

IMPACT OF TAX BURDEN UPON TAX FRAUD AND TAX EVASION

Lia Pricope (Sabou)¹, ORCID ID: 0009-0002-9702-1483
Sorin Nicolae Borlea², ORCID ID: 0000-0002-9987-3682

Abstract: *The goal of the current study is to assess the impact of tax burden upon tax fraud and tax evasion. We use a sample of 104 countries around the world for which we employ the most used indexes in the field's literature to assess tax fraud and tax evasion, for the 2015 – 2020 period. This period is limited by the data availability. Using dynamic panel data models, we show that, regardless of the proxy used for tax fraud and tax evasion, tax burden positively impacts it them short-term. Things change for the long-term coefficients, for some variables. The introduction of the development level or the government effectiveness does not alter the impact of tax burden upon tax fraud and tax evasion.*

Introduction

Tax fraud and tax evasion have been activities that date back to the ancient times. From the earliest fiscal systems in antiquity to the modern era, tax fraud and tax evasion have been consistently encountered issues, often having both economic and social implications (Faccia & Mosteanu, 2019). Despite the significant differences between ancient and contemporary societies, the foundation of these practices remains the same: taxpayers seek ways to reduce their tax obligations, while tax authorities strive to combat such behaviors and ensure the funding of public projects and other state needs (Pomeranz & Vila-Belda, 2019). Such practices lead to fiscal losses for national governments (Young, 2018, Ozili, 2020), impacting economic growth (Ozpence & Mercan, 2020). In consequence, there is a continuous struggle to construct fiscal policies able to counteract such practices.

The Laffer Curve (Laffer, 2016) states that there is reverse U shape between taxation level and the amount of money the state is able to collect from contributors. This illustrates that at very low levels of taxation, the revenue collected by the state is reduced due to low tax rates, and at very high levels of taxation, the revenue collected is also reduced because it stimulates fraud and tax evasion and discourages economic activity. Between these two extremes, there is an optimal taxation point at which state revenues are maximized. This point represents the balance between stimulating economic activity and the need to collect sufficient tax revenues. Thus, the Laffer curve provides insight into how fiscal policy can influence the efficiency and effectiveness of state revenue collection. As previously shown, the relationship between the level of taxation, which can be considered a fiscal burden, and tax fraud and evasion is directly proportional. Increasing the fiscal burden can lead to intensified tax evasion and fraud activities. Essentially, as tax rates increase, taxpayers are motivated to find ways to reduce their tax burden through illegal or semi-legal means. This includes underreporting income, exaggerating deductions, or shifting income to lower-tax jurisdictions. Furthermore, a high fiscal burden can discourage voluntary compliance and encourage the perception that taxes are unfair, which in turn stimulates tax avoidance behaviors. This creates a vicious cycle: tax increases lead to increased evasion, which can reduce the tax base and collected revenues, forcing the state to raise taxes further to meet budgetary goals, thereby exacerbating the initial problem. Considering all these aspects, the main factor introduced in this

¹ University of Oradea, Faculty of Economics, Universităţii Street, no. 1, Zip Code 410087, Oradea, Romania

² University of Oradea, Faculty of Economics, Universităţii Street, no. 1, Zip Code 410087, Oradea, Romania

analysis is the fiscal burden. This determinant is supplemented by other variables revealed by the literature as potential influencing factors of tax fraud and evasion, in the form of control variables.

To fulfil the research goal, we select the most used proxies for tax fraud and tax evasion in the field's literature, namely indexes constructed based on offshore activities and informal economy estimations. Besides tax burden as the main factor, and following the findings from the field's literature, we introduce the level of development proxied by the GDP per capita growth rate and government effectiveness as control variables.

The next section deals with the issue of tax burden versus tax fraud and tax evasion in the specialized literature and concludes by stating the research hypothesis. Section 3 describes the data and the methodological development. Results are presented and discussed in the following section, while the last one concludes.

Literature Review and Working Hypothesis

The relationship between tax burden and tax behavior, particularly concerning tax fraud and evasion, has been extensively studied. This literature review explores the impact of tax burden on tax compliance, fraud, and evasion, drawing on various theoretical and empirical studies.

As stated in the introductory part, the Laffer Curve is a foundational concept in understanding the relationship between tax rates and tax revenues. It posits that both excessively low and excessively high tax rates can lead to reduced tax revenues, the former due to insufficient rates and the latter due to incentivized tax evasion and discouraged economic activity (Laffer, 2004, 2016, or Farhi & Gabaix, 2020). The curve suggests an optimal tax rate that maximizes revenue without overburdening taxpayers. Empirical studies support the theoretical assertions of the Laffer Curve. Slemrod (2007) or Petruscu et al. (2023) find that high tax rates correlate with increased incidences of tax evasion. Taxpayers often resort to underreporting income, exaggerating deductions, or shifting income to lower-tax jurisdictions as a means to mitigate high tax burdens (Saptono et al., 2024). Attempts to model the relationship between tax burden and tax evasion are quite old. Allingham and Sandmo (1972) developed a model highlighting the decision-making process behind tax evasion, suggesting that higher tax rates increase the potential gains from evasion, thereby motivating non-compliant behavior. The models estimated by them are respecified in the current specialized literature, such as the studies by Khamis & bin Kamarudin (2023) or Rashid & Islam (2024).

Feld and Frey (2007) or Idrus (2024) argue that taxpayer morale and perceived fairness play significant roles in compliance behavior. A high tax burden perceived as unfair can erode trust in the tax system and government, leading to increased tax evasion. Kirchler et al. (2008) further emphasize the psychological aspects, noting that compliance is higher when taxpayers view the tax system as just and the tax burden as reasonable. Alexander & Balavac-Orlic (2022) also introduce financial literacy as an important issue in researching this topic.

The effectiveness of tax enforcement mechanisms also influences the impact of tax burden on compliance (Slemrod, 2019). Andreoni et al. (1998) highlight that stricter enforcement and higher penalties for evasion can mitigate the negative effects of a high tax burden on compliance. However, overly aggressive enforcement can backfire by fostering an adversarial relationship between taxpayers and tax authorities.

Alm et al. (1992) conducted experiments showing that taxpayers are more likely to comply when they perceive that their contributions are used effectively and when they believe that others are also paying their fair share. This suggests that improving transparency and accountability in public spending can enhance compliance even in high tax burden environments. Similar results were obtained by Casal et al. (2016) or Falsetta et al. (2024).

The literature consistently indicates that the tax burden significantly impacts tax behavior, with higher burdens often leading to increased tax evasion and fraud. However, the relationship is nuanced, influenced by perceptions of fairness, taxpayer morale, and the effectiveness of

enforcement mechanisms. Policymakers must balance tax rates to maximize revenue while maintaining taxpayer compliance and trust.

Based on all the above, we have constructed the following working hypothesis:

H1: Tax burden significantly and positively impacts tax fraud and tax evasion.

Data and Methodology

For the current research we have selected seven variable which comprise the most used indexes in the economic literature for addressing the topic of tax fraud and evasion. They are used for 104 countries around the world for the 2015 – 2020 period. These variables are described in the above and presented in table 1, along with their descriptive statistics.

1. Corporate Tax Revenue Lost – CTRL = The Corporate Tax Revenue Lost indicator estimates the percentage of tax revenues lost by a country due to profit transfers made by companies to tax havens, out of the total taxes collected from companies. Source: Atlas of the Offshore World, <https://atlas-offshore.world/dataset/global-profit>.
2. Lost Profits – LP = Lost Profits estimate the actual amounts of money countries have lost in a given year due to corporations transferring profits to tax havens. Measured in billion USD. Used as natural log. Source: Atlas of the Offshore World, <https://atlas-offshore.world/dataset/global-profit>.
3. Tax Revenue Lost – TRL = The Tax Revenue Lost indicator estimates the total amounts lost by the sample countries due to profit transfers to tax havens. Measured in billion USD. Used as natural log. Source: Atlas of the Offshore World, <https://atlas-offshore.world/dataset/global-profit>.
4. Offshore Financial Wealth – OFW = The Offshore Financial Wealth indicator estimates the value of all types of investments such as stocks, bonds, mutual fund shares, bank deposits, etc., that households hold in banks outside their country of residence. It can be measured as a percentage of the country's GDP (OFW) or in billion USD (LOFW). The latter was logged to reduce heterogeneity. Source: Atlas of the Offshore World, <https://atlas-offshore.world/dataset/offshore-financial>.
5. Informal Economy EDG - IE_EDG = The Informal Economy estimated by the Dynamic General Equilibrium (DGE) Model, which estimates the informal output obtained in a national economy as a percentage of the country's GDP. Source: <https://www.worldbank.org/en/research/brief/informal-economy-database>.
6. Informal Economy MIMIC - IE_MIMIC = The Informal Economy estimated by Multiple Indicators Multiple Causes (MIMIC) Models, which estimate the informal output obtained in a national economy as a percentage of the country's GDP. Source: <https://www.worldbank.org/en/research/brief/informal-economy-database>.

Table 1. Descriptive statistics of the tax fraud and tax evasion proxies

Variable	Mean	Std. dev.	Min.	Max.
CTRL	8.60	4.57	1.5	30.3
LP	7.18	19.23	0.002	164
Logged LP	0.37	1.83	-6.21	5.10
TRL	1.76	5.91	0.0006	66
Logged TRL	-1.71	2.16	-7.49	4.19
OFW (%)	14.58	19.05	0	160.7
OFW (USD)	73.63	219.20	0	2032
Logged OFW	2.16	2.17	-2.21	7.62
IE_EDG	29.01	10.76	7.95	60.88
IE_MIMIC	31.19	11.35	8.07	63.95

Source: own calculations in STATA 16

The main factor is Tax Burden (TB). We introduce as control variables the development level proxied by the GDP per capita growth rate (GDP_r), following the work of Ozpence & Mercan (2020). Additionally, we also use as control variable the Worldwide Governance Indicator of Government Effectiveness (GE) developed by the World Bank, to account for the perceived level of fairness and effectiveness of the administration to use public money (Falsetta et al., 2024).

The methodological development consists of the descriptive statistics, followed by the assessment of the time series properties of the variables. They are stationary (see results in table 2), but autocorrelated (see results in table 3). We employ the Levin-Lin-Chu test for stationarity and the Wooldridge test (2002) (and Drukker, 2003) for serial correlation.

Table 2. Stationarity analysis results

Variable	Test value	p-value	Conclusion
CTRL	-5.36	0.019	Stationary
LP	-13.63	0.000	Stationary
TRL	-67.74	0.000	Stationary
OFW	-53.05	0.000	Stationary
LOfw	-2.36	0.009	Stationary
IE_EDG	-51.47	0.000	Stationary
IE_MIMIC	-7.73	0.000	Stationary
TB	-17.62	0.000	Stationary
GDP _r	-19.21	0.000	Stationary
GE	-18.02	0.000	Stationary

Source: own calculations in STATA 16

Table 3. Autocorrelation analysis results

Dependent/ Factor	CTRL	LP	TRL	OFW	LOFW	IE_EDG	IE_MIMIC
TB	23.51 (0.000)	19.1 (0.000)	49.20 (0.000)	117.21 (0.000)	135.83 (0.000)	632.43 (0.000)	133.36 (0.000)
GDP _r	26.94 (0.000)	21.98 (0.000)	57.16 (0.000)	68.01 (0.000)	119.48 (0.000)	513.25 (0.000)	148.77 (0.000)
GE	24.12 (0.000)	19.61 (0.000)	46.55 (0.000)	120.32 (0.000)	133.56 (0.000)	651.26 (0.000)	146.7 (0.000)

F test (p-value)

Source: own calculations in STATA 16

To treat the autocorrelation issue in the estimation process we opted for the dynamic panel of Roodman (2009), also known as "xtabond2". The dynamic panel methodology involves introducing lags of the dependent variable among the regressors, as well as using instruments. Lags of the factor variables can also be introduced, either as actual factors or as instruments in the estimation process. This methodology was introduced by Arellano & Bond (1991) and later developed by Arellano & Bover (1995). The starting equation is given by Eq. (1):

$$Y_i = c + \alpha \times L.Y_i + \beta TB_i + \sum_{k=1}^2 \gamma_k X_{ki} + u_{it} \quad \text{Ec. (1)}$$

Where: Y = dependent variable

c = constant

α = coefficient of the first lag of the dependent variable

β = coefficient of the main factor, Tax Burden

γ_k = coefficients of the control factors
 k = index numbering the control factors
 X = the control factors
 i = country index
 u = errors resulting from the dynamic estimation
 t = time, in this case, year.

(2): The dynamic estimation allows for the computation of the long-term coefficients, using Ec.

$$\text{long - term coefficient} = \frac{\beta}{1-\alpha} \quad \text{Ec. (2)}$$

Analyses were conducted in STATA 16.

Results and Discussions

The results in table 4 reveal that the coefficient of tax burden is significant and positive in the short-term, regardless of the variable used as a proxy for tax fraud and evasion, confirming the working hypothesis. Thus, regardless of the proxies tested for tax fraud and evasion, the impact of the tax burden on them is similar. In all cases, an increase in the tax burden led to a significant increase in tax fraud and evasion. As the tax burden increases, taxpayers are more tempted to apply creative accounting, such as relocating income and profits to tax havens, even in the digital era, as shown by the study of Bahtiar & Sudarmanto (2024). The increase in the tax burden intensifies tax fraud and evasion through several economic and behavioral mechanisms. An essential starting point is the theory of economic utility, which suggests that individuals and companies make decisions to maximize their net utility or benefit (see, for example, Kaplow (2024) or Scherf & Weinzierl (2020)). When the tax burden becomes higher, the costs associated with paying taxes increase, making tax evasion more attractive because the savings obtained from avoiding taxes can outweigh the potential risks and penalties. Another theory that provides important explanations for the results obtained is the incentives theory for which Mirrlees & Vickrey won the Nobel Prize in Economics in 1996. According to this theory, higher tax rates offer greater incentives for evasion. As taxes increase, the potential savings from avoiding these taxes become more substantial. For example, if a company can save a significant amount by avoiding a 40% tax, it may consider the risk of being caught and penalized justified by the savings obtained.

The Laffer Curve (2016) illustrates an inverted U-shaped relationship between the level of taxation and collected tax revenues. At very high levels of taxation, tax revenues start to decline because taxpayers either reduce economic activity or resort to tax evasion to maintain profitability. This relationship suggests that there is an optimal tax rate at which tax revenues are maximized, and any further increase in tax rates leads to a decrease in collected revenues (see, among others, Farhi & Gabaix, 2020). Beyond the optimal point, the potential benefit of evasion becomes more attractive compared to the risk and cost associated with being caught and penalized. This increases the likelihood of taxpayers engaging in tax fraud and evasion activities. They may underreport income, exaggerate deductions, or resort to income shifting to lower-tax jurisdictions to reduce their tax burden.

The results obtained are consistent with the empirical studies presented in the literature review part.

Table 4. Dynamic regression results - TB

Variable	CTRL	LP	TRL	OFW	LOFW	IE_EDG	IE_MIMIC
L.Y	0.385*** (0.143)	1.300*** (0.19)	0.454*** (0.032)	0.479*** (0.117)	1.097*** (0.046)	0.893*** (0.01)	0.659*** (0.034)
L2.Y	-	-	-	-	0.475*** (0.063)	-	-
TB	2.881** (1.232)	0.014*** (0.008)	0.098*** (0.027)	6.585*** (0.716)	0.031*** (0.003)	0.018*** (0.006)	0.067*** (0.007)
L.TB	-	-	-	-	-	0.010*** (0.004)	-
Constant	-215.9** (93.78)	-1.06 (0.687)	-8.42*** (2.038)	-498*** (53.64)	-3.440*** (0.369)	0.693*** (0.122)	5.486*** (0.569)
Wald (p-value)	49.51 (0.000)	604.72 (0.000)	206.51 (0.000)	736.03 (0.000)	5004.66 (0.000)	67680.38 (0.000)	9863.16 (0.000)
No of instruments	6	7	8	7	8	7	7
AR p-value	0.941	0.306	0.553	0.756	0.784	0.645	0.752

Coef.*** (standard error)

***, **, * significant at 1%, 5%, 10%

Source: own calculations in STATA 16

Table 5. Long-term coefficients for Tax Burden

Variable	CTRL	LP	TRL	OFW	LOFW	IE_EDG	IE_MIMIC
Coefficient	4.685	-0.045	0.180	12.642	-0.054	0.260	0.169
Std. err.	1.399	0.006	0.055	1.751	0.001	0.016	0.035
p-value	0.001	0.000	0.001	0.000	0.000	0.000	0.000

Source: own calculations in STATA 16

Due to the presence of autocorrelation, we introduced lags of the dependent variable (L.Y) into the regression estimates. In all models in table 4, it is observed that the past positively impacts all proxy variables for tax fraud and evasion. Thus, it confirms that the more intense tax fraud and evasion are currently in a country, the more significantly they will increase in the future if administrative, fiscal, and economic measures are not taken.

But coefficients in table 4 are short-term coefficients. Therefore, using the formula estimated by equation (2), we calculated the long-term coefficients and assessed their statistical significance. Table 5 shows that all long-term coefficients are statistically significant at the 1% critical threshold. The positive impact of the tax burden on tax fraud and evasion also manifests in the long term for five out of the seven dependent variables. Thus, an increase in the tax burden will, in the long term, lead to an increase in the revenue lost from corporate taxation or lost through relocation to tax havens. The highest impact of the tax burden is manifested both in the short-term and long-term on the share of offshore financial wealth in the GDP of the country of residence (a coefficient of 6.585 in the short term and 12.64 in the long term). As the tax burden in the country of residence increases, more funds will be invested in offshore destinations. The second most significant impact is on the lost corporate tax revenues, meaning the share of tax and duty revenues that a country loses through profit transfers by companies to tax havens in total taxes and duties collected from companies (a coefficient of 2.881 in the short term and 4.69 in the long term).

Tax fraud and evasion will also increase in the long term, as indicated by the World Bank's Informal Economy estimates, but the impact on these two proxies is much lower than on those related to offshore destinations. Interestingly, the long-term effect of the tax burden on lost profits and actual amounts invested in offshore destinations is negative, contrary to the expectations of the working hypothesis. Possible explanations for these relationships are provided by the specialized

literature. The reasons stated include the evolution of regulations, compliance costs, reputational risks, and changes in domestic fiscal policies. First, international efforts to combat tax evasion have significantly increased through initiatives such as the OECD's Base Erosion and Profit Shifting (BEPS) project (2015) and automatic information exchange agreements. These measures make hiding profits in tax havens more difficult and riskier, thus discouraging companies from continuing these practices in the long term. Secondly, the compliance costs associated with maintaining offshore structures are increasing as regulations tighten. Companies must allocate significant resources for tax consultancy and legal services to navigate new rules and avoid penalties, thus reducing the net benefits of profit relocation. This aspect is supported by studies showing that as compliance costs increase, the attractiveness of using tax havens decreases (Desai et al., 2006, Beck et al., 2024, or Darmouni & Mota, 2024).

Another important factor is reputational risk. In an era of transparency and corporate responsibility, companies perceived as avoiding taxes through the use of tax havens face severe criticism from the public, customers, and investors. This reputational risk can discourage companies from resorting to such practices in the long term, preferring to maintain a positive public image and avoid scandals related to tax evasion (Slemrod, 2007). Additionally, changes in domestic fiscal policies can reduce incentives for profit relocation. Governments, in their efforts to attract and retain investments, can adjust tax rates or offer tax incentives, making it more attractive to keep profits domestically. Thus, companies may find it more advantageous to invest and maintain their profits locally rather than bearing the risks and costs associated with relocation to tax havens (OECD, 2015). In conclusion, although the initial tax burden may stimulate profit relocation, countermeasures and contextual changes can reverse this trend in the long term.

To test the stability of the impact of the tax burden on tax fraud and evasion, we introduced the two control factors in the analysis. The positive and significant impact of tax burden preserves on short-term with the introduction of the annual growth rate of GDP per capita (table 6) or the government effectiveness (table 7). The exception is the lost profits through transfers to offshore destinations, for which the tax burden loses its influence in the presence of GDP_r.

Table 6. Dynamic regression results – TB with GDP_r

Variable	CTRL	LP	TRL	OFW	LOFW	IE_EDG	IE_MIMIC
L.Y	0.646*** (0.163)	1.113*** (0.15)	0.887*** (0.085)	0.519*** (0.075)	1.150*** (0.051)	0.867*** (0.008)	0.872*** (0.035)
L2.Y	-	-	0.256*** (0.044)	-	0.409*** (0.062)	-	-
TB	2.898** (1.256)	0.005 (0.006)	0.012*** (0.007)	0.208*** (0.030)	0.029*** (0.003)	0.030*** (0.004)	0.030*** (0.007)
L.TB	-	-	-	-	-	0.007** (0.003)	-
GDP _r	0.271*** (0.079)	0.033*** (0.005)	0.064*** (0.007)	-0.799*** (0.073)	0.012*** (0.003)	0.040*** (0.092)	-0.171*** (0.009)
Constanta	-219.5** (95.59)	-0.35 (0.544)	-0.613** (0.265)	-8.105*** (1.57)	-3.34*** (0.382)	0.79*** (0.092)	1.797*** (0.598)
Wald (p-value)	59.56 (0.000)	826.66 (0.000)	4497.15 (0.000)	1206.53 (0.000)	4520.76 (0.000)	122157 (0.000)	10367.1 (0.000)
No of instruments	6	8	7	8	9	7	7
AR p-value	0.721	0.143	0.378	0.171	0.298	0.699	0.237
Long-term coefficients							
TB	8.18*** (3.042)	-0.046*** (0.014)	-0.086*** (0.009)	0.433*** (0.037)	-0.053*** (0.002)	0.273*** (0.009)	0.236*** (0.019)

Coef.*** (standard error)
 ***, **, * significant at 1%, 5%, 10%

Source: own calculations in STATA 16

The growth rate of GDP per capita positively impacts five of the seven dependent variables: CTRL, LP, TRL, LOFW AND IE_EDG. The estimation of tax fraud and evasion through these variables is positively influenced by the GDP growth rate. The more a country develops, the higher the level of tax fraud and evasion. The exceptions are OFW, the share of financial investments in offshore destinations in GDP, and IE_MIMIC. In their case, tax fraud and evasion are negatively impacted by the GDP growth rate per capita. The development of a country leads to a decrease in tax fraud and evasion measured by these aspects.

Table 7. Dynamic regression results – TB with GE

Variable	CTRL	LP	TRL	OFW	LOFW	IE_EDG	IE_MIMIC
L.Y	1,163*** (0,291)	0,196 (0,196)	0,442*** (0,101)	1,421*** (0,115)	0,463*** (0,051)	0,287*** (0,110)	0,030 (0,124)
L2.Y	-	-	-	-	0,244*** (0,055)	0,70*** (0,117)	-
TB	1,115* (0,602)	0,016*** (0,005)	0,054*** (0,011)	1,526* (0,820)	0,012*** (0,003)	0,060*** (0,004)	0,349*** (0,052)
GE	40,32* (20,87)	1,776*** (0,255)	3,483*** (0,509)	60,24* (30,8)	1,009*** (0,053)	2,444*** (0,319)	5,926*** (1,06)
Constant	-88,19* (49,3)	-0,880** (0,415)	-5,14*** (0,903)	-124,3* (64,61)	-0,195 (0,356)	-4,70*** (0,697)	3,2*** (1,005)
Wald (p-value)	105,7 (0,000)	1707,9 (0,000)	2893,7 (0,000)	323,08 (0,000)	7330,9 (0,000)	103850 (0,000)	3822,2 (0,000)
No of instruments	7	7	7	7	8	9	7
AR p-value	0,851	0,456	0,639	0,952	0,192	0,564	0,300
Long-term coefficients							
TB	-6,83 (8,84)	0,019** (0,009)	0,096*** (0,026)	-3,62* (1,891)	0,039** (0,019)	4,334 (4,81)	0,360*** (0,014)

Coef.*** (standard error)
 ***, **, * significant at 1%, 5%, 10%

Source: own calculations in STATA 16

Government effectiveness positively impacts all the proxies. This is an interesting result, as this shows that, in time, an increase in government effectiveness leads to an increase in tax fraud and tax evasion.

The long-term coefficients of the tax burden retain most of the signs from the initial regressions in table 5 in the presence of GDP. In the presence of GE they are not significant for CTRL and IE_EDG and negative for OFW, but only at the 10% critical level. For all other variables, TB positively impacts tax fraud and tax evasion on long-term.

Conclusions

The goal of the current study was to test if tax burden positively impacts tax fraud and tax evasion. By conducting a dynamic panel analysis, we validate the working hypothesis. On short-term this is true regardless of the control factor used. The results consistently show a significant and positive short-term impact of the tax burden on tax fraud and evasion across all proxies tested. This supports the hypothesis that as the tax burden increases, there is a corresponding increase in tax evasion behaviors such as creative accounting and income shifting to tax havens.

On long-term, some of the coefficients remain positive, some others become insignificant or become negative. Moving beyond short-term effects, the long-term coefficients reaffirm the enduring influence of the tax burden on tax fraud and evasion. Despite some variations in significance levels across different proxies and control factors, the overall trend indicates that higher tax burdens lead to sustained increases in tax evasion activities, particularly in relation to offshore financial wealth and lost corporate tax revenues.

Economic development, as measured by the GDP per capita growth rate, demonstrates a nuanced impact on tax fraud and evasion proxies. While development generally correlates with increased tax evasion across most proxies, exceptions are noted, such as in the case of offshore financial wealth (OFW) and the share of taxes lost through profit transfers. These exceptions suggest that as countries develop, mechanisms to curb these specific forms of tax evasion may become more effective.

Interestingly, government effectiveness emerges as a crucial determinant, positively impacting all tax fraud and evasion proxies. This underscores the role of strong governance in combating tax evasion behaviors, implying that improvements in government effectiveness can mitigate tax evasion tendencies over time.

These findings suggest that policies aimed at reducing tax burdens should be carefully designed to mitigate unintended consequences on tax compliance. High tax burdens not only incentivize evasion but also influence economic decisions regarding profit allocation and investment strategies. Future research could explore additional factors influencing tax evasion dynamics, such as cultural norms, institutional trust, and international tax cooperation frameworks. Furthermore, longitudinal studies could provide deeper insights into the evolving relationship between tax policy changes and evasion behaviors.

In conclusion, the study underscores the complex interplay between tax burdens, economic development, government effectiveness, and tax evasion behaviors. The findings highlight the importance of balanced tax policies and effective governance in promoting tax compliance and combating evasion in a globalized economic environment.

References

1. Alexander, P., & Balavac-Orlic, M. (2022). Tax morale: Framing and fairness. *Economic Systems*, 46(1), 100936.
2. Allingham, M. G., & Sandmo, A. (1972). Income tax evasion: A theoretical analysis. *Journal of public economics*, 1(3-4), 323-338.
3. Alm, J., Jackson, B. R., & McKee, M. (1992). Estimating the determinants of taxpayer compliance with experimental data. *National tax journal*, 45(1), 107-114.
4. Andreoni, J., Erard, B., & Feinstein, J. (1998). Tax compliance. *Journal of economic literature*, 36(2), 818-860.
5. Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The Review of Economic Studies*, 58(2), 277-297.
6. Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal of Econometrics*, 68(1), 29-51.
7. Atlas of the Offshore World (2024): <https://atlas-offshore.world/dataset> , last accessed 17.04.2024.
8. Bahtiar, M. Y., & Sudarmanto, E. (2024). Digital Paradise: Navigating the Complexity of Taxation in the Era of Technological Transformation. *International Journal of Economic Literature*, 2(3), 884-900.
9. Beck, R., Coppola, A., Lewis, A. J., Maggiori, M., Schmitz, M., & Schreger, J. (2024). *The geography of capital allocation in the Euro Area* (No. w32275). National Bureau of Economic Research.

10. Casal, S., Kogler, C., Mittone, L., & Kirchler, E. (2016). Tax compliance depends on voice of taxpayers. *Journal of Economic Psychology, 56*, 141-150.
11. Darmouni, O., & Mota, L. (2024). The savings of corporate giants. *The Review of Financial Studies*, hhae030.
12. Desai, M. A., Foley, C. F., & Hines Jr, J. R. (2006). The demand for tax haven operations. *Journal of Public Economics, 90(3)*, 513-531.
13. Drukker, D. M. (2003). Testing for serial correlation in linear panel-data models. *The Stata Journal, 3(2)*, 168-177.
14. Faccia, A., & Mosteanu, N. R. (2019). Tax evasion, information systems and blockchain. *Journal of Information Systems & Operations Management, 13(1)*, 65-74.
15. Falsetta, D., Schafer, J. K., & Tsakumis, G. T. (2024). How government spending impacts tax compliance. *Journal of Business Ethics, 190(2)*, 513-530.
16. Farhi, E., & Gabaix, X. (2020). Optimal taxation with behavioral agents. *American Economic Review, 110(1)*, 298-336.
17. Feld, L. P., & Frey, B. S. (2002). Trust breeds trust: How taxpayers are treated. *Economics of governance, 3*, 87-99.
18. Idrus, M. (2024). Efficiency of Tax Administration and Its Influence on Taxpayer Compliance. *Economics and Digital Business Review, 5(2)*, 889-913.
19. Kaplow, L. (2024). Optimal income taxation. *Journal of Economic Literature, 62(2)*, 637-738.
20. Khamis, M. R., & bin Kamarudin, M. F. (2023). The Economic Theory Assumption and Utility Maximization Model: The Perspective of Zakat Compliance Behavior. *Information Management and Business Review, 15(2 (I) SI)*, 17-34.
21. Kirchler, E., Hoelzl, E., & Wahl, I. (2008). Enforced versus voluntary tax compliance: The “slippery slope” framework. *Journal of Economic psychology, 29(2)*, 210-225.
22. Laffer, A. B. (2004). The Laffer curve: Past, present, and future. *Backgrounders, 1765(1)*, 1-16.
23. Laffer, A. (2016). *The Laffer Curve: Past, Present, and Future*. The Heritage Foundation. Retrieved May 2, 2016.
24. Ozili, P. K. (2020). Tax evasion and financial instability. *Journal of Financial Crime, 27(2)*, 531-539.
25. Ozpence, O., & Mercan, N. (2020). The relationship between tax burden and economic growth: Turkey case. *Journal of Business Economics and Finance, 9(2)*, 143-154.
26. Petraşcu, D., Păcurariu, I., Ciocanea, B. C., & Piţu, C. I. (2023). Tax Evasion Between Tax Optimization at the Border of Legality, Tax Burden and Voluntary Compliance. *Journal of Legal Studies, 32(46)*, 163-180.
27. Pomeranz, D., & Vila-Belda, J. (2019). Taking state-capacity research to the field: Insights from collaborations with tax authorities. *Annual Review of Economics, 11*, 755-781.
28. Rashid, M. H. U., & Islam, A. (2024). Does Economic Freedom Matter in Tax Evasion? Empirical Evidence from Asian Countries.
29. Roodman, D. (2009). How to do xtabond2: An introduction to difference and system GMM in Stata. *The Stata Journal, 9(1)*, 86-136.
30. Saptono, P. B., Mahmud, G., Salleh, F., Pratiwi, I., Purwanto, D., & Khozen, I. (2024). Tax Complexity and Firm Tax Evasion: A Cross-Country Investigation. *Economies, 12(5)*, 97.
31. Scherf, R., & Weinzierl, M. (2020). Understanding different approaches to benefit-based taxation. *Fiscal studies, 41(2)*, 385-410.
32. Slemrod, J. (2007). Cheating ourselves: The economics of tax evasion. *Journal of Economic perspectives, 21(1)*, 25-48.
33. Slemrod, J. (2019). Tax compliance and enforcement. *Journal of economic literature, 57(4)*, 904-954.
34. Wooldridge, J. M. (2002). *Econometric analysis of cross section and panel data*. MIT Press. Cambridge, MA, *108(2)*, 245-254.

35. World Bank (2024). World Bank Databank. <https://databank.worldbank.org/>, last accessed 05.06.2024.
36. World Bank – Informal Economy Database (2024).
37. <https://www.worldbank.org/en/research/brief/informal-economy-database> , last accessed 17.03.2024.
38. Young, A. T. (2018). Hospitalitas: Barbarian settlements and constitutional foundations of medieval Europe. *Journal of Institutional Economics*, 14(4), 715-737.