

Print ISSN: 2288-4637 / Online ISSN 2288-4645
doi:10.13106/jafeb.2023.vol10.no2.0267

Costs Stemming from Tax Systems: Tax Compliance Costs

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Received: November 30, 2022 Revised: March 08, 2023 Accepted: March 15, 2023

Abstract

The relationship between the state and taxation starts from the establishment of the state. The most important element is the concept of “tax compliance”. Tax compliance can be considered as the harmony of state-society relations. However, the concept of tax non-compliance occurs when taxpayers do not fulfill their tax-related tasks as required. Tax non-compliance is just one of the costs that occur in tax systems, and is named “tax compliance cost” in the literature. This study focuses on tax compliance costs because tax compliance costs are the ones taxpayers are personally obliged to deal with. For this purpose, the study investigates costs accruing from tax systems, including efficiency, planning, application, and compliance costs. According to the analysis results, it was concluded that the main reason for fraud in the tax systems is high compliance costs and that tax compliance directly impacts social wealth. Besides, the existence of conditions conducive to tax evasion and tax avoidance in a country, short-term tax policies, belief in the unfairness and inequality of tax systems, inadequacy of audits conducted by tax authorities, insufficiency of pressure and deterrence mechanisms, constantly changing legislation, and the attitudes and perceptions regarding the illegitimacy of the government determine tax compliance.

Keywords: Tax Systems, Compliance Costs, Efficiency Costs, Enforcement Costs, Planning Costs

JEL Classification Code: C81, H21, H25, M41

1. Introduction

According to Elias (2000), who assessed the relationship between the state and tax revenues, the tax revenues collected by the center sustain the monopoly of the use of force, and the monopoly of the use of force sustains the tax monopoly. Neither of these two has priority over the other. Economic monopoly does not have priority over military force, while military force does not have priority over economic monopoly. Therefore, tax compliance guarantees the state’s existence and economic independence (Elias, 2000). However, the tax systems in all states more or less accrue costs which may be separated into four categories: efficiency costs, planning costs, application costs, and compliance costs. All costs, except compliance costs, are costs that the

public sector must bear. But tax compliance costs represent the costs the taxpayers are directly obliged to pay and are the main reason for tax fraud (Nar, 2015a).

Three factors affect the level of tax revenues. These are tax rate, tax base, and tax compliance. Maybe the most important concept among these factors is tax compliance, defined as the implementation of tax duty by taxpayers without avoiding its results. In other words, it is the concept of “voluntary tax compliance”. It is understood that taxpayers fulfill their tax duty due to citizenship awareness. However, income systems mostly trust the direct execution capability of the state, not voluntary compliance. In addition to the complexity of tax systems, the benefit level from public services is also extremely important in tax compliance. There are two general views on voluntary tax compliance. The first is that (a) compliance occurs in the form of a lottery, and (b) compliance occurs in the form of a conscious taxpayer. According to the traditional view, tax compliance appears to be a lottery (chance). According to this opinion, the taxpayer calculates the benefit-cost between the loss they will suffer due to payment and the benefit provided if they comply with the tax. The gain expected from tax non-compliance decreases because the possibility of getting caught increases along with the increase in tax audits and monetary fines. Tax authorities control non-compliance by adjusting fines and

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audit rates. Compliance by a responsible taxpayer expresses individuals' desire to pay their taxes due to their awareness of being a responsible citizen (Frank, 2006; Nar, 2015b; Nar, 2022).

States' voluntary compliance with tax demands is important because economic development is hampered. After all, deficient tax compliance means lower public revenues. This is assessed as "very urgent" for developing countries. Various factors reveal tax non-compliance, corruption rates, and the volume of bureaucracy are frequently used as anchors in calculations. According to studies conducted about corruption and bureaucracy, the highest compliance occurs in the Nordic states such as Denmark, Sweden, and Finland, and the lowest compliance level occurs in Indonesia, Turkey, and Argentina. This situation reveals that perceptions of justice and equality are especially important in forming strong tax morale. Besides, cultural, population, and income differences in states and between democratic and undemocratic regimes are also used in assessing tax compliance levels (National Learning Corporation, 2019; Picur & Belkaoui, 2006).

2. Costs Occurring in Tax Systems

Tax compliance is the complete and timely fulfillment of the tax duties determined by law. In other words, the individual or company intends to obey the tax rules. High tax compliance is also a requirement for sustainable public policies (Gruber, 2015; Lee, 2022a, 2022b). Large-scale income losses stemming from problems regarding tax compliance, mainly tax evasion, in developed countries began to receive attention during the 2008 financial crisis after. The public deficits after the great recession increased the inspection of high-income individuals and companies. Notably, global income and wealth inequality also increased parallel to the decrease in states' tax revenues. The issue of tax compliance continues to be the source of long-term concern for similar reasons in many developed and developing economies (Backhaus & Wagner, 2004; Slemrod, 2018).

The existence of a climate of abuse motivates taxpayers to tax avoidance, and the opinion that tax payment is a moral and social duty is lost. As a result, transition economies have low tax compliance and a high tax evasion and avoidance tendency. Mere punishment does not appear to be effective. More important is the establishment of a consciousness of responsibility generally in society. Furthermore, efforts by states to expand the tax treaty network with other states within the context of international tax policies increase the flow of information between tax administrations, and, in this way, there are important developments for the issue of tax compliance (Andersson, 1997; Profeta & Scabrosetti, 2010).

Even in traditional ancient periods, it was known that merchants moved from place to place to avoid high taxes.

When kings applied heavy taxes to increase state revenues in the Middle Ages, many businesses, particularly Portuguese merchants, migrated to Holland. Again, in Great Britain, accepted as the leader in income tax, a progressive income tax system was implemented due to the Napoleonic Wars by the English Prime Minister William Pitt in 1799. In this taxation system, in which deduction and exemption applications were in place for the benefit of those with low income, the income tax rate of 1% was modified with a 10% single-rate income tax. In this way, the public was encouraged to comply with tax, and tax avoidance was discouraged with a tax management system that was simple and easy to apply. Again, in the 19th century, many US and foreign-origin companies moved their activities to New Jersey in the USA after implementing a low corporate tax rate. In modern times, Germany moved its Nokia factory to Romania to minimize costs from tax premiums. In the building tax implemented in France for a period, taxes were calculated according to the number of doors and windows in a building, so taxpayers avoided tax by decreasing the number of doors and windows or migrating to rural areas. Today, the desire to move from high-tax areas to low-tax or tax-free areas has transferred from companies to businesses and individual investors to other sections of society. The famous rock group, the Rolling Stones, located the company that manages their copyrights in the Dutch-owned Antilles, and the famous investor John Templeton chose Costa Rican citizenship. Similarly, Eduardo Saverin, the rich American co-founder of Facebook, has become a citizen of Singapore, Tina Turner became a citizen of Switzerland, and Gerard Depardieu became a citizen of Russia, proving that money has no nation (Nar, 2015a).

Tax is the sum transferred to the state after being acquired from people or institutions. Tax systems are legal regimes ensuring the implementation of the tax mechanism, the set of taxes, fees, duties, and other payments (Nazarov, 2016) that reveal how and upon what taxes should be levied. They are legal regimes because taxes are collected based on the law, such as income tax or corporation tax law. However, tax systems involve some costs as well as benefits. These costs are separated into four main groups: (i) efficiency cost of tax, (ii) tax application costs, (iii) tax planning costs, and (iv) tax compliance costs (Figure 1). "The efficiency cost" is the loss of social wealth due to taxes paid. Consumers and producers experience a negative impact due to distortions in the price of consumer goods that reflect tax in their prices. In addition, the losses observed in total production are the efficiency costs of the tax. "Application costs," or administrative costs, are the costs governments must pay for tax collection, and the public sector meets these costs. The establishment of revenue administrations, supply of personnel and tools, filing costs, and costs of tax audits are within this scope. The highest cost for administration is staff salaries.

“The planning costs” of tax cover the planning and design of taxes by the revenue administration and the preparation of social and economic conditions as required, submission of tax drafts to parliament, and audits and regulations conducted in this process. In short, it expresses all the planning activities for designing taxes to meet financial accounting needs. Because negative situations at the planning stage of tax will affect the application stage, this causes complexity in tax systems and makes them open to abuse. For instance, in the US, taxes on income are levied without specifying in detail what exactly is meant by “income.” It is, therefore, up to courts and fiscal authorities to define what income includes and does not include. For this reason, judges influence tax laws in the US. In Germany, by contrast, the number of objections subjected to court cases is very low, and the financial accounting rules are sufficiently clear and certain because it is a state in which income is clearly defined (Schanz & Schanz, 2016; Tran-Nam et al., 2000; Wilkinson, 1992).

“Tax compliance cost” is like the transaction costs in the market for both the buyer and seller; tax liability occurring as a result of these transactions leads to compliance costs, which are actually a part or continuation of the transaction costs in the market (Nar, 2022). Therefore, the costs suffered by the taxpayers to fulfill the liabilities occurring from economic transactions they conduct are called tax compliance costs. For example, going to the revenue administration, waiting in a queue, spending time and money to fill in the tax declaration, obtaining assistance from professionals (accountants), going to court due to conflicts with financial authorities, paying the court costs and lawyer fees, and most importantly, enduring the psychological strain of all these efforts as a human being represent the tax compliance costs. A taxation system that is basic, clear, and understandable and one that considers societal priorities causes low costs in terms of planning and application costs and leads to a significant decrease in tax compliance costs specifically (Schanz & Schanz, 2016) (Figure 1).

3. Scope of Tax Compliance

The increasing financial pressure in the last decade following the global financial crisis has increased the need for national income sources such as taxes, borrowing, privatization, printing money, and property and enterprise revenues in countries. Moreover, tax income is the most important income source among total income sources, and approximately 80–90% of the state income consists of tax revenues. Although the issue of tax is very important, income policies targeting the efficient collection of tax income face some difficulties; the main one being tax compliance costs. It is possible to increase tax compliance, deal with tax evasion, and develop the relationship between taxpayers and revenue administrations by decreasing compliance costs (Evans et al., 2018).

Compliance costs cover both monetary and nonmonetary costs. Acquisition of information regarding the tax system, arrangement of records, storing documents, filling in tax declarations, collecting tax payments of staff and delivering them to the tax administration, and assessing the efficiency of alternative tax transactions are among the monetary or nonmonetary costs. Kirchler (2007) states that tax compliance occurs in obligatory or voluntary ways. Obligatory compliance occurs due to forced precautions by revenue administrations (such as monetary penalties, bans on activities, and work permit cancellation). Obligatory compliance costs are the ones taxpayers are obliged to meet to fulfill legal requirements. For instance, they are the costs taxpayers are obliged to meet, such as notification of all their gains, legally accepted cuts from gains, documentation of deductions and exemptions, notification of starting a business, finalizing the activities to the tax administrations, and keeping the books necessary according to the law. Voluntary compliance is the compliance of taxpayers to the regulations of the tax administration according to their own choice. Voluntary compliance costs are the additional

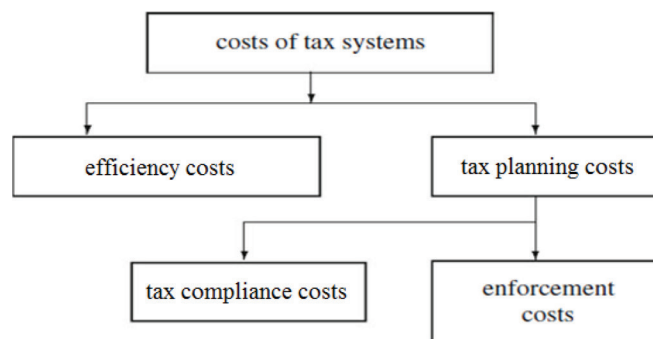


Figure 1: Cost of Tax Systems

Source: (Schanz & Schanz, 2016)

costs taxpayers may take to minimize their obligations. For example, the assessment of alternative methods to obey the law or time spent or monetary expenditures made to benefit from legal loopholes and pay less tax is evaluated within this scope (Kirchler, 2007; Muehlbacher & Kirchler, 2010; Randlane, 2016; Tracy & Bartley, 2005).

The concept of tax culture must be carefully assessed in tax compliance. Culture is a difficult term to define. Henrich et al. (2001) defined culture as information stored in people's heads, which can be transmitted between individuals. Tax culture is the active interaction between the state and citizens regarding tax policies, attitudes towards taxation, and the tax payment level. For this reason, tax culture impacts tax compliance because compliance is also a part of the culture (Halikova & Giniyatullina, 2013). For example, compliance with income tax is a great problem in many places worldwide. Italy, Spain, Greece, and Central and South American states, particularly, display a similar cultural understanding of tax compliance and see tax payment as drudgery. To take a well-known example, because Italians believe that their government is cheating them due to corruption and inefficiency, they often cheat on their taxes, the money they pay the government. People in southern European countries generally agree with the Italians' point of view. Northern Europeans have a very different attitude toward their governments, which they see as reliably providing important public benefits; thus, they tend to pay their taxes readily. In addition, demographic traits such as educational level, age interval, income level, religious viewpoints, and gender affect tax compliance similarly to cultural factors. Again, the existence of conditions conducive to tax evasion and tax avoidance in a country, short-term tax policies, regulations that satisfy some groups, belief in the unfairness and inequality of tax systems, the inadequacy of audits conducted by tax authorities, immature moral liability, insufficiency of pressure and deterrence mechanisms, and the attitudes and perceptions regarding the illegitimacy of the government determine tax compliance. According to Alm and Torgler (2006), the aforementioned factors are part of the tax payment culture. In this respect, revealing cultural differences in tax compliance is extremely important. Depending on taxation awareness, the tax payment culture is high in OECD countries, where almost half the population are taxpayers. Furthermore, it is seen that the tax culture is not settled sufficiently in the states such as Saudi Arabia and India, in which only 1.51% and 2.57% of the public are taxpayers, respectively (Kirchler et al., 2008; Nar, 2015b; Ulbrich, 2011; Zhang et al., 2016).

4. Assessment of Tax Compliance Costs

Tax compliance costs are costs that taxpayers, or third parties, such as businesses, must pay to comply with a

particular tax structure or level (Evans, 2003; Evans et al., 2014). The main reason for tax fraud is high compliance costs. There is uncertainty about the form taxation compliance costs take (Pashev, 2006), and compliance costs mainly have three kinds: direct money costs, time costs, and psychic or psychological costs (IFA, 1989).

Almost all taxation systems create compliance costs. The main income source to finance public expenditures is taxes. All transactions to increase tax revenues and collect them fairly cause certain compliance costs: hidden costs. It is important to keep these costs at a minimum level and ensure the sustainability of public revenue. Sandford, Godwin and Hardwick (1989) also included opportunity costs in compliance costs and identified four types of compliance costs: 1) money costs, 2) time costs, 3) psychic costs, and 4) opportunity costs (Cabalu et al., 1996; Evans, 2003).

4.1. Money Costs

Money costs are all the costs realized by taxpayers until they pay the tax. All expenditures within this scope, such as filling out the tax declaration and forms, money spent on professional consultants to benefit from computer software, payment of postage, and travel costs, form the monetary dimension of compliance costs. Also, aid purchased and expertise costs, fees paid for professional tax consultants and lawyers, and the costs paid to tax courts in case of a conflict with the tax administration are counted within this scope and reach significant amounts. Conversely, the ease and understandability of tax systems help significantly decrease monetary costs because tax systems without complexity also significantly decrease administrative costs and tax compliance costs. In this way, less expense, time, and effort are incurred by taxpayers, and lower costs are incurred for tax administrations. Compliance costs, particularly monetary ones, significantly decrease with an easy taxation system and voluntary compliance increases. For example, voluntary tax compliance and increasing income rates explain this situation in states where a basic taxation system is applied, such as single-rate income tax.

Basic tax systems and complex tax systems are compared in Table 1, and social costs also decrease in economies that simplify their tax systems.

Complexity is clearly the main determinant of tax compliance cost and has three types. The first one is technical complexity, which is related to the understandability level of a law provision. The second one is structural complexity, which is related to the interpretation and application of the laws and provides an opportunity to manipulate laws. Finally, the third one is compliance complexity, which is related to the variety of recordkeeping tasks and form completion necessary to be fulfilled by a taxpayer to obey the tax laws. For instance, the tax legislation enforced in the USA is still

Table 1: Comparison of Basic Tax Systems and Complex Tax Systems

Outcomes of Basic Tax Systems
<ul style="list-style-type: none"> • Simplification is the initial condition: It is easier to reach principal income policies with a basic and simple tax system. • More basic approaches are dominant: Countries making their tax laws more basic and transparent explain their tax policies and meet revenue collection targets more comfortably. • Compliance decreases costs: Compliance costs are minimized in time and money. In this way, the tax system is proportional to the resources and abilities of the taxpayers. • Modification frequency of tax laws is limited: Frequent modifications of tax laws are prevented because frequently changing tax laws increases complexity more in the short term. • Statements in tax laws are clear: The concepts and definitions in the laws are more consistent in a basic tax system. • It is vital to decrease the load on tax administrations: The tax administrations guide the decision-makers in preparing, developing, and applying the laws as the law enforcers. In this way, administrative loads also decrease. • There is no limited applicability: Tax laws implemented for a limited number of taxpayers or valid just for a short period of time do not occur in basic tax systems.
Outcomes of Complex Tax Systems
<ul style="list-style-type: none"> • Lower levels of voluntary compliance • Inadvertent tax overpayments or deficits • Increased perception that the tax system is unfair • Higher costs for both tax administration and tax compliance • Poorer quality of tax administration and tax assistance • Inefficient economic decisions, driven primarily by tax considerations • Unintended tax “traps” for certain taxpayers

Source: American Institute of Certified Public Accountants (2012). *Tax policy concept statement*. Harborside Financial Center, New York, NY; AICPA (2022). *Tax*, American Institute of Certified Public Accountants. <https://www.aicpa.org/topic/tax>.

Table 2: Accounting & Tax Complexity Ranking

10 Most Complex States in Terms of Accounting and Tax Compliance				10 Least Complex States in Terms of Accounting and Tax Compliance			
1	Argentina	6	China	1	British Virgin Islands	6	United Arab Emirates
2	Bolivia	7	Vietnam	2	Denmark	7	Jamaica
3	Greece	8	Portugal	3	Curaçao	8	Cayman Islands
4	Brazil	9	Colombia	4	Switzerland	9	Australia
5	Turkey	10	Hungary	5	Hong Kong	10	Singapore

Source: TMF Group (2020).

complex despite final amendments. According to the Internal Revenue Service (IRS), this complexity means a 20.4-cent compliance cost for each dollar of revenue collected by the federal revenue administration (Evans, 2003; Evans et al., 2018; Hyman, 2020).

The Financial Complexity Index draws attention to this situation and compares data regarding the accounting and tax complexity of 77 countries worldwide. According to this, electronic flows make it harder to follow goods and services.

Taxation of institutions has become more controversial in recent years. Technological developments, in particular, clearly terminate international taxation at the e-trade point. It is very hard to apply traditional taxation principles in the global world. This situation causes taxation systems to become more complex in national and international areas, and tax compliance is decreasing daily worldwide (Table 2).

The five states in Table 2 are tax systems that are most complex in terms of accounting and tax applications, where

tax legislation is always changing and generally lacks clarity and is hard to understand. These are generally states in South America. The least complex states are ones where low tax rates are applied and which have basic and easy taxation systems. At the same time, the tax payment obligation is also less in these states and regions (TMF Group, 2020).

There is an optimal level of complexity in theory, and social benefit will also decrease in the event of exceeding this level. Figure 2 illustrates the relationship between equity and compliance costs with the help of a graph.

The complexity of tax systems negatively affects the behavior and attitudes of taxpayers and the tax administration. Complexity has a socially optimal level, and it is possible to reveal this theoretically. The conceptual model measures the equality/efficiency and compliance costs in dollars. If there were no costs associated with complexity, the optimal complexity level would point to C_0 , at which equality is maximized. However, there are costs associated with complexity, and the optimal level will decrease when these costs are considered.

For this reason, the new optimum is when an extra complexity unit's marginal benefit (MB) equals the marginal cost (MC) of complying with the increased complexity. Point C_s^* indicates the socially optimal level of complexity. Going beyond this complexity level causes an increase in compliance costs and a decrease in benefits (Tracy & Bartley, 2005).

4.2. Time Costs

All of the time taxpayers spend with respect to taxes expresses the time costs. In other words, the time cost is all the time spent dealing with tax issues. All these periods of

time spent attaining information related to taxes, recording tax information, preparing a tax declaration, compiling vouchers, recording data, and keeping books from the time costs (OECD, 1998; Wilkinson, 1992). The components of time costs can be listed in 10 items (Idawati, 2014):

1. Learntime: obtaining all possible tax information before completing a tax return.
2. Keiptime: maintaining tax records, including receipts and bank statements.
3. Looktime: Consult sources such as tables or tax explanations to find all legal deductions and rebates.
4. Advicetime: consulting a tax professional for help with tax returns.
5. Complete time: time needed to complete the tax return and all revisions.
6. Submit time: submitting the final tax return to the appropriate authority.
7. Paytime: time taken to pay tax in a particular year.
8. Supplytime: if a tax preparer was used, supplying information to that individual.
9. Plantime: making financial plans with tax liability in mind.
10. Helptime: time spent providing free assistance to someone else to prepare tax returns.

The total individual compliance costs give the social compliance costs. Increasing compliance costs will cause tax avoidance and tax evasion by taxpayers. According to Buchanan (1999), each tax not paid by the current generation is nothing but a tax burden that will be transferred to the next generation and come back to society with a boomerang effect (Nar, 2015b).

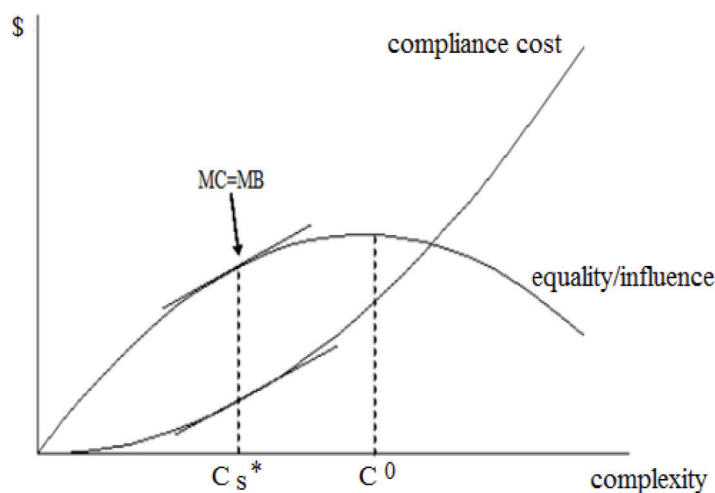


Figure 2: Socially Optimal Level of Complexity

Source: (Tracy & Bartley, 2005)

The periods spent complying with tax requirements in OECD countries are shown in Table 3, measured in hours. In this respect, the periods taxpayers spend paying taxes in OECD countries such as Slovenia, Portugal, Poland, Mexico, Hungary, and Chile are above 240 hours. The most prominent state where tax payment is an important issue is Chile, with 291 hours. The necessary period of time for calculating fees for the payment of taxes in Chile is 125 hours, 42 hours for corporation tax, and 124 hours for consumption taxes. The state with the lowest compliance cost is Estonia, where the total time spent paying taxes is 50 hours. It is important to note that Estonia has a basic taxation system in which a single rate is applied to income and corporation taxes.

4.3. Psychic Costs

The main tax compliance model used to explain the reason for tax non-compliance is the economic theory of criminal behavior developed by Gary Becker (1968). According to this model, a taxpayer compares the benefit they will obtain from tax non-compliance and the cost to themselves of non-compliance. If the benefit exceeds the costs, they avoid tax and may lean towards tax evasion. According to Becker, tax non-compliance can be decreased with increased penalties and audits. The classical approach theory developed by Allingham and Sandmo (1972) also foresees, similar to the Becker model, that this problem could be significantly decreased via penalties and audits (Lederman, 2003).

However, compliance is about the willingness of a taxpayer to fulfill their tax obligations. Therefore, it refers to behavior. Also, the fact that deterrent precautions such as audits and penalties have a low impact on the tax payment desire of individuals was proven in many studies. Thus, it is necessary to examine the reasons underlying the voluntary compliance of taxpayers to tax demands in other areas. The particular theories revealed within the context of behavioral economics are very important. As in the expectation theory described by Kahneman and Tversky (1979), avoiding risk explains the high compliance level because people's tendency to avoid risk is higher than their desire to gain. The pain given to people by losses is much higher than the satisfaction of gain (Torgler, 2007).

For this reason, taxpayers avoid risks by considering the potential damage that may occur in the future and show "voluntary compliance" to pay taxes with the consciousness of a responsible citizen. For example, 85% of the population in Australia, 88% of the population in Canada, and 98% of the individuals in Finland are taxpayers. The number of taxpayers is very high even in states such as Greece and Hungary, with a relatively lower income level, and tax compliance is ultimately high in these states. The voluntary compliance rate to income tax in the USA is generally 83% and above (Lederman, 2003; Nar, 2015b; Ulbrich, 2011).

For the lowest cost and most effective method of achieving an optimal level of tax compliance, taxpayer behavior and influences on taxpayers must be examined carefully. Allingham and Sandmo (1972) asserted that faster detection of tax evasion risk and application of higher sanctions would cause less tax evasion. Thus, the only way to increase tax compliance is through traditional sanctions, namely audits and penalties. However, recent studies show that taxpayers worldwide evade less tax, and it is understood that audits and penalties are insufficient in explaining tax compliance. For this reason, these and similar results reveal that economic models cannot completely explain tax compliance. Therefore; the theories within the scope of the behavioral economy, such as satisfaction; framing and prospect theory; mental accounts; Etzioni's approach; ideas derived from behavioral psychology, such as melioration and myopia; and attitudes, particularly the theory of planned behavior are used in the explanation of behaviors regarding tax compliance. Again, behavioral psychology and attitude theory are highly important in showing how attitudes turn into behaviors because humans are biological and psychological. Therefore, all of the current theories draw attention to the psychological aspects of the economy, and in this way, the aim is to analyze tax compliance more comfortably by examining psychological factors (European Union, 2010; McGee, 2012; Nar, 2015b; Webley et al. 2001).

The concept of psychology has special significance in the area of social sciences. Torgler objected to the concept of Homo Economicus and indicated the sentimental dimension of human beings. Recent studies also support this. According to the results of this study, although the probability of taxpayers being caught is low, the reason underlying their tax compliance is psychological factors. It is impossible to understand the justifications underlying economic behaviors in a general way and tax behaviors in a specific way without comprehending the importance of psychological approaches. Personal conditions are the most important factors negatively affecting the psychology of the taxpayer. This situation also decreases tax compliance to a large extent. The greatest reactions evaluated within personal conditions are service inequalities and the psychological perception regarding an unjust and unequal taxation system. According to Frey & Benz, experimental economic studies showed that people generally attach importance to social norms such as justice or mutual interest. In particular, the low level of benefit provided by public services in return for tax paid, the common belief that those benefiting from the public services are free-riders who pay no tax, and beliefs regarding the abuse of tax incomes form a significant sentimental reaction leading to tax avoidance. The sentimental reactions to political authority, the sharing of the tax load by certain sections, and illegal transfers psychologically cause negative feelings towards taxation. Sentimental abnormalities such as stress, worry, pain, misery,

Table 3: Period of Time (Hours) Spent by Taxpayers With Respect to Taxes

Ranking	Country	Total Time (Hour)	Corporation Tax	Labor Tax	Consumption Tax
1	Australia	105	37	18	50
2	Austria	131	46	50	35
3	Belgium	136	21	40	75
4	Canada	131	45	36	50
5	Chile	291	42	125	124
6	Colombia	239	86	87	66
7	Czech Republic	248	53	87	108
8	Denmark	130	25	65	40
9	Estonia	50	5	31	14
10	Finland	93	21	48	24
11	France	139	28	80	31
12	Germany	218	41	134	43
13	Greece	193	78	46	69
14	Hungary	277	35	146	96
15	Iceland	140	40	60	40
16	Ireland	82	12	40	30
17	Israel	235	110	60	65
18	Italy	238	39	169	30
19	Japan	151	38	92	21
20	Korea	188	83	80	25
21	Latvia	169	23	80	66
22	Lithuania	109	18	34	57
23	Luxembourg	55	19	14	22
24	Mexico	241	102	39	100
25	Netherlands	119	21	64	34
26	New Zealand	140	34	59	47
27	Norway	83	24	15	44
28	Poland	260	59	103	98
29	Portugal	243	63	90	90
30	Slovak Republic	192	46	62	84
31	Slovenia	245	86	90	69
32	Spain	152	33	84	35
33	Sweden	122	50	36	36
34	Switzerland	63	15	40	8
35	Turkey	216	45	80	91
36	United Kingdom	110	37	48	25
37	United States	175	87	55	33

Source: Paying Taxes 2020. Note: World Bank Group *While the number of member countries in the OECD was 36, this number increased to 37 after the acceptance of Colombia for membership. We compiled data.

disappointment, holding a grudge, hate, and jealousy occur in taxpayers (Nar, 2015b). A psychic load such as worry occurs (Sandford, 1981). Again, amnesty applications become a continuous trigger for “sentimental danger or psychological abnormality” in terms of taxpayers (Evans, 2003).

4.4. Opportunity Costs

Tax compliance costs do not just consist of cash expenses, psychological costs, or time costs. Opportunity costs also cause compliance costs. Opportunity costs are the costs of the foregone opportunity (Kanshimike, 2009). In other words, it is the cost stemming from the foregone alternative due to preferring one of the alternatives to others (Packard, 2010).

Because resources are scarce in the economy, individuals cannot achieve all their aims. For this reason, they try to choose the best way of using the current opportunities at hand most efficiently. For this reason, it is important to make correct decisions as to which asset we want among assets due to scarcity. In addition, the foregone preference or preferences are the opportunity costs of the chosen preference. Thus, “the opportunity cost is the opportunity lost.” Opportunity cost is the chance to think or consider the economic decision-making units related to scarcity, choice, and cost elements (Arnold, 2007; Hempling, 2020). The opportunity costs of tax compliance include time and money spent complying with tax because the taxpayer could use this time or money in other areas. For instance, the period of time used to comply with tax could be spent on entertainment, resting, or having a good time with the family (Sandford, 1981). Another opportunity cost of tax compliance is keeping more disposable income in hand. The increase in the disposable income level provides an opportunity for more spending and wealth accumulation by the individual. At this point, Andreoni (1991) stated that similar negative aspects, such as tax amnesty, the power to affect government, the complexity of tax systems, and tax injustice increase the opportunity cost, and it becomes more beneficial to avoid paying taxes. As the applications for tax amnesty increase and the probability of punishment for any fraud decreases in the future, people tend to declare less income (Andreoni, 1991).

It is possible to rate a series of factors affecting tax compliance behavior in the following way: (i) opportunity, (ii) perceived justice, (iii) social norms/personal norms, and (iv) deterrence.

- (i) The opportunity for cheating is an important factor for cheating to occur.
- (ii) Taxpayers’ equality and justice perceptions significantly affect their tax compliance behavior. Where taxes are spent, whether taxpayers are

subjected to equal treatment, and whether those not paying their taxes are punished as required affect behavior.

- (iii) Social norms can be seen as the values of a certain social group. Personal norms are the personal ethical values and moral beliefs of the individual. Social norms turn into personal norms when internalized by the individual. Social norms are an important pressure element in states such as Finland, where tax evasion, in particular, is seen as immoral in terms of social norms.
- (iv) The factor of deterrence is one of the reasons behind compliance behavior. As many studies emphasize, the fear of feeling guilty and the risk of social stigmatization, i.e., personal and social norms, considerably affect the decision to pay tax (European Union, 2010; Nar, 2015b).

5. Economic Analysis of Tax Compliance Costs

Having dependable and sustainable funding methods (taxation system) is critical for governments to support effective social programs and public investment programs that provide health, education, infrastructure, and other services essential for a prosperous, functional, and orderly society. In addition to the benefits of taxation in terms of public goods and services, it is a key part of the social contract. A government can even determine its legitimacy by raising and spending taxes (Lee, 2015; World Bank, 2020a).

All governments need revenue. However, it is difficult to design tax systems, encourage taxpayers to pay their taxes, and minimize tax compliance costs (World Bank, 2020). Especially in states where tax compliance costs are a problem, tax incomes cannot be collected sufficiently, and public needs cannot be fulfilled as required. Also, the tax autonomy of the governments is interrupted. Again, the fact that those who do not pay taxes can benefit from public goods and services as they wish leads to the problem of free riders in economies. This situation increases the tax compliance costs even more for those who pay their taxes regularly. The free-rider usage of public goods and services by subscribers first causes excessive usage of the services rendered. This causes an increase in depreciation costs and the accrual of additional costs.

To show how compliance costs affect economic output, let us assume that two types of goods are produced in an economy (Figure 3). One is public goods, and the other is private goods. The production level of the two goods is shown with the PP production possibilities curve. The production possibilities curve determines the limit of the goods and services an economy can produce under the current resources and technology. If a tax system includes high compliance costs, the production possibilities curve in the economy also cannot perform as required.

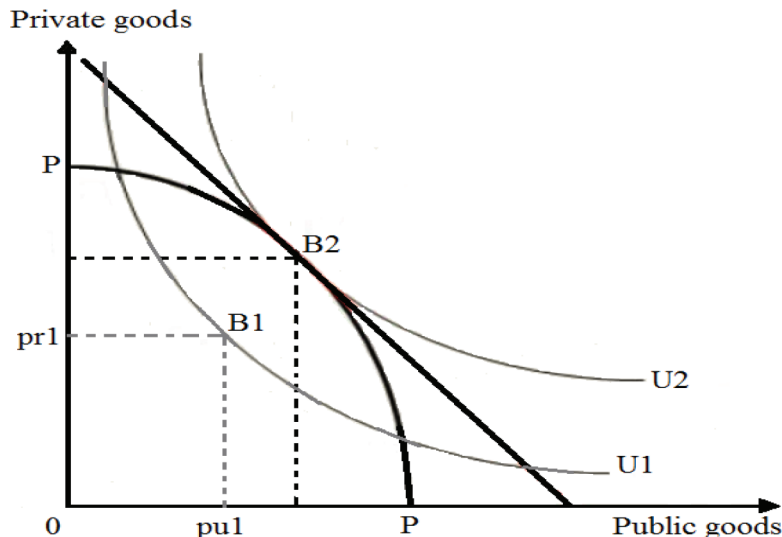


Figure 3: Compliance Costs and the Production Possibility Curve

The B1 point in Figure 3 shows a non-optimal production level. At this point, the social benefit level remains low at U1. The goods produced at the B1 point by the public and private sectors are up to $Pr1$ and $Pu1$, respectively. This production level, which is lower than the optimal, is also proof that the tax compliance costs in the economy are high. Tax incomes decrease in economies where compliance costs are high, and the economy is prevented from reaching the optimal level shown by PP production opportunities. In contrast, higher tax incomes, higher production and benefit levels, and high quality of life occur in states where tax compliance costs are minimized. In this case, increasing the amount of public goods and services produced is also possible. While the social benefit level increases to the U2 indifference curve, the social benefit also maximizes when the production possibilities curve and social indifference curve are tangents (Nar, 2022; 2007; Tracy & Bartley, 2005).

Tax incomes increase parallel to tax compliance and increase in developed states as they are returned to the taxpayers as more qualified service providers, reflecting the social state understanding. In developing states, the decrease in tax compliance causes an increase in the finance requirements of the public section and the transfer of the budget deficits from past generations to future generations. Decreasing tax compliance costs is of vital importance for all states. This situation is also necessary for the increase in wealth in a global sense because the increasing public goods and services first provide the opportunity for the re-distribution of income. It protects citizens against the risk and uncertainties they will face and works as insurance. It keeps the public interest aware of public bad things. For this purpose, expenses in terms of social wealth gain importance with the policies such as education, health, social security, and

transfer expenditures. However, the existence of practices harming tax compliance, tax amnesty, and negative incentives in an economy negatively affect voluntary compliance. Also, people may not comply with taxes when they realize they are exposed to financial exploitation. Taxpayers turn to free-riding by acting strategically (Lederman, 2003; Nar & Nar, 2019; Nar, 2020).

Three approaches come to the forefront in theory regarding why individuals resist tax compliance. These also reveal the degree of tax compliance. (i) General deterrence theory says that sanctions can prevent tax non-compliance. (ii) Economic deterrence models explain that tax non-compliance is a complete economical decision affected by uncertainty. (iii) The approaches within the scope of financial psychology specify that non-compliance can be explained by demographic behavior, attitudes, and perceptions. However, the findings related to these three theories do not provide certain explanations for the unwillingness or non-compliance of the people with tax payments (Nar, 2022; Picur & Belkaoui, 2006).

Moreover, tax non-compliance continues to be a common phenomenon in all societies. The most important evidence for this is the existence of a shadow economy in the international area. The main problem in the shadow economy is that individuals act rationally or strategically by rendering the wrong information. The distortion in the information flow negatively affects the control and authority of states on the economy. For this reason, governments try to efficiently benefit from internal and external motivation tools to direct taxpayers to act honestly, ensure correct information flow, and increase tax compliance. Internal motivation tools are religious belief and ethical systems. External motivation tools include audits, penal sanctions, and preventing access

to public services. Furthermore, decreasing bureaucracy can be assessed as one of the main mechanisms that can be used to deter tax non-compliance (Picur & Belkaoui, 2006).

In addition to the above, tax amnesty applications that reflect populist politics are among the most important problems for tax compliance. It negatively affects the feelings of equality and justice in society and prevents taxes from expanding to the base. Disappointment occurs in the perception of justice for honest taxpayers. This situation turns into an incentive or reward mechanism with economic meaning in terms of the taxpayers not paying taxes. Similarly, tax exceptions applied to some segments of society, exemptions, deductions, tax postponements, and the constant decrease in tax on capital incomes partly explain the dimension reached by tax losses and evasions today. This situation causes the nonequivalence of competition, benefiting those who receive tax incentives and disadvantaging those who regularly pay taxes. The active functioning of the market gets distorted. This result causes macroeconomic problems such as the fragility of the tax autonomies of the states, unstable growth in an economic sense, financial crises, and employment loss. First, a progressive taxation system must be implemented. In other words, it is necessary to create a taxation system that will enable less tax to be demanded from those gaining less and more tax demanded from those gaining more. Second, there is a need for a basic and understandable tax structure with no complexity. Finally, tax applications must be conducted so there is no tax pressure on taxpayers in the psychological sense and no negative attitudes and perceptions. In this way, a decrease in income differences in economies will also be possible (Brux, 2011; Lee, 2022b; Nar, 2020).

As a result, the observations made by Tanzi are vitally important. Tanzi (2017) classified problems underlying the national tax systems as financial termites and specified that financial termites occur due to the interaction of new technologies, globalization, and tax competition. As with the biological definition, it was stated that financial termites weaken the bases of tax systems and make it harder for states to ensure continuity in their tax systems. Tanzi (2017) listed some of the problems referred to as financial termites as follows: (i) electronic trade; (ii) electronic money (credit card and other forms) and confidential bank accounts; (iii) in-company transactions, transfer pricing, and prearranged transactions conducted between the related businesses with thin capitalization; (iv) rapid development of offshore financial centers and the existence of tax havens; (v) the ability to conduct new, interesting and complex financial tools and various derivative transactions; and (vi) the rapid increase in the number of the states where taxes are kept low to draw foreign investors. Tanzi (2017) specified that the most important impact of these problems

would gradually affect (a) tax base, (b) tax incomes, and (c) tax structures and drew attention to the fact that the free policy determination opportunities of the states will decrease in time. However, the clear result is that a heterogeneous world with lower tax compliance, lower tax incomes, and more different tax systems will exist (Tanzi & Zee, 2001; Tanzi, 2017).

6. Conclusion

The informal economy increases in states where tax compliance is insufficient, tax expansion to the base are prevented, and stable development is impossible. Unpaid taxes increase the state's debt burden and interest rates, and factors such as employment, investment, and inflation become more problematic. It is also difficult for people to comply with taxes in states where the perception of justice in taxes is nonexistent. In such countries, income is underreported, taxes are completely evaded, or the tendency to benefit from the gaps in the law increases. The existence of opportunities for cheating, the lack of sufficient information about the taxpayers, insufficiency of penalties, constant modification of legislation, and a complex taxation system can be evaluated as the main barriers to tax compliance. While this situation causes feelings of being deceived among those paying their taxes on time, it becomes a reward mechanism for taxpayers not complying with taxes. In addition, while compliance costs remain lower for taxes such as consumption and property taxes, much higher non-compliance levels occur for income tax (individual, corporate). In addition, according to the OECD (2009), while small businesses bear higher compliance costs, big businesses (also referred to as large taxpayers) have lower compliance costs because, in big businesses, when elements such as the amount of turnover or gross sales, the value of assets, amount of tax paid, operating in certain business sectors (e.g., banking, insurance, oil, etc.), and the number of employees is considered, tax non-compliance can be easily detected by comparing them to companies with similar qualifications (Nar & Nar, 2020; OECD, 2009).

Information technologies should be efficiently used to facilitate tax compliance. Tax calculations, in particular, should be conducted using automatic software items (examples are Finland and Denmark). Tax accounting standards of states should be made easy, clear, understandable, and applicable. As in the Nordic states, where more than 90% of the population are taxpayers, training programs regarding tax policies should be given to individuals as the first educational step. The power of the media should be utilized as much as possible to terminate negative perceptions because the media has an important role in transferring information that is required to the people.

Moreover, psychological factors should be carefully assessed when examining attitudes and perceptions

regarding tax compliance or non-compliance. The actions and agreements about providing cooperation in local and global areas among tax administrations will also increase tax compliance. According to Slemrod (2018), a warning notes that “you may be audited at any time” on payment documents sent to taxpayers. A clear explanation of the penalty rates to which taxpayers will be exposed significantly increases tax compliance.

Similarly, reminder letters about tax payments also have the same impact. However, although these types of warnings are meant for a US citizen in a world where tax payment is also a cultural issue, it may not have the same impact on a taxpayer in India, where 70% of the people are poor. Again, many factors, such as population and national income differences of states, wealth differences, differences between democratic and non-democratic regimes, and justice and legal rules, directly affect the tax compliance level of the states. However, the fact that the US Internal Revenue Service (IRS) works intimately with the FBI, the greatest investigation and security institution in the USA, is a practice that should be carefully evaluated. This issue could be the subject of a separate article about the US, where financial intelligence agencies have more authority than law officers. Furthermore, it is important to apply positive discrimination to reward honest taxpayers. Making a discount on taxes for taxpayers who pay their taxes regularly can be considered partly to be “justice coming from injustice.”

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