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Is There a Shift in the Intended Tax Compliance During the COVID-19 Outbreak? An Exploratory Study

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This exploratory study investigates whether there was a shift in intended tax compliance during the COVID-19 pandemic in Romania, identifying factors influencing taxpayers' perceived moral obligation to pay taxes amid crises. Using data from an online survey with 404 respondents conducted at the end of 2021, a multinomial logistic regression (MLR) analysis, informed by the slippery slope framework, was employed to analyze the role of voluntary and enforced compliance, trust in government, power of tax authorities, and other socio-demographic factors in influencing taxpayer behavior. The results indicate that older taxpayers felt a heightened moral obligation to comply with tax regulations during the COVID-19 crisis compared to younger individuals. Gender did not significantly affect intended tax compliance in crisis periods. Voluntary compliance showed mixed outcomes; taxpayers who recognized taxes as beneficial to society demonstrated increased compliance during the pandemic, whereas those who usually paid willingly displayed decreased compliance. Crucially, higher perceptions of tax fairness and greater trust in governmental institutions substantially increased taxpayers' moral obligation to comply during the pandemic. Unexpectedly, reduced corruption perceptions did not correspond with improved tax compliance. This research contributes to existing literature by highlighting the complex interplay of demographic variables, voluntary compliance motivations, and institutional trust during economic crises. The findings emphasize the need for policymakers to foster transparent communication, equitable tax policies, and enhance institutional trust to maintain and potentially increase tax compliance during challenging economic conditions.

Keywords: *Tax Compliance; Slippery Slope; COVID-19 Crisis; Perception Change; Tax Collection.*

Introduction

A well-structured taxation system forms the foundation for a state's fiscal stability and operational capacity, acting as a key pillar of public revenue generation. An effective fiscal system can collect the revenues needed to cover the usual public expenses and, at the same time, finance human capital development, generate the health system's performance, develop the infrastructure, and ensure the services for citizens. In this framework, taxes are pivotal in steering the economy toward attaining its social and economic objectives.

Each government should seek an efficient and equitable tax system for businesses and individuals. It is difficult to achieve both of these characteristics, and governments know that, usually, there is a tradeoff between reduced compliance costs and the fairness of taxes paid. In many countries, an equitable tax system is based on the ability-to-pay principle, which means that people with higher incomes should pay more taxes. However, of crucial importance is the willingness of individuals and businesses to pay taxes voluntarily. Therefore, an important issue is determining the optimal taxation level and the tax system's structure to create sustainable economic growth by stimulating production, consumption, and investments.

Over the years, many researchers have explored the drivers that made people pay their dues. Two basic approaches were investigated: one that taxpayers have to be forced to pay taxes (enforced compliance) and another one considering that, on the contrary, they willingly pay them (voluntary compliance). The factors that inhibit or stimulate voluntary compliance were explored thoroughly. Some of them were economic, such as the level of the tax; others psychological, like the simplicity of the process of paying taxes; or sociological, like the acceptable behavior norms.

It is well known that effective tax systems rely on high voluntary compliance, a significant challenge nationally. Improving citizens' motivation to pay taxes will increase public revenues with a considerably less increase in compliance costs. It is essential to highlight that a performant tax system builds trust and legitimacy among taxpayers, emphasizing educating citizens about the need for a stable and permanent level of revenues for the state to work correctly. As our study aims to analyze a change in the intention to pay taxes, we focus on the behavioral approaches of the respondents.

From a macroeconomic perspective, fiscal impacts of noncompliance are of critical interest (Thackray *et al.,* 2021). The government should motivate its citizens to comply voluntarily so that the expense generated by the enforcement is reduced. A better collection of taxes

increases the resources available for governments to spend in the interest of their citizens. On the contrary, the amount of taxes not collected diminishes the benefits a society could access, increases the tax gap, and reduces growth and development (Gaspar *et al.,* 2016). It is a vicious circle because, as researchers showed, the intensity of losses from not collecting the tax is substantially higher in low-income and lower in middle-income countries (Cobham & Jansky, 2018; Holz *et al.,* 2023).

The tax gap is the difference between the expected tax revenue and the collected amount. It has two main components: the compliance gap and the policy gap (Hutton, 2017). For many countries (where VAT is applicable), the main components of the tax gap, depending on the nature of the taxes, are the corporate income tax (CIT) gap, the personal income tax (PIT) gap, the VAT gap, and the excise gap. Another way of analyzing the tax gap involves breaking it into classes that depend on how it is pursued. For example, IRS (2022) analyzes non-filing (tax not paid on time by those who do not file required returns on time), underreporting (tax understated on timely filed returns), and underpayment (a tax that was reported on time but not paid on time).

On the other hand, HRMC (2022) lists the range of behaviors that lead to underpayment of taxes as follows: non-payment (which refers to revenue losses driven, mainly, by insolvencies); use of avoidance schemes (which involves bending the tax rules to try and gain a tax advantage that the regulator never intended), legal interpretation of the fiscal effects of complex transactions (defined as the situation when losses arise because the taxpayer's and HMRC's interpretation of the law and how it applies in a particular case result in a different tax outcome and there is no avoidance), error (which are mistakes made in preparing tax calculations, completing returns or in supplying other relevant information, despite the taxpayer taking reasonable care), failure to take reasonable care (which is the carelessness and/or negligence in adequately recording the transactions and/or in preparing the tax returns), evasion (the illegal activity where registered individuals or businesses deliberately omit, conceal or misrepresent information in order to reduce their fiscal obligations), the hidden economy (which refers to sources of taxable economic activity that are entirely hidden from the tax authority) and criminal attacks on the tax system (which refers to criminal groups undertaking coordinated and systematic attacks on the tax system). Analyzing the tax gap by its driver is essential, as different measures could address different causes. For example, the tax gap due to errors could be diminished by offering assistance to taxpayers; the non-payment could be addressed by allowing installment payments, and the tax gap due to evasion could be decreased with the help of tax audits.

Many imagine that the main component of the tax gap relates to companies failing to pay their tax, especially in the context of the conjugated efforts of many countries involved in preventing international profit shifting. However, recent data showed that a significant part of the tax gap relates to individuals failing to pay their fair share of taxes.

The slippery slope framework, one of the tax compliance models based on psychological and behavioral traits, starts from the idea that the tax climate can vary on a continuum between an antagonistic and a synergistic one. In other words, the two dimensions influence each other, and jointly, they impact the level of tax compliance (Kirchler, 2007). Ideally, the tax payment is maximized when the trust and power are maximum. As this scenario is hypothetical, tax authorities should be interested in finding the right mix that optimizes the collection. The coercive power the authorities have to enforce compliance comes with a cost, as the audit and the enforcement procedures are expensive, and the power cannot diminish the "legal tax avoidance" (Kirchler *et al.,* 2008). By growing the trust in the tax authorities, the outcome is more likely to be beneficial for the authorities.

Crises disrupt the economy and ask for flexibility, solidarity, and transparency in the measures taken (Utami & Ilyas, 2020). They lead to adjusted public expenditure and tax policies, tax compliance being imperative to ensure a viable source of funding to respond to the pandemic (Lachapelle *et al.,* 2021). However, in times of crisis, the taxpayer's behavior may change. It may be the lost trust in the authorities (driven by the handling of the sanitary crisis) or the perceived loss of power that could influence the ability and intention to pay tax. COVID-19 negatively impacted the governments' revenues (OECD, 2021; Naydenov & Tsenov, 2021; European Commission, 2022) due to the declining demand and supply and income reduction.

From our knowledge, research investigating the impact of the pandemic on tax compliance is scarce. Our study bridges the research gap by investigating the change in the taxpayers' perception of tax compliance during a crisis. The novelty of our paper is brought about by investigating the motivating factors for a tax shift in a Pandemic context. At the same time, the previous literature has not analyzed the motivating factors in a crisis context. The conclusions of our paper are critical considering that it is likely for another generalized crisis, this time a financial one, to hit the world economy.

The article is organized as follows: The next section reviews the relevant literature, establishing the theoretical foundation for the study. This is followed by a detailed description of the research methodology, outlining the approaches employed to address the research question. Subsequently, the research findings are presented and discussed, summarizing the key results and concluding remarks.

Literature Review

Tax compliance is a worldwide preoccupation. Why people pay their taxes is a question that has preoccupied researchers for many years (Alm *et al.*, 1992; Cullis & Lewis, 1996; Zang *et al.,* 2016; Dwenger *et al.,* 2016; Alm, 2018).

Traxler (2010) modeled tax morale as a social norm for tax compliance. He showed that behavior is influenced by norm compliance among morale reference groups. At the same time, Togler (2006) connected it with religiosity, considering that social sciences did not show as much interest in religion as in other topics. The role of social norms in this matter was subject to an analysis done by Bobek et al. (2012). Their results show that individuals'

standards for behavior or ethical beliefs (personal norms) and the expectations of other close persons, such as family or friends (subjective norms), directly influence tax compliance decisions.

In contrast, general societal expectations (injunctive norms) and other individuals' actual behavior (descriptive norms) have an indirect influence. In their prior research involving Australia, Singapore, and the United States, Bobek et al. (2007) observed that taxpayers' own moral beliefs, along with the beliefs of those close to them (e.g., friends and important others), are very influential factors, together with the societal views of proper behavior. On the same note, Onu and Oats (2016) found that taxpayers actively seek to influence other taxpayers and enforce these social norms.

Cummings et al. (2009) studied how tax morale affects tax compliance by comparing Botswana and South Africa, considering that cross-cultural differences in specific behavior are based on the fiscal authorities and how taxpayers assess the quality of governance. Luttmer and Singhal (2014) also used the term "tax morale" about types of tax influences, arguing that it is an important component of tax compliance decisions, even if enforcement is seen as the primary driver of compliance.

Wenzel (2004) analyzed the causal relations between ethics, norms, and tax compliance supporting the existing view in the literature that the latter is primarily a function of taxpayers' rational pursuit of their self-interests.

From the perspective of aggressive tax planning, Murphy (2005) studied the relationship between procedural justice, legitimacy, and tax noncompliance using cross-sectional data and longitudinal survey data. Previously, the same author (Murphy, 2004) demonstrated using survey data that variables such as trust need to be considered when managing noncompliance, a solution being to reduce the levels of distrust between the fiscal authority and the taxpayers with positive effects in voluntary compliance.

Kirchler et al. (2008) suggested a framework for tax compliance, also known as the slippery slope framework, based on trust in authorities and the power of authorities. Starting from a static framework, the authors proposed a dynamic framework in which the two dimensions influence each other, leading to different levels of tax collection. The authors investigated two scenarios: taxpayers who pay tax to avoid sanctions for noncompliance and those who pay their fair share of tax as they feel like community members and understand the importance of participating in society. The tax payment is seen as a dependent variable, while the authority's power and trust are independent. Although this approach was not new, before their model, the trust in the authorities and their power were seen as independent, and the function was static. Later, (Kogler *et al.,* 2015) ran a study on 476 self-employed taxpayers. They found that the power of authorities and the trust in them are both relevant factors to influence compliance since this group of taxpayers not only has the opportunity to evade taxes but is also suspicious of using this opportunity.

Using this framework and employing a lab experiment, Wahl et al. (2010) showed that the results reflect the basic assumptions of the slippery slope framework. This means that tax collection is improved when taxpayers trust the authorities and when the tax authorities have the power to audit, discover mistakes, and sanction misbehavior. Other scholars came to similar conclusions, proving the validity of the slippery slope framework, regardless of the demographic coordinates, economic systems, social climates, political regimes, or cultural backgrounds (Batrancea *et al.,* 2019; Gangl *et al.,* 2019; Kogler *et al.,* 2022).

Furthermore, to explain the dynamic between power and trust, other researchers extended the original slippery slope framework by differentiating the power of tax authorities into coercive and legitimate power and the trust in tax authorities into reason-based and implicit trust (Gangl et al., 2015). Later on, based on the comprehensive slippery slope framework (SSF), scholars showed that although coercive power has adverse side effects, legitimate power positively impacts trust, climate, motivation, and compliance (Gangl *et al.,* 2019).

The main factors increasing the trust in the authorities are, as previous literature showed, subjective tax knowledge, participation, positive attitudes towards taxes, favorable norms on the personal, social, and national levels (Hallsworth *et al.,* 2017), perceived fairness in distributional, procedural and retributive terms and considerate use of power. On the other hand, financial rewards may have no effect (for those rewarded) or a negative effect (for those not rewarded) in terms of tax compliance behavior (Fochmann & Kroll, 2016). On the other hand, social rewards may motivate taxpayers to comply more, as Fatas et al. (2021) found. In a recent study, Engström et al. (2022) found that loss aversion could be considerably more critical than standard economic incentives. Their experiment was run on Swedish taxpayers claiming deductions and attracting a possible audit.

Balliet and Van Lange (2013) consider the decision to pay tax a social dilemma in which the individual short-term interest to minimize paying taxes conflicts with the long-term collective interest to ensure enough tax for financing public goods. They found that in high-trust societies, people may begin to cooperate in response to punishment. On the contrary, in low-trust societies, people may respond negatively to being punished for not cooperating with other strangers. In another study, Balliet et al. (2011) obtained similar results that punishment promotes norms of cooperation, which leads to greater societal trust. Their findings also showed that incentives (rewards and punishments) are more efficient in case of iterated dilemmas than in one-shot ones.

Previous research showed that by creating a partnership between the taxpayers and tax authorities (the so-called service and client approach, Alm et al., 2010), the taxpayers perceive the treatment as fair and respond with reciprocity and compliance (Kirchler *et al.,* 2008; Pickhardt & Prinz, 2014). On the contrary, the antagonistic climate is unstable or slippery as it depends on the coercive power the tax authorities must have. It usually generates higher costs than assuring a voluntary tax compliance climate (Gangl *et al.,* 2015; Hallsworth *et al.,* 2017). Tax enforcement is associated with negative emotions taxpayers feel, which lead to enforced compliance, but they also elevate the readiness to evade (Olsen *et al.,* 2018).

Tax enforcement resides in the power of authorities. Most tax authorities audit taxpayers and punish

noncompliance. Sigle et al. (2022) found a significant relationship between the quality of internal tax control and tax compliance. Analyzing post-audit tax compliance, Kasper and Alm (2022) concluded that Effective audits increase post-audit tax compliance, while ineffective audits have the opposite effect. However, the threat of a tax audit should not be the only argument used by tax authorities to motivate compliance. This is because tax audits are costly, and they only cover a small portion of taxpayers, so, from a rational perspective, taxpayers may decide that it is more advantageous to take this risk. Also, tax avoidance does not depend on traditional audit parameters, such as frequency and fines (degl'Innocenti *et al.,* 2022). Moreover, recent studies based on lab experiments found no significant effects of deterrence on compliance behavior driven by audit probabilities or penalties (Casal *et al.,* 2022). On the contrary, intrinsic motivation to pay taxes occurs to sustain tax compliance.

Other authors consider that tax audits extend beyond verification and should play a significant role in managing compliance by collecting extra revenues, publicizing audit activity results, and punishing taxpayers who do not comply. Such behavior builds community confidence and public trust (Bieber, 2010). On the other hand, fewer audits may negatively affect public trust in the system, especially during crises, even if their number and frequency reduction may be justified (Haaland & Olden, 2022).

Batrancea et al. (2019) performed the first large-scale investigation of the slippery slope framework by collecting answers from 44 nations on five continents. Their results proved that trust in authorities and power are important determinants of worldwide tax compliance, regardless of demographic coordinates, economic systems, social climates, political regimes, or cultural backgrounds. Though the sensitivity degree may differ between subjects (such as students as opposed to entrepreneurs), the previous research showed that high intended tax compliance and voluntary compliance have a similar influence on both groups (Batrancea *et al.,* 2022). By using the data collected previously by Batrancea et al. (2019), Kogler et al. (2022) tested the slippery slope framework on a sample of 44 countries/regions and 14,509 participants, using shadow economy estimates and – as an alternative indicator of noncompliance – corruption indices to which both trust and power proved to be negatively related. Other authors, such as Dayioglu (2020), tested this framework in the scope of fiscal sociology.

Authors like Delgado et al. (2021) showed interest in the negative impact of a global crisis, namely COVID-19, on public spending, analyzing the transmission channels and relationships of three very complex variables: tax compliance, public spending, and happiness in the short-term (Lubian & Zarri, 2011). Considering that the long-term sustainability of state budgetary expenses is intimately connected to tax compliance, Cabelkova (2021) studied the reaction of different income groups in the Czech Republic in the presence of a fiscal measure called solidarity tax. Based on a survey of 550 small and micro enterprises in Greece, a country with one of the most significant tax gaps regarding their tax compliance, the factors of such behavior were explored by Kaplanoglou et al. (2016) through economic integration and psychological perspectives. Their results suggest a strong connection between the quality of fiscal policy and authorities is felt. At the same time, trust plays the most important role in increasing compliance intentions and deterring strategic tax evasion.

During difficult times, it is even more important for governments to collect taxes and ensure compliance as the need for finance increases (OECD, 2021; Lachapelle *et al.,* 2021; European Commission, 2022). Moreover, collective avoidance of tax payments could even make enforcement difficult. A crisis may lead to a significant loss of trust in tax authorities. It may lead to a loss of power (for example, by not being able to audit the taxpayers due to the context of the restriction on circulation). As previous research shows (Kirchler *et al.,* 2008; Wahl *et al.,* 2010), a loss of trust may significantly impact tax compliance. Many Governments (OECD, 2022; European Commission, 2022) faced decreased trust from their citizens. As a result, when funds needed to finance the health system and protect those impacted by the pandemic were critical, the risk was for them to face higher tax gaps. As such, trust is considered one of the significant factors in the aftermath of the pandemic that could impact tax collection (Utami & Ilyas, 2020; OECD, 2021; Lachapelle *et al.,* 2021; European Commission, 2022; Dom *et al.,* 2022).

Lachapelle et al. (2021) examined the public's willingness to support new taxes amid a crisis. Their results showed that the public's tax aversion extends to these crises. Also, they showed the importance of generalized social and political trust in the willingness to support a new tax.

Hartmann et al. (2022) employed a scenario study on Austrian taxpayers to investigate the effect of the COVID-19 pandemic on tax compliance. Their results show that individuals affected by the hostile economic environment are likelier to be less tax compliant. Such individuals are usually younger and less educated. On the other hand, a positive attitude toward taxes was found to have the potential to mitigate the negative effect of economic crises on compliance.

The research questions we focus on throughout this article are:

RQ1: *Voluntary tax compliance is an important trigger to increase the change in the shift of the intended tax compliance.*

RQ2: *Enforced tax compliance can also increase the perception of tax compliance in difficult periods.*

RQ3: *The Government's trust and power are important factors influencing the shift of the intended tax compliance.*

Database and Methodology

The Sample

Our study aims to analyze changes in the perception of paying taxes before and during the COVID-19 outbreak. Starting with the slippery slope framework and the methodology designed by Wahl et al. (2010), we applied a multinomial logistic regression (MLR) to investigate if there was a change in the intended tax compliance during the COVID-19 outbreak. Our research is based on a sensitivity analysis. We asked respondents about their opinions regarding voluntary compliance in paying taxes in a typical macroeconomic environment and in case of a major crisis such as the recent pandemic.

The dataset for this study was derived from a survey conducted in late 2021 in Romania following the conclusion of the COVID-19 outbreak. The survey aimed to assess potential shifts in individuals' intended tax compliance during the pandemic and identify factors that might influence changes in the perceived moral obligation to pay taxes. The online survey gathered responses from 404 participants, most of whom were undergraduate or graduate students enrolled in business programs at the Bucharest University of Economic Studies.

The results are deemed reliable and free from significant age-related bias. This perspective aligns with Hofman et al. (2017), who argue that European fiscal studies should incorporate taxpayers' demographic profiles, as age may impact tax compliance. To address this perspective, the questionnaire included age as a variable.

The sample's structure shows a fair distribution of different features, such as gender (70 % female, 30% male) and age (48% younger than 35 years old, 20% between 35 and 45 years old, 22 % between 45 and 55 years old; 10% over 45 years old). As opposed to Wahl et al. (2020), we ran the same experiment for both individuals earning income and those not yet receiving revenues.

Of the respondents, 43% did not receive income of their own (which is reasonable considering the young age and the fact that many of the respondents were students). Of the remaining 57% of the respondents, 13% earned less than 5,000 euros net/year, 28% earned between 5,000 euros and 13,000 euros net/year, and the rest, 16%, earned above 13,000 euros per year. The average yearly salary in Romania for 2020 and 2021 was around 8,200 euros and 8,500 euros, respectively. Of the 57% of respondents, 49% earned income that was taxed by the payer of the revenue (such as salary income), 2% earned income for which they have to pay the tax due, and 6% earned mix revenues both taxed by the payer and revenues for which they have to pay the tax due.

We have tested our sample based on population distribution, and the upcoming results can explain the respondents' shift in their intention to pay tax in case of the COVID-19 outbreak. The results were collected from a survey active between December 2020 – December 2021. We believe the findings are consistent and not influenced by the recent energy crisis or other macroeconomic discrepancies.

From the slippery slope methodology, we used the questions asked to quantify citizens' perceptions toward voluntary and enforced compliance, trust and power of authorities, distractors, and the will to pay taxes. To analyze a possible shift in tax compliance, we collected data about respondents' moral obligation to pay taxes during the COVID-19 outbreak compared to regular times. Preliminary results show that more than 66% consider their obligation to pay tax the same regardless of any crisis. However, many people seemed to have different perceptions of paying taxes during the pandemic (Table 1). More than 25% of the respondents answered that during the COVID-19 outbreak, they felt more obliged to pay their fair share of taxes, while only 8% considered that they were less morally bound to do so.

Table 1

Descriptive Statistics

Moral Obligation to Pay Taxes During the Pandemic, Compared to Regular Economic Periods – Shift in the Perception. *I feel more obliged to pay taxes during the times of pandemic:*

Agree (or strongly Agree)	25,50%
I felt exactly the same moral obligation	66,58%
Disagree (or strongly disagree)	7,92%
Total	100,00%

Source: Author's survey analysis

To explain the change in the perception towards the moral obligation to pay taxes, we used the slippery slope questionnaire to find some determinant factors regarding trust and power of authorities or other distractors. Then, we employed a multinomial logistic regression analysis based on the respondents' answers. The respondents were split into three groups, depending on whether they felt more morally bound to pay taxes during the COVID-19 pandemic (Group 1 – Disagree or strongly disagree; Group 2 - The same moral obligation to pay tax; Group 3 – Agree or strongly agree). Group 2 (those who stated that they felt the same obligation to pay tax, with or without COVID-19) is the baseline category.

Methodology

Our analysis consists of an MLR used to predict and explain a change in the perception of being (or not) more morally obligated to pay taxes during the COVID-19 pandemic. To interpret the results, we used multiple independent variables (Table 2). In our case, the MLR uses the maximum likelihood estimation to evaluate a taxpayer's probability of being in a specific category based on his/her perception of voluntary compliance, enforced compliance, trust and power of authorities, distractors, and will to pay taxes. The multinomial response variable of perception level consists of three categories: Group 1 – Disagree (or strongly disagree), Group 2 - there is the same moral obligation, and Group 3 – Agree (or strongly Agree).

As in other forms of linear regression, MLR uses a linear predictor function i,k to predict the probability that observation I (in our case, respondents) has outcome k (in our case, decision towards taxes) of the following form:

$$\pi(i,k) = \beta_{0,k} + \beta_{1,k} X_{1,i} + \beta_{2,k} X_{2,i} + \cdots + \beta_{Y,k} X_{Y,i} \quad (1)$$

In Eq. 1, Y,k is a regression coefficient associated with the Y-th explanatory variable and the k-th outcome. More generally, πi,k = Pr (Yi,k) denotes the probability that the i - th individual's outcome belongs to the k - th class, where kk = 1.

Our analysis aims to examine how factors change π, hence the name multinomial regression. The logit models for multinomial responses are expressed in terms of a baseline category (in our case, the group 2 respondents believed they had the same moral obligation during the pandemic). This model simultaneously describes the effects of X variables on the K – 1 logit computed concerning the baseline category, that is:

$$log\ log\ \frac{\pi(i,k)}{\pi(i,K)} = \beta_k X_i', k = 1, \dots, K-1, \quad (2)$$

In Eq. 2, we considered that the baseline category is K. According to the model, the effects are expected to vary concerning the baseline category paired. So, the K-1 equations determine the parameters for the logits with other pairs of response categories since:

$$log\ log\ \frac{\pi(i,a)}{\pi(i,b)} = log\ log\ \frac{\pi(i,a)}{\pi(i,K)} - log\ log\ \frac{\pi(i,b)}{\pi(i,K)} \quad (3)$$

In the end, the fitted class probabilities for an observation with explanatory variable vector X are therefore:

$$\pi(i,k) = \frac{exp\,(\beta_k X_i')}{1+\sum_{r=1}^{K-1} exp\,(\beta_r X_i')},\ k = 1, \dots, K-1, \quad (4)$$

In Eq. 4, k is defined as zero for model identifiability.

Even if we applied the MLR to compare the determinants of each category, that could lead to a shift in the intended tax compliance (Group 1 – Disagree (or strongly disagree), Group 2 - there is the same moral obligation, and Group 3 – Agree or strongly agree), we are aware that this model has some limitations. Even if our categories are closely related, and there is a chance that the odds of preferring one category can be influenced by the presence or characteristics of other categories, we consider our results robust and consistent. The exact sampling sizes were used previously by other researchers either on similar topics or in similar contexts (Kogler *et al.,* 2015; Batrancea *et al.,* 2019; Batrancea *et al.,* 2022; Kogler *et al.,* 2022; Surugiu *et al.,* 2024).

Descriptive Statistics of the Explanatory Variable Included in the Analysis

In MLR, which processed the data, the dependent variable was the probability of a change in the intention to pay taxes during the COVID-19 pandemic. The model was run in IBM SPSS 13.

To determine the explanatory variable that can explain the probability of someone's decision to change his/her mind, we analyzed a five-factor set consisting of various variables created from the questions asked using the slippery slope methodology: voluntary tax compliance, enforced tax compliance, manipulation check trust, manipulation check power, and distractors **(Appendix 1).**

Table 2 presents the descriptive statistics showing the trends in the decision to pay taxes for the explanatory variable.

Table 2

Descriptive Statistics

Explanatory variable	Mean	StDev	Media
Voluntary tax compliance			
PayingTaxAdvantage	3,90	1,01	4,00
Payingtaxwillingly	4,24	0,93	4,00
Payingtaxhelpgov	3,71	1,03	4,00
Payingtaxfairresponsability	4,38	0,74	4,00
Payingtaxrightchoice	4,23	0,84	4,00
Payingtaxacceptance	4,27	0,79	4,00
Enforced tax compliance			
Authpenalty	4,02	0,96	4,00
Authnoabuse	4,56	0,69	5,00
Authperceptionofnoncompliant	3,15	1,01	3,00
Authsatisfy	3,41	1,12	3,00
Authandneedtocoop	3,69	0,99	4,00
Authstandagainst	3,49	1,08	3,00
Manipulation check trust & power			
TrustGovactfairlytocitizens	2,65	0,99	3,00
Trustinterestofafewovercommunity	3,87	1,03	4,00
Turstgovactinlinewothcitizeninterest	2,61	1,02	3,00
Trustgovactequalywithall	4,13	1,02	4,00
Trustdetectingtaxevasion	3,16	1,09	3,00
Trusteasytomaketrustevasion	3,23	1,00	3,00
Trustgovefftotaxcriminality	2,65	0,98	3,00
Trusthardtoevadetax	3,13	1,03	3,00
Distractors			
Distcorrupcomparison	4,18	0,89	4,00
Distdemocracy	3,49	0,99	4,00
Distgovsepndinginfo	2,44	1,06	2,00
Disttaxequalydistribution	2,74	1,00	3,00
Distcitizenparticipation	3,07	1,16	3,00
Distgovfreeassistance	2,83	1,02	3,00
Will to pay fair taxes			
Willtopayfairlesscorruption	4,28	1,09	5,00

Explanatory variable	Mean	StDev	Media
Willtopayfairgovtransparencyexpenses	4,28	1,06	5,00
Willtopayfairtaxequity	4,11	1,06	4,00
Willtopayfairclearlegislation	4,25	0,99	5,00
Willtopayfaircitizenparticipation	3,92	1,11	4,00
Willtopayfairtaxassistance	4,20	1,04	5,00
Willtopayfairpaytaxeasy	3,97	1,18	4,00
Willtopayfaireveryonepays	4,24	1,07	5,00

According to Appendix 1, all variables quantify the taxpayer's perception toward paying taxes with a scale from 1 to 5, lowest grade meaning that the respondent strongly disagreed and the highest grade meaning strongly agreed.

Source: Author's survey analysis

As the descriptive statistics show, the respondents consider voluntary tax compliance very important as they almost agree or strongly agree that paying taxes is important to an economy. The same conclusion was reached regarding the will to pay taxes, as the respondents had an average grade above 4. These results align with the previous one (Kogler *et al.,* 2015; Todor, 2018; Batrancea *et al.,* 2019), which showed that Romanian taxpayers were significantly less likely to avoid paying taxes when compared to other nationalities.

Some of our results show contradictory answers for manipulation check trust and manipulation check power, as trust in authorities and law enforcement apparently are not key elements influencing the taxpayer's intention toward paying taxes during the pandemic compared to regular times.

Results and Discussions

To predict a possible shift in the intended tax compliance during the COVID-19 pandemic, we used a multinomial logistic regression that fitted five characteristics: voluntary compliance, enforced compliance, trust and power of authorities, distractors, and the will to pay taxes. Then, we analyzed each characteristic in a separate model, adding two supplementary variables, age, and gender. The likelihood ratio test (Appendix 1) shows that the multinomial logistic regression model is better at predicting the change in the intention to pay taxes during the pandemic according to some explanatory variables, which will be presented hereafter.

According to our results, during difficult times, such as the COVID-19 outbreak, older respondents feel more morally obliged to pay taxes. Our results align with other scholars (Fonseca & Myles, 2012; Hofmann *et al.,* 2017; Surugiu *et al.,* 2024), who have shown that older subjects tend to evade less. Hartmann et al. (2022) also found that younger and less educated taxpayers are more likely to change their compliance behavior in response to the economic environment. Our respondents were primarily grads and undergrads, so we did not include education among our variables.

Other authors (Kogler *et al.,* 2013; Batrancea *et al.,* 2019) investigated the applicability of the slippery slope framework to students from multiple countries. They found that women had higher intended tax compliance, while age did not matter. Our conflicting results in terms of age may be explained by the fact that our respondents' age was spread throughout 18 years and above 65 years. On the other hand, our results show that the respondents' gender does not significantly affect the intended tax compliance during difficult times.

Per our parameter estimates (Appendix 1) regarding voluntary compliance, the results show that respondents who consider paying taxes an advantage for everyone and those who stated that they pay taxes willingly are more likely to change their intention to pay taxes during difficult times. However, their change of intention goes in opposite ways. Those who consider paying taxes an advantage for other citizens feel more obligated to pay taxes during the pandemic. In contrast, those who stated that they pay their taxes willingly tend to be less interested in paying more during a pandemic episode. Our results show that RQ 1 is confirmed as being valid. Therefore, voluntary tax compliance is an important trigger to increase the chance of shifting the intended tax compliance.

In terms of manipulation check trust, according to the parameter estimates (Appendix 1), our analysis shows that respondents who consider that authorities act reasonably (with no abuses) towards their citizens or in line with their citizens' interests are more likely to feel that they are more obliged to pay taxes during a pandemic period. RQ 2 is also valid, as enforced tax compliance can increase the perception of tax compliance in difficult periods.

Those who perceive that the authorities will penalize you without helping remedy the situation tend to say they are less willing to pay more taxes, even if the economic situation is complicated. Surprisingly, respondents who felt that authorities never changed their mind after labeling a taxpayer non-compliant declared they felt more morally obliged to pay taxes during difficult economic situations. Our results confirm that RQ 3 is valid; the Government's trust and power are important factors influencing the shift of the intended tax compliance (Batrancea *et al.,* 2019).

According to the parameter estimates (Appendix 1), results for the distractors show that respondents who believe they have a democratic participation right or that the tax burden is equitably distributed among different occupational groups are likely to disagree on a higher moral obligation to pay during tough times. On the other hand, precise information from the tax authorities about governmental expenditures, tax agenda, and legislative duties will trigger the taxpayers' belief that tax compliance is even more of a moral obligation during the pandemic. Our analysis also shows that the respondents who believe that the local tax authorities respect their right to participate in referendums and co-decide in the legislation tend to feel an increased obligation to pay taxes during the pandemic.

Lastly, we analyzed the variables that quantify the will to pay a fair share of taxes in different scenarios. According to the parameter estimates (Appendix 1), respondents valuing clear legislation and law enforcement feel more morally obligated to pay taxes during the pandemic. On the other hand, respondents did not seem more willing to pay taxes during the tough times despite a possible reduction in corruption. Our findings contradict the previous ones, showing that reducing corruption could improve tax compliance (Bird *et al.,* 2008; Alm *et al.,* 2016; Banerjee *et al.,* 2022). This variation may stem from diverse cultural origins and educational backgrounds.

Conclusions

Policymakers must know the factors increasing tax compliance for both businesses and individuals. The COVID-19 outbreak or other crises are difficult economic tests for every government as they may lead to problems in collecting taxes. In this context, our research question was whether there was a shift in the intended tax compliance during the COVID-19 outbreak compared to a regular period.

As such, age significantly impacts tax compliance during crises (older respondents show a higher moral obligation to pay taxes during COVID-19, while younger taxpayers are more likely to change their compliance behavior), while gender does not significantly affect intended tax compliance during difficult times, contradicting some previous research.

However, voluntary compliance shows mixed effects. People who view taxes as benefiting society showed increased compliance, while those who typically pay willingly showed decreased compliance during the pandemic.

Our study reveals that the perception of tax fairness and trust in the government impacts the intended tax compliance during tough times. On the one hand, increased trust in the government leads to increased voluntary tax compliance (Wahl, 2010; Kogler *et al.,* 2015), which translates into a perceived higher moral obligation to pay taxes during periods of crisis. The government influences this shift in the intended tax compliance and enforces tax compliance if tax authorities are perceived as abusive.

On the other hand, tax collection increases, providing that taxes are perceived as being fair. Our results show that taxpayers who understand the advantage of paying taxes, perceive the tax legislation as transparent and clear, with little possibility of tax evasion, and feel that everyone is correctly paying their fair share will feel a higher moral obligation to pay taxes in a crisis period. Our results are consistent with those obtained by previous scholars (Batrancea *et al*.,2019; Godlewska,2023), who found that the higher the level of trust in the legal system, the fewer changes in the tax system policy were needed due to COVID-19.

Contrary to previous research, reduced corruption did not improve tax compliance, possibly due to cultural and educational differences in the study population.

These findings suggest that successful tax compliance during crises requires a balanced approach focusing on clear communication, fair treatment, and recognition of demographic differences in compliance behavior (for example, the channels and the tools used to increase voluntary compliance could address such differences). Nonetheless, our results must be considered considering some strengths and limitations. Our sample imposes some of the limitations. As such, almost 40% of the respondents were not receiving income alone, and their age was low. The answers obtained do not represent the population (in this case, the taxpayers), as they mainly expressed their intentions. Such a limitation was proved by previous research as insignificant (Batrâncea *et al.,* 2019; Gangl *et al.,* 2019; Kogler *et al.,* 2022). Nichita et al. (2019) contend that age does not significantly influence the willingness to pay taxes, while Hofmann et al. (2017) propose that age has only a minimal impact on compliance behavior.

On the one hand, Batrancea et al. (2022) found that, although the degree of sensitivity may be different between students and entrepreneurs, the high intended tax compliance and voluntary compliance have a similar influence in both groups. Kogler et al. (2022) validated the main assumptions of the SSF in a cross-country context by testing the relationship between experimental data and two different indicators of tax compliance. On the other, Surugiu et al. (2024), by investigating Generation Z and Millenium representatives, consider that the age variable positively influences tax compliance.

Another limitation is that most of our respondents were educated (students or graduates). Scholars reported contradictory results regarding the impact education might have on tax compliance. For example, Hofman et al. (2017) obtained unclear results, although they consider that higher education may be related to lower evasion and higher avoidance tendencies. On the other hand, by analyzing 28 OECD countries, Martínez et al. (2022) found that higher efficiency in tax collection is associated with higher education. For further research, we believe it will be helpful to increase the size of samples and expand the study to other regions or countries, as well as to more diverse individuals in terms of age, education, and income type. Other variables affecting voluntary taxpayer compliance could also be added to the model.

The strength of our study is evidence of the taxpayer's moral and behavioral characteristics that can explain the change in perception towards paying taxes in case of an important crisis. The results should be carefully considered by tax authorities and public decision-makers, as they are helpful in implementing fiscal policies and further explain what factors can lead to a better collection in cases of crisis.

Future research should focus on examining perceptions toward tax compliance while simultaneously considering the specific types of taxes that individuals typically pay. This approach would allow gathering specific information about distinct groups, such as entrepreneurs, employees, or investors, facilitating a more nuanced analysis of tax-related attitudes.

Appendix 1

Table 1. Likelihood Ratio Tests and Parameter Estimates for voluntary compliance

The dependent variable consists of three groups according to their answers to the statement: *During the Pandemic, I feel more morally obligated to pay my taxes*. Group 1 – Disagree (or strongly disagree), Group 2 - there is exactly the same moral obligation, Group 3 – Agree (or strongly Agree).
The reference category is: the group that said that there is exactly the same moral obligation to pay taxes during the pandemic.

Likelihood Ratio Tests

Effect	Model Fitting Criteria			Likelihood Ratio Tests		
	AIC of Reduced Model	BIC of Reduced Model	-2 Log Likelihood of Reduced Model	Chi Square	df	Sig.
Intercept	516.174	580.196	484.174	36.927	2	.000
Gender	480.441	544.464	448.441	1.194	2	.550
Age	489.170	553.193	457.170	9.923	2	.007
PayingTaxAdvantage	486.443	550.466	454.443	7.196	2	.027
Payingtaxwillingly	487.105	551.128	455.105	7.858	2	.020
Payingtaxhelpgov	482.292	546.315	450.292	3.045	2	.218
Payingtaxfairresponsability	481.776	545.798	449.776	2.529	2	.282
Payingtaxrightchoice	479.274	543.297	447.274	.027	2	.986
Payingtaxacceptance	479.906	543.929	447.906	.659	2	.719

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0

Parameter Estimates

		B	Std. Error	Sig.	Exp(B)
Agree (or strongly Agree)	Intercept	-4.649	1.109	.000	
	Gender	-.165	.272	.545	.848
	Age* **	**.326**	**.105**	**.002**	**1.385**
	PayingTaxAdvantage**	**.382**	**.194**	**.049**	**1.465**
	Payingtaxwillingly	-.065	.232	.778	.937
	Payingtaxhelpgov	.259	.170	.128	1.296
	Payingtaxfairresponsability	.062	.293	.833	1.064
	Payingtaxrightchoice	-.019	.270	.945	.982
	Payingtaxacceptance	.071	.257	.783	1.073
Disagree (or strongly disagree)	Intercept	3.533	1.194	.003	
	Gender	.411	.495	.406	1.508
	Age	-.047	.242	.846	.954
	PayingTaxAdvantage	-.404	.264	.126	.668
	Payingtaxwillingly* **	**-.746**	**.279**	**.008**	**.474**
	Payingtaxhelpgov	-.162	.255	.525	.851
	Payingtaxfairresponsability	-.469	.310	.130	.626
	Payingtaxrightchoice	-.055	.346	.874	.947
	Payingtaxacceptance	.240	.306	.433	1.271

The reference category is: I felt exactly the same moral obligation. The symbols *, **, *** represent significance levels of 10%, 5% and 1%.

Table 2. Likelihood Ratio Tests and Parameter Estimates for enforced tax compliance

The dependent variable consists of three groups according to their answers to the question: During the Pandemic, I feel more morally obligated to pay my taxes? Group 1 – Disagree (or strongly disagree), Group 2 - there is exactly the same moral obligation, Group 3 – Agree (or strongly Agree).
The reference category is: the group that said that there is exactly the same moral obligation to pay taxes during the pandemic.

Likelihood Ratio Tests

Effect	Model Fitting Criteria			Likelihood Ratio Tests		
	AIC of Reduced Model	BIC of Reduced Model	-2 Log Likelihood of Reduced Model	Chi Square	df	Sig.
Intercept	592.343	656.366	560.343	2.364	2	.307
Gender	590.701	654.723	558.701	.722	2	.697
Age	606.290	670.312	574.290	16.311	2	.000
Authpenalty	599.602	663.625	567.602	9.623	2	.008
Authnoabuse	595.004	659.026	563.004	5.025	2	.081
Authperceptionofnoncompliant	607.194	671.217	575.194	17.215	2	.000
Authsatisfy	591.024	655.046	559.024	1.045	2	.593
Authandneedtocoop	601.890	665.913	569.890	11.911	2	.003
Authstandagainst	595.008	659.031	563.008	5.029	2	.081
The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.						

Parameter Estimates

Pandemicsimplua		B	Std. Error	Sig.	Exp(B)
Agree (or strongly Agree)	Intercept	-.520	.869	.550	
	Gender	-.219	.268	.414	.804
	Age* **	**.354**	**.106**	**.001**	**1.425**
	Authpenalty	-.053	.167	.752	.948
	Authnoabuse	**-.346**	**.189**	**.068**	**.708**
	Authperceptionofnoncompliant	**.350**	**.164**	**.032**	**1.419**
	Authsatisfy	-.014	.147	.925	.986
	Authandneedtocoop	**-.484**	**.151**	**.001**	**.616**
	Authstandagainst	**.302**	**.143**	**.034**	**1.352**
Disagree (or strongly disagree)	Intercept	-2.519	1.767	.154	
	Sex	-.149	.415	.719	.861
	Varsta	-.343	.214	.109	.709
	Authpenalty	**1.010**	**.368**	**.006**	**2.746**
	Authnoabuse	-.628	.413	.128	.534
	Authperceptionofnoncompliant	**-.730**	**.239**	**.002**	**.482**
	Authsatisfy	.228	.232	.325	1.256
	Authandneedtocoop	.166	.258	.521	1.180
	Authstandagainst	.205	.224	.358	1.228

a. The reference category is: I felt exactly the same moral obligation.
The reference category is: I felt exactly the same moral obligation. The symbols *, **, *** represent significance levels of 10%, 5% and 1%.

Table 3. Likelihood Ratio Tests and Parameter Estimates for manipulation check trust

The dependent variable consists of three groups according to their answers to the question: During the Pandemic, I feel more morally obligated to pay my taxes? Group 1 – Disagree (or strongly disagree), Group 2 - there is exactly the same moral obligation, Group 3 – Agree (or strongly Agree).
The reference category is: the group that said that there is exactly the same moral obligation to pay taxes during the pandemic.

Likelihood Ratio Tests

Effect	Model Fitting Criteria			Likelihood Ratio Tests		
	AIC of Reduced Model	BIC of Reduced Model	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	645.659	725.687	605.659	23.407	2	.000
Gender	622.424	702.452	582.424	.172	2	.918
Age	641.332	721.360	601.332	19.080	2	.000
trustGovactfairlytocitizens	633.870	713.898	593.870	11.618	2	.003

Effect	Model Fitting Criteria			Likelihood Ratio Tests		
	AIC of Reduced Model	BIC of Reduced Model	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
trustinterestofafewovercommunity	626.187	706.216	586.187	3.936	2	.140
Turstgovactinlinewothcitizeninterest	627.503	707.532	587.503	5.252	2	.072
Trustgovactequalywithall	630.328	710.356	590.328	8.076	2	.018
Trustdetectingtaxevasion	624.302	704.330	584.302	2.050	2	.359
Trusteasytomaketrustevasion	622.387	702.415	582.387	.135	2	.935
Trustgovefftotaxcriminality	622.940	702.968	582.940	.688	2	.709
Trusthardtoevadetax	624.317	704.345	584.317	2.065	2	.356

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Parameter Estimates

		B	Std. Error	Sig.	Exp(B)
Agree (or strongly Agree)	Intercept	-4.858	1.080	.000	
	Gender	-.068	.276	.805	.934
	Age * **	**.432**	**.114**	**.000**	**1.540**
	trustGovactfairlytocitizens*	**.308**	**.182**	**.089**	**1.361**
	Trustinterestofafewovercommunity*	**.290**	**.152**	**.057**	**1.336**
	Turstgovactinlinewothcitizeninterest**	**.410**	**.182**	**.024**	**1.507**
	Trustgovactequalywithall**	**-.298**	**.127**	**.019**	**.742**
	Trustdetectingtaxevasion	-.085	.137	.537	.919
	Trusteasytomaketrustevasion	.032	.136	.816	1.032
	Trustgovefftotaxcriminality	.098	.170	.565	1.103
	Trusthardtoevadetax	.194	.136	.153	1.214
Disagree (or strongly disagree)	Intercept	-.097	1.770	.956	
	Gender	-.150	.415	.718	.860
	Age	-.326	.221	.140	.722
	trustGovactfairlytocitizens***	**-.819**	**.311**	**.008**	**.441**
	trustinterestofafewovercommunity	-.033	.205	.873	.968
	Turstgovactinlinewothcitizeninterest	-.015	.287	.958	.985
	Trustgovactequalywithall	.317	.249	.202	1.373
	Trustdetectingtaxevasion	-.266	.201	.187	.767
	Trusteasytomaketrustevasion	-.056	.216	.796	.946
	Trustgovefftotaxcriminality	.173	.262	.510	1.189
	Trusthardtoevadetax	.042	.210	.844	1.042

The reference category is: I felt exactly the same moral obligation. The symbols *, **, *** represent significance levels of 10%, 5% and 1%.

Table 4. Likelihood Ratio Tests and Parameter Estimates for distractors

The dependent variable consists of three groups according to their answers to the question: During the Pandemic, I feel more morally obligated to pay my taxes? Group 1 – Disagree (or strongly disagree), Group 2 - there is exactly the same moral obligation, Group 3 – Agree (or strongly Agree).
The reference category is: the group that said that there is exactly the same moral obligation to pay taxes during the pandemic.

Likelihood Ratio Tests

Effect	Model Fitting Criteria			Likelihood Ratio Tests		
	AIC of Reduced Model	BIC of Reduced Model	-2 Log Likelihood of Reduced Model	Chi Square	df	Sig.
Intercept	631.652	695.675	599.652	14.212	2	.001
Gender	617.849	681.872	585.849	.409	2	.815
Age	641.007	705.030	609.007	23.566	2	.000
Distcorrupcomparison	618.174	682.197	586.174	.733	2	.693
Distdemocracy	623.914	687.937	591.914	6.474	2	.039
Distgovsepndinginfo	626.682	690.704	594.682	9.241	2	.010

Effect	Model Fitting Criteria			Likelihood Ratio Tests		
	AIC of Reduced Model	BIC of Reduced Model	-2 Log Likelihood of Reduced Model	Chi Square	df	Sig.
Disttaxequalydistribution	624.848	688.870	592.848	7.407	2	.025
Distcitizenparticipation	622.509	686.531	590.509	5.068	2	.079
Distgovfreeassistance	621.796	685.818	589.796	4.355	2	.113
The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.						

Parameter Estimates

		B	Std. Error	Sig.	Exp(B)
Agree (or strongly Agree)	Intercept	-3.362	1.067	.002	
	Gender	-.093	.267	.727	.911
	Age * **	**.411**	**.113**	**.000**	**1.508**
	Distcorrupcomparison	.122	.144	.398	1.130
	Distdemocracy	-.109	.144	.448	.897
	Distgovsepndinginfo * **	**.419**	**.150**	**.005**	**1.521**
	Disttaxequalydistribution	-.018	.159	.908	.982
	**Distcitizenparticipation ** **	**-.276**	**.129**	**.032**	**.758**
	Distgovfreeassistance**	**.309**	**.151**	**.040**	**1.362**
Disagree (or strongly disagree)	Intercept	2.007	1.576	.203	
	Gender	-.246	.417	.555	.782
	Age	-.526	.229	.021	.591
	Distcorrupcomparison	.045	.222	.841	1.046
	Distdemocracy**	**-.543**	**.222**	**.014**	**.581**
	Distgovsepndinginfo	.377	.244	.122	1.459
	Disttaxequalydistribution * **	**-.683**	**.260**	**.009**	**.505**
	Distcitizenparticipation	-.185	.201	.357	.831
	Distgovfreeassistance	.162	.258	.531	1.176

The reference category is: I felt exactly the same moral obligation. The symbols *, **, *** represent significance levels of 10%, 5% and 1%.

Table 5. Likelihood Ratio Tests and Parameter Estimates for the will to pay taxes

The dependent variable consists of three groups according to their answers to the question: During the Pandemic, I feel more morally obligated to pay my taxes? Group 1 – Disagree (or strongly disagree), Group 2 - there is exactly the same moral obligation, Group 3 – Agree (or strongly Agree).
The reference category is: the group that said that there is exactly the same moral obligation to pay taxes during the pandemic.

Likelihood Ratio Tests

Effect	Model Fitting Criteria			Likelihood Ratio Tests		
	AIC of Reduced Model	BIC of Reduced Model	-2 Log Likelihood of Reduced Model	Chi Square	df	Sig.
Intercept	543.202	623.230	503.202	30.463	2	.000
Gender	513.007	593.035	473.007	.267	2	.875
Age	522.459	602.487	482.459	9.719	2	.008
Willtopayfairlesscorruption	520.631	600.659	480.631	7.892	2	.019
Willtopayfairgovtransparencyexpenses	514.627	594.655	474.627	1.888	2	.389
Willtopayfairtaxequity	516.949	596.978	476.949	4.210	2	.122
Willtopayfairclearlegislation	524.180	604.208	484.180	11.441	2	.003
Willtopayfaircitizenparticipation	514.473	594.501	474.473	1.734	2	.420
Willtopayfairtaxassistance	515.372	595.400	475.372	2.633	2	.268
Willtopayfairpaytaxeasy	513.573	593.601	473.573	.833	2	.659
Willtopayfaireveryonepays	518.107	598.135	478.107	5.368	2	.068
The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.						

Parameter Estimates

		B	Std. Error	Sig.	Exp(B)
Agree (or strongly Agree)	Intercept	-4.071	.832	.000	
	Gender	-.133	.271	.624	.876
	Age* **	**.316**	**.107**	**.003**	**1.372**
	Willtopayfairlesscorruption* **	**-.486**	**.186**	**.009**	**.615**
	Willtopayfairgovtransparencyexpenses	-.101	.212	.633	.904
	Willtopayfairtaxequity	.284	.212	.180	1.329
	Willtopayfairclearlegislation **	**.516**	**.242**	**.033**	**1.675**
	Willtopayfaircitizenparticipation	.045	.181	.803	1.046
	Willtopayfairtaxassistance	-.236	.232	.309	.790
	Willtopayfairpaytaxeasy	.096	.137	.484	1.101
	Willtopayfaireveryonepays **	**.395**	**.180**	**.028**	**1.484**
Disagree (or strongly disagree)	Intercept	-.133	1.023	.896	
	Gender	-.096	.419	.819	.909
	Age	-.118	.216	.584	.888
	Willtopayfairlesscorruption	.158	.332	.634	1.171
	Willtopayfairgovtransparencyexpenses	.399	.334	.233	1.490
	Willtopayfairtaxequity	-.377	.277	.173	.686
	Willtopayfairclearlegislation **	**-.730**	**.329**	**.027**	**.482**
	Willtopayfaircitizenparticipation	.338	.264	.200	1.402
	Willtopayfairtaxassistance	-.416	.306	.174	.659
	Willtopayfairpaytaxeasy	.153	.238	.520	1.165
	Willtopayfaireveryonepays	.037	.222	.867	1.038

The reference category is: I felt exactly the same moral obligation. The symbols *, **, *** represent significance levels of 10%, 5% and 1%.

Appendix 2

The questionnaire was adapted from Wahl et al. (2010). It included socio-demographic questions (such as the age and gender of the respondent). It also referred to the level and type of income obtained (subject to self-assessment tax or to be withheld by the payer). Questions were included in pairs (a standard one and one considering the pandemic) and aimed at identifying voluntary and enforced tax compliance. Although the number of questions was high, the respondents were instructed about the pairs, so the effort required to answer consciously was reasonable.

Other questions, developed by the authors, were meant to measure the shift in the intended tax compliance in case of changing some parameters. Those questions are written in Italic fonts. For each question, we included the matching variable nearby.

General questions
Gender
Age
Type of income (subject to withholding tax, self-assessment or both)
Net income per year

Voluntary tax compliance
I feel a moral obligation to pay my tax. (Comparison variable)
During the pandemic, I feel more morally obligated to pay my taxes. (Dependent dummy variable)
Paying my tax ultimately advantages everyone. (Variable name: PayingTaxAdvantage)
Overall, I pay my tax with good will. (Variable name: Payingtaxwillingly)
I think of tax paying as helping the government do worthwhile things. (Variable name: Payingtaxhelpgov)
I accept responsibility for paying my fair share of the tax. (Variable name: Payingtaxfairresponsability)
Paying tax is the right thing to do. (Variable name: Payingtaxrightchoice)
Paying taxes is a responsibility that all citizens should willingly accept. (Variable name: Payingtaxacceptance)

Enforced tax compliance
The tax office is more interested in catching you for doing the wrong thing, than helping you do the right thing. (Variable name: Authpenalty)
It's important not to let the tax office push you around. (Variable name: Authnoabuse)
Once the tax office has you branded as non-compliant taxpayer, they will never change their mind. (Variable name: Authperceptionofnoncompliant)
It's impossible to satisfy the tax office completely. (Variable name: Authsatisfy)
If you don't cooperate with the tax office, they will get tough with you. (Variable name: Authandneedtocoop)

As a society, we need more people willing to take a stand against the tax office. (Variable name: Authstandagainst)

Manipulation check trust
The governmental authorities in my country are fair towards their citizens. (Variable name: TrustGovactfairlytocitizens)
The interests of a few are considered in my country stronger than the interests of the community. (Variable name: Trustinterestofafewovercommunity)
The governmental institutions in my country act upon their citizens' interests. (Variable name: Turstgovactinlinewothcitizeninterest)
Had I perceived my government to have acted more in line with their citizens' interests and in favor of all of them equally, I would be more willing to pay my fair share of taxes. (Variable name: Trustgovactequalywithall)

Manipulation check power
Chances that tax evasion will be detected are high in my country. (Variable name: Trustdetectingtaxevasion)
It is easy to evade taxes in my country. (Variable name: Trusteasytomaketrustevasion)
Governmental institutions are very effective in the suppression of tax criminality. (Variable name: Trustgovefftotaxcriminality)
Had I perceived my chances to escape the tax payment to be less, I would be more willing to pay my fair share of taxes. (Variable name: Trusthardtoevadetax)

Distractors
In my country, citizens have a democratic right to participate in the decision-making process along with authorities and / or politicians. (Variable name: Distdemocracy)
Citizens get regular information about governmental expenditures by means of a clear official gazette. (Variable name: Distgovsepndinginfo)
The tax load is equitably distributed among different occupational groups and income groups. (Variable name: Disttaxequalydistribution)
Citizens have the possibility to participate in referenda and to co-decide in the legislation. (Variable name: Distcitizenparticipation)
Tax office offers free information centered to advise citizens about legislative and tax agendas. (Variable name: Distgovfreeassistance)

Please express your agreement with the following statements, on a scale from 1 (strongly disagree) to 5 (strongly agree). I'd be more willing to pay my fair share of taxes providing that:

1. Corruption decreases (Variable name: Willtopayfairlesscorruption)
2. Transparency of how Government is spending my money will increase (Variable name: Willtopayfairgovtransparencyexpenses)
3. The tax load is equitably distributed among different occupational groups and (Variable name: Willtopayfairtaxequity)
4. Legislation is more clear (Variable name: Willtopayfairclearlegislation)
5. Taxpayer will have a chance to be involved in the legislative process (Variable name: Willtopayfaircitizenparticipation)
6. Tax assistance will be more efficient (Variable name: Willtopayfairtaxassistance)
7. Paying tax will be easier (Variable name: Willtopayfairpaytaxeasy)
8. Everyone is forced to pay their taxes (Variable name: Willtopayfaireveryonepays)

References

Alm, J. (2019). What Motivates Tax Compliance?. *Journal of Economic Surveys*, 33(2), 353–388. https://doi.org/10.1111/joes.12272

Alm, J., Cherry, T., Jones, M., & McKee, M. (2010). Taxpayer information assistance services and tax compliance behavior. *Journal of Economic Psychology*, 31(4), 577–586. https://doi.org/10.1016/j.joep.2010.03.018

Alm, J., Martinez-Vazquez, J., & McClellan, C. (2016). Corruption and firm tax evasion. *Journal of Economic Behavior & Organization*, 124, 146-163. https://doi.org/10.1016/j.jebo.2015.10.006

Alm, J., McClelland, G. H., & Schulze, W. D. (1992). Why do people pay taxes? *Journal of Public Economics*, 48, 21–38. https://doi.org/10.1016/0047-2727(92)90040-M

Balliet, D., Mulder, L., B., & Van Lange, P. A. M. (2011). Reward, punishment, and cooperation: a meta-analysis. *Psychological Bulletin*, 137. https://doi.org/10.1037/a0023489

Balliet, D., & Van Lange, P. A. M. (2013). Trust, punishment, and cooperation across 18 societies. *Perspectives on Psychological Science*, 8. https://doi.org/10.1177/1745691613488533

Banerjee, R., Boly, A., & Gillanders, R. (2022). Anti-tax evasion, anti-corruption and public good provision: An experimental analysis of policy spillovers. *Journal of Economic Behavior & Organization*, 197, 179-194. https://doi.org/10.1016/j.jebo.2022.03.006

Batrancea, L., Nichita, A., Olsen, J., Kogler, C., Kirchler, E., Hoelzl, E., Weiss, A., Torgler, B., Fooken, J., Fuller, J., Schaffner, M., Banuri, S., Hassanein, M., Alarcón-Garcia, G., Aldemir, C., Apostol, O., Bank Weinberg, D., Batrancea, I., Belianin, A., Bello Gomez, F., Briguglio, M., Dermol, V., Doyle, E., Gcabo, R., Gong, B., Ennya, S., Essel-Anderson, A., Frecknall-Hughes, J., Hasanain, A., Hizen, Y., Huber, O., Kaplanoglou, G., Kudla, J., Lemoine, J. E., Leurcharusmee, S., Matthiasson, T., Mehta, S., Min, S., Naufal, G., Niskanen, M., Nordblom, K., Ozturk, E. B., Pacheco, L., Pantya, J., Rapanos, V., Roland-Levy, C., Roux-Cesar, A. M., Salamzadeh, A., Savadori, L., Schei, V., Sharma, M., Summers, B., Suriya, K., Tran, Q., Villegas-Palacio, C., Visser, M., Xia, C., Yi, S. & Zukauskas, S. (2019). Trust and power as determinants of tax compliance across 44 nations. *Journal of Economic Psychology*, 74, ISSN 0167-4870. https://doi.org/10.1016/j.joep.2019.102191

Batrancea, L. M., Kudla, J., Blaszczak, B., & Kopyt, M. (2022). Differences in tax evasion attitudes between students and entrepreneurs under the slippery slope framework. *Journal of Economic Behavior & Organization*. 200, 464-482. https://doi.org/10.1016/j.jebo.2022.06.017

Biber, E. (2010). Revenue Administration: Taxpayer Audit-Development of Effective Plans. Technical Notes and Manuals, 2010(003). https://doi.org/10.5089/9781462306145.005

Bird, R. M., Martinez-Vazquez, J., & Torgler, B. (2008). Tax effort in developing countries and high-income countries: The impact of corruption, voice and accountability. *Economic analysis and policy*, 38(1), 55-71. https://doi.org/10.1016/S0313-5926(08)50006-3

Bobek, D., Roberts, R., & Sweeney, J. (2007). The Social Norms of Tax Compliance: Evidence from Australia, Singapore, and the United States. *Journal of Business Ethics*, 74, 49-64. https://doi.org/10.1007/s10551-006-9219-x

Bobek, D., Hageman, A., & Kelliher, C. (2012). Analyzing the Role of Social Norms in Tax Compliance Behavior. *Journal of Business Ethics*, 115. https://doi.org/10.1007/s10551-012-1390-7

Cabelkova, I. (2021). Sustainability of State Budgetary Expenses: Tax Compliance of Low-, Middle-, and High-Income Groups—The Evidence from the Czech Republic. *Sustainability*, 13(16), 8966. https://doi.org/10.3390/su13168966

Casal, S., Faillo, M., & Mittone, L. (2022). I want to pay! - Identifying the Unconditional Tax Propensity (UTP). *Journal of Economic Behavior & Organization*, 197, 103-114. https://doi.org/10.1016/j.jebo.2022.02.023

Cobham, A., & Jansky, P. (2018). Global distribution of revenue loss from corporate tax avoidance: re-estimation and country results. *Journal of International Development*, 30(2), 206-232. https://doi.org/10.1002/jid.3348

Cummings, R. G., Martinez-Vazquez, J., McKee, M., & Torgler, B. (2009). Tax morale affects tax compliance: Evidence from surveys and an artefactual field experiment. *Journal of Economic Behavior & Organization*, 70(3), 447-457. https://doi.org/10.1016/j.jebo.2008.02.010

Cullis, J. G., & Lewis, A. (1997). Why people pay taxes: From a conventional economic model to a model of social convention. *Journal of Economic Psychology*, 18(2–3), 305-321, ISSN 0167-4870. https://doi.org/10.1016/S0167-4870(97) 00010-X

Dayioglu Erul, R. (2020). Testing the Slippery Slope Framework in the Scope of Fiscal Sociology: A Study on the Classification of Income Levels. F*iscaoeconomia*, 4(1), 61-93. https://doi.org/10.25295/fsecon.2020.01.004

Degl'Innocenti, D. G., Levaggi, R., & Menoncin, F. (2022). Tax Avoidance and Evasion in a Dynamic Setting.

Delgado, R., María, J., & Santos, S. (2021). Tax compliance, public spending and happiness in Europe. *Corporate Governance*, 22(3), 577-591. https://doi.org/10.1108/CG-05-2021-0202

Dom, R., Custers, A., Davenport, S., & Prichard, W. (2022). Innovations in Tax Compliance: Building Trust, Navigating Politics, and Tailoring Reform. World Bank Publications. https://openknowledge.worldbank.org/handle/ 10986/36946 (accessed in December 2022). https://doi.org/10.1596/978-1-4648-1755-7

Dwenger, N., Kleven, H., Rasul, I., & Rincke, J. (2016). Extrinsic and Intrinsic Motivations for Tax Compliance: Evidence from a Field Experiment in Germany. *American Economic Journal: Economic Policy*, 8(3), 203–232. Available online at: http://www.jstor.org/stable/24739235; https://doi.org/10.1257/pol.20150083

European Commission - Directorate-General for Taxation and Customs Union, (2022). Annual Report on Taxation 2022. Publications Office of the European Union. Luxembourg. available online at: https://taxation-customs.ec.europa.eu/taxation-1/economic-analysis-taxation/annual-report-taxation_en (accessed in December 2022)

Fatas, E., Nosenzo, D., Sefton, M., & Zizzo, D. J. (2021). A self-funding reward mechanism for tax compliance. *Journal of Economic Psychology*, 86. https://doi.org/10.1016/j.joep.2021.102421

Fochmann, M., & Kroll, E. B. (2016). The effects of rewards on tax compliance decisions. *Journal of Economic Psychology*, 52, 38-55. https://doi.org/10.1016/j.joep.2015.09.009

Fonseca, M., & Myles, G. D. (2012). A survey of experiments on tax compliance. HM Revenue and Customs Research Report, 198. available online at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/ attachment_data/ file/355001/Experimental_evidence_on_taxpayer_compliance.pdf (accessed in December 2022)

Gangl, K., Hofmann, E., Hartl, B., & Berkics, M. (2019). The impact of powerful authorities and trustful taxpayers: evidence for the extended slippery slope framework from Austria, Finland, and Hungary. Policy Studies. https://doi.org/10.1080/01442872.2019.1577375

Gangl, K., Hofmann, E., & Kirchler, E. (2015). Tax authorities' interaction with taxpayers: A conception of compliance in social dilemmas by power and trust. *New ideas in psychology*, 37, 13-23. https://doi.org/10.1016/j.newideapsych. 2014.12.001

Gaspar, V., Jaramillo, L., & Wingender, M. P. (2016). Tax Capacity and Growth: Is There a Tipping Point? International Monetary Fund. https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Tax-Capacity-and-Growth-Is-there-a-Tipping-Point-44436; https://doi.org/10.5089/9781475558173.001

Godlewska, M. (2023). The Impact of Informal Institutions on the Tax System Policy Responses due to Covid-19: Evidence from CEECs. *Inzinerine Ekonomika-Engineering Economics*, 34(5), 490–499. https://doi.org/10.5755/j01.ee. 34.5.31327

Haaland, I., & Olden, A. (2022). Fraud concerns and support for economic relief programs. *Journal of Economic Behavior & Organization,* 203, 59-66. https://doi.org/10.1016/j.jebo.2022.08.026

Hallsworth, M., List, J. A., Metcalfe, R. D., & Vlaev, I. (2017). The behavioralist as tax collector: Using natural field experiments to enhance tax compliance. *Journal of Public Economics*, 148, 14-31. https://doi.org/10.1016/j.jpubeco.2017.02.003

Hartmann, A. J., Gangl, K., Kasper, M., Kirchler, E., Kocher, M. G., Mueller, M., & Sonntag, A. (2022). The economic crisis during the COVID-19 pandemic has a negative effect on tax compliance: Results from a scenario study in Austria. *Journal of Economic Psychology*, 93. https://doi.org/10.1016/j.joep.2022.102572

Hofmann, E., Voracek, M., Bock, C., & Kirchler, E. (2017). Tax compliance across socio demographic categories: Meta-analyses of survey studies in 111 countries. *Journal of Economic Psychology*, 62, 63-71. https://doi.org/10.1016/j.joep.2017.06.005

Holz, J. E., List, J. A., Zentner, A., Cardoza, M., & Zentner, J. E. (2023). The $100 million nudge: Increasing tax compliance of firms using a natural field experiment. *Journal of Public Economics*, 218, 104779. https://doi.org/10.1016/j.jpubeco.2022.104779

Hutton, E. (2017). The Revenue Administration – Gap Analysis Program: Model and Methodology for Value-Added Tax Gap Estimation, IMF Technical Notes and Manuals 17/04, Washington DC, International Monetary Fund. https://doi.org/10.5089/9781475583618.005

Kaplanoglou, G., Rapanos, V., & Daskalakis, N., (2016). Tax compliance behavior during the crisis: the case of Greek SMEs. *European Journal of Law and Economics*, 42. https://doi.org/10.1007/s10657-016-9547-y

Kasper, M., & Alm, J., (2022). Audits, audit effectiveness, and post-audit tax compliance. *Journal of Economic Behavior & Organization*, 195, 87-102. https://doi.org/10.1016/j.jebo.2022.01.003

Kirchler, E. (2007). The economic psychology of tax behavior. Cambridge University Press. https://doi.org/10.1017/CBO9780511628238

Kirchler, E., Hoelzl, E., & Wahl, I. (2008). Enforced versus voluntary tax compliance: The "slippery slope" framework. *Journal of Economic Psychology*, *29*(2), 210-225. https://doi.org/10.1016/j.joep.2007.05.004

Kogler, C., Batrancea, L., Nichita, A., Pantya, J., Belianin, A., & Kirchler, E. (2013). Trust and power as determinants of tax compliance: Testing the assumptions of the slippery slope framework in Austria, Hungary, Romania and Russia. Journal of Economic Psychology. 34, 169-180. https://doi.org/10.1016/j.joep.2012.09.010

Kogler, C., Olsen, J, Kirchler, E., Batrancea, L. M., & Nichita, A. (2022). Perceptions of trust and power are associated with tax compliance: A cross-cultural study, *Economic and Political Studies*. https://doi.org/10.1080/20954816. 2022.2130501

Kogler, C., Muehlbacher, S., & Kirchler, E. (2015). Testing the "slippery slope framework" among self-employed taxpayers. *Economics of Governance*, 16. 125-142. https://doi.org/10.1007/s10101-015-0158-9

Internal Revenue Services (IRS). (2022). Federal Tax Compliance Research: Tax Gap Estimates 2014–2016, available online at: https://www.irs.gov/pub/irs-pdf/p5364.pdf

HRMC. (2022). Tax gaps: Illustrative tax gap by behavior; available online at: https://www.gov.uk/government/statistics/measuring-tax-gaps/7-tax-gaps-illustrative-tax-gap-by-behaviour#description -of-behaviours

Lachapelle, E., Bergeron, T., Nadeau, R., Daoust, J. F., Dassonneville, R., & Belanger, E., (2021). Citizens' Willingness to Support New Taxes for COVID-19 Measures and the Role of Trust. *Politics & Policy*, 49(3), 534-565. https://doi.org/10.1111/polp.12404

Lubian, D., & Zarri, L., (2011). Happiness and tax morale: An empirical analysis. *Journal of Economic Behavior & Organization,* 80(1), 223-243. https://doi.org/10.1016/j.jebo.2011.03.009

Luttmer, E. F., & Singhal, M. (2014). Tax morale. *Journal of Economic Perspectives*, 28(4), 149-68. https://doi.org/10.1257/jep.28.4.149

Martínez, Y. U., Arzoz, P. P., & Arregui, I. Z., (2022). Tax collection efficiency in OECD countries improves via decentralization, simplification, digitalization and education. *Journal of Policy Modeling*, 44(2), 298-318. https://doi.org/10.1016/j.jpolmod.2022.03.003

Murphy, K. (2005). Regulating More Effectively: The Relationship between Procedural Justice, Legitimacy, and Tax Non-compliance. *Journal of Law and Society*. 32, 562-89. https://doi.org/10.1111/j.1467-6478.2005.00338.x

Murphy, K. (2004). The role of trust in nurturing compliance: A study of accused tax avoiders. *Law and human behavior,* 28(2), 187-209. https://doi.org/10.1023/B:LAHU.0000022322.94776.ca

Naydenov, L., & Tsenov, D., (2021). Covid-19 Effects on Tax Gaps. Economic Archive. 20(1),15-27

Nichita, A., Batrancea, L., Pop, C. M., Batrancea, I., Morar, I. D., Masca, E., Roux-Cesar, A. M., Forte, D., Formigoni, H., & da Silva, A. A. (2019). We Learn Not for School but for Life: Empirical Evidence of the Impact of Tax Literacy on Tax Compliance. Eastern European Economics, 57(5), 397–429. https://doi.org/10.1080/00128775.2019.1621183

Parliament of Australia. (2022), Addressing the tax gap, available at: https://www.aph.gov.au/About_Parliament/Parliamentary_departments/ Parliamentary_Library/pubs/rp/BudgetReviewOctober202223/AddressingTaxGap

OECD. (2021). Tax and Fiscal Policies after the COVID-19 Crisis: OECD Report for the G20 Finance Ministers and Central Bank Governors. available at: www.oecd.org/tax/tax-policy/tax-and-fiscal-policies-after-the-covid-19-crisis.htm

OECD. (2022). Trust in the government. available at: https://data.oecd.org/gga/trust- in- government.htm

Olsen, J., Kasper, M., Enachescu, J., Benk, S., Budak, T., & Kirchler, E. (2018). Emotions and tax compliance among small business owners: An experimental survey. *International Review of Law and Economics*, 56, 42-52. https://doi.org/10.1016/j.irle.2018.05.004

Pickhardt, M., & Prinz, A., (2014). Behavioral dynamics of tax evasion–A survey. *Journal of Economic Psychology*, 40, 1-19. https://doi.org/10.1016/j.joep.2013.08.006

Sigle, M. A., Goslinga, S., Spekle, R. F., & van der Hel, L. E., (2022). The cooperative approach to corporate tax compliance: An empirical assessment. *Journal of International Accounting, Auditing and Taxation,* 46, 100447. https://doi.org/10.1016/j.intaccaudtax.2022.100447

Surugiu, C., Surugiu, M. R., & Gradinaru, C. (2024). Millennials vs."Zoomers" Tax Compliance Behaviour in Romania: SEM and GLM with Survey Data. *Inzinerine Ekonomika-Engineering Economics*, 35(1), 102-118. https://doi.org/10.5755/j01.ee.35.1.33517

Thackray, M., Jennings, S., & Knudsen, M. B. (2021), The Revenue Administration–Gap Analysis Program: An Analytical Framework for Excise Duty Gap Estimation. International Monetary Fund.

Todor, A. (2018). Willing to pay? The politics of engendering faith in the post-communist Romanian tax system. The Leap of Faith. *The Fiscal Foundations of Successful Government in Europe and America*, 250-270. https://doi.org/10.1093/oso/9780198796817.003.0011

Torgler, B. (2006). The importance of faith: Tax morale and religiosity. *Journal of Economic Behavior & Organization*, 61(1), 81-109. ISSN 0167-2681. https://doi.org/10.1016/j.jebo.2004.10.007

Traxler, C. (2010). Social norms and conditional cooperative taxpayers. *European Journal of Political Economy*, 26(1), 89-103. ISSN 0176-2680. https://doi.org/10.1016/j.ejpoleco.2009.11.001

Wahl, I., Kastlunger, B., & Kirchler, E., (2010). Trust in authorities and power to enforce tax compliance: An empirical analysis of the "Slippery Slope Framework". *Law & Policy*, 32(4), 383-406. https://doi.org/10.1111/j.1467-9930.2010. 00327.x

Wenzel, M., 2005. Motivation or rationalization? Causal relations between ethics, norms and tax compliance. *Journal of Economic Psychology*, 26(4), 491-508. ISSN 0167-4870. https://doi.org/10.1016/j.joep.2004.03.003

Utami, D., & Ilyas, W., (2021). The role of tax in COVID-19 response in Indonesia: The principles of flexibility, solidarity, and transparency. *Asian Politics & Policy*, 13. https://doi.org/10.1111/aspp.12573

Zhang, N., Andrighetto, G., Ottone, S., Ponzano, F., & Steinmo, S., (2016). "Willing to Pay?" Tax Compliance in Britain and Italy: An Experimental Analysis. *PLoS ONE* 11(2), e0150277. https://doi.org/10.1371/journal.pone.0150277

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