

FACTORS INFLUENCING PERSONAL INCOME TAX COMPLIANCE OF TAXPAYERS WITH E-COMMERCE BUSINESS ACTIVITIES

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Abstract

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Taxpayers' personal income tax compliance significantly influences the effectiveness of personal income tax management. In Vietnam, e-commerce is quite developed, but tax compliance of taxpayers with e-commerce business activities is not high. This study aimed to quantify the factors affecting taxpayers' personal income tax compliance with e-commerce business, a typical case in Vietnam, and this is very important for stakeholders, especially for policy makers to have a strategy to have better tax management. Personal income tax compliance is influenced by the following factors: economic factors, tax authority characteristics, social factors, personal factors, demographic factors and other factors (Engida & Baisa, 2014; Helhel & Ahmed, 2014). The research was carried out using qualitative combined with quantitative methods such as; Cronbach's alpha test, exploratory factor analysis (EFA), and confirmatory factor analysis to determine the impact of factors affecting personal income tax compliance of taxpayers with e-commerce business. This research employs survey data from 355 personal income taxpayers engaged in e-commerce businesses in Hung Yen of Vietnam. The results reveal that five determinants influencing the personal income tax compliance of taxpayers with e-commerce activities, including economic factors, tax authority characteristics, social factors, personal factors and demographic factors. Based on the findings, several suggestions are proposed to enhance the personal income tax compliance of taxpayers with e-commerce business activities in order to improve the effectiveness of personal income tax management of e-commerce business activities.

Keywords: Tax Compliance, Personal Income, E-Commerce, Vietnam

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1. INTRODUCTION

Personal income tax is an important source of revenue for the national budget and is a tax with a wide scope of regulation, directly affecting the economic interests of each individual in society. It is a form of payment by taxpayers to support and enhance the cost of governance (Enyi et al., 2019). Personal income tax management is the intentional impact of functional agencies in the state apparatus on the process of calculating and collecting personal income tax to change this process in order to generate revenue for the budget and achieve the goals set by the state.

Personal income tax management contributes to increasing concentration, mobilizing fully and promptly the revenue for the state budget on the basis of constantly nurturing and developing revenue sources. Personal income tax accounts for the majority of state budget revenue in most countries in the world. Therefore, doing a good job of income tax management in general and personal income tax in particular will have a great effect in concentrating, mobilizing fully and promptly the revenue for the state budget.

In addition, personal income tax directly affects the income of individuals, can reduce work efforts and cause immediate reactions from taxpayers such as tax evasion. Personal income tax management contributes to enhancing the awareness of law compliance for economic organizations and residents. In a market economy, the state uses legal tools to impact the economy at the macro level, the awareness of law compliance of economic organizations and residents will have a significant impact on the implementation of these impacts. Through the organization of implementation and inspection of compliance with tax laws in general and personal income tax in particular, along with strengthening the legality of this tax policy, awareness of tax policy compliance will be enhanced, thereby creating the habit of "living and working according to the law".

In developing countries like Vietnam, due to low income of the population, personal income tax is still a new issue for many people. People still have to pay taxes but have less awareness of the impact of taxes, even knowing nothing about taxes because they are mainly indirect taxes. People buy goods and services with prices that already include taxes. Therefore, awareness of the obligation to pay taxes to the state is generally lower.

In the past few years, in the context of Hung Yen province, the revenue from personal income tax accounted for over 7% of the province's total domestic revenues. Personal income tax management in the province has achieved initial results; the rate of tax declarations submitted reached about 99.17%; the rate of tax declarations submitted on time reached about 98.48%. However, the phenomenon of personal income tax evasion and tax arrears still exists. Therefore, it is important to raise taxpayers' awareness of voluntary tax declaration and payment to improve the effectiveness of personal income tax management in Hung Yen province. Hung Yen Provincial Tax Department has closely followed the national digital transformation program, as well as the direction of the Ministry of Finance, the General Department of Taxation, and the Provincial People's Committee. In the coming time, the provincial tax sector will continue to

promote digital transformation and modernize tax management. However, digital transformation in personal income tax management in particular and in tax management in general has some challenges that can be mentioned such as shortage of skills, equipment infrastructure, cyber security risks, data safety and security. These challenges require the efforts of tax authorities in orienting goals, as well as building a digital transformation strategy suitable to the new situation, thereby improving the effectiveness of tax management for tax authorities. In addition, the work of propagating and disseminating tax policies and laws and supporting taxpayers is still passive and lacking in creativity (Ngo, 2024). The collection of personal income tax for individuals with e-commerce business activities has not been fully implemented in Hung Yen. According to Çekerol (2020), the Smart Legislature of 2041 will be able to implement 'untraceable management' with 100% paperless workplaces and highly customized management stages in essential areas such as health services, training, agriculture, income, boards of directors, public security, etc. Vietnam is also aiming for digital government. Smart government will include initiatives across ministries, departments, and national platform efforts such as a public e-commerce center, a computerized work stage, and others (Milusheva & Bedoya, 2023). It is important to have rules on information technology to maintain transparency and accountability among individuals, governments and businesses to achieve some national development goals. Policies related to data protection and cybersecurity: the frequency of data breaches and theft of personal information has increased, as well as the increasing use of open source and free software as a platform (Berberi & Roche, 2022).

In the digital economy, smart people use mobile phones and the internet to learn, contribute, and improve their lives. They use technology to receive services, communicate with businesses, and make smart decisions in the digital economy. Shopping, banking, and sharing are done on internet platforms and smartphone applications (Bhuiyan et al., 2023; Bhuiyan et al., 2024).

It can be seen that the compliance tax management model focuses on studying taxpayers' compliance behavior and proposing appropriate principles, methods and measures to create pressure to reduce the number of non-compliant taxpayers. However, to increase tax compliance, state government should improve tax administration system and strengthen tax collection process (Appah & Duoduo, 2023). Taxpayers' compliance behavior is not an independent, immutable factor, it is affected by factors in the operating environment and factors within the taxpayers themselves. In Vietnam, along with the development of the 4.0 revolution, e-commerce activities have developed rapidly in recent years. In particular, the problem is the need for solutions to manage personal income tax of individuals with e-commerce business activities. To improve the effectiveness of personal income tax management of these subjects, it is necessary to identify factors affecting their personal income tax compliance behavior. A number of studies have identified determinant influencing taxpayers' personal income tax compliance. Taxpayer tax compliance is reflected in full, timely and correct compliance with tax laws, specifically compliance with the criteria of timeliness, accuracy, honesty and

completeness of tax registration, tax declaration, tax payment and other tax obligations of taxpayers (Ozili, 2020; Matarirano et al., 2019; Hasan et al., 2014; Kim & Im, 2017; Dao & Hang, 2022; Trang, 2023). According to Engida and Baisa (2014), Helhel and Ahmed (2014), personal income tax compliance is influenced by the following factors: economic factors, tax authority characteristics, social factors, personal factors, demographic factors and other factors. In this study, we built a model to investigate the impact level of determinants on personal income tax compliance of taxpayers with e-commerce business. From there, we propose several recommendations for enhancing income tax compliance of taxpayers and the effectiveness of personal income tax management of taxpayers with e-commerce business activities.

This research is conducted to fill up the literature in the context of emerging countries and Vietnam as the good example. In this circumstance, we choose Hung Yen as one of the provinces in Vietnam which has a fast development of electronic commerce, and not much publications are investigated.

This research is to conduct an in-depth study on the factors influencing the personal income tax compliance of taxpayers with e-commerce business activities in Vietnam and, on that basis, propose recommendations to impact tax compliance in order to improve personal income tax compliance, improve the effectiveness of personal income tax management in the context of strong e-commerce development as present.

The rest of the paper is as follows: Section 2 evaluates related scientific works and research hypotheses. Section 3 explains the methodology applied to the empirical study, research design, scale, sampling, sampling method and measurement tools. Section 4 presents the results, while Section 5 discusses the results based on the analysis from the use of measurement tools. Section 6 proposes the conclusions and limitations of the paper.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Cored theories

This study employs the unprincipled institutional theory, the theory of planned behavior, and expected utility theory to study factors affecting personal income tax compliance.

Unprincipled institutional theory. This theory holds that individuals make decisions based on social values; when individuals base their decisions on social behavior, they follow those behaviors. Social behavior is universal. When individuals follow the social norms of tax compliance, they affect tax compliance.

Planned behavior theory. Ajzen (1991) argues that human behavior is the result of planned behavior. Behavioral control affects compliance with the norms. Therefore, behavioral awareness affects tax compliance.

Expected utility theory. According to Von Neumann and Morgenstern (1944), the expected utility theory suggests that taxpayers will determine the risk of non-compliance with taxes. Therefore, when penalized for non-compliance with taxes, individuals increase their tax compliance.

2.2. Formation of personal income tax compliance behavior

Personal income tax compliance is the correct and complete implementation of the provisions of personal income tax law (Alm & Yunas, 2009; Adem et al., 2024). Personal income tax compliance is mandatory for many different entities, such as tax authorities, taxpayers, and other relevant organizations and individuals specified in legal tax documents. It can be seen that compliance with personal income tax depends on two factors: Understanding of personal income tax law and responsibility for implementing personal income tax law. The two factors are closely related to each other: understanding the personal income tax law will create the basis for determining the taxpayer's obligation to comply with the personal income tax law, thereby determining tax payment responsibility. Simultaneously, these two factors interact with each other and form individual income tax compliance behaviors at different levels.

2.3. Research hypotheses

Based on related research models on determinants influencing personal income tax compliance; several hypotheses are proposed basing on literature review. These determinants are economic factors, tax authority characteristics, social factors, personal factors, and demography factors.

2.3.1. Economic factors

Regular tax inspection and examination

According to Engida and Baisa (2014), regular tax inspections and examinations could reduce tax fraud and evasion. It can be seen that tax inspection and examination of e-commerce business will increase their voluntary tax compliance and encourage taxpayers to be careful when declaring taxes and declare income more accurately, and vice versa.

Perception of government public spending

Taxpayers are often concerned about public government expenditures. If the government spends the state budget appropriately in socio-economic fields such as economics, education, health, and culture, then personal income taxpayers with e-commerce business activities can improve tax compliance. In contrast, if they see that the government spends public money unreasonably, tax compliance may decrease (Engida & Baisa, 2014).

Economic growth, including stable e-commerce business, inflation situation

An unstable economic situation and high inflation greatly impact the income of individuals or businesses. High inflation can lead to a decrease in personal income tax revenue. If the economy is stable, including stable e-commerce business, limiting inflation stimulates taxpayers' personal income tax compliance (Engida & Baisa, 2014; Bui et al., 2024).

2.3.2. Tax authority characteristics

A tax authority is a state agency competent to manage and collect taxes into the state budget. Accordingly, tax authorities include the general taxation department, specifically central tax agencies, tax departments, provincial tax authorities, central cities, the tax sub-department of the district tax office, and the city directly under the province (Aumeerun & Jugurnath, 2016; Chen et al., 2019). Tax authorities: request taxpayers to provide information and documents related to the determination of tax obligations, numbers, and transaction contents of accounts opened at commercial banks or other credit institutions and explain tax calculation, tax return, and tax payment (Delgado et al., 2014; Frank et al., 2009). Organization or individual is responsible for providing the information with the correct content, time limit, and address (Hamid et al., 2019; Inasius, 2013; Noor et al., 2010; Nguyen et al., 2025). The characteristics of the tax authority have a substantial impact on tax compliance behavior. Tax authority characteristics, such as capacity, professional qualifications, facilities and equipment serving tax collection, and the coordination of relevant authorities, that serves the management of personal income tax of individuals doing e-commerce business increases, affect their tax compliance.

Competence, professional qualifications, and ethical qualities of tax administrators

According to Helhel and Ahmed (2014), the professional capacity of tax administrators plays an important role in the inspection and management of personal income taxes. Tax managers need basic training in both tax operations and related legal policies such as accounting and business law, etc. Especially in the management of personal income tax from e-commerce business activities, tax management officers need to have information technology skills to effectively manage personal income tax from this difficult-to-control business activity. The high professional capacity of personal income tax administrators will positively affect taxpayers' personal income tax compliance, and vice versa.

In addition to professional competence, the ethical qualities of tax administrators must be promoted. Personal income tax administrators must be transparent, honest, and impartial when performing personal income tax management and inspection tasks of e-commerce business individuals. If personal income tax administrators have integrity and impartiality, they can positively affect taxpayers' compliance with personal income tax, and vice versa (Helhel & Ahmed, 2014).

Facilities and equipment for tax collection

The facilities and equipment for tax collection have a significant impact on the effectiveness of personal income tax management. With modern facilities, modern information technology widely applied in personal income management activities of e-commerce businesses can positively affect personal income tax compliance of taxpayers and vice versa.

Coordination of relevant authorities

Good and close coordination of relevant authorities with tax authorities can increase the effectiveness of personal income tax management. Smooth coordination of relevant agencies, such as the police, courts, customs, increase personal income tax compliance of taxpayers with e-commerce business activities. Due to the complexity of e-commerce business, coordination of relevant authorities is extremely important. If relevant agencies do not coordinate closely with tax authorities, they can reduce taxpayers' compliance with personal income tax. (Helhel & Ahmed, 2014).

2.3.3. Social factors

Perception of fairness

Engida and Baisa (2014) find that perceptions of fairness have an impact on tax avoidance and evasion. Positive perceptions of fairness in personal income tax policies of e-commerce business have a positive impact on taxpayers' personal income tax compliance behavior.

Changes in government tax policies

Government tax policies significantly impact taxpayers' personal income tax compliance. Detailed regulations on tax rates and methods for calculating personal income tax of e-commerce business individuals, fully covering all practical cases, will contribute to improving personal income tax compliance. If personal income tax policies are not suitable for practical situations, they can have a negative impact on personal income tax compliance (Engida & Baisa, 2014).

Impact of individuals and groups

According to Engida and Baisa (2014), family members and relatives play an important role in determining a person's behavioral intention. Family and friends influence individuals' decisions to evade taxes. Therefore, the surrounding group of people influences taxpayers' personal income tax compliance.

2.3.4. Personal factors

Personal income tax compliance is significantly influenced by personal factors. Personal factors that influence personal income tax compliance include personal finances, knowledge of personal income tax, and awareness of criminal behavior and penalties.

Personal finance

Personal financial limitations can affect tax evasion and tax avoidance behavior. Engida and Baisa (2014) show that individuals with personal financial problems are at a higher risk of tax evasion and avoidance than individuals without personal financial problems. Therefore, individuals with financial surplus from e-commerce businesses are more likely to comply with personal income tax.

Personal income tax awareness

Engida and Baisa (2014) detect that personal income tax awareness has an impact on taxpayers' personal income tax compliance. If taxpayers are widely informed about personal income tax, their personal income tax awareness increases and they will have higher tax compliance behavior.

Awareness of criminal behavior and punishment

According to Engida and Baisa (2014), tax evasion penalties affect tax compliance. When the personal income tax of e-commerce business activities aware of the consequences of tax evasion, they improve their compliance. Other studies have shown similar results, such as Wahl et al. (2010), Guenther et al. (2017), Wenzel (2002), Wu et al. (2012), Salaudeen and Eze (2018), Matarirano et al. (2019).

2.3.5. Demography factors

The research results show that demographic factors influence personal income tax compliance, such as gender, income, and education.

Gender

According to Helhel and Ahmed (2014), women tend to have higher personal income tax compliance from e-commerce activities than men. Other studies have shown similar results (Abung & Damayanti, 2023; Bernasek & Shwift, 2001; Dewanta & Machmuddah, 2019; Kastlunger et al., 2010; Muhamremi et al., 2022; Ikhsan et al., 2023). However, Afif and Setiawan (2024) and Beredugo and Ekpo (2023) reported that gender has no effect on taxpayer's tax compliance behaviour.

Income

According to Helhel and Ahmed (2014), income factors have mixed and unclear effects on tax compliance. In countries where income redistribution is unsatisfactory, high-income individuals from e-commerce business tend to evade taxes more than low-income individuals do. Loo and Ho (2005) also found that high-income individuals in Malaysia tend to evade taxes more than low-income individuals. Torgler (2007) finds that low-income individuals in West Germany have lower tax compliance (Helhel & Ahmed, 2014).

Education

Helhel and Ahmed (2014) also points out a positive relationship between education level and tax compliance. It can be observed that taxpayers with higher education levels have higher personal income tax compliance from e-commerce business and vice versa. Kumi et al. (2024), Le et al. (2020), Vicent et al. (2023), Amaning et al. (2021) reported that a positive relationship exists between education level and tax compliance.

Based on the explanations above, the following hypotheses were proposed as:

H1: Economic determinants such as frequent inspection & audit of personal income tax of e-commerce business, perception of government spending, stable economic growth, including stable e-commerce business, personal income tax

compliance of e-commerce business individuals also increases or vice versa.

H2: Factors related to tax authority characteristics such as expertise, facilities, and close coordination of tax authorities that serves the management of personal income tax of individuals doing e-commerce business increase, and personal income tax compliance also increases, or vice versa.

H3: Social determinants of understanding fairness, policies, and positive impacts from the collectives of e-commerce business increase, personal income tax compliance also increases, and vice versa.

H4: Personal factors related to finance, behavioral awareness and consequences, and understanding of e-commerce business individuals increases, personal income tax compliance also increases, and vice versa.

H5: As demographic determinants increase, personal income tax compliance of e-commerce individuals also increases or vice versa.

3. RESEARCH METHODOLOGY

3.1. Data collection

Quantitative research method was conducted based on pre-designed questionnaire and data were collected by random. According to Hair et al. (2009), when applying the exploratory factor analysis (EFA) method, the sample size should be 4 or 5 times the number of variables. In this study, the expected number of observed variables is 20, so the sample size $n \geq 5 \times 20 = 100$. So the sample size is higher than 100 is acceptable. In this case we sent 370 questionnaires to taxpayers doing business in digital commerce. We received the feedback of 355 survey questionnaires at random in people who do business in an electronic commerce, meeting the above requirements.

3.2. Data analysis

The data collected from the questionnaire were coded and pre-processed on Excel software. Then, using SPSS as a statistical tool, this study examined the structural model. For example, techniques of cronbach's alpha, EFA, regression model analysis are employed in this study.

Cronbach's alpha reliability analysis was used to assess the homogeneity of the questions on the scales, helping to determine the reliability of the measurement scales for the research concepts. According to Hair et al. (2009), a scale is considered suitable and reliable for use in research if the Cronbach's alpha coefficient value is higher than 0.7. The scale used in this investigation is confirmed by the collected data, showing that all scales in the study have Cronbach's alpha coefficient values ranging from 0.761 to 0.844, all of which are greater than 0.7.

This study is robust and reliable. To determine the relationship between independent and dependent variables in a model and investigate the relationship between several independent factors and a dependent variable, multivariate regression analysis is used.

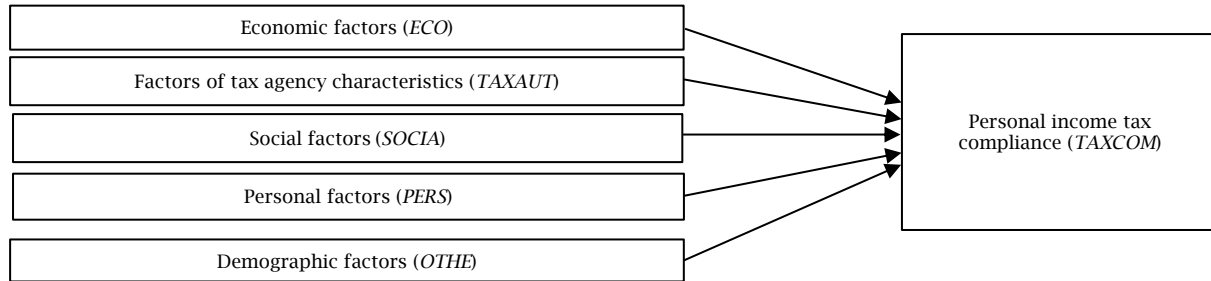
The other way to conduct this kind of the research is that we can use totally the qualitative approach. It means that we use in-depth interviews together with observations of activities of tax officers and taxpayers as well and then describe all in the study.

3.3. Research model

The research model was built using the group discussion technique with tax management officers.

In addition, based on relevant theories, previous research findings and the above-mentioned analyses, we propose the research model (see Figure 1).

Figure 1. Research model proposed



Based on the research model, and Engida and Baisa (2014), we synthesize how to measure dependent and dependent variables and presented in Table 1, below:

Table 1. Variables and codings

Codings	Names
Independent variables	
ECO	Economic factor
ECO1	Regular check and inspection
ECO2	Perception of government spending
ECO3	Economic stability, including stable e-commerce business
TAXAUT	Tax agency characteristics factor
TAXAUT1	Professional qualifications of personal income tax management officers of e-commerce business activities
TAXAUT2	Facilities for managing personal income tax of e-commerce business activities
TAXAUT3	Close coordination of tax authorities with other agencies in managing personal income tax of e-commerce business activities
SOCIA	Social factor
SOCIA1	Fairness understanding
SOCIA2	Personal income tax policy for e-commerce business activities changes accordingly
SOCIA3	Impact from the collective
PERS	Individual factor
PERS1	Paying personal income tax before paying other amounts
PERS2	Perception of behavior and consequences
PERS3	Understanding personal income tax of e-commerce business activities
OTHE	Demographic factor
OTHE1	Income from e-commerce business
OTHE2	Gender
OTHE3	Education level
Dependent variables	
TAXCOM	Personal income tax compliance
TAXCOM1	We have never avoided personal income tax of e-commerce business.
TAXCOM2	We have never complained about the personal income tax system for e-commerce business.
TAXCOM3	We have never owed personal income tax of e-commerce business.
TAXCOM4	We declare all income derived from e-commerce business to the tax authorities.
TAXCOM5	We always pay taxes of e-commerce business on time.

Source: Compilations by the Authors.

Regarding the dependent variable, personal income tax compliance of taxpayers with e-commerce businesses, we refer to the research model of Engida and Baisa (2014), and consult with experts, including the following observed variables:

- **TAXCOM1:** We have never avoided personal income tax from e-commerce business.
- **TAXCOM2:** We have never complained about the personal income tax system for e-commerce business.
- **TAXCOM3:** We have never owed personal

income tax of e-commerce business.

- **TAXCOM4:** We declare all income from e-commerce business to the tax authority
- **TAXCOM5:** We always pay tax from e-commerce business on time

Regression model: based on the hypotheses and proposed research models, we built a regression model on factors affecting taxpayers' compliance with the personal income tax associated with e-commerce business activities, as follows:

$$TAXCOM = \beta_0 + \beta_1 \times ECO + \beta_2 \times TAXAUT + \beta_3 \times SOCIA + \beta_4 \times PERS + \beta_5 \times OTHE + \varepsilon \quad (1)$$

4. RESULTS

4.1. Cronbach's alpha test

Scale analysis can be used to eliminate inconsistent variables and reduce the error rate of the research model. Accordingly, only variables with Cronbach's alpha coefficient equal to or greater than 0.6 and total correlation coefficient (adjusted item-total correlation) greater than 0.3 are accepted (Hair et al., 2009). Table 2 shows the results of Cronbach's alpha analysis for five determinants with fifteen observed variables affecting tax compliance of e-commerce individuals in Hung Yen province, Vietnam.

Table 2. Cronbach's alpha test

Components	No. of items	Cronbach's alpha
1 ECO	3	0.776
2 TAXAUT	3	0.772
3 SOCIA	3	0.761
4 PERS	3	0.764
5 OTHE	3	0.769
6 TAXCOM	5	0.844

Source: Compilations by the Authors.

The results demonstrate that all adjusted item-total correlations of observed variables are above 0.3 and all Cronbach's alpha coefficients are above 0.6. For future studies, all variables of the research model are suitable.

4.2. Exploratory factor analysis

Fifteen independent variable attributes were obtained using component analysis and varimax in EFA. The component analysis results in Table 3 demonstrate that through Table 3, Kaiser-Meyer-Olkin (KMO) = 0.690 > 0.5 so factor analysis is appropriate. At the same time, sig. (Bartlett's test) = 0.000 (sig. < 0.05) proves that the observed variables participating in EFA analysis are correlated with each other.

Table 3. KMO and Bartlett's test

KMO measure of sampling adequacy		0.690
Bartlett's test of sphericity	Approx. chi-square	1468.136
	df	105
	Sig.	0.000

Source: Compilations by the Authors.

Table 4. Total variance explained

Component	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	2.623	17.485	17.485	2.623	17.485	17.485	2.085	13.899	13.899
2	2.324	15.495	32.980	2.324	15.495	32.980	2.075	13.830	27.730
3	1.927	12.845	45.826	1.927	12.845	45.826	2.071	13.804	41.534
4	1.765	11.770	57.595	1.765	11.770	57.595	2.059	13.727	55.261
5	1.694	11.291	68.886	1.694	11.291	68.886	2.044	13.625	68.886
6	0.596	3.976	72.863						
7	0.564	3.757	76.620						
8	0.548	3.652	80.272						
9	0.500	3.334	83.606						
10	0.479	3.191	86.797						
11	0.447	2.978	89.776						
12	0.427	2.846	92.621						
13	0.393	2.617	95.238						
14	0.375	2.499	97.737						
15	0.339	2.263	100.000						

Source: Compilation by the Authors.

Table 4 shows the variances of the variables. Table 5 shows that the factor loading coefficients of the observed variables in the rotation matrix are all

greater than 0.5, so these observed variables all have a meaningful contribution to the model (Hair et al., 2009).

Table 5. Rotated component matrix

Variables	Components				
	1	2	3	4	5
ECO3	0.829				
ECO2	0.826				
ECO1	0.826				
TAXAUT1		0.838			
TAXAUT3		0.835			
TAXAUT2		0.805			
OTHE3			0.856		
OTHE1			0.817		
OTHE2			0.795		
PERS3				0.837	
PERS1				0.817	
PERS2				0.808	
SOCIA3					0.837
SOCIA1					0.822
SOCIA2					0.794

Source: Compilation by the Authors.

The results in Table 6 show that KMO = 0.833 > 0.5; thus, the factor analysis is appropriate. At the same time, sig. (Bartlett's

test) = 0.000 (sig. < 0.05) show that the observed variables participating in the EFA analysis are correlated with each other.

Table 6. KMO and Bartlett's test

KMO measure of sampling adequacy		0.833
Bartlett's test of sphericity	Approx. chi-square	677.588
	df	10
	Sig.	0.000

Source: Compilation by the Authors.

According to Table 7, the results of the rotated matrix table show that there is 1 factor extracted from the observed variables and included in the EFA analysis. The explained variance is 61.734% at eigenvalue of 3.087 > 1.

Table 7. Total variance explained

Component	Initial eigenvalues			Extraction sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	3.087	61.734	61.734	3.087	61.734	61.734
2	0.609	12.170	73.905			
3	0.545	10.901	84.806			
4	0.427	8.532	93.338			
5	0.333	6.662	100.000			

Source: Compilation by the Authors.

Table 8 shows that the loading factors of the observed variables are all greater than 0.5, so these observed variables all have a meaningful contribution to the model (Hair et al., 2009).

Table 8. Component matrix

Variables	Component 1
TAXCOM4	0.813
TAXCOM5	0.803
TAXCOM3	0.801
TAXCOM1	0.755
TAXCOM2	0.754

Source: Compilation by the Authors.

4.3. Regression analysis

Table 9 shows that the F-test sig. = 0.000 < 0.05, so the regression model is significant.

Table 10, regression results show that all variables have an impact on the dependent variable because the t-test sig of each independent variable is less than 0.05. The variance inflation factor (VIF) coefficients of the independent variables are all less than 5, so there is no multicollinearity.

Table 9. Analysis of variance

	Model	Sum of squares	df	Mean square	F	Sig.
1	Regression	54.103	5	10.821	146.398	0.000
	Residual	25.795	349	0.074		
	Total	79.898	354			

Source: Compilation by the Authors.

Table 10. Coefficients

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics	
		B	Std. error	Beta			Tolerance	VIF
1	(Constant)	-0.578	0.180		-3.215	0.001		
	ECO	0.342	0.022	0.472	15.294	0.000	0.972	1.029
	TAXAUT	0.403	0.021	0.591	19.256	0.000	0.982	1.019
	SOCIA	0.121	0.023	0.160	5.181	0.000	0.964	1.037
	PERS	0.069	0.022	0.098	3.191	0.002	0.978	1.022
	OTHE	0.253	0.022	0.359	11.579	0.000	0.964	1.037

Source: Compilation by the Authors.

The standardized regression equation is as follows:

$$TAXCOM = 0.472 \times ECO + 0.591 \times TAXAUT + 0.16 \times SOCIA + 0.16 \times PERS + 0.359 \times OTHE + \varepsilon$$

5. DISCUSSION

The results of regression analysis show that there are 5 factors affecting personal income tax compliance of taxpayers engaged in e-commerce activities in Hung Yen province, Vietnam, namely: economic factors, tax authority characteristics, social factors, personal factors, demographic factors. All 5 factors have a positive impact on personal income tax compliance. Thus, all 5 hypotheses are accepted. The research results are consistent with previous studies by Engida and Baisa (2014), Helhel and Ahmed (2014), Bui et al. (2024), and Hamid et al. (2019).

First, tax authority characteristics such as capacity, professional qualifications; facilities,

equipment for tax collection; coordination of relevant authorities has the largest and most positive impact on taxpayers' tax compliance. This result is consistent with the study of Engida and Baisa (2014), Hamid et al. (2019), Inasius (2013), Noor et al. (2010), Nguyen et al. (2025), this factor has a positive impact on personal income tax compliance. This shows that the higher the capacity and professional qualifications of personal income tax management officers, the higher the personal income tax compliance of taxpayers engaged in e-commerce activities. At the same time, the better the facilities and equipment for personal income tax management with e-commerce business activities, the higher the personal income tax compliance. On the other hand, the better

the coordination of relevant authorities with tax authorities, the higher the personal income tax compliance. At that time, they have less opportunity to avoid or evade taxes because relevant authorities provide data to the tax sector to ensure full collection of information of personal income taxpayers. The characteristics of the tax authority have the greatest influence on personal income tax compliance. Therefore, tax authorities need to have strategy to improve their capacity, professional qualifications, invest in modern facilities for tax management, and closely coordinate with relevant agencies to improve personal income tax compliance. To do so, tax authorities need to develop a strategy for recruiting and retraining tax officials to improve their capacity and qualifications. In addition, tax authorities need to create a scheme for investing in modern machinery and technology for tax authorities to improve tax management efficiency. At the same time, tax authorities, banks, businesses, etc. need to plan a tactic for linking and providing information to each other for more effective tax management.

Second, economic factors such as regular inspections and audits, perceptions of government spending, and economic stability greatly affect personal income tax compliance. Regular inspections and audits by tax authorities will increase personal income tax compliance. This result is consistent with the study of Engida and Baisa (2014) Bui et al. (2024), this factor has a positive impact on personal income tax compliance. When taxpayers perceive government spending from appropriate personal income tax sources, they will comply with personal income tax more. At the same time, the economy is stable, including stable e-commerce business, limiting inflation stimulates taxpayers' personal income tax compliance. This result is consistent with the study of Engida and Baisa (2014); Bui et al. (2024). Economic factors also greatly affect personal income tax compliance. Therefore, tax authorities need to strengthen personal income tax audits and audits of individuals doing e-commerce business, government spending needs to be fair, and stable economic growth will promote personal income tax compliance. Beside, the government should build policies to promote e-commerce business growth contributes to economic growth, thereby increasing taxpayer compliance.

Third, the above findings also illustrate that demographic factors have a great influence on personal income tax compliance such as: gender, income and education. The research results also show that women have a higher level of personal income tax compliance than men. This study results are similar to Helhel and Ahmed (2014) that women tend to have higher compliance with personal income tax of e-commerce activities than men. In addition, as taxpayers' income from e-commerce activities increases, their personal income tax compliance increases. The results of this study are similar to those of Loo and Ho (2005), Abung and Damayanti (2023), Bernasek and Shwift (2001), Dewanta and Machmuddah (2019), Kastlunger et al. (2010), Muharremi et al. (2022), Ikhsan et al. (2023). This result is contrary to the research results of Afif and Setiawan (2024) and Beredugo and Ekpo (2023) reported that gender has no effect on taxpayer's tax compliance behaviour. Therefore, tax authorities need to develop a personal income tax audit strategy that focuses more on men than women. Besides, it is necessary to focus on tax inspections of low-income

individuals to detect violations, in order to improve tax management efficiency. However, the results contrary to Torgler (2007) found that low-income individuals in West Germany had lower tax compliance, and the results are difference from the study of Helhel and Ahmed (2014), income factor has mixed and unclear impact on tax compliance. The educational level of personal income taxpayers engaged in e-commerce activities increases, increasing tax compliance. Taxpayers' income and education level also have a positive impact on personal income tax compliance. This result is consistent with the study of Helhel and Ahmed (2014), Kumi et al. (2024), Le et al. (2020), Vicent et al. (2023), Amaning et al. (2021) which also showed a positive relationship between education level and tax compliance. Therefore, it is necessary to improve the qualifications of taxpayers with e-commerce business activities to improve tax compliance by tax authorities implementing programs to disseminate and propagate personal income tax knowledge through the artificial intelligence (AI) — chat GPT tool. Using AI tools to answer questions and provide automatic tax advice to taxpayers is a smart strategy and helps tax authorities to answer questions anytime, anywhere for individuals without using human resources.

Forth, social factor such as: social determinants of understanding fairness, policies, and positive impacts from the collective increase, the compliance with personal income tax of individuals doing e-commerce business increases. Taxpayers doing e-commerce business with increased understanding of fairness will increase their compliance with personal income tax. Appropriate changes in personal income tax policies for e-commerce business activities will increase tax compliance. Collectives with a tendency to comply with personal income tax will have a positive impact on tax compliance. This result is consistent with the study of Engida and Baisa (2014) which showed that the perception of fairness has an impact on the tendency to avoid and evade taxes. This issue raises the need for tax authorities and the government to change the personal income tax policy for e-commerce business activities to suit the characteristics of e-commerce business. On the other hand, the personal income tax policy for e-commerce business activities needs to be fairer, thereby increasing taxpayer compliance.

Fifth, the personal determinants that have the least impact on personal income tax compliance include: personal finance, understanding of personal income tax, awareness of criminal behavior and penalties. The results show that personal finances of taxpayers willing to pay personal income tax before paying other expenses have a positive impact on tax compliance. Personal understanding of personal income tax also has a positive impact on tax compliance. Awareness of criminal behavior and tax penalties has a positive impact on tax compliance. This result is consistent with the study of Engida and Baisa (2014), Wahl et al. (2010), Guenther et al. (2017), Wenzel (2002), Wu et al. (2012), Salaudeen and Eze (2018), Matarirano et al. (2019) that argued that penalties for tax evasion have an impact on tax compliance. Therefore, tax authorities need to effectively propagate to impact these factors, raise awareness of behavior and consequences of not properly performing personal income tax obligations and understanding of personal income tax of individuals doing e-commerce business in Hung Yen

of Vietnam. There needs to be a more effective strategy to disseminate knowledge about personal income tax, such as poetry, music, on media such as YouTube, TikTok, etc.

6. CONCLUSION

This study identified a model of factors affecting taxpayers' personal income tax compliance with e-commerce activities in Hung Yen province, Vietnam, which includes economic factors, tax agency characteristics, social factors, personal factors, and demographic factors. All the factors had a positive impact on tax compliance. The results of this study are consistent with the findings of previous studies.

Tax agency characteristics have the greatest impact on personal income tax compliance. Therefore, tax authorities need to have strategy to improve their capacity and expertise, invest in modern facilities for tax management, and closely coordinate with relevant agencies to improve personal income tax compliance of taxpayers with e-commerce business activities.

Economic factors also greatly affect the personal income tax compliance of taxpayers with e-commerce business activities. Therefore, tax agencies need to make plan strengthen inspections and examinations, government spending needs to be fair, and stable economic growth promotes personal income tax compliance.

Demographic factors such as taxpayers' income and education level also have a positive impact on personal income tax compliance of individuals engaged in e-commerce business. Therefore,

measures to increase revenue and profit for individuals engaged in e-commerce business will contribute to improving their personal income tax compliance. To improve tax compliance, it is necessary to improve the qualifications of taxpayers with e-commerce business activities.

Some personal determinants such as the willingness to pay personal income tax before paying other expenses, have a positive impact on tax compliance. Personal understanding of income tax also has a positive impact on tax compliance. Awareness of criminal behavior and tax penalties has a positive impact on tax compliance. Therefore, it is necessary to raise awareness of personal income tax as well as awareness of criminal behavior and tax penalties for taxpayers operating e-commerce activities so that they can improve their personal income tax compliance by having effective propaganda solutions from tax authorities with the support of AI — chat GPT.

However, this study also has several limitations, such as we do not compare the findings of this research with other provinces. This research only focuses on the province of Hung Yen. That is why the generalization of the findings for the whole of Vietnam is to some extent limited. The future research should expand the study to other regions or countries to assess the generalizability of the findings; or explore the impact of emerging technologies like blockchain or AI on improving tax compliance; or investigate the effectiveness of different policy measures in promoting compliance, especially for digital businesses; or longitudinal studies to track changes in tax compliance behaviors over time.

REFERENCES

- Abung, Y. R., & Damayanti, T. W. (2023). The influence of gender on tax compliance with love of money as a moderating variable. *Journal of Social Research*, 2(4), 1–18. <https://doi.org/10.55324/josr.v2i4.747>
- Adem, M., Desta, T., & Girma, B. (2024). Determinants of tax compliance behavior: A case study in Ethiopia. *SAGE Open*, 14(4). <https://doi.org/10.1177/21582440241292869>
- Afif, A., & Setiawan, A. (2024). The impact of demographic factors on MSME tax compliance in Pontianak City. *Journal of Business & Management*, 2(1), 23–35. <https://doi.org/10.47747/jbm.v2i1.1610>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Alm, J., & Yunas, M. (2009). Spatiality and persistence in U.S. individual income tax compliance. *National Tax Journal*, 62(1), 101–124. <https://doi.org/10.17310/ntj.2009.1.05>
- Amaning, N., Anim, R. O., Kyere, A., Kwakye, G., & Abina, S. (2021). Tax compliance among Ghanaian SMEs: How impactful is taxpayer education? *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(1), 40–58. <https://doi.org/10.6007/ijarafms.v10-i4/8332>
- Appah, E., & Duoduo, G. (2023). Determinants of tax compliance behaviour and sustainable economic growth among MSMEs in Nigeria. *International Journal of Development and Economic Sustainability*, 11(3), 70–105. <https://doi.org/10.37745/ijeld.13/vol11n370105>
- Aumeerun, B., Jugurnath, B., & Soondrum, H. (2016). Tax evasion: Empirical evidence from sub-Saharan Africa. *Journal of Accounting and Taxation*, 8(7), 70–80. <https://academicjournals.org/journal/JAT/article-full-text-pdf/85AF14D61786>
- Berberi, I., & Roche, D. G. (2022). No evidence that mandatory open data policies increase error correction. *Nature Ecology & Evolution*, 6, 1630–1633. <https://doi.org/10.1038/s41559-022-01879-9>
- Beredugo, S. B., & Ekpo, B. O. (2023). Tax payers' attitudes and demographic analysis of SMEs operators in River and Akwa-Ibom state — Nigeria. *Journal of Accounting and Taxation*, 3(1), 65–76. <https://doi.org/10.47747/jat.v3i1.1079>
- Bernasek, A., & Shwiff, S. (2001). Gender, risk and retirement. *Journal of Economic Issues*, 35(2), 345–356. <https://doi.org/10.1080/00213624.2001.11506368>
- Bhuiyan, M. R. I., Hossain, R., Rashid, M., Islam, M. M., Mani, L., & Milon, M. N. U. (2024). Gravitating the components, technologies, challenges, and government transforming strategies for a Smart Bangladesh: A PRISMA-based review. *Journal of Governance and Regulation*, 13(3), 177–188. <https://doi.org/10.22495/jgrv13i3art15>
- Bhuiyan, M. R. I., Uddin, K. M. S., & Milon, M. N. U. (2023). Prospective areas of digital economy in the context of ICT usages: An empirical study in Bangladesh. *FinTech*, 2(3), 641–656. <https://doi.org/10.3390/fintech2030035>
- Bui, M. T., Ngo, H. T., Nguyen, G. T. C., & Duong, H. N. (2024). Tax revenue in ASEAN: Impact factors and policy recommendations. *Global Business & Finance Review*, 29(6), 158–169. <https://doi.org/10.17549/gbfr.2024.29.6.158>

- Çekerol, G. S. (2020). Senior executives' opinions regarding educational competencies of university graduate young labor force: Logistics education case. *Journal of Qualitative Research in Education*, 8(3), 796-813. <https://doi.org/10.14689/issn.2148-2624.1.8c.3s.2m>
- Chen, Y., Ge, R., Louis, H., & Zolotoy, L. (2019). Stock liquidity and corporate tax avoidance. *Review of Accounting Studies*, 24(1), 309-340. <https://doi.org/10.1007/s11142-018-9479-6>
- Dao, L. T., & Hang, N. P. T. (2022). Factors affecting tax compliance of enterprises during the COVID-19 pandemic in Vietnam. *Montenegrin Journal of Economics*, 18(4), 7-17. <https://doi.org/10.14254/1800-5845/2022.18-4.1>
- Delgado, F. J., Fernandez-Rodriguez, E., & Martinez-Arias, A. (2014). Effective tax rates in corporate taxation: A quantile regression for the EU. *Engineering Economics*, 25(5), 487-496. <https://doi.org/10.5755/j01.ee.25.5.4531>
- Dewanta, M. A., & Machmuddah, Z. (2019). Gender, religiosity, love of money, and ethical perception of tax evasion. *Jurnal Dinamika Akuntansi dan Bisnis*, 6(1), 71-84. <https://doi.org/10.24815/jdab.v6i1.10990>
- Engida, T. G., & Baisa, G. A. (2014). Factors influencing taxpayers' compliance with tax system: An empirical study of MekelleCity, Ethiopia. *eJournal of Tax Research*, 12(2), 433-452. <https://classic.austlii.edu.au/au/journals/eJlTaxR/2014/19.pdf>
- Enyi, P. E., Rufus, A. I., & Augustine, A. A. (2019). Quality of tax administration and enforced tax compliance behaviour in selected states in South-West, Nigeria. *International Journal of Development Strategies in Humanities, Management and Social Sciences*, 9(3), 162-183. <https://internationalpolicybrief.org/wp-content/uploads/2023/10/ARTICLE11-35.pdf>
- Frank, M. M., Lynch, L. J., & Rego, S. O. (2009). Tax reporting aggressiveness and its relation to aggressive financial reporting. *Accounting Review*, 84(2), 467-496. <https://doi.org/10.2308/accr.2009.84.2.467>
- Guenther, D. A., Matsunaga, S. R., & Williams, B. M. (2017). Is tax avoidance related to firm risk? *Accounting Review*, 92(1), 115-136. <https://doi.org/10.2308/accr-51408>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis* (7th ed.). Prentice Hall.
- Hamid, N. A., Ibrahim, N. A., Ibrahim, N. A., Ariffin, N., Taharin, R., & Jelani, F. A. (2019). Factors affecting tax compliance among Malaysian SMEs in e-commerce business. *International Journal of Asian Social Science*, 9(1), 74-85. <https://doi.org/10.18488/journal.1.2019.91.74.85>
- Hasan, I., Hoi, C. K., Wu, Q., & Zhang, H. (2014). Beauty is in the eye of the beholder: The effect of corporate tax avoidance on the cost of bank loans. *Journal of Financial Economics*, 113(1), 109-130. <https://doi.org/10.1016/j.jfineco.2014.03.004>
- Helhel, Y., & Ahmed, Y. (2014). Factors affecting tax attitudes and tax compliance: A survey study in Yemen. *European Journal of Business and Management*, 6(22), 48-58. <https://www.iiste.org/Journals/index.php/EJBM/article/viewFile/14454/14952>
- Ikhsan, S., Restiatum, & Suratman, E. (2023). Demographic characteristics and tax compliance. *Asian Journal of Social Science Studies*, 8(1), 1-10. <https://doi.org/10.20849/ajsss.v8i1.1322>
- Inasius, F. (2013). The implication of VAT regulation to tax revenues: The cases of small retailer in Indonesia. *Binus Business Review*, 4(1), 147-156. <https://doi.org/10.21512/bbr.v4i1.1043>
- Kastlunger, B., Dressler, S. G., Kirchler, E., Mittone, L., & Voracek, M. (2010). Sex differences in tax compliance: Differentiating between demographic sex, gender-role orientation and prenatal masculinization (2D:4D). *Journal of Economic Psychology*, 31(4), 542-552. <https://doi.org/10.1016/j.joep.2010.03.015>
- Kim, J. H., & Im, C. C. (2017). The study on the effect and determinants of small-and medium-sized entities conducting tax avoidance. *Journal of Applied Business Research*, 33(2), 375-390. <https://doi.org/10.19030/jabr.v33i2.9911>
- Kumi, R., Bannor, R. K., Oppong-Kyeremeh, H., & Adeleye, J. E. (2024). Voluntary and enforced tax compliance determinants and impact among agrochemical business in Ghana. *Arab Gulf Journal of Scientific Research Law*, 42(3), 991-1011. <https://doi.org/10.1108/AGJSR-03-2023-0133>
- Le, H. T., Tuyet, V. T. B., Hanh, C. T. B., & Do, Q. H. (2020). Factors affecting tax compliance among small- and medium-sized enterprises: Evidence from Vietnam. *Journal of Asian Finance, Economics and Business*, 7(7), 209-217. <https://doi.org/10.13106/jafeb.2020.vol7.no7.209>
- Loo, E. C., & Ho, J. K. (2005). Competency of Malaysian salaried individuals in relation to tax compliance under self assessment. *eJournal of Tax Research*, 3(1), 45-62. https://www.unsw.edu.au/business/sites/default/files/documents/paper3_v3n1-2005.pdf
- Matarirano, O., Chiloane-Tsoka, G. E., & Makina, D. (2019). Factors driving tax compliance costs of small businesses in the South African construction industry. *Acta Commercii*, 19(1), 1-10. <https://doi.org/10.4102/ac.v19i1.687>
- Milusheva, S., & Bedoya, G. (2023). *The price of mobility: Assessing the impact of Bogota's integrated system of transportation (SITP) tariff policies on the well-being of vulnerable populations*. AEA RCT Registry. <https://doi.org/10.1257/rct.10456>
- Muharremi, O., Salé, M. J., & Hoxhaj, M. (2022). A mixed-methods study of the influence of demographic factors on Albanian individual taxpayers' ethical beliefs surrounding tax compliance. *Business Ethics and Leadership*, 6(1), 47-66. [https://doi.org/10.21272/bel.6\(1\).47-66.2022](https://doi.org/10.21272/bel.6(1).47-66.2022)
- Ngo, Q. D. (2024). The future of e-commerce taxation in Vietnam: A causal layered analysis approach. *Journal of Futures Studies*, 29(2). <https://jfsdigital.org/articles-and-essays/2024-2/vol-29-no-2-december-2024/the-future-of-e-commerce-taxation-in-vietnam-a-causal-layered-analysis-approach/>
- Nguyen, T. Q., Pham, T. A. N., Hoang, A. P., Do, T. H. N., & Fuller, D. (2025). Factors affecting the acceptance of online tax filing and payment system by micro small medium enterprises in Vietnam. *Journal of Asian Public Policy*, 18(1), 184-205. <https://doi.org/10.1080/17516234.2023.2248640>
- Noor, R. M., Fadzillah, N. S. M., & Mastuki, N. A. (2010). Corporate tax planning: A study on corporate effective tax rates of Malaysian listed companies. *International Journal of Trade, Economics and Finance*, 1(2), 189-193. <https://doi.org/10.7763/IJTEF.2010.V1.34>
- Ozili, P. K. (2020). Tax evasion and financial instability. *Journal of Financial Crime*, 27(2), 531-539. <https://doi.org/10.1108/JFC-04-2019-0051>
- Salaudeen, Y. M., & Eze, U. C. (2018). Firm specific determinants of corporate effective tax rate of listed firms in Nigeria. *Journal of Accounting and Taxation*, 10(2), 19-28. <https://doi.org/10.5897/JAT2017.0288>
- Torgler, B. (2007). *Tax compliance and tax morale: A theoretical and empirical analysis*. Edward Elgar Publishing.

- Trang, B. H. (2023). Determinants affecting tax compliance behavior of small and medium enterprises in the development context of e-commerce, Vietnam. *Montenegrin Journal of Economics*, 19(4), 153–163. <https://mnje.com/sites/mnje.com/files/v19n4/153-163%20-%20Trang.pdf>
- Vicent, O., Stevenson, A., & Owolabi, A. (2023). Do socio-demographic characteristics of SME entrepreneurship influence their tax (non)compliance behaviour? *Journal of Economic Criminology*, 1, Article 100008. <https://doi.org/10.1016/j.jeconc.2023.100008>
- Von Neumann, J., & Morgenstern, O. (1944). *Theory of games and economic behavior*. Princeton University Press.
- 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 and Policy*, 32(4), 383–406. <https://doi.org/10.1111/j.1467-9930.2010.00327.x>
- Wenzel, M. (2002). The impact of outcome orientation and justice concerns on tax compliance: The role of taxpayers’ identity. *Journal of Applied Psychology*, 87(4), 629–645. <https://doi.org/10.1037//0021-9010.87.4.629>
- Wu, L., Wang, Y., Luo, W., & Gillis, P. (2012). State ownership, tax status and size effect of effective tax rate in China. *Accounting and Business Research*, 42(2), 97–114. <https://doi.org/10.1080/00014788.2012.628208>

APPENDIX. QUESTIONNAIRE

Please answer the following questions by circling the answer of your choice.

No	Content	1	2	3	4	5
1	Economic factors					
1.1	Regular inspection and examination of e-commerce business people has an impact on personal income tax compliance.	1	2	3	4	5
1.2	If the government spends the state budget reasonably, it will have a positive impact on personal income tax compliance.	1	2	3	4	5
1.3	Economic and e-commerce business growth is steady has a positive impact on personal income tax compliance.	1	2	3	4	5
2	Characteristics of tax authorities					
2.1	Personal income tax management officers with good professional qualifications and good moral qualities will encourage personal income tax compliance.	1	2	3	4	5
2.2	Modern facilities and equipment for tax collection will increase personal income tax compliance.	1	2	3	4	5
2.3	Good coordination between tax authorities and relevant authorities will increase tax compliance personal income tax.	1	2	3	4	5
3	Social factors					
3.1	The more equitable the personal income tax policy is, the more positive the impact on personal income tax compliance.	1	2	3	4	5
3.2	The Vietnamese government’s appropriate changes in personal income tax policy will positively impact personal income tax compliance.	1	2	3	4	5
3.3	Individuals and groups around me believe that paying personal income tax is a responsibility.	1	2	3	4	5
4	Personal factors					
4.1	We pay personal income tax before paying other amounts.	1	2	3	4	5
4.2	Our understanding of of e-commerce business will increase personal income tax compliance.	1	2	3	4	5
4.3	We are aware of the consequences of personal income tax evasion will increase personal income tax compliance.	1	2	3	4	5
5	Demographic and other factors					
5.1	We believe that high income from the digital economy will have higher personal income tax compliance than low income.	1	2	3	4	5
5.2	We believe that women have higher personal income tax compliance than men.	1	2	3	4	5
5.3	We believe that the higher the education level of taxpayers, the more high personal income tax compliance and vice versa.	1	2	3	4	5
6	Personal income tax compliance					
6.1	We never avoid personal income tax.	1	2	3	4	5
6.2	We never complain about the personal income tax system.	1	2	3	4	5
6.3	We do not owe personal income tax.	1	2	3	4	5
6.4	We declare all income from the digital economy to the tax authorities.	1	2	3	4	5
6.5	We always pay taxes on time.	1	2	3	4	5

Note: 1: Disagree, 2: Agree, 3: Neutral, 4: Agree, 5: Strongly agree.

Thank you very much for your cooperation!