

Tax Literacy & Government Trust against Tax Evasion

V. Stasinopoulos¹, Ckastanioti¹, D. Stasinopoulos²

1.University of Peloponnese, Department of Business & Organization Administration, School of Management, Kalamata, Greece

2.Hellenic Open University

Corresponding author: V. STASINOPOULOS, Avidou 130 Street, Zografou, Greece, Postal Code 15772,

Abstract

Tax literacy refers to the citizens' degree of possession of specific competencies and skills, which are required for understanding tax issues and concepts at a basic level, and to handle their tax obligations at an advanced level. The aim of this paper is to analyse whether the level of tax literacy affects the tax citizens' compliance and government trust, especially of those with a high level of general scientific academic literacy.

A quantitative survey of 757 physicians was carried out for the purposes of this study, which showed that an increase in tax literacy can be more effective in increasing tax compliance than an increase in the so-called economic and/or financial literacy. Finally, the research showed that when citizens - in this case physicians - are actively involved in managing their personal tax affairs without resorting to a professional accountant/tax advisor, they exhibit a more responsible tax behaviour.

Keywords: Tax Evasion, Tax Literacy, Trust, Tax Compliance, Shadow Economy

1. Introduction

1.1 General

As the complexity of modern life increases, the number and types of literacies that individuals need to possess in order to participate fully in modern society is growing. One of these literacies is economic or financial literacy, to which tax literacy is added.

The increased attention that financial literacy has received in recent years is largely due to the new, changing context in which individuals are required to function, such as: the growth of the financial sector with the emergence of increasingly complex financial products; globalisation of the financial and labour markets; economic recession and deregulation of markets; increased life expectancy and, therefore, longer retirement periods; changes in the insurance/pension system with more private insurance options available and a limited social benefit framework, and changes in the information environment with the digitalisation of the financial system and greater availability of financial information (O'Connor, 2013; Reifner & Herwig, 2003).

The ability of individuals to make informed financial decisions is crucial for the development of personal financial well-being and thus contributes to a more efficient allocation of financial resources (Klapper, et al., 2012).

In general, across the world, individuals tend to have limited financial literacy, while at the same time a segment of the population has some basic financial knowledge related to managing their finances in the short term but struggles to apply this knowledge to other areas.

Examples include lack of savings, credit over-reliance and difficulties in choosing appropriate financial products and making financial decisions. Survey results continue to show large differences in the level of financial capability between different groups of people, with gender being the main distinguishing factor. The literature shows that certain groups find it particularly difficult to deal with financial issues and therefore have lower levels of financial literacy. These groups may differ according to national

circumstances, but in general they mainly comprise young people and females (Lusardi & Mitchell, 2013; Lusardi & Curto, 2014; Fallan, 1999).

To protect and secure their personal finances, people should strive to constantly monitor any changes in their economic context.

To handle their personal finances effectively, people need to be well informed about their tax obligations and rights, as any disruption to the tax system can affect their level of disposable income and their decisions to spend, save and invest. In order to understand the tax system and determine one's tax liabilities, one should have a good level of tax literacy.

Tax literacy is closely related to the issue of public finances and public spending.

1.2 The tax literacy approach

The size of the "shadow economy" and its impact on economic and social life have been of great concern in recent decades, both to government institutions, national and international organisations and the academic community, while references to it are frequent in the traditional and electronic press. The different approaches that have been taken in both Greek and international literature to describe the phenomenon, in terms of the type of economic - and not only - activities it encompasses, often cause confusion, while further ambiguity is caused by the nomenclature that has been used from time to time by scholars to 'conceptualise' the phenomenon in question (Stasinopoulos, 2023).

The problem of low tax compliance and tax evasion is often linked to the complexity of the tax systems, where taxpayers are not well informed and educated about their tax obligations.

However, tax illiteracy is dangerous for the economy as a whole, but also for individuals personal budgets as well. Therefore, if tax issues are not given the required special attention, certain economic issues may arise that pose significant risks to the financial stability of households (e.g. they may lead taxpayers to pay excessive taxes and prevent them from benefiting from tax reliefs to which they are entitled).

Tax administration is highly important in personal financial planning. An individual should have a good knowledge of the various aspects of taxes and tax policies, which will help them to better understand how much they can save even after tax duties are paid. The ability to meet tax obligations on time, accurately prepare tax returns certainly affects the overall financial status of an individual (Brackin, 2007).

In contrast, individuals who have not received any kind of formal tax education find it hard to understand the issues related to determining tax liabilities, completing tax return forms, and duty savings (Mutascu and Danuletiu, 2013; Bhushan & Medury, 2013).

Some authors argue that there is a strong relationship between tax complexity, including tax revenue, tax compliance, and illiteracy levels (Eriksen and Fallan, 1999; Kirchler et al., 2008; Mutascu and Danuletiu, 2013; Fallan, 1999; Stasinopoulos, 2022a; 2023; Bhushan and Medury, 2013).

Tax literacy is correlated with tax attitudes. According them tax attitudes could be improved through a more comprehensive understanding of the tax law system (Eriksen and Fallan, 1999).

A survey by Stasinopoulos & Kastanioti (2024) on a random sample of 517 respondents to measure the knowledge of Greek taxpayers on the use of indirect control techniques as well as the knowledge of the population on their basic tax obligations showed that 96.13% of the population were not aware of what indirect control techniques were, while 79.88% stated that being aware of them could potentially increase their tax compliance.

1.3 Definitions relating to tax literacy

There are different definitions of tax literacy, but there is a consensus regarding its basic meaning. According to Remund (2010), financial literacy refers to an individual's ability to handle finances. OECD defines financial literacy as the combination of awareness, knowledge, skills, attitudes and behaviours necessary to make sound financial decisions with the ultimate goal of achieving individual financial well-being (OECD, 2005). It includes an individual's ability to identify the financial options available at any given time, to discuss financial matters without discomfort, to plan for the future, and to successfully respond to situations that affect day by day financial decisions, including events of the economy as a whole. Financial literacy is the ability to process financial information and make informed decisions about the use and handling of finances, and more specifically about financial planning, asset accumulation, borrowing and retirement (Lusardi & Mitchell, 2014). From the set of definitions, two main characteristics of Financial

Literacy (FL) can be distinguished: firstly, FL involves day-to-day financial issues and secondly, it is related to making sound choices based on available information (decision making).

The concept of tax literacy, on the other hand, has been defined by various researchers.

Literature distinguishes between the concepts of tax literacy and illiteracy. People who have the ability and skills to complete the tax return forms are considered 'functionally tax literate' and people who cannot understand and complete the tax return forms can be considered 'tax illiterate', while others have defined it as the ability to complete the tax form and calculate taxable income and tax liability independently (Bardai, 1992; Madi et. al., 2010).

A taxpayer should be tax literate, which means that he/she must have sufficient knowledge of the various aspects of taxation to fulfil tax obligations responsibly, accurately and on time.

From the above definitions, it can be concluded that tax literacy is a special area of financial literacy.

Bhushan & Medury, (2013) defined tax literacy as the knowledge that an individual possesses to effectively manage issues related to their personal taxation.

Tax literacy is the level of awareness or sensitivity of taxpayers to the overall tax laws and tax system. Tax literacy aims to help individuals obtain information about taxes and to understand the functioning of the tax system and tax policy at national and international levels. If people are never taught the key concepts of taxation, they may be more vulnerable to issues such as over indebtedness or non-compliance with their tax obligations.

1.4 Health professionals and tax literacy

The shadow economy extends and is met in almost all economic activities, although its intensity and extent vary according to the specific characteristics of each sector.

The "health sector", whether public or private, is often mentioned in literature and the press as one of the main economic sectors suffering from intense and serious shadow economy phenomena. "Health" is a very critical area of government activity that has a decisive influence on human well-being and development in all aspects of life - physical, social, economic, political and cultural. The goal of health care systems is - or should be - clinical efficiency, by finding an optimal balance between economic efficiency and social equity, with a healthy coexistence of public and private business activities of health care providers. In this economic sector of healthcare, shadow economy phenomena develop and become endemic, causing 'fiscal imbalances in the economic organisation of states' (Stasinopoulos et al, 2018;20-22).

1.5 The Medical Sector in Greece & the Shadow Economy

Physicians constitute one of the most important resources in the provision of health services. Moreover, the medical profession is associated with individuals of a high level of literacy, at least at an academic level. The human factor is not only a means of providing the necessary health care, but is also an important factor which, through its behaviour, influences the outputs of the system and contributes to its effective, efficient, and high-quality functioning (Rigoli et al, 2003). Greece has the highest number of physicians with an average value of 6.3 and at the same time the lowest number of nurses with an average value of 3.2 per 1,000 inhabitants, while the EU average value for nurses is 8.4 and for physicians 3.6 (OECD, 2017). Moreover, the ratio of general practitioners in Greece is only 1 in 16, compared to an EU average of 1 in 4 (OECD, 2019). According to the data collected in Greece (see Table 1):

Table 1. Number of Doctors/Dentists based on data from the Hellenic Statistical Authority

| Variable | N% |
|------------------|-------|
| Gender | |
| 1 Male | 62 |
| 2 Female | 38 |
| <i>Total</i> | 100 |
| Age group | |
| 1. 20-24 | 0.02 |
| 2. 25-29 | 5.40 |
| 3. 30-44 | 46.57 |
| 4. 45-64 | 43.70 |
| 5. 65+ | 4.31 |
| <i>Total</i> | 100 |

Doctor employment Status

| | |
|------------------------|------------|
| 1 Self-Employed | 52.5 |
| 2 Public Hospital | 22.5 |
| 3. Working Abroad | 15 |
| 4.Private Sector, etc. | 10 |
| <i>Total</i> | <i>100</i> |

Specialty

| | |
|----------------------|-------------|
| Pathologists | 48.96 |
| Surgeons | 25.45 |
| Laboratory doctors | 11.64 |
| Psychiatrists | 2.34 |
| Interns | 10.07 |
| <i>Rural doctors</i> | <i>1.54</i> |
| <i>Total</i> | <i>100</i> |

Number of Doctors/Dentists by NUTS2**Regions**

| | |
|-----------------------------|------------|
| Attiki | 45.70 |
| Stereia Ellada | 2.45 |
| Dytiki Ellada | 5.08 |
| Peloponnisos | 3.28 |
| Thessalia | 5.80 |
| Ipeiros | 3.43 |
| Anatoliki Makedonia, Thraki | 4.57 |
| Kentriki Makedonia | 17.64 |
| Dytiki Makedonia | 1.48 |
| Ionia Nisia | 1.52 |
| <i>Total</i> | <i>100</i> |

Source: Hellenic Ministry of Health 2020,ELSTAT,2020-own processing

-22.5% (+/-2.5%) of physicians and dentists are employed in public health structures,

-52.5% (+/-2.5%) are self-employed professionals/managers of corporate organisations.

-15% (+/-2.5%) of doctors and dentists are working abroad

-The remaining percentage corresponds to physicians employed in the private sector, in other government services (except hospitals), unemployed, etc.: 10% (+/-2.5%) (Stasinopoulos et al,2023).

The shadow economy in the medical and dental services sector alone is estimated at 0.40% of GDP, showing a significant downward trend since 2011 when it was estimated at 0.73% of GDP (Stasinopoulos, 2024a).

2. Presentation Of A Survey On The Level Of "Tax Literacy".

In the context of this paper, the researchers conducted a survey on a sample of health professionals in Greece to determine the level of "tax literacy".

2.1 Measuring tax literacy

The importance of financial literacy and its high position on the countries' political agenda has led to the need to develop and establish relevant measurement indicators to systematically record and monitor its levels. These indicators can be used to make geographical and longitudinal comparisons between individuals, regions or groups within a territory, but also between countries, groups of countries and continents, in order to obtain an overall picture of how this measure is evolving. The most known instruments for measuring "financial literacy" [e.g. TEU (Test of Economic Understanding), TEL (Test of Economic Literacy) and TFL (Test of Financial Literacy), TFK (Test of Financial Knowledge), BFT (Basic Finance Test) by Walstad and Rebeck (2017)].

For the measurement of tax literacy, however, no separate and specific measurement instruments can be found in literature.

3. Research Methodology

The research design of this study is descriptive and quantitative in nature. It was conducted from 01 March 2023 to 31 November 2023.

3.1 Material And Method

Sample

The sample of the study consisted of self-employed physicians and dentists, permanent tax residents of Greece, for the year 2023, who were randomly selected from the Greek telephone directory covering all medical specialties. A systematic sampling method was employed to ensure the representativeness of the sample in the population.

Measurement tool

The respondents were asked to give their response on a 5-point Likert scale with 5 being «strongly disagree» and 1 «strongly agree» (distributed via Microsoft Forms and using data from the telephone directory).

The 10 groups of questions in the questionnaire (excluding demographic information) were created based on whether a physician was tax literate:

- Q1: Level of knowledge of basic tax concepts (VAT, types of taxes, fines, surcharges, tax evasion limits).
- Q2: Level of knowledge of the basic functioning of the tax system (e.g. audit eligibility methods, audit methods employed by the tax authorities).
- Q4: Level of knowledge of taxpayers' rights (appeals, contesting the taxable product)
- Q5: Level of knowledge of how taxes are used (allocation to the state budget),
- Q6: Level of knowledge of the position of taxes as part of the personal budget (share in the total income),
- Q7: Degree of knowledge of physicians' ability to fulfil their own tax-related obligations (communication with the tax administration, filling in of income declarations, paying taxes, declaring POS tax obligations, declaring professional bank accounts),
- Q8: Degree of tax compliance as professionals (issuing receipts, use of POS).
- Q9: Degree of prudent financial behaviour (rational use of finances, savings, rational spending)
- Q10: Degree of tax compliance as consumers

Statistical Analysis

Testing the significance of mean score differences between groups

Independent samples t-test was used to test for significant differences in mean scores, and one-way ANOVA was used to test for significant differences in mean scores between question subcategories and demographic variables.

SPSS was used to statistically process the survey data and to measure questionnaire internal consistency (see Table 2):

Table 2. Group of questions-Questionnaire internal consistency

| Subscales | Number of questions | Cronbach's a |
|--|---------------------|--------------|
| Q1. Level of knowledge of basic tax concepts | 4 | 0,851 |
| Q2. Level of knowledge of the basic functioning of the tax system | 4 | 0,865 |
| Q3. Level of knowledge of the economic developments | 5 | 0,742 |
| Q4. Level of knowledge of the taxing rights | 5 | 0,684 |
| Q5. Level of knowledge of how and where taxes are used | 6 | 0,815 |
| Q6. Level of knowledge of what part of personal budget taxes represent | 6 | 0,725 |
| Q7. Level of knowledge of own fulfilment of tax obligations | 4 | 0,715 |
| Q8. Level of sector tax fulfilment | 6 | 0,745 |
| Q9. Level of prudent financial consumer behaviour | 5 | 0,715 |
| Q10. Level of prudent tax behaviour as consumers | 6 | 0,735 |

Validity of Questionnaire

The validity of the questionnaire was assessed using the content validity method by a panel of ten experts (including 4 academics, 2 private sector physicians, 2 public sector physicians and 2 senior managers who have held positions of responsibility in the prosecution of financial crime). These experts evaluated the questionnaire and found it to have high face and content validity, which is the desired result, i.e. it is clear from the questions that the test measures what it is intended to measure (Litwin, 1995).

Correlation of quantitative variables

Pearson's correlation coefficient (r) was used to test for correlation of two quantitative variables, with values ranging from -1 to 1.

3.2 Results

The sample consisted of 757 persons. The majority of participants were aged 35-54 years (70.28%) and only 5.02% of the sample were aged 24-34 years.

43.20% of the participants were pathologists, 39.37% were surgical specialists, 7.33% were laboratory specialists, 3.27% were psychiatrists and the remaining 6.84% were dentists.

The majority of respondents were aware of their obligation as taxpayers to file income tax returns (96.19%) and that they comply with their obligation to file income tax returns regardless of the truth or falsity of the contents (96.78%).

Most respondents employ an accountant to manage their tax affairs (93.26%, n=706).

3.3 Analysis of results by question group

This section presents the results of the survey, focusing on the results of the main sub-groups of questions. Note that the further to the left of 3 (minimum is zero; maximum is five) the mean value is, the stronger the disagreement, while the further to the right of 3 the mean value is, the stronger the agreement. On the other hand, a value approaching 3 indicates a neutral position, i.e. neither agreement nor disagreement. 757 doctors took part in the survey and their demographic characteristics are shown in Table 3.

Table 3. Demographic Characteristics of participating physicians in the survey

| Μεταβλητή | N | N% | Αθροιστική N% |
|-------------------|-----|---------|---------------|
| Gender | | | |
| 1 Male | 499 | 65,92% | 65,92% |
| 2 Female | 258 | 34,08% | 100,00% |
| Total | 757 | 100,00% | |
| Age group | | | |
| 1 24-34 | 38 | 5,02% | 5,02% |
| 2 35-54 | 532 | 70,28% | 75,30% |
| 3 55+ | 187 | 24,70% | 100,00% |
| Total | 757 | 100,00% | |
| Married | | | |
| 1 Yes | 599 | 79,13% | 79,13% |
| 2 No | 158 | 20,87% | 100,00% |
| Total | 757 | 100,00% | |
| Having Children | | | |
| 1 Yes | 590 | 77,94% | 100,00% |
| 2 No | 167 | 22,06% | |
| Total | 757 | 100,00% | |
| Private Insurance | | | |
| 1 Yes | 340 | 44,91% | 44,91% |
| 2 No | 417 | 55,09% | 100,00% |

| | | | |
|---------------------|-----|---------|---------|
| Total | 757 | 100,00% | |
| Specialty | | | |
| Pathologist | 327 | 43,20% | 43,20% |
| Surgeon | 298 | 39,37% | 82,56% |
| Laboratory doctor | 56 | 7,33% | 89,89% |
| Psychiatrist | 25 | 3,27% | 93,16% |
| Dentist | 52 | 6,84% | 100,00% |
| Total | 757 | 100,00% | |
| Place of Employment | | | |
| 1 Agglomeration | | | |
| Athens – | | | |
| Thessaloniki – | | | |
| Piraeus | 440 | 58,10% | 58,10% |
| 2 Major Urban | | | |
| Centre | | | |
| (more than 50.000 | | | |
| inhabitants) | 185 | 24,46% | 82,57% |
| 3 Urban Centre | | | |
| (10.000 - 50.000 | | | |
| inhabitants) | 105 | 13,87% | 96,43% |
| 4 Semi-Urban Centre | | | |
| (2.500 - 10.000 | | | |
| inhabitants) | 27 | 3,57% | 100,00% |
| Total | 757 | 100,00% | |

Source:The Authors

3.4 Analysis of the results of the groups of questions

Table 4 shows the means and standard deviations. More specifically:

Table 4. Mean values (MV) and standard deviations (SD) of the Group of questions Q1-Q10

| | N | MV | SD |
|---------|-----|--------|--------|
| MEANQ1 | 757 | 2.8723 | ,83876 |
| MEANQ2 | 757 | 3.0932 | ,77182 |
| MEANQ3 | 757 | 3.7234 | ,72638 |
| MEANQ4 | 757 | 2.9933 | ,69740 |
| MEANQ5 | 757 | 2.8900 | ,64985 |
| MEANQ6 | 757 | 2.9466 | ,60184 |
| MEANQ7 | 757 | 2.0123 | ,65639 |
| MEANQ8 | 757 | 2.9869 | ,45630 |
| MEANQ9 | 757 | 3.4402 | ,65613 |
| MEANQ10 | 757 | 2.8897 | ,61428 |

Source:The Authors

Question group Q1: As can be seen from the survey results, doctors tend to have insufficient knowledge of tax concepts, as the mean value (MV) of most of their answers is less than 3 (MV=2.8783).

Question group Q2: Doctors tend to have the least in-depth knowledge of the functioning of the tax system, as the mean value is slightly less than 3 (MV=3.01).

Question group Q3: Doctors tend to be interested in the current economic developments, as the mean value is greater than 3 (MV=3.72).

Question group Q4: Doctors tend not to be fully aware of their taxing rights as the mean value is slightly less than 3 (MV=2.99).

Question group Q5: Doctors tend to be marginally aware of how and where taxes are used and what percentage of the national budget they represent, as the mean value is 3 (MV=2.89).

Question group Q6: Doctors tend to be marginally aware of what part of their personal budget taxes represent, as the mean value is marginally less than 3 (MV=2.95).

Question group Q7: Doctors tend not to fulfil their tax obligations on their own, without the service of an accountant, as the mean value is below 3 (MV=2.01).

Question group Q8: Doctors are of the opinion that their occupational sector tends to meet its tax obligations as the mean value is approximately 3 (MV=2.99).

Question group Q9: Doctors tend to believe that they do not have prudent financial and consumer behaviour.

Question group Q10: Doctors believe that they do not act with the utmost prudence and fiscal vigilance as consumers, as the mean value is less than 3 (MV=2.89).

3.5 Question Groups correlations

Pearson's correlation coefficient (r) was used for testing the correlation among the survey quantitative variables (see Table 5). Based on the processing and analysis of the results, it can be observed that:

Table 5. Correlation per pair of the mean values of the subscales Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8 , Q9 , Q10,

| | MEA NQ1 | MEA NQ2 | MEANQ 3 | MEA NQ4 | MEA NQ5 | MEANQ6 | MEANQ7 | MEA NQ8 | MEAN Q9 | MEANQ10 |
|---------|------------|------------|------------|------------|------------|--------|--------|------------|------------|---------|
| MEANQ1 | 1 | | | | | | | | | |
| MEANQ2 | ,316* | 1 | | | | | | | | |
| MEANQ3 | ,116* | ,218* | 1 | | | | | | | |
| MEANQ4 | ,045 | ,031 | -,071** | 1 | | | | | | |
| MEANQ5 | -,044* | -,011 | -,059* | ,391 | 1 | | | | | |
| MEANQ6 | -,033 | ,017 | ,032 | -,081* | ,014 | 1 | | | | |
| MEANQ7 | ,067* | -,040 | -,017 | ,270** | ,351* | ,017 | 1 | | | |
| MEANQ8 | -,018 | ,093** | ,009 | ,085** | -,16 | ,88 | ,094** | 1 | | |
| MEANQ9 | -,020 | ,106** | ,004 | ,234** | -,19 | ,93 | ,103** | ,162* | 1 | |
| MEANQ10 | -,020 | ,237** | ,022 | ,104** | ,21 | ,233 | ,233** | ,204* | ,413* | 1 |

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source:The Authors

(i) as doctors' knowledge of tax concepts increases, their propensity for tax compliance as professionals and as citizens-consumers does not increase, nor does their prudent financial consumer behaviour:

-(there is no statistically significant correlation between questions Q1 and Q8 (r=- .18),

-(there is no statistically significant correlation between questions Q1 and Q9 (r=-.20),

-(there is no statistically significant correlation between questions Q1 and Q10 (r=-.20),

(ii) as doctors' knowledge of the basic function of the tax system increases, so does their propensity for tax compliance as professionals and as citizens-consumers, as well as their prudent financial consumer behaviour.

-(there is a statistically significant positive correlation between questions Q2 and Q8 (r= .093**,sig<0.01),

-(there is a statistically significant positive correlation between questions Q2 and Q9 (r= .106**,sig<0.01),

-There is a statistically significant positive correlation between questions Q2 and Q10 (r= .237**,sig<0.01),

(iii) When doctors follow and are aware of recent economic developments, there is no increase in their propensity for tax compliance as professionals, tax behaviour as citizens-consumers, and prudent financial consumer behaviour.

- (there is no statistically significant correlation between questions Q3 and Q8 ($r = .093$),
- (there is no statistically significant correlation between questions Q3 and Q9 ($r = .106$),
- (there is no statistically significant correlation between questions Q3 and Q10 ($r = .237$),

(iv) When doctors are aware of their rights as taxpayers, their propensity for tax compliance as professionals and as citizens-consumers increases, as well as their prudent financial consumer behaviour.

- (there is a statistically significant positive correlation between questions Q4 and Q8 ($r = .085^{**}$, $\text{sig} < 0.01$),
- (there is a statistically significant positive correlation between questions Q4 and Q9 ($r = .234^{**}$, $\text{sig} < 0.01$),
- (there is a statistically significant positive correlation between questions Q4 and Q10 ($r = .104^{**}$, $\text{sig} < 0.01$),

v) When doctors are aware of how taxes are distributed in the tax system, their propensity to comply with taxes as professionals and as citizens-consumers does not increase, nor does their prudent financial consumer behaviour.

- (there is no statistically significant correlation between questions Q5 and Q8 ($r = -.16$),
- (there is no statistically significant correlation between questions Q5 and Q9 ($r = -.19$),
- (there is no statistically significant correlation between questions Q5 and Q10 ($r = -.21$),

(vi) When doctors are aware of how taxes are allocated in their personal budgets, their propensity for tax compliance as professionals and as citizens-consumers does not increase, nor does their prudent financial consumer behaviour.

- (there is no statistically significant correlation between questions Q6 and Q8 ($r = .088$),
- (there is no statistically significant correlation between questions Q6 and Q9 ($r = .093$),
- (there is no statistically significant correlation between questions Q6 and Q10 ($r = .233$),

vii) When doctors manage their own tax obligations, there is an increased tendency towards tax compliance as professionals, but also as citizens-consumers and prudent financial consumer behaviour.

- (there is a statistically significant positive correlation between questions Q7 and Q8 ($r = .094^{**}$, $\text{sig} < 0.01$),
- (there is a statistically significant positive correlation between questions Q7 and Q9 ($r = .103^{**}$, $\text{sig} < 0.01$),
- (there is a statistically significant positive correlation between questions Q7 and Q10 ($r = .233^{**}$, $\text{sig} < 0.01$),

3.6 Impact of demographic variables on questions subcategories

At this point of data processing, it should be noted that:

Laboratory physicians and male physicians appear to be more aware of:

- Q1: the basic concepts of taxation (VAT, types of taxes, fines, penalties, surcharges, limits of tax evasion)
- Q2: the basic functioning of the tax system (e.g. eligibility for tax audits, methods of tax audits)
- Q4: taxpayers' rights (appeals, disputing tax liability)
- Q5: how taxes are used (allocation to the state budget),
- Q6: proportion of taxes in the personal budget (proportion of total income),
- Q7: the ability to fulfil one's tax obligations (communicating with the tax administration, filling in income tax returns, paying taxes, declaring POS obligations, declaring business bank accounts),

Laboratory physicians and male physicians monitor more closely:

- Q3: recent economic developments (inflation, tax levels, tax developments and restructuring).

Laboratory physicians and male physicians exhibit:

- Q8: better tax compliance as a professionals (issuing receipts, using POS)
- Q9: more prudent financial behaviour (rational use of finances, savings, rational spending)

4. Discussion Of The Research Findings

The conducted research shows a relationship between taxpayers' tax knowledge and tax compliance behaviour, and that acquiring additional tax information increases tax compliance and reduces the propensity to tax evade.

In particular, a number of interesting conclusions can be drawn:

First, when doctors' knowledge of tax concepts increases, their propensity for tax compliance as professionals, their tax behaviour as citizens-consumers, and their prudent financial consumer behaviour does not increase.

Second, when doctors' knowledge of the basic functioning of the tax system increases, their propensity for tax compliance as professionals, their tax behaviour as citizens-consumers, and their prudent financial consumer behaviour increases.

In other words, increasing tax literacy may be more effective than simply increasing the so-called economic and/or financial literacy.

Third, when doctors keep abreast of economic developments, neither their propensity for tax compliance as professionals nor their prudent financial consumer behaviour increases.

Fourth, when doctors are aware of their rights as taxpayers, their propensity for tax compliance as professionals, tax compliance as citizens-consumers, and prudent financial consumer behaviour increases.

Again, a mere increase in the so-called economic and/or financial literacy does not substantially contribute to increased tax compliance and to an increase in tax literacy.

Fifth, when doctors are aware of how taxes are allocated in the tax system, their tax compliance as professionals does not increase, nor does their prudent financial consumer behaviour.

Sixth, when doctors are aware of how taxes are allocated in their personal budgets, their propensity for tax compliance as professionals and consumers does not increase, nor does their prudent financial consumer behaviour.

Seventh, when doctors manage their own tax obligations, the propensity for tax compliance as professionals and as consumers does not increase, nor does their prudent financial consumer behaviour.

It follows that when doctors, and by extension citizens, are actively involved in managing their tax affairs, they exhibit a more responsible tax behaviour.

5. Conclusion

Raising taxpayers' tax awareness and knowledge is a crucial element in creating and maintaining as well, a successful tax system. Increased tax literacy should reduce the likelihood of over-indebtedness of individuals or households by reducing the tax risk, increase their tax compliance and hence reduce the size of shadow economy, and increase tax revenues through tax compliance.

Simply increasing financial literacy without a balanced increase in tax literacy cannot be a sustainable long-term solution.

There is a need to change the relationship between the state and its citizens and to underline the importance of cultural change in tax administrations. Where once tax administrations followed a culture of fear, today they acknowledge citizens not only as "liable entities" but also as stakeholders. It is time for tax administrations and tax officials to change their approach from a punitive one to one of promoting and developing tax literacy among citizens.

This change therefore requires an understanding of tax perceptions and increased tax awareness, as well as the adoption by tax administrations of programmes to raise the level of tax literacy and cultivate long-term tax education.

Acknowledgments: This Manuscript Has Been Done Within The Framework Of The Phd Programme In Business & Organization Administration Of The University Of Peloponnese (Greece) -Vasilios STASINOPOULOS, Phd (C)

6. References

1. Bardai, B. (1992). Tax Illiteracy in Malaysia: Problems Solutions. *Journal of ACCAMADIA* 2 (2): 7-31.
2. Bhushan, P.; Medury, Y. (2013). Determining Tax Literacy of Salaried Individuals - An Empirical Analysis. *IOSR Journal of Business and Management*: 76-80.
3. Brackin, T. (2007). Overcoming tax complexity through tax literacy – An analysis of Financial Literacy research in the context of the taxation system. ATTA Conference 2007.

4. Cvrilje, D. (2015). "Tax Literacy as an Instrument of Combating and Overcoming Tax System Complexity, Low Tax Morale and Tax non-Compliance", *The Macrotheme Review*, 4(3), pp. 156-167.
5. Fallan, L. (1999). Gender, exposure to tax knowledge, and attitudes towards taxation; an experimental approach. *Journal of Business Ethics* 18 (2): 173-184.
6. Klapper, L. F., Lusardi, A. & Panos, G. A. (2012). Financial literacy and the financial crisis (No. w17930). National Bureau of Economic Research.
7. Kirchler, E., Hoelzl, E., Wahl, I. (2008). Enforced versus voluntary tax compliance: The slippery slope framework. *Journal of Economic Psychology* 29: 210-225.
8. Lusardi, A. & Mitchell, O. (2013). Financial literacy around the world. Insights: Financial Capability.
9. Lusardi, A., Mitchell, O. S. & Curto, V. (2014). Financial literacy and financial sophistication in the older population. *Journal of pension economics & finance*, 13(4), 347-366.
10. Madi, N.; Kamaluddin, A.; Janggu, T., Ibrahim, M.B.A.; Samah, A.B.A. (2010). Tax Literacy among Employees: Sabah and Sarawak's Perspective. *International Journal of Economics and Finance* 2 (1): 218-223.
11. Mutascu, M.; Danuletiu, D. (2013). The Literacy Impact on Tax Revenues. *Economics*: 1-24. Discussion Paper. <http://www.economics-ejournal.org/economics/discussionpapers/2013-63>.
12. Reifner, U., & Herwig, I. (2003). Consumer education and information rights in financial services. *Information & Communication Technology Law*, 12(2), 125–142.
13. O'Connor, L. G. (2013). Investors' information sharing and use in virtual communities. *Journal of the American Society for Information Science and Technology*, 64(1), 36–47.
14. OECD (2005). Recommendation on principles and good practices for financial education. OECD Publishing. Retrieved from <https://www.oecd.org/finance/financial-education/35108560.pdf>
15. Remund, R. L. (2010). Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. *Journal of Consumer Affairs*, 44(2), 276–295.
16. Stasinopoulos, D., & Kastanioti, C. (2024). The Implementation of Tax Indirect Auditing Methods in Greek Economy Against Tax Evasion. *Vision*, 0(0). <https://doi.org/10.1177/09722629241237395>
17. Stasinopoulos D, Goula A, Kastanioti C, Sarris M, Soulis S (2024a). Estimating Tax Evasion in the Medical Sector in Comparison with Other Human-to-human (H2H) Life Services. *Journal of Health Management*. 2024;26(1):13-27. doi:10.1177/09720634231222991
18. Stasinopoulos D, Goula A, Kastanioti C, Sarris M, Soulis S (2023). Shadow Economy in Physicians' Sector: The Physicians' Point of View from Greece. *Journal of Health Management*. 2023; 25(3):672-685. doi:10.1177/09720634231195980
19. Stasinopoulos, D., Goula, A., and Soulis, S (2022a). The Economics of Shadow Economy in Health: The Case of Greek Physicians Sector. *Journal of Health Management (JHM)* 24(4):617-634. doi:10.1177/09720634221128090
20. Stasinopoulos, D., Goula, A., and Soulis, S (2022). Estimation of Tax Evasion in the Greek Business Sector. *Vision: The Journal of Business Perspective (VIS)* (VIS-2021-0356.RV1-doi: 10.1177/09722629221129090)
21. Stasinopoulos D., Soulis S., Kastanioti C., Stasinopoulos V., Zegkou D. (2018). Evaluation of the Effect of the Economic Crisis on the Pharmaceutical Sector. Financial Statement Analysis Techniques: A Case Study of Greece. *Archives of Hellenic Medicine* 37(3):358-368