bureaucracy. As the review of the literature shows, the case of Greece has not been rigorously investigated and we address this gap using modern analytical methods.

To our knowledge, the only research on this issue with regard to Greece was conducted by Stamatopoulos et al. (2017). They found that the average cost of tax compliance in respect of a legal entity's most important tax liability—the submission of its income tax return—amounted to €5,864.46 (Stamatopoulos et al., 2017). At the same time, they found that compliance costs correlated with certain business characteristics, such as size, firm age, industry, location, and legal form (Stamatopoulos et al., 2017). The present study, in contrast to the above work, focuses primarily on identifying the key determinants that shape the excessively high cost of tax compliance for businesses operating in the Greek economy. It divides these tax compliance costs into two broad categories—the complexity of the tax system and the electronically supplied services of the tax administration—with the aim of identifying the root causes of the high tax compliance costs. In addition, based on the analysis of the main components, it proposes ways in which to deal with the excessive complexity of the Greek tax system and improve the electronic services provided by the tax administration in order to reduce businesses' tax compliance costs.

This study also contributes by drawing useful conclusions and proposing methods by which the cost of tax compliance can be reduced. These findings and proposals can be used by the businesses to which the research refers and by those who shape the country's tax policy. If the costs of, and barriers to, tax compliance are reduced, businesses will have more resources for their main activities, bringing significant benefits in the short term and the long term.

With regard to proposals for future research, this work could be repeated on an annual basis in order to construct a reliable model by which to monitor the cost of tax compliance. In addition, the survey could be extended in order to determine the total cost of tax compliance for all businesses in the Greek tax system as a percentage of gross domestic product. This model could investigate the relationship between tax compliance costs and additional business characteristics, such as business size, legal form, industry, geographic area, etc.

6. CONCLUSION

It is particularly important to investigate the cost of tax compliance in order to reduce both businesses' operational costs and the overall cost of tax compliance borne by the national economy. The results of this study agree with a section of the literature that states that tax legislation complexity and e-government are the most important factors to affect the cost of tax compliance. In this paper, the components of these two factors were investigated and proposals were made in order to reduce the complexity of the tax system and to accelerate the penetration of e-government within the framework of the Greek tax system. However, as this subject is of particular interest in the current, highly competitive, business environment, further research should be conducted and the amount of progress made should be regularly monitored.

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