

# EFFECTS OF TAXPAYER CODE OF ETHICS AND TAX SANCTIONS ON TAX MORALE AND VOLUNTARY TAX COMPLIANCE OF LISTED COMPANIES ON THE STOCK EXCHANGE OF THAILAND

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## Abstract

This research aimed (1) to analyze the effect of the taxpayer code of ethics and tax sanctions on the voluntary tax compliance of listed companies in the Stock Exchange of Thailand; (2) to analyze the effect of the taxpayer code of ethics and tax sanctions, mediated by tax morality, on the voluntary tax compliance of listed companies in the Stock Exchange of Thailand; and (3) to compare the general information of respondents in relation to opinions on taxpayer code of ethics and tax sanctions. This study employed a quantitative research design. Data were collected via questionnaire from 380 Chief Financial Officers (CFO) of listed companies in the Stock Exchange of Thailand. Hierarchical random sampling was used in order to select the sample. The collected data were analyzed using a structural equation model. The findings of the study indicated the following: 1) taxpayer code of ethics and tax sanctions have direct and indirect positive influences on voluntary tax compliance; 2) the willingness to pay taxes varies across industry groups, suggesting different perceptions of taxpayer code of ethics and tax sanctions; and 3) factors such as gender, age, level of education, and work experience, do not significantly influence opinions on taxpayer code of ethics or tax sanctions.

**Keywords:** Voluntary Tax Compliance, Taxpayer Code of Ethics, Tax sanctions, Tax Morality

## 1. INTRODUCTION

Taxation is a fundamental aspect of any modern society. It provides the necessary financial resources so that governments can carry out their functions and meet public needs. However, the effective collection of taxes relies not only on legislation and enforcement but also on the willingness of taxpayers to comply with their tax obligations. In recent years, there has been growing interest in understanding the factors influencing taxpayers' behavior and their willingness to pay taxes.

Numerous studies have examined the determinants of tax compliance, highlighting the role of ethical considerations and the impact of penalties on taxpayer behavior. Ethical considerations, such as the perception of fairness and moral obligations, have been found to influence taxpayers' willingness to comply with tax obligations (Kirchler, 2007; Murphy, 2004). When taxpayers perceive the tax system as fair and equitable, they are more likely to voluntarily pay their taxes (Torgler, 2007).

The imposition of tax sanctions and enforcement measures has been recognized as a significant deterrent to tax evasion (Alm et al., 2017). Penalties punishing non-compliance

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incentivize taxpayers to fulfill their tax obligations (Slemrod, 2019). The severity and certainty of penalties has been found to influence taxpayers' compliance decisions (Cowell, 1990; Kleven et al., 2016).

While the literature extensively explores the relationships between the taxpayer code of ethics, tax sanctions, tax morality, and voluntary tax compliance, further research for examining these factors specifically within the context of listed companies in the Stock Exchange of Thailand remains necessary. The Stock Exchange of Thailand plays an important role in the country's economic development, with the tax contributions of listed companies significantly affecting government revenue. Therefore, understanding the dynamics that shape tax compliance behaviors among these companies is paramount.

This research aimed to fill this gap in the literature by examining the impact of taxpayer code of ethics, tax sanctions, and tax morality, on voluntary tax compliance within listed companies in the Stock Exchange of Thailand. By focusing on this specific context, the study provides valuable insights that can inform policy decisions and improve tax compliance practices within the Thai business sector.

## Background and Significance of the Problem

Voluntary tax compliance depends on many factors, such as:

- (1) The extent to which the public see the importance of paying taxes. If the public believe that the tax money they spend will be used to benefit the whole society, they will receive those benefits as well. Voluntary tax compliance will consequently increase.
- (2) The efficiency of management. State funds are utilized more effectively if the government efficiently operates and ensures that every tax dollar is spent wisely. This also supports voluntary tax compliance substantially.
- (3) The fairness in paying taxes. This is necessary in order to make each taxpayer cooperate in paying taxes to the government. The system of collecting taxes must be fair to all taxpayers.
- (4) The punishments given by the law and social punishment.

**Table 1** Financial Secrecy Index 2022

Ranking	Country	FSI Value	Secrecy Score	Global Scale Weight (%)	FSI Share (%)
1	United States of America	1,951	67/100	25.78%	5.74%
2	Switzerland	1,167	70/100	3.91%	3.43%
3	Singapore	1,167	67/100	5.64%	3.43%
4	Hong Kong	927	65/100	3.87%	2.73%
5	Luxembourg	804	55/100	11.32%	2.36%
23	Thailand	380	70/100	0.1%	1.12%
140	San Marino	12	60/100	0%	0.03%
141	Montserrat	5	74/100	0%	0.01%

Note: FSI Value measures the jurisdiction's financial confidentiality, resulting in combining a jurisdiction's confidentiality score and global weighting. The Secrecy Score is the extent of financial confidentiality a jurisdiction's legal and financial system permits; 100 percent represents fully unrestrained scope for financial confidentiality. The Global Scale Weight refers to the extent of financial services a jurisdiction provides to the residents of other countries. Expressed as a percentage of the total global financial services provided by all jurisdictions to non-residents. FSI share measures the level of global financial secrecy expressed as a percentage.

Source: Tax Justice Network

As shown in Table 1, the top five countries with the world's highest Financial Secrecy Index (FSI) are the United States, Switzerland, Singapore, Hong Kong, and Luxembourg, respectively.

**Figure 1** Financial Secrecy Index

### 23. Thailand



Source: Tax Justice Network

Thailand is ranked 23rd in the world on the Financial Secrecy Index. Substantial crucial financial information is private, such as public company ownership, public company accounting concepts, ownership of assets, and other wealth. Outside the stock market, information from the tax court is publicly unknown, and tax avoidance takes place within the country, resulting in one of the world's highest rich-to-poor disparities. The lowest ranking countries are San Marino and Montserrat (Tax Justice Network, 2022).

The government must find a way to prevent and fix various problems and shortcomings. This may happen due to loopholes in the law, unfair tax system public administration, poor attitudes among the business sector, or various other causes which result in the business sector avoiding taxes. The government must be aware of and pay attention to these causes in order to utilize them for creating appropriate guidelines and strategies for tax collection. Neglecting or allowing tax evasion to continue creates unfairness in the society, especially for honest taxpayers. If the government does not earnestly seek to prevent and suppress tax evaders, everyone will continue to avoid taxes. This will result in collection of taxes that does not meet its target and may possibly cause divisions. Lack of national unity can cause taxpayers to lose interest, while they must be kept aware of their civic obligations to the nation. While a government without the people's interest may run the nation as they wish, this can result in severe future damage to the nation.

Evasion intensifies business downturns. All companies have tax avoidance behaviors, while small firms have simpler forms of tax avoidance than large firms. Listed companies in the Stock Exchange of Thailand display tax evasion behaviors such as incomplete income reporting, fraudulent acts, the establishment of subsidiaries and affiliates in tax avoidance territories, and false cost generation.

In order to reduce the cost of corporate income tax collection and tax sanctions against non-compliance of voluntary tax payment among listed companies in the Stock Exchange of Thailand, the research results could offer guidance for government agencies in policymaking and tax measures, and the allocation of annual expenditure budgets from the collected taxes to be used more appropriately for the country's development. This will create tax fairness, build trust, and will result in taxpayers becoming more willing to pay taxes.

## 2. OBJECTIVES OF THE RESEARCH

- 2.1 To analyze the effect of the taxpayer code of ethics and tax sanctions on the voluntary tax compliance of listed companies in the Stock Exchange of Thailand.
- 2.2 To analyze the effect of the taxpayer code of ethics and tax sanctions, mediated by tax morality, on the voluntary tax compliance of listed companies in the Stock Exchange of Thailand.
- 2.3 To compare the general information of respondents in relation to their opinions on the taxpayer code of ethics and tax sanctions.

## 3. LITERATURE REVIEW

### 3.1 Effect of Taxpayer Code of Ethics on Voluntary Tax Compliance

A taxpayer should have a sense of duty and responsibility to perform the correct behavior, specifically to pay complete taxes to the government within a specific timeframe. The government is able to use tax money for the effective development of the country and must create awareness of tax payment. National development must be in people's minds in order to follow morally, display correct behavior, and comply with the provisions of the law, including the payment of total taxes (Tharitimanont, 2001). The government should create good awareness by providing good services for the people. Establishing feelings of comfort and fairness among the people, creates positive feelings of trust and satisfaction (Bowseriwong, 1997), leading to cooperation.

According to Alm and Martinez (2007), it was found that Taxpayer ethics positively influence willingness to pay taxes, while the ethics of the taxpayer also result in the payment of taxes. This depends on the social environment of the taxpayer, such as family members, colleagues, and relatives, with honesty as a sense of good citizenship. This also results in voluntary tax-paying behavior. Fjeldstad and Semboja (2001) found that taxpayer ethics positively influence willingness to pay taxes. The tax rate must be reasonable and fair, while tax spending should be appropriate and without corruption (McGee, 2006). The government must provide tax incentives and build good relationships between taxpayers and tax authorities. Meanwhile, the taxpayer himself must be honest and have a sense of good citizenship (Mughal & Akram, 2012). Karavitis et al. (2022) stated that chief financial officers must have good basic ethics and high experience, to choose to strictly follow the tax law, especially in the organizational context, focusing on environmental, social, and governance image. Additionally, encouraging good ethics within organizations is an important part of encouraging voluntary compliance with tax law. To build an organizational culture which adheres to ethics and fair practice in terms of tax, not only reduces risk but also encourages trust from society and the stakeholders of listed firms.

### 3.2 Effect of Tax Sanctions on the Voluntary Tax Compliance

Cummings et al. (2009) and Slemrod (2007) pointed out that deterrence theory could be effectively applied at the organizational level, especially, in the context of strictly enforcing tax law with obvious penalties. Under the stated law, chief financial officers (CFOs) would make considerations before paying taxes, comparing between the benefits of tax planning and the risks which might occur from a failure to make full payment. When there is a high chance of being examined, organizations choose to strictly follow the tax law in order to avoid damage to their reputation and a negative environmental, social, and governance (ESG) evaluation. Tax sanctions have a positive influence on voluntary tax compliance, while tax penalties result in

the application of tax payments (Fjeldstad & Semboja, 2001). This depends on an intensive inspection rate and severe penalties (Ali et al., 2001).

### **3.3 Effect of Tax Morality on Voluntary Tax Compliance**

Robbins et al. (2016) stated that the motivation for tax compliance increases when organizations trust in a government that participates in transparent spending of taxes and when taxes lead to social benefits. Slemrod (2007) said that organizations consider paying tax as a duty of good citizenship, always following tax law voluntarily, especially, in cases where the organizations have an obvious corporate social responsibility (CSR) policy and a focus on sustainable operations. Organizations feel that paying taxes is an obligation for everyone according to the law. This results in a high number of voluntary taxpayers (Tyler, 1997) and fair law enforcement that does not discriminate against taxpayers (James & Nobes, 2000).

### **3.4 The Relationships Between Gender, Age, Level of Education, Work Experience, and Industry Groups and Taxpayer Code of Ethics and Tax Sanctions**

Tehulu (2014) found that older adults tended to be less likely to voluntarily comply with tax laws when the tax system lacked equity and fairness. Meanwhile, Salleh (2016) found that gender was a significant factor influencing taxpayers' ethical perceptions. Females placed greater emphasis on ethical values as taxpayers when compared to males (Bayaz et al., 2014).

In the context of Chief Financial Officers (CFO), Karavitis et al. (2022) found that the experience and industry group of CFOs influenced their opinions and ethical behavior regarding taxation. CFOs with diverse experiences and high managerial skills might perceive tax avoidance as a business tool, whereas CFOs undergoing a significant life transition, such as being close to retirement, were more likely to adhere to ethical practices. Furthermore, Rottger et al. (2019) found that CFOs with extensive tax expertise often use their knowledge to minimize tax rates for the benefit of their business. In contrast, CFOs with limited tax experience tended to strictly comply with tax laws, prioritizing penalty avoidance and risk reduction.

Jerene and Adimasu (2016) found that level of education has a significant impact on the behavior of tax compliance, reflecting awareness and understanding that positively influences compliance. Similarly, Palil (2010) found that enhancing tax knowledge and simplifying the tax system are key factors for promoting ethical behavior and compliance, particularly among individuals having varying education levels.

### **3.5 Hypotheses**

According to the research objectives and related literature, five hypotheses were developed based on the relevant theory.

H1: The taxpayer code of ethics positively influences the voluntary tax compliance of listed companies in the Stock Exchange of Thailand.

H2: Tax sanctions positively influence the voluntary tax compliance of listed companies in the Stock Exchange of Thailand.

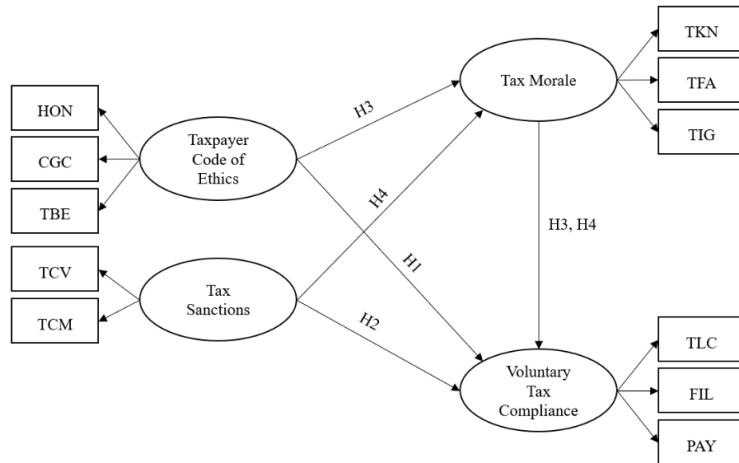
H3: The taxpayer code of ethics directly and positively influences tax morality and indirectly and positively influences the voluntary tax compliance of listed companies in the Stock Exchange of Thailand through tax morality.

H4: Tax sanctions directly and positively influence tax morality and indirectly and positively influence the voluntary tax compliance of listed companies in the Stock Exchange of Thailand through tax morality.

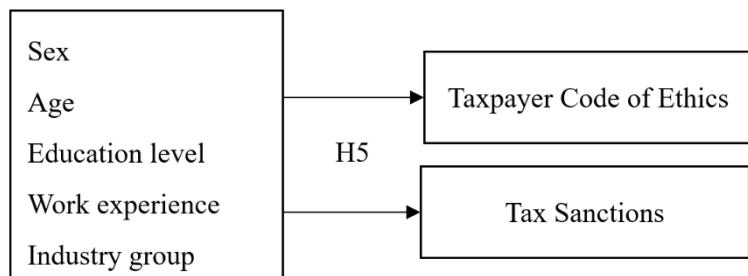
H5: Different gender, age, education, work experience, and industry group, lead to different opinions on the overall taxpayer code of ethics and tax sanctions.

### 3.6 Conceptual Framework

**Figure 2** Conceptual Framework Effects of Taxpayer Code of Ethics and Tax Sanctions on Tax Morale and Voluntary Tax Compliance among Listed Companies in the Stock Exchange of Thailand



**Figure 3** Conceptual Framework of Gender, Age, Education, Work Experience, and Industry Group, on The Overall Taxpayer Code of Ethics and Tax Sanctions



## 4. METHODOLOGY

### 4.1 Research Pattern

This research was quantitative research. Questionnaires were used for collecting data.

### 4.2 Population and Sample

The population used in this research consisted of the Chief Financial Officers (CFO) of listed companies in the Stock Exchange of Thailand from 2020, yielding a total of 824 companies (Information as of January 16, 2021). Information was collected from 8 industry groups, excluding the category of listed companies that underwent business rehabilitation. Five companies within the study population were in the process of business rehabilitation (The Stock Exchange of Thailand, 2020). A stratified random sampling method was used, with the sample size being determined according to the formula of Hair et al. (2009). For structural equation statistical analysis, sample size should be about 10 to 20 times the number of observed

variables. Therefore, a sample size 20 times the 11 variables was deemed suitable for observation, amounting to a minimum sample size of 220. Actual data were successfully collected from a total of 380 companies. The general information of respondents is reported in Table 2.

**Table 2** The General Information of Respondents (N = 380)

<b>Respondent profile</b>	<b>Category</b>	<b>Frequency</b>	<b>Percent</b>
Gender	Male	127	33.40
	Female	253	66.60
Age	Under 35 years	44	11.60
	35 – 40 years	71	18.70
	Over 40 – 45 years	52	13.70
	Over 45 years and above	213	56.10
Education level	Bachelor's degree	126	33.20
	Master's degree	248	65.30
	Doctoral degree	6	1.50
Work experience	Less than 10 years	109	28.70
	10 to 15 years	96	25.30
	More than 15 to 20 years	45	11.80
	More than 20 years and above	130	34.20
Industry group	Agriculture and Food Industry	30	7.90
	Resources Industry	34	8.90
	Technology Industry	26	6.80
	Financial Business Industry	35	9.20
	Services Industry	78	20.50
	Industrial Products Industry	61	16.10
	Consumer Products Industry	25	6.60
	Real Estate and Construction Industry	91	23.90

#### 4.3 Research Variables

**Table 3** Summary of Information Regarding the Measurement of Variables

<b>Variables</b>	<b>Symbol</b>	<b>Measurement</b>
Exogenous Latent Variables		
1. Taxpayer Code of Ethics (TCE)	HON CGC TBE	1. Honesty 2. Good Citizen Consciousness 3. Tax Paying Behavior
2. Tax sanctions (TSA)	TCV TCM	1. Intensity of the use of civil sanctions 2. Intensity of the use of criminal sanctions
Mediating Variable Tax Morality (TMO)	TKN TFA TIG	1. Knowledge of tax law 2. Tax Fairness 3. Trust in Government

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Endogenous Latent Variable Voluntary Tax Compliance (TCO)	TLC FIL PAY	1. Tax Law Compliance 2. Tax return filing 3. Payment
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#### 4.4 Research Tools

A questionnaire was used to collect the data for this research, utilizing a 5-level Likert scale estimation. The questionnaire structure consisted of 5 parts:

- Part 1 Personal Information of the Respondent
- Part 2 Taxpayer Code of Ethics
- Part 3 Tax Sanctions
- Part 4 Tax Morality
- Part 5 Voluntary Tax Compliance

A confidence test was conducted, trialing the questionnaire using a Pre-test with a non-target sample of 30 people. The confidence value of the whole set of questionnaire items was determined accordingly. The Cronbach's alpha coefficient formula was used, and calculated, yielding an overall questionnaire confidence value of 0.98, which is more significant than the 0.70 cut off value for acceptability, indicating that the questionnaire was suitable and could be used to collect data.

#### 4.5 Data Collection

The contact details of listed companies in the Stock Exchange of Thailand for all eight industry groups, were found and contacted via a coordinator, providing the essential details about the research. The questionnaire was generated online via Google Forms and sent to Chief Financial Officers (CFO) via email. The completed information, was analyzed and summarized for the data period of desired data collection from 2021-2022.

#### 4.6 Methodology

A descriptive statistical analysis, including frequency distribution, percentage, and means was used, along with a comparison between the means of 2 sample groups independent from each other (t-test independent), more than two sample groups (F-test), and one-way analysis of variance (ANOVA). When a statistically significant difference was found at the 0.05 level, pairwise differences were tested by Scheffe's Method.

The preliminary statistical analysis of the variables used in this research included the mean, standard deviation, skewness, and kurtosis.

A structural equation model analysis technique (Structural Equation Model) was applied to analyze the relationships between the exogenous independent variables and the internal latent variables (endogenous). Structural equation modelling (SEM) was used due to its ability to reliably analyze complex relationships between multiple observable and latent variables at the same time. SEM was considered suitable for this research as it can evaluate both direct and indirect influences among different variables. It was necessary to analyze the data using a structural model which has various dimensions. Additionally, SEM can control the deviation from the variables in the model. This helps to increase the accuracy and reliability of the results of the research.

## 5. RESULTS AND DISCUSSION

### 5.1 Results

The research results, will be summarized according to the objectives as follows.

5.1.1 To analyze the effect of the taxpayer code of ethics and tax sanctions on the voluntary tax compliance of listed companies in the Stock Exchange of Thailand.

5.1.2 To analyze the effect of the taxpayer code of ethics and tax sanctions, as mediated by morality, on the voluntary tax compliance of listed companies in the Stock Exchange of Thailand.

**Table 4** The Descriptive Statistics for Variable Characteristics (N = 380)

Variable	$\bar{X}$	S.D.	Skewness	Kurtosis
Honesty	4.02	0.72	-0.419	-0.416
Good citizen consciousness	4.08	0.71	-0.584	0.075
Tax paying behavior	4.12	0.73	-0.386	-0.455
Intensity of the use of civil sanctions	4.20	0.98	-1.229	0.331
Intensity of the use of criminal sanctions	4.20	0.99	-1.179	0.229
Knowledge of tax law	4.29	0.79	-1.409	1.687
Tax fairness	4.33	0.81	-1.395	1.737
Trust in government	4.30	0.79	-1.342	1.702
Tax law compliance	4.26	0.84	-1.166	0.681
Tax return filing	4.15	0.87	-0.851	-0.086
Payment	4.25	0.85	-1.130	0.641

As shown in Table 4, most observable variables had an average score at the high level ( $\bar{X} = 4.02 - 4.33$ ), with standard deviation (S.D.) values ranging from 0.71 to 0.99. This indicates that the data were closely clustered around the means, with the standard deviations not exceeding 1.

When considering the distribution of skewness of the variables, the yielded values ranged from -1.409 to -0.386, none of which were over the recommended cut-off of  $\pm 2$ . It was considered to be acceptable at the confidence level of 0.05. Similarly, consideration of the Kurtosis of variables, yielded values ranging from -0.455 to 1.737, none of which were over  $\pm 2$ , and thus were considered to be acceptable. Therefore, the data were deemed suitable to be analyzed according to the structural equation model.

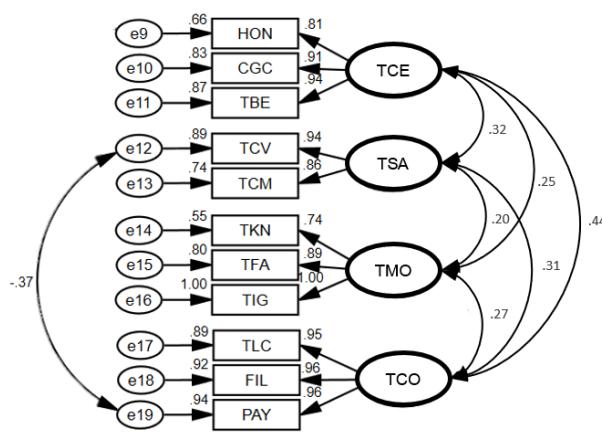
**Table 5** Factor Loading Score, CR, AVE, and Cronbach's Alpha of the Latent Variables Studied

**In The Model by Confirmatory Factor Analysis Technique (N =380).**

Variable	Loading	CR	AVE	$\alpha$
<b>Taxpayer Code of Ethics (TCE)</b>				
1) Honesty (HON)	0.81	0.925	0.805	0.923
2) Good citizen consciousness (CGC)	0.91			
3) Tax paying behavior (TBE)	0.94			
<b>Tax sanctions (TSA)</b>				
1) Intensity of the use of civil sanctions (TCV)	0.94	0.898	0.816	0.898

2) Intensity of the use of criminal sanctions (TCM)	0.86			
<b>Tax Morality (TMO)</b>				
1) Knowledge of tax law (TKN)	0.74	0.875	0.700	0.873
2) Tax fairness (TFA)	0.89			
3) Trust in government (TIG)	1.00			
<b>Voluntary tax compliance (TCO)</b>				
1) Tax law compliance (TLC)	0.95	0.972	0.919	0.971
2) Tax return filing (FIL)	0.96			
3) Payment (PAY)	0.96			

**Figure 4** The Results of the Confirmatory Component Analysis for Examining the Structural Validity of the Latent Variables



Chi-square = 90.431, df = 81, p=.222, CMIN/DF = 1.116,  
 RMSEA = .018, CFI = .999, GFI = .976, AGFI = .943, RMR = .017

As shown in Table 5 and Figure 4, the construct validity (Construct validity), confidence analysis of the combined latent variables (Composite Reliability: CR) and mean-variance extracted (Average Variance Extracted: AVE) were analyzed as follows.

### 1. Construct Validity Analysis

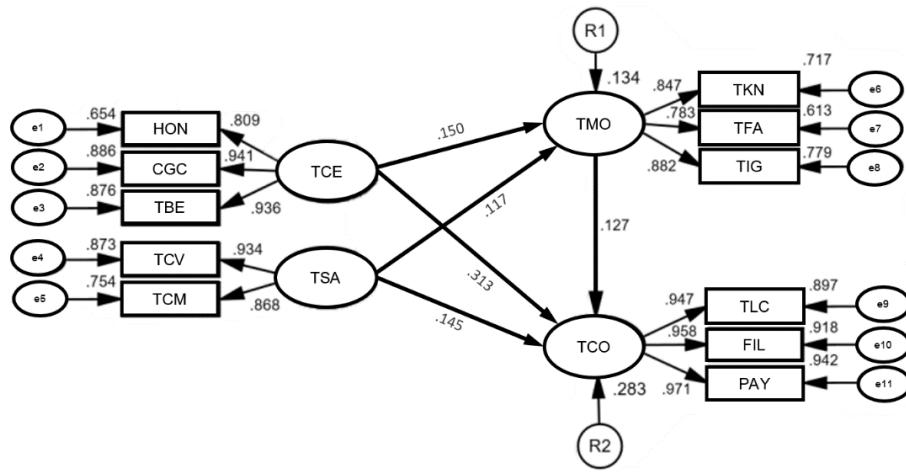
The analysis of structural validity (Construct validity) was considered according to the component weightings (Factor Loading) of the observed variables as mentioned above. It could be seen that every observed variable had a component weighting (Factor Loading) greater than 0.30, indicating that the data held high accuracy (Hair et al., 2009).

### 2. Analysis of The Combined Confidence of The Latent Variables (Composite Reliability: CR) and Mean-Variance Extracted (Average Variance Extracted: AVE).

The results of the analysis of confidence in the latent variables (CR) yielded a highest value of 0.97, and lowest value of 0.88, all being greater than 0.60 cut-off. The mean-variance extracted by components (AVE) had a highest value of 0.92. Moreover, the lowest value was 0.70, which is more significant than 0.50, as shown in Table 5. This showed that each latent variable could explain the variance of the observed variable well. According to the evaluation of the measurement model, there was clear evidence that the definitions of all latent variable operations were correct and reliable.

In addition, the results of the analysis of reliability via the Cronbach's Alpha coefficients (Cronbach's Alpha) found that the highest value was 0.97 and the lowest value was 0.87, all of which were more significant than the recommended cut-off of 0.70, indicating that the analyzed data were highly reliable (Hair et al., 2010).

**Figure 5** Model Based on the Research Hypotheses



Chi-square = 122.924, df = 124, p = .510, CMIN/DF = .991, RMSEA = .000, CFI = 1.000, GFI = .967, AGFI = .950, RMR = .025

The results of the confirmatory component analysis of latent variables in the model of the effects of taxpayer code of ethics, tax sanctions, tax morality, and the continued voluntary tax compliance of listed companies in the Stock Exchange of Thailand, found that the adjusted model was consistent with the empirical data. This was determined from the fit indices as follows: p = 0.51 passed the specified criteria as it was more significant than 0.05, Chi-square = 122.92, and df = 124. CMIN/DF values were found to be equal to 0.99, which was considered to pass the criteria as it was less than 2.00. GFI = 0.97 passed as it was more significant than 0.95. AGFI = 0.95 passed as it was more significant than 0.90. CFI = 1.00 passed as it was more significant than 0.95. Meanwhile, RMSEA = 0.00 was considered to have passed the criteria as it was less than 0.05. Similarly, RMR = 0.03 passed the necessary criterion as it was less than 0.05.

Moreover, SRMR = 0.03 passed the criterion as it was less than 0.05 from the harmony index. So, the adjusted structural equation model (Adjusted Model) was harmonious with the empirical data. Therefore, the parameter estimation in this model was deemed acceptable. The analysis results are shown in Figure 5.

**Table 6** Results of Parameter Estimation of Direct Effect Coefficients (Direct Effect), Indirect Effects (Indirect Effect), and Total Effects (Total Effect) from the Corrected Equation Model (N = 380)

Independent variable	Dependent variable					
	Tax Morality (TMO)			Voluntary Tax Compliance (TCO)		
	DE	IE	TE	DE	IE	TE
Tax Morale (TMO)						
Taxpayer code of ethics (TCE)	0.150**	-	0.150**	0.313**	0.019**	0.332**
Tax sanctions (TSA)	0.117*	-	0.117*	0.145*	0.015*	0.160*
Tax morality (TMO)	-	-	-	0.127*	-	0.127*

p = 0.51, Chi-square = 122.92, df = 124, CMIN/DF = 0.99, GFI = 0.97, AGFI = 0.95, CFI = 1.00, RMSEA = 0.00, RMR = 0.03

Note: \* indicates the 5% significance level, while \*\* indicates the 1% significance level.

Table 6 and Figure 5, show the estimations for tax variables according to the structural equation model.

Taxpayer code of ethics was found to directly influence the voluntary tax compliance of listed companies in the Stock Exchange of Thailand. The respective coefficient of influence was 0.313, with a statistical significance of 0.01, indicating an indirect and positive influence on voluntary tax compliance. The coefficient of influence through tax morality was 0.019, with statistical significance at the 0.01 level.

Tax sanctions were found to directly influence the voluntary tax compliance of listed companies in the Stock Exchange of Thailand. The respective influence coefficient was 0.145, with statistical significance at the 0.05 level, indicating an indirect and positive influence on voluntary tax compliance. The path between tax sanctions and voluntary tax compliance, through tax morality (TMO) as a mediator, yielded a coefficient of influence of 0.015, with statistical significance at the 0.05 level.

### 3. Comparing the General Information of Respondents Regarding Taxpayer Code of Ethics and Tax Sanctions

**Table 7** Comparison of Opinions on Taxpayer Code of Ethics and Tax Sanctions Classified by Gender

variable	gender	n	Mean	SD	t	P-value
<b>Taxpayer Code of Ethics</b>						
gender	male	127	4. 09	0.64	0.32	0.75
	female	253	4. 07	0.69		
<b>Tax sanctions</b>						
gender	male	127	4.16	0.95	-0.51	0.61
	female	253	4.22	0.94		

\*Statistically significant at the 0.05 level

As shown in Table 7, no significant differences were found between males and females regarding opinions about taxpayer code of ethics and tax sanctions.

**Table 8** The Overall Results of the F-Test, For One-Way Analysis of Variance (ANOVA), Between the Age, Education Level, Work Experience and Industry Groups of the Chief Financial Officers (CFOS) Regarding Taxpayer Code of Ethics and Tax Sanctions

variable	source of variance	df	SS	MS	F	P-value
<b>Taxpayer Code of Ethics</b>						
age	between groups	3	2.21	0.74	1.65	0.18
	within the group	376	167.99	0.45		
education level	between groups	2	0.16	0.08	0.17	0.84
	within the group	377	170.04	0.45		
work experience	between groups	3	1.46	0.49	1.08	0.36
	within the group	376	168.74			
industry group	between groups	7	30.02	4.29	11.38**	0.00
	within the group	372	140.18	0.38		
<b>Tax sanctions</b>						
age	between groups	3	0.42	0.14	0.16	0.93
	within the group	376	338.52	0.90		

	between groups	2	0.42	0.21	0.23	0.79
education level	within the group	377	338.52	0.90		
	between groups	3	0.34	0.11	0.13	0.95
work experience	within the group	376	338.60	0.90		
	between groups	7	49.72	7.10	9.14 **	0.00
industry group	within the group	372	289.23	0.78		

\*\* Statistically significant at the 0.01 level

As shown in Table 8, it was found that different industry groups had statistically significant differences in their opinions of the taxpayer code of ethics and tax sanctions at the 0.01 significance level. However, different ages, education levels, and levels of work experience did not yield significant differences regarding opinions of the taxpayer code of ethics and tax sanctions.

## 5.2 Discussion

The results showed that the taxpayer code of ethics and tax sanctions had a direct positive influence on the voluntary tax compliance of listed companies in the Stock Exchange of Thailand, with statistical significance at the 0.05 level, indicating that if taxpayers had a sense of duty and responsibility to pay taxes to the government in a complete and accurate manner within the specified timeframe, the government could use that money to effectively develop the country. This in turn creates awareness of tax payment. National development must be in people's minds in order for them to follow moral obligations, maintain good social behavior, and comply with the provisions of the law, including the payment of all taxes in full. The creation of an excellent mental state where the government provides good services for the people, creates a good feeling of trust and satisfaction due to convenience and fairness. This makes taxpayers realize that avoiding paying taxes only creates anxiety and distress to themselves; they would be severely punished. Taxpayers would also realize that paying taxes correctly would bring them comfort so that they become a good voluntary taxpayer. This corresponds to the work of Cummings et al. (2009) and Slemrod (2007) who pointed out that deterrence theory can be effectively applied at the organizational level, especially in the context of strictly enforcing tax law and having obvious penalties. Under the stated law, the chief financial officers (CFOs) would consider and compare the benefits of tax planning and the risks which might occur. In cases where there is a high chance of being examined, organizations always chose to strictly follow the tax law in order to avoid damage to their reputation and the negative effects of the evaluation in terms of their environment, society, and governance (ESG) assessment.

Regarding the research results, it can be concluded that the taxpayer code of ethics and tax sanctions have a direct positive influence on tax morality and an indirect positive influence on the voluntary tax compliance of listed companies in the Stock Exchange of Thailand through tax incentives. This relationship is statistically significant at the 0.05 level, indicating that if the government pays attention to tax morality for listed companies in the Stock Exchange of Thailand, this would lead to greater voluntary tax compliance. This corresponds to Robbins et al. (2016), who stated that the motivation for tax compliance increases when organizations trust in a government which engages in transparent spending of taxes and when it can be seen that tax spending leads to social benefits. This is also consistent with the findings of Slemrod (2007), Tyler (1997), and James and Nobes (2000), who suggested that worthy and efficient spending of tax money is important for building confidence and trust in the government, as it leads to benefits for the whole society. These researchers suggested that governments focus on

ensuring a fair tax system, making taxpayers feel that paying taxes is everyone's obligation, and that everyone should pay in according to the law. This results in more people voluntarily paying taxes. Moreover, the fairness in law enforcement must not discriminate against individual taxpayers, corresponding to Sheffrin and Triest (1991), Park and Hyun (2003), and Alm and Torgler (2006). The government must be fair in tax collection, creating knowledge and understanding about taxation and building trust among taxpayers. This results in taxpayers being more likely to voluntarily pay taxes.

The results show that different industry groups have different opinions regarding the taxpayer code of ethics and tax sanctions (Tehulu, 2014; Salleh, 2016; Palil, 2010; Rottger et al., 2019; Bayaz et al., 2014; Jerene and Adimasu, 2016; Karavitis et al., 2022). Respondents from different industry groups gave different comments on the taxpayer code of ethics and tax sanctions. In addition, gender, age, education level, and work experience, yielded different results. Quantitative data yielded no significant differences in opinions about tax services at the 0.05 and 0.01 levels, which contradicted the qualitative results of the study which found that respondents having different gender, age, education level, and work experience gave different comments on the taxpayer code of ethics and tax sanctions.

### **5.3 Limitations of the Research**

The results reflected the specific data provided by the chief financial officers (CFOs) of firms listed in the stock exchange of Thailand (SET) only.

### **5.4 Suggestions for Implementation**

The research results could be used as a guideline for tax practices. Moreover, the research results could be used as a guideline to promote the taxpayer code of ethics and raise awareness of tax sanctions resulting in greater voluntary tax compliance.

### **5.5 Recommendations**

5.5.1 Researchers should study other factors, such as information perception and taxpayer attitudes. These factors might affect the tax morality and voluntary tax compliance of listed companies in the Stock Exchange of Thailand.

5.5.2 Researchers should study other sample groups, such as bookkeepers and auditors, as the sample group of this study only included people who work on accounting and taxation within the listed companies in the Stock Exchange of Thailand. If accounting and tax preparation is correct, it would result in the government being able to efficiently collect tax.

## **6. CONCLUSION**

In conclusion, this research aimed to investigate the impact of taxpayer code of ethics and tax sanctions on the tax morality and voluntary tax compliance of listed companies in the Stock Exchange of Thailand. A questionnaire was used to collect data for a quantitative research study, from the Chief Financial Officers (CFO) of 380 listed companies. The collected data were analyzed using a structural equation model.

The findings of this study revealed several essential insights. Firstly, regarding both the taxpayer code of ethics and tax sanctions, it was found that there are both direct and indirect positive influences, mediated by tax morality, on voluntary tax compliance. Companies having a solid ethical framework and awareness of potential penalties are more likely to fulfill their tax obligations.

Furthermore, the study highlights that voluntary tax compliance varies across industry groups, indicating different perceptions of taxpayer code of ethics and tax sanctions. This finding suggests that industry-specific factors influence companies' attitudes toward tax compliance, potentially due to variations such as business operations or regulatory environments.

Interestingly, the research also found that demographic factors such as gender, age, level of education, and work experience, did not significantly influence opinions on taxpayer code of ethics and tax sanctions. This implies that regardless of individual characteristics, the importance of taxpayer code of ethics and tax sanctions are consistently perceived among Chief Financial Officers (CFO).

Overall, this research contributes to the existing literature by examining the relationships between taxpayer code of ethics, tax sanctions, tax morality and voluntary tax compliance by using the specific context of listed companies in the Stock Exchange of Thailand. The study's findings shed light on the factors that shape companies' attitudes toward tax compliance and emphasize the significance of ethical standards and the regulatory measures of fostering tax compliance behavior.

These insights have practical implications for policymakers and tax authorities in Thailand. By recognizing the influence of the taxpayer code of ethics and tax sanctions on tax morality and voluntary tax compliance, authorities could develop targeted interventions and regulatory measures for enhancing tax compliance among listed companies. Furthermore, variations in perceptions across industry groups suggest a need for industry-specific strategies in order to effectively promote tax compliance and ethical behavior.

It is important to note that this study has limitations. The research focused solely on listed companies in the Stock Exchange of Thailand, thus the findings lack generalizability to other contexts. Additionally, the reliance on self-reported data through a questionnaire introduces the possibility of response bias. Future research could address these limitations by expanding the sample size, including companies from diverse industries, and employing additional data collection methods.

Overall, the study makes a valuable contribution to understanding the taxpayer code of ethics, tax sanctions, tax morality, and voluntary tax compliance, within the context of listed companies in Thailand. The findings underscore the importance of fostering tax morality, ensuring fairness in enforcement, and providing taxpayer incentives. Such strategies could significantly enhance voluntary tax compliance. Trust in the government, transparency, and equitable treatment were found to be essential elements that encourage taxpayers to view compliance as a moral and legal duty. Thus, governments must focus on education, and equitable tax policies.

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