



University of Thessaly

**TAX COMPLIANCE COSTS AND THEIR IMPACT -
EVIDENCE FROM GREECE**

Professor Andreas G. Koutoupis



Introduction

Research Aim

- Our Research investigates the key determinants of costs that arise for businesses during the voluntary tax compliance process under the current tax system's requirements.

Methodology

- Research was conducted using a representative sample of businesses in the Greek economy. Data was collected via questionnaires and processed using factor analysis.

Key Findings

- The survey revealed that the complexity of the tax system and the level of electronic tax services are the main factors determining tax compliance costs.

Practical Implications

- Recognizing and analyzing these factors is crucial for reducing operating costs, which is necessary for business sustainability, growth, and competitiveness in the modern economic environment.

Literature review (1)

Existing Research

Definition and Scope: Tax compliance costs include fees for lawyers and accountants, expenses for tax departments in large enterprises, and the time and effort of taxpayers in organizing files and preparing tax declarations (Sandford, 1995; Weistroffer et al., 1999).

Components of Costs: Costs involve time spent by taxpayers and employees, remuneration to external advisors, and non-labor costs like equipment and stationery (Tran-Nam et al., 2000).

Historical Context: First empirical study in the US by Haig in 1935; recognized as a "hidden cost" of taxation in the 1970s (Tran-Nam et al., 2014).

Complexity of Tax Systems: Complex tax systems increase compliance costs due to additional training and professional advice requirements (Slemrod & Blumenthal, 1996; Musimenta, 2020). Complexity leads to hidden taxation cost regarding preparation, drafting and submission of tax return and the monitoring of tax legislation.

Modern Technology: Adoption of modern technologies and electronic filing systems can reduce compliance costs by simplifying processes and reducing errors (Azmi et al., 2016; World Bank & PwC, 2017).

Impact on Small Businesses: Compliance costs disproportionately burden small businesses due to fewer resources and less experience (Freedman, 2009; Matarirano et al., 2019).

Literature review (2)

Gaps Identified

Greek Context

- Despite extensive research in other developed countries, tax compliance costs have not been thoroughly examined in Greece, especially considering its unique tax system complexities and high administrative costs.

Specific Factors

- The study aims to identify and analyze the specific factors affecting tax compliance costs in Greece, such as system complexity and electronic services, and how these can be managed to reduce overall costs.

First-of-its-Kind

- This research is pioneering in the Greek context, aiming to fill the gap by providing empirical data and analysis on tax compliance costs for businesses in Greece.

Research Methodology (1)

Sample

- **Population:** All active businesses in the Greek economy.
- **Sample Size:** 310 small, medium, and large businesses.
- **Sampling Methods:** Stratified and random sampling.
 - **Stratified Sampling:** Ensures representation of subgroups.
 - **Random Sampling:** Random chance of inclusion for each respondent in the subgroup.
- **Data Sources:** Hellenic Statistical Authority's Statistical Businesses Register for 2017 and Ministry of Development and Investment's General Commercial Register.

Data Collection

- **Tool:** Anonymous structured questionnaires.
- **Period:** November and December 2019.
- **Questionnaire:**
 - **Type:** Closed-ended questions.
 - **Pre-test:** Reliability and validity check with 5% of the sample.
 - **Distribution:** Sent to 500 businesses; 310 completed questionnaires (62% response rate).
 - **Administration:** In-person.



Research Methodology (2)

Data Analysis

- **Method:** Factor analysis.
 - **Purpose:** Reduce large number of variables to significant factors.
 - **Extraction Method:** Principal components.
- **Variables Analyzed:**
 - Length of tax legislation (Lenleg)
 - Changes in tax legislation (Legchang)
 - Legal uncertainty (Uncertleg)
 - Appeals (Appeals)
 - Conflicting provisions (Conprov)
 - Codification of tax legislation (Coditax)
 - Electronic tax services (Eservices)
 - Electronic connection (Econnect)
 - Number of visits (Numvisits)
 - Electronic tax data interchange (ETDI)
- **Pilot Survey:** Conducted with 25 businesses to minimize response errors.
- **Response Format:** Five-point Likert scale (1 = lowest, 5 = highest).

Factor Analysis model

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

$i = 1, \dots, p$

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.

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

$i = 1, \dots, p$

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.

Results (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

The analysis revealed that most businesses (94.2%) are very small (0-9 employees), with small (4.5%), medium (1%), and large (0.3%) businesses being less common. Sector-wise, 35.8% operate in the primary sector, 9.3% in the secondary sector, and 54.9% in the services sector. Regarding legal form, 87.7% are sole proprietorships, 7.4% are partnerships, and 4.9% are legal entities. Factor analysis showed a high KMO measure of 0.843, indicating suitability, and Bartlett's Test confirmed significant variable correlation ($p < 0.05$).

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

Communalities indicate how much of each variable's variation is explained by all factors. Table 2 shows that all variables have significant communalities, indicating their relation to a factor.

Results – Questionnaire (2)

We initially launch a telephone campaign. This enabled us to gather the email addresses of individuals responsible for tax compliance and inform them about our research objectives. The campaign spanned three days, during which we successfully completed more than 500 phone calls.

Our survey included questions about:

1. Respondent's firm (turnover, number of employees, type of accounting system and software used).
2. Time consumed and cost incurred in order to comply with the legislation regarding the submission of income tax return (internal and external costs).
3. Respondents views of the Greek Tax System (i.e. the way the tax legislation is applied in Greece).

Results (3) - Complexity of the Tax System

Description

The complexity of tax regulations in Greece imposes substantial burdens on businesses, leading to increased compliance costs and administrative challenges.

Businesses face difficulties in understanding and applying numerous tax laws, interpretative circulars, and frequent amendments, which lack consistency and stability.

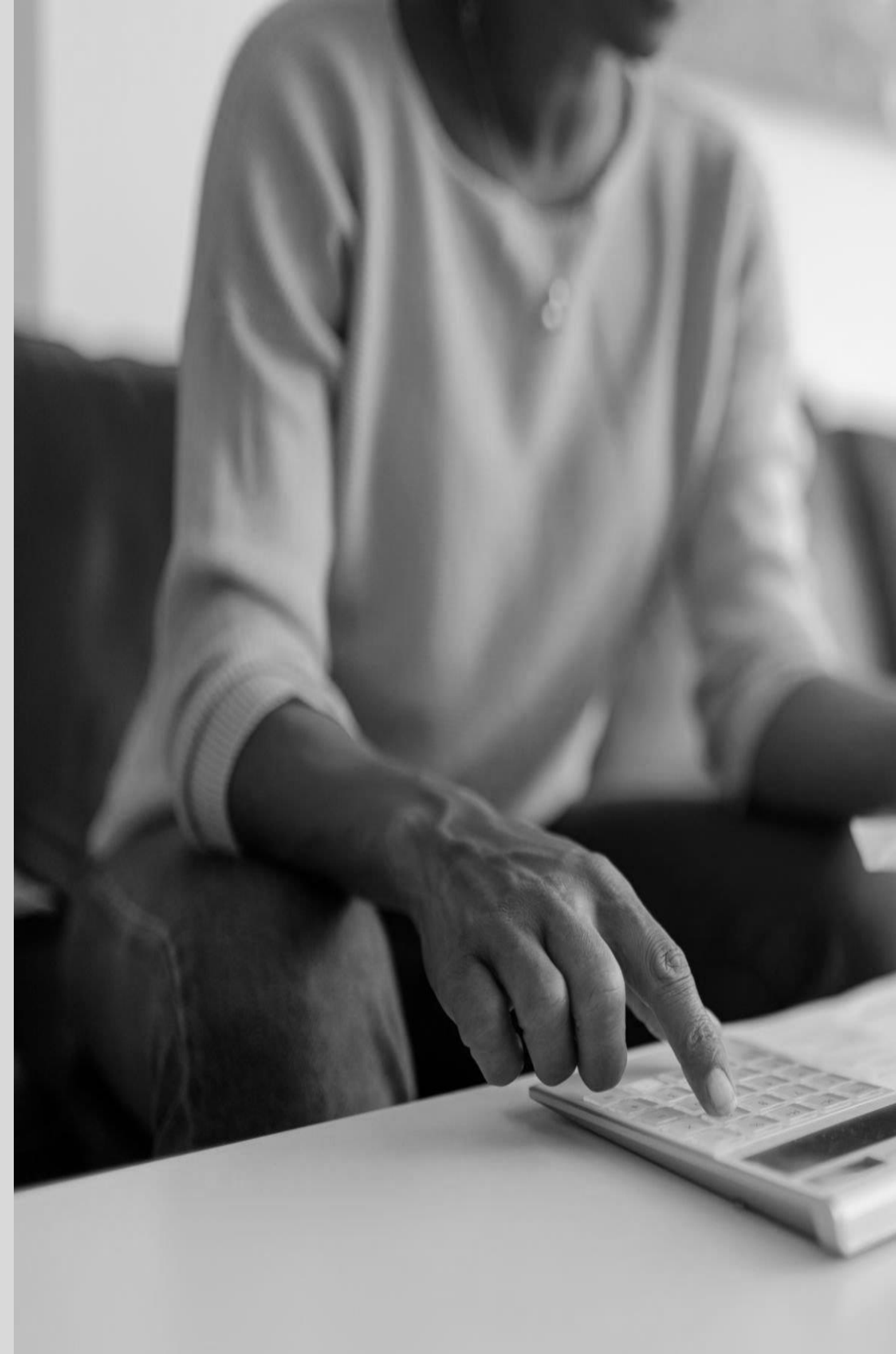
Conflict among tax provisions further complicates compliance, requiring additional resources for clarification and adjustment.

Examples

Frequent Legislative Changes: On average, six new tax laws are introduced annually since 1975, accompanied by numerous interpretative circulars and decisions, contributing to an unstable tax environment.

Conflicting Provisions: Inconsistencies among different tax laws and circulars often lead to conflicting interpretations, complicating compliance efforts and requiring clarification from tax authorities.

Complex Dispute Resolution: Administrative and judicial procedures for resolving tax disputes are lengthy and complex, adding to compliance costs and administrative burden.



Results (4) – Electronic Tax Services

Description

Electronic tax services play a crucial role in modernizing tax administration and reducing compliance costs for businesses.

Effective e-government initiatives can streamline tax processes, improve transparency, and enhance efficiency.

Current State

Despite progress, electronic tax services in Greece still require significant improvement:

- Not all tax types are adequately covered by online services.
- Integration between tax administration (My data) and business accounting systems remains underdeveloped.
- A considerable number of in-person visits are still necessary for issue resolution.
- Electronic data exchange between businesses for tax purposes is not optimally utilized.



Results (5)

International comparisons of tax compliance costs can be misleading due to:

- Sampling differences
- Methodological variations
- Fluctuations in revenue or GDP

The Greek corporate income tax compliance cost/revenue ratio of 12.61% is higher than in other European countries:

Greece's higher ratio suggests potential for improving tax system efficiency, crucial during economic constraints like the financial crisis.

Greece compares favorably or equally to transitional countries:

Croatia: 11.7%

Slovenia: 16.2%

Empirical studies on corporate income tax compliance costs are lacking for other Southeast European countries such as Italy, Spain, Portugal, and Cyprus.

Discussion

Understanding the factors influencing tax compliance costs can lead to effective strategies for cost reduction (Two main factors).

Tax System Complexity By addressing complexities in tax regulations and enhancing electronic tax services, businesses can streamline compliance processes.

Implementing reforms to simplify tax laws, reduce litigation issues, and improve e-government services can directly lower operational expenses and improve psychological costs related to stress, frustration and anger.

Administration Services The non productive costs that need to be reduced include direct labor, office supply, software and machinery, and external professional services (e.g., accountants, tax experts) etc. Needs an electronic tax services enhancement.



Conclusion

According to the results of the research, tax compliance costs could be reduced by following:

- 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 electronic interconnections across business accounting information systems and tax administration systems should be strengthened.
- Electronic interconnections between businesses and tax authorities, in terms of accounting and tax matters (e.g. electronic invoicing, electronic file exchanges, etc.), should be enhanced.

Future Research

- Explore how ongoing tax reforms and advancements in e-government services impact compliance costs.
- Compare tax compliance costs across different sectors and business sizes within the Greek economy.
- Conduct comparative studies with other European Union countries to benchmark Greece's tax system complexity and e-government services.
- Identify best practices and lessons learned from countries with successful tax simplification initiatives.
- Assess the potential of digital solutions in enhancing tax administration efficiency and reducing compliance costs.
- Analyze the economic impact of reducing tax compliance costs on business competitiveness and economic growth.

Thank you!