

# DEVELOPMENT AND VALIDATION OF A MANAGERIAL MODEL TO UNDERSTAND TAXPAYERS' ATTITUDES AND PERCEPTIONS TOWARDS TAX COMPLIANCE

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## Abstract

This study investigates the viewpoints of Romanian taxpayers regarding the various attitudes and factors that impact their compliant or non-compliant behavior regarding their tax payments. A quantitative approach was used, and data collection was carried out by employing a research questionnaire distributed via a Google Form. The research hypotheses were examined with a sample size of 432 individual taxpayers, and quantitative data analysis was performed using PLS-SEM. The findings indicate that the association of tax compliance with a managerial approach model is suitable with the four study categories of quadrants that have been developed based on the Competence-Based View or Market-Based View approaches. This study offers a new perspective on tax compliance that can help tax authorities to develop policies, strategies, tactics, plans, and legal and commercial actions with the aim of avoiding tax noncompliance.

## Keywords

tax compliance, taxpayer behavior, Competence-Based View, Market-Based View.

## JEL Classification

G41, H21, H30

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## Introduction

In recent years, especially in the context of the "new normal" generated by the pandemic situation, wars, and various crises such as energy and food, which have led to high levels of uncertainty, local administrations and governments had to make considerable efforts to preserve an efficient tax collection system and to reconfigure and strengthen the tax system. In some countries in the European Union, such as Denmark, France, and Belgium, there is a better collection of tax obligations. Ireland and Romania are the EU member

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states that have the lowest level of collection of tax obligations from the state budget in relation to GDP (European Commission, 2021).

In this context, the need for a new paradigm regarding the approach to tax compliance issues is felt. Tax administrations around the world are increasingly using behavioral techniques to understand taxpayer behavior and improve tax compliance.

A better understanding of tax compliance mechanisms is the objective of the study, with the aim of helping tax authorities develop policies, strategies, tactics, plans, and legal and commercial actions with the aim of avoiding tax noncompliance. It is not enough for the tax authorities to quantify the number of taxpayers who comply or not from a fiscal point of view. The situation must be analyzed much more deeply, with roots in economic psychology, respectively, from the point of view of the way in which tax obligations are perceived and made aware by the taxpayer, emphasizing their opinion and attitude towards the remaining tax obligations. Thus, taxation must achieve a balance between increasing budgetary income and the existing economic circumstances on the one hand and the practical ability to pay tax obligations in the current context on the other. No matter how technically perfect a tax system may be, if it is not fair and socially acceptable, it produces imbalances and social disruption. Understanding, explaining, and taking into account the factors that lead to a certain type of tax compliance behavior is important. These help tax authorities create specific legal and moral policies, strategies, and actions to change the behavior of taxpayers who don't follow the rules.

This study provides a new perspective on tax compliance and aims to shift the focus from observed taxpayer behavior to taxpayers' opinions of tax compliance or non-compliance. As a way of analyzing tax compliance in this field, it is also useful to understand the strategic alternatives from the perspective from which such an analysis can be made for fundamental research in this field. The study's theoretical approach is presented in Figure 1.

Market-Based-View refers to the market perspective (McGee, 2015), respectively, taxpayers positioning view regarding tax compliance, and the Competence-Based-View model (Sanchez and Heene, 2004; Freiling, 2004) takes into account the perspective of the tax authority in achieving tax compliance. Competence is defined as the ability to support the coordinated deployment of resources to help achieve organizational goals (Sanchez and Heene, 2004; Freiling, 2004). There are tax compliance studies that emphasize the Competence-Based-View (McKerchar and Evans, 2009) but there is also a tendency to perform the tax compliance analysis from the perspective of the taxpayer, namely Market-Based-View (McBarnet, 2001).

The present study aims to change the emphasis from the Competence-Based-View perspective, based on the concept of tax compliance from the perspective of the tax authority, to a way of understanding tax compliance from the perspective of tax payers, respectively, Market-Based-View. The direction from which the tax compliance initiative comes is important: "up to the bottom" and in this case the method is to push tax compliance ("push") by the tax administration or government, or "bottom to up" when the tax compliance initiative starts with the taxpayer, motivated by his convictions,

various policies, strategies, or results obtained through effective and efficient budget allocations, and in this case the method is to attract fiscal compliance ("pull").

<b>Compliance direction (administration versus contributor)</b>	<b>Approche perspective</b>	
	<b>Market-Based-View</b>	<b>Competence-Based-View</b>
<b>Up to the bottom</b>	<b>PUSH compliance conviction</b> “willness to accept”	<b>PUSH compliance coercion</b> “willness to change non-compliance“
<b>Bottom to up</b>	<b>PULL voluntary compliance</b> “willness to pay “	<b>PULL imposed compliance</b> “willness to follow“

**Figure no. 1: The theoretical approach**

*Source:* self-determined

This research paper aims to fill the knowledge gap regarding the perspective and opinion of taxpayers (Market-Based-View) in which they are seen as clients of public services and the state as a provider of public services that must also deliver a certain volume of services to achieve objectives mandated by government programs, which implies public effectiveness, respectively the achievement of target objectives and also services of a certain quality. This also implies efficiency in the use of public financial resources, of course in accordance with the expectations of taxpayers, all of which constitute a paradigm shift compared to current approaches.

In this study, we used a quantitative approach, and data collection was carried out by employing a research questionnaire distributed via a Google Form. The research hypotheses were examined using a sample of 432 taxpayers from Romania. The analysis of the data collected was carried out using partial least squares-structural equation modeling.

The contribution of the article to the existing literature comprised several aspects. Firstly, it aimed to gain a comprehensive understanding of the interconnections among various aspects that influence compliance with taxes. Secondly, it tried to quantify the impact of each individual factor. Thirdly, it aims to test the research hypotheses using statistical methods. Finally, it aimed to evaluate tax compliance within the framework of four distinct categories of study cases.

The practical implications of the research consist of the fact that study findings can be useful to tax administrations to identify vulnerable points, such as the importance of carrying out tax compliance awareness campaigns, the collaboration of tax authorities with non-governmental organizations, schools, churches, and religious cults, as well as organizing public debates on tax legislation.

The article continues with a section in which the literature review is carried out, after which the research methodology and the results and conclusions of this research are presented in the following sections.

## **1. Review of the scientific literature**

Over time, the concept of tax compliance has received multiple definitions, with the perception that taxes are different from one country to another because diverse tax rules and regulations exist between states and individual taxpayers also exhibit unique approaches (Palil, 2010). According to Handke and Barthauer (2019), tax compliance is presented as the situation in which a person complies with existing tax laws or orders. According to James and Alley (2002), tax compliance can be defined as the extent to which taxpayers adhere to the regulations and requirements of the tax legislation. Simultaneously, tax compliance is characterized as the voluntary adherence of individuals and other taxable entities to both the intended principles and explicit provisions of tax legislation and administration, without necessitating enforcement measures.

According to Feld and Frey (2007) and Trifan et al. (2023) the interactions among citizens and tax authorities must be based on a "psychological contract" characterized by a relationship of collaboration, mutual benefits, and expectations. On the one hand, tax authorities need to encourage and trust citizens' civic sense to be fair, and on the other hand, citizens want respect from authorities as well as the exclusion of suspicions of tax evasion (Franzoni, 2000). According to Alm, Kirchler and Muehlbacher (2012), the lack of one of these elements leads to a sabotage of cooperation between authorities and taxpayers.

Starting from the theoretical approach (Figure 1), we regrouped the specialized literature on the four situations regarding tax compliance: Push Compliance Conviction; Push Compliance Coercion; Pull Voluntary Compliance and Pull Imposed Compliance.

According to Push Compliance Conviction, the payment of tax obligations is the result of an action of conviction. In this situation, fiscal pressure comes from the authority, and compliance is accepted by the taxpayer based on their trust in the system (authorities and administrations). Regarding the degree of the compliance with the tax payments, it depends on how the government and the tax authority attract the trust of taxpayers. The word "trust" is of particular importance in the tax compliance process, meaning the trust of taxpayers that everyone pays the correct amount in the form of tax, as well as the trust of taxpayers that their money is used correctly by the administration (Feld and Frey, 2002). The study conducted by Kirchler, Hoelzl and Wahl (2008) and Trifan et al. (2023) demonstrates a direct relationship between taxpayers' trust in the tax authorities and

compliance with tax payment responsibilities, and the factors of perceived fairness and procedural justice. This implies that taxpayers are aware of the importance of their payments and obtaining benefits from the government; perceive and observe the efficiency of spending public funds; and are treated by the authorities with respect, not as evasives (Remeikiene et al., 2022; Dissanayake and Kirchler, 2021; Feld and Frey, 2002; Alm, Jackson and MCKee, 1992).

According to Push Compliance Coercion, the payment of tax obligations is determined by legislation, coercion, tax policies (willingness to change non-compliance). According to Kirchler, Hoelzl and Wahl (2008), the performance of fiscal controls contributes directly to the improvement of the degree of compliance of taxpayers, with beneficial outcomes in terms of the payment of tax liabilities, and the frequency and rigor of controls can encourage taxpayers to be more cautious in declaring income. Also, Pommerehne and Weck-Hannemann (1996) and Frey and Torgler (2007) concluded that periodic checks of tax activity contribute to the adoption of taxpayers' tax compliance behavior. Simultaneously, a limited quantity of controls and punishments may raise skepticism over the authority, efficacy, and legitimacy of the tax authority (Kirchler et al., 2007; Teivāns-Treinovskis et al., 2022; Fochmann et al., 2019).

According to Pull Voluntary Compliance, paying tax is considered a duty of honor by taxpayers. From the analysis of the prior studies, it can be found that there is a direct and extremely important link between the morality of the taxpayer (expressed by fiscal consciousness and fiscal morale) and compliance with tax (Horodnic, 2018; Togler et al., 2008). Fiscal morality is the set of norms, values, and beliefs present and accepted in a community that expresses a model of conduct for fiscal compliance and also motivates a type of positive fiscal behavior. Moral beliefs at the individual level are not only powerful, but also particularly important, as they directly influence decisions made, including those related to tax compliance. Also, it can be found that the role of ethics in better tax compliance for taxpayers is significant (Cummings et al., 2009; Molero and Pujol, 2012). A person who is fiscally certain that it is right to pay tax obligations regardless of the government's utilization of funds and the tax conduct of other (Ortega, Ronconi, and Sanguinetti, 2016). Ethical beliefs could be an effective means by which the level compliance is improved, especially for taxpayers with a low level of moral development (Ho and Wong, 2008). Therefore, shaping the ethical behavior of citizens can help improve the level of tax compliance. It is important to acknowledge that there may be inconsistencies and ethical conflicts between what taxpayers say and what they do regarding tax compliance. Studies have shown that although a large proportion of taxpayers claim that it is wrong not to pay taxes, there is at the same time a very high level of tax evasion, the conclusion being that they do not do what they say. Chelala and Giarrizzo (2014) confirm this reality through their study and call taxpayers who only support the payment of taxes without actually paying them as "moralistic evasionists".

According to Pull Imposed Compliance, the payment of tax obligations comes as a response from the tax payers to the action of the tax authorities. This is driven by existing and promoted tax incentives. Rewarding compliance is the use of tax institutions around the world as a tool to improve tax compliance. One such example, applied in many

countries, including Romania, is the electronic publication of correct and incorrect taxpayer lists.

## 2. Research methodology

The aims of this study comprised several aspects. Firstly, it aimed to gain a comprehensive understanding of the interconnections among various aspects that influence tax compliance behavior. Secondly, it tried to quantify the impact of each individual factor. Thirdly, it aimed to test the research hypotheses using statistical methods. Lastly, it aimed to evaluate tax compliance within the framework of four distinct categories of study cases.

The research team created a questionnaire for the current study, which was distributed online via a Google Form. It focused on individual Romanian taxpayers. The size of the analyzed sample was 432 respondents with valid answers from the total questionnaires received. Table 1 present the demographic characteristics of the participants.

**Table no. 1. The demographic characteristics of the participants (N=432)**

	Demographics	Frequency	%
<b>Gender</b>	Male	241	55.78
	Female	191	44.22
<b>Age</b>	>25	60	13.89
	25-35	134	31.02
	35-50	211	48.84
	>50	27	6.25
<b>Education</b>	<Bachelor	118	27.31
	Master	146	33.80
	MS	116	26.85
	PhD	52	12.04
<b>Work experience</b>	1-3	96	22.22
	4-9	197	45.61
	10-20	91	21.06
	>20	48	11.11

Source: authors estimation

Table no. 2. Research constructs

Variable	Code	Items
Law knowledge	1.LOF	I know the tax legislation in Romania and there is information regarding the tax obligations that I have to pay monthly, quarterly, semi-annually and annually.
Intensity of law knowledge	20.OCV.1	I possess comprehensive knowledge and expertise in all facets of Romanian tax legislation.
Ethical and moral values	20.OCV.9	Paying your tax obligations is an essential civic duty for me
	20.OCV.10	I am compelled by a sense of moral duty to fulfill my tax commitments.
	20.OCV.11	I always pay my tax obligations in full and on time
Noncompliance difficulties	3.SD	I have encountered challenging circumstances as a result of delayed or non-payment of tax liabilities.
Tax compliance factors	6.FDP.1	I pay my tax obligations due to the tax penalties applied
	6.FDP.2	I pay my tax obligations to avoid over-indebtedness
Factors of noncompliance	4.FNTT7	The lack of trust in the tax authority causes me not to pay tax obligations in full and on time
	4.FNTT8	The inadequate allocation and utilization of budgetary resources by the state administration results in my inability to fulfill my tax responsibilities in a timely and complete manner.
Impotence of tax compliance	2.PIT	Paying tax obligations in full and on time is important to me.
Voluntary tax compliance	20.OCV.3	I consider paying tax obligations the price we pay for a civilized society
	20.OCV.4	Public money is distributed in a transparent manner
	20.OCV.5	I have full trust in my relationship with the taxing authorities.
	20.OCV.6	I believe that the tax authorities are very well prepared and apply the legislation correctly
	20.OCV.7	The partnership between myself and the Romanian tax authorities is founded upon principles of mutual respect and honesty.
	20.OCV.8	The tax authorities provide complete information regarding the payment of my obligations
Avoid push compliance	20.OCV.12	I am looking for opportunities to avoid paying tax obligations
	20.OCV.13	I pay tax obligations only when the possibility of control and detection is high
	20.OCV.14	Paying tax obligations when due creates a financial hardship for me
	20.OCV.15	Tax liabilities are too high compared to my income

Source: authors work

The questionnaire consists of 21 items that are scored on a 5-point Likert scale, with responses ranging from 1 to 5, with 1 being strongly disagree and 5 being strongly agree.

The hypotheses proposed by the research team are:

H<sub>1</sub>: *Avoid Push compliance -> Noncompliance difficulties*: Tax avoidance behavior has an influence on the difficult situations that taxpayers go through due to late or non-payment of their tax obligations.

H<sub>2</sub>: *Ethical and moral values -> Noncompliance difficulties*: A high moral and civic sense declared by taxpayers has a positive influence on avoiding the difficult situations that taxpayers go through due to the delay or non-payment of their tax obligations.

H<sub>3</sub>: *Factors of noncompliance -> Noncompliance difficulties*: The factors that influence tax non-compliance have an influence on the difficult situations that taxpayers go through due to the delay or non-payment of their tax obligations.

H<sub>4</sub>: *Factors of noncompliance -> Tax compliance factors*: The factors that influence tax non-compliance have an influence on the factors that influence compliance.

H<sub>5</sub>: *Importance of tax compliance -> Noncompliance difficulties*: The level of importance given to tax liabilities has a positive influence on the difficult situations by which they contribute to their tax compliance with non-payment of obligations.

H<sub>6</sub>: *Intensity of law knowledge -> Noncompliance difficulties*: The level of tax legislation awareness among taxpayers has a positive influence on avoiding the difficult situations taxpayers go through due to late or non-payment of their tax obligations.

H<sub>7</sub>: *Law knowledge -> Intensity of law knowledge*: The knowledge of the tax legislation has an influence on the degree of knowledge of the legislation by taxpayers.

H<sub>8</sub>: *Voluntary tax compliance -> Noncompliance difficulties*: Voluntary tax compliance behavior has a beneficial influence on avoiding the difficult situations that taxpayers go through due to the delay or non-payment of their tax obligations.

H<sub>9</sub>: *Tax compliance factors -> Noncompliance difficulties*: Factors that influence tax compliance have a direct influence on the difficult situations taxpayers go through due to late or non-payment of their tax obligations

### **3. Results and discussions**

To test the validity of the selection items and to determine the variables, a confirmatory factor analysis was performed using the Kaiser-Meyer-Olkin test. The value of the Kaiser-Meyer-Olkin test of 0.895, greater than the significance of the value of the Bartlett sphericity test of  $p = 0.000$  indicate a good fit of the data for a factor analysis. The reliability of the variables was assessed by the utilization of statistical measures such as Cronbach Alpha (CA) and Composite reliability (CR). In the first stage of analysis, a comprehensive evaluation was conducted on the entire sample, whereby items exhibiting factor loadings below the threshold of 0.600 were excluded from further consideration. Table 3 displays the outcomes of the reliability and validity assessments, as well as the factor loadings for the remaining questions. All CA and CR values exhibited a level of



0.700 or above, which is in line with the suggested threshold. The Average Variance Extracted (AVE) and Composite reliability (CR) values exhibited a notable magnitude, surpassing or closely approaching the thresholds of 0.500 and 0.700, respectively. This outcome serves as additional evidence supporting the convergent validity of the study.

**Table no. 3. Construct Reliability and Validity**

	CA	rho_A	CR	AVE
Avoid push compliance	0,802	0,856	0,868	0,624
Ehical and moral values	0,908	0,926	0,942	0,844
Factors of noncompliance	0,609	0,625	0,835	0,717
Impotance of tax compliance	1,000	1,000	1,000	1,000
Intensity of law knowledge	1,000	1,000	1,000	1,000
Law knowledge	1,000	1,000	1,000	1,000
Noncompliance difficulties	1,000	1,000	1,000	1,000
Voluntary tax compliance	0,904	0,912	0,926	0,677
Tax compliance factors	-0,738	0,426	0,001	0,635

Source: authors estimation

The assessment of multicollinearity was conducted by employing the variance inflation factor (VIF). The VIF values observed in our study were found to be below the predetermined threshold of 5, suggesting that this model does not demonstrate the presence of multicollinearity (Table 4).

**Table no. 4. VIF test**

Constructs	VIF values	Constructs	VIF values
LOF	1,000	OCV5	3,986
PIT	1,000	OCV6	3,484
OCV1	1,000	OCV7	2,644
OCV10	3,700	OCV8	2,649
OCV11	2,627	OCV9	3,148
OCV12	2,166	SD	1,000
OCV13	2,236	FNTT7	1,237
OCV14	2,018	FNTT8	1,237
OCV15	1,644	FDP1	1,078
OCV3	1,413	FDP2	1,078
OCV4	2,870		

Source: authors estimation

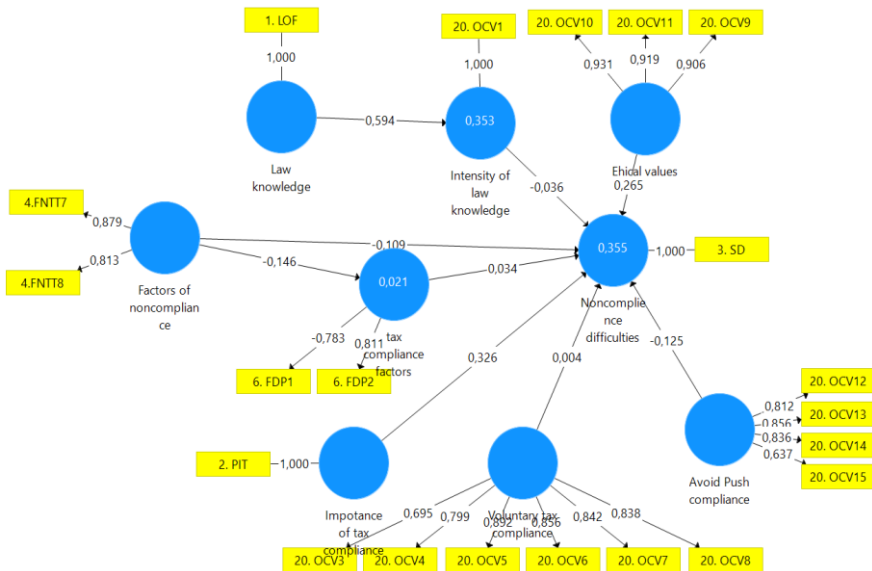


Figure no. 2: Model constructs and factor loadings (SmartPLS design)

Source: authors estimation

Table no. 5. Path analysis

H	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	p-Value	Decision
H1	-0,125	-0,133	0,050	2,503	0,013	Accepted
H2	0,265	0,266	0,060	4,438	0,000	Accepted
H3	-0,109	-0,110	0,047	2,323	0,021	Accepted
H4	-0,146	-0,001	0,160	0,912	0,362	Rejected
H5	0,326	0,321	0,057	5,717	0,000	Accepted
H6	-0,036	-0,040	0,048	0,748	0,455	Rejected
H7	0,594	0,592	0,035	16,859	0,000	Accepted

H8	0,004	0,011	0,056	0,067	0,947	Rejected
H9	0,034	0,008	0,057	0,595	0,552	Rejected

Source: authors estimation

Table 5 presents the hypothesized relationships between the constructs and shows that the behavior of avoiding tax compliance has an influence on the difficult situations faced by taxpayers due to late tax payments or tax non-payment. Thus, H<sub>1</sub> is accepted. According to research findings, taxpayers who declare a high level of civic and ethical values are more likely to avoid trying circumstances brought on by late or unpaid tax obligations. Therefore, H<sub>2</sub> is accepted. Regarding H<sub>3</sub>, the results depict that the factors that influence people do not follow the tax rules, like not trusting the tax authority, also because people do not pay their taxes in full and on time. The way the state government spends and allocates money also affects how quickly and completely people pay their taxes, as well as the difficult situations they face when they don't pay or pay late. Thus, H<sub>3</sub> is statistically supported. The insignificant coefficient indicates that non-compliance factors may have no effect on the factors that influence compliance. Thus, H<sub>4</sub> is not supported. Regarding H<sub>5</sub>, we hypothesized that the importance that taxpayers attach to tax compliance has a positive impact on the challenging circumstances that taxpayers encounter as a result of their late or non-payment of tax obligations. The results show that H<sub>5</sub> is supported. According to research findings, the degree of knowledge of tax legislation by taxpayers has no effect on avoiding the difficult situations that taxpayers go through due to the delay or non-payment of their tax obligations. Thus, H<sub>6</sub> is not supported. Regarding H<sub>7</sub>, the results depict that the knowledge of the tax legislation has an influence on difficult situations that taxpayers go through. Therefore, H<sub>7</sub> is well supported. H<sub>8</sub> predicts that voluntary tax compliance behavior has a beneficial influence on avoiding the difficult situations that taxpayers go through due to late or non-payment of their tax obligations. The findings indicate that H<sub>8</sub> is not supported. Considerations like „I consider paying tax obligations the price we pay for a civilized society” or „I believe that the tax authorities in Romania are very well prepared and apply the tax legislation correctly” don't directly influence difficult situations of taxpayers. At the same time, the findings from PLS-SEM analysis reveal that H<sub>9</sub> is not statistically accepted, because contrary to good compliance avoids difficulties for taxpayers.

The obtained results are correlated with other studies carried out in various countries on several continents, respectively European Union (Pukeliene and Kažemekaityte, 2016), Romania (Trifan et al., 2023), Indonesia (Dauna and Masdupi, 2023) Botswana and South Africa (Cummings et al., 2009), and Latin America (Ortega, Ronconi, and Sanguinetti, 2016).

The originality of the research consists in the fact that in the testing of research hypotheses were used statistical methods to the assessment of fiscal compliance within several distinct categories of study cases.

## Conclusions

Tax non-compliance is a challenge that the governments of states all over the world constantly face, and in this sense, a reconsideration of the tax administrations must direct their attention to "pull" strategies, friendlier and more positive, that attract and maintain the behavior of compliance in this period of "new challenges". Taxation must achieve a balance between the increasing need for budget income and the existing economic circumstances on the one hand and the practical ability to pay tax obligations in different specific contexts.

The behavior of avoiding tax compliance has an influence on the difficult situations that taxpayers go through due to the delay of tax payments or due to non-payment of tax obligations, so a better relationship and communication between the taxpayer and the administration is recommended in such a way as to avoid difficult and unpleasant situations due to tax non-compliance. It is also found that ethical values play a very important role in achieving tax compliance and avoiding difficulties. This aspect is in total agreement with the theory of voluntary compliance, "willingness to pay", proposed by the authors.

According to the study findings, as proposals for governments and tax administrations, we summarize some aspects. Due to the fact that a high civic sense declared by taxpayers has a positive influence on the difficult situations that taxpayers go through due to the delay in tax payments or the non-payment of these obligations, there is a need to carry out programs for the development of civic sense, civic education, and the development of the level of ethics and morality in society by involving factors such as non-governmental organizations, schools, churches, and religious cults, as well as public debates. In this regard, the "willingness to follow" from „pull-imposed compliance" in the fourth quadrant has to be developed. The first quadrant of compliance conviction is „willingness to accept" which has to be developed through appropriate measures.

Since the degree of knowledge of tax legislation by taxpayers has an influence on the difficult situations that taxpayers go through due to late tax payments or non-payment of tax obligations, there is a need for training on tax legislation, its public presentation, but also in a formally organized manner, contests, and/or its clarity and simplification. Also, for the category of the third quadrant pull voluntary compliance „willingness to pay", Also, based on results, it is recommended to have a system of incentives and motivations for taxpayers towards tax compliance. This system can include good practices that show transparently how the public and community money are used. For the PUSH compliance coercion quadrant "willingness to change non-compliance", it is also important to carry out awareness campaigns on the importance of tax compliance and the consequences of non-compliance.

The limits of the paper consist in the sample tested, in that it expresses the opinion of the respondents at a given moment according to the existing fiscal legislation. The fairly frequent changes in the tax legislation influence the behavior of taxpayers, so that a longer analysis could have more relevant results on their behavior. This situation can be debated in future research.

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