

**DETERMINANTS OF TAX EVASION: PERCEPTION
OF SOUTHERN-THAILAND TAXPAYERS**



MASTER OF SCIENCE (INTERNATIONAL ACCOUNTING)

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**DETERMINANTS OF TAX EVASION: PERCEPTION
OF SOUTHERN-THAILAND TAXPAYERS**



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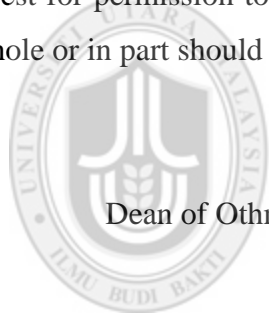
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**Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
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in Partial Fulfillment of the Requirement for the Degree of
Master of Science (International Accounting)**

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ABSTRACT

Tax evasion has long been a prevalent issue in many countries including Thailand. Tax is a major source of the government income thus, if the people evade taxes there will be a major loss to government revenue. The purpose of this study is to examine the perceptions of actual taxpayers from Southern Thailand on the factors related to tax evasion. Using survey method, a total of 361 questionnaires were distributed to employees in three public universities in Hat Yai, Songkhla. Multiple regression analysis was employed to analyse the data. The findings of the study indicate that fairness of tax system, tax rates, penalty rate, level of education and level of income have positive relationship but insignificant with tax evasion. However, corruption indicates a positive significant relationship with tax evasion. This study recommends that the government should implement strategies to decrease tax evasion in Thailand, which includes strengthening the tax administration to improve taxpayers' perceptions towards the tax authorities and the Government as a whole.

Key words: taxation, tax evasion, taxpayer, tax system, Thailand.

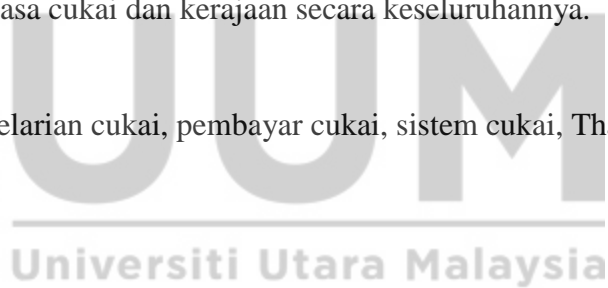


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ABSTRAK

Pengelakkan cukai telah lama menjadi isu lazim di kebanyakan negara termasuklah Thailand. Cukai merupakan sumber terbesar pendapatan kerajaan oleh itu, jika rakyat lari daripada membayar cukai maka akan berlaku kehilangan besar kepada hasil kerajaan.. Tujuan kajian ini adalah untuk mengkaji persepsi pembayar cukai sebenar di Selatan Thailand terhadap faktor-faktor berkaitan pelarian cukai. Dengan menggunakan kaedah tinjauan, sejumlah 361 borang soalselidik telah diedarkan kepada pekerja-pekerja di tiga buah universiti awam di Hat Yai, Songkhla. Analisis regresi berganda telah digunakan untuk menganalisis data. Dapatan kajian menunjukkan bahawa keadilan sistem cukai, kadar cukai, kadar penalti, tahap pendidikan dan tahap pendapatan mempunyai hubungan positif tetapi tidak signifikan dengan pelarian cukai. Namun begitu, rasuah menunjukkan hubungan yang positif dan signifikan dengan pelarian cukai. Kajian ini mencadangkan supaya pihak kerajaan sepatutnya melaksanakan strategi-strategi untuk mengurangkan pelarian cukai di Thailand termasuk memperkukuhkan pentadbiran cukai untuk meningkatkan persepsi pembayar-pembayar cukai terhadap pihak berkuasa cukai dan kerajaan secara keseluruhannya.

Kata kunci: percukaaian, pelarian cukai, pembayar cukai, sistem cukai, Thailand.



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In the name of Allah, the Most Merciful Gracious, the Most Merciful.

All praises and thanks are due to Allah, the Lord of the Worlds, for all his bounties and blessings. May peace and blessing be unto the Holy Prophet Muhammad, his Progeny, and his Companions.

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LIST OF ABBREVIATIONS

GDP	Gross Domestic Product
IRS	Internal Revenue Service
PIT	Personal Income Tax
SD	Standard Deviation
SPSS	Special Package for Social Sciences
TCMP	Taxpayer Compliance Measurement Program
TE	Tax Evasion
TR	Tax Rate
TS	Tax System
VIP	Variance Inflation Factor



CHAPTER ONE

INTRODUCTION

1.1 Introduction

Taxes imposed on citizens of a country are meant for management and development of public sector services such as economy, education, health, transportation, public welfare, infrastructural development, defence and for maintaining peace and territorial integrity of the nation. Also, taxes imposed and revenues accrued therefrom are used for payment of salaries of public workers like teachers, policemen and soldiers. The Revenue Department is charged with the responsibility of ensuring that citizens pay their taxes as and when due, failure of which can inhibit the socio-economic development of a country.

Notwithstanding the above, there are many people who evade paying their taxes and this result in loss of revenue to the state and by implication slow down the pace of development arising from budget cuts. Tax evasion is a global menace and with a significant presence, and the need towards reducing and possibly stopping tax evasions cannot be over-emphasised. To this end therefore, the impact of government's tax policy being recognized as an important fact of economic growth cannot be overlooked (Hung, 2015).

Most developing countries are unable to raise the tax revenue needed to finance the public sector and the development needs of their country. In 2005, developed countries

in the world had the average of tax revenue per GDP (Gross Domestic Product) at about 35 %. Fuest and Riedel (2009) noted that in 2005, developing countries had just 15 % of GDP only and in the poorest countries there was low income, which stood at just 12 % of the GDP. Furthermore, Cobham (2005) noted that approximately US-\$ 285.8 billion tax revenue is lost in developing countries on an annual basis mainly due to tax evasion in the domestic shadow economy and this amount includes loss from East Asia of about US-\$ 39 billion.

Tax evasion has long been a prevalent issue in many countries including Thailand (Chandarasorn, 2012). In view of this, it has become imperative to know why supposed taxpayers do not pay tax. One of the reasons is that so many taxpayers who are not favourable to reporting their taxable income and hence do not pay taxes based on their income. The variance in the amount of tax that is hypothetically owed against the amount that is actually paid is referred to as the 'tax gap' (Karlinsky, Burton, & Blanthorne, 2004). Thailand had a personal income tax gap of at least 200 billion baht (\$6.7 billion) or 10 % of the total revenue (Chandarasorn, 2012). In the United States, the Internal Revenue Service (IRS) estimated that the tax gap was pegged at about \$300 billion in 2006 (Alm & McKee, 2006).

Consequent upon the above, this study is intended to identify the factors that can be used to address a major economically sabotaging trend (tax evasion) in Thailand. Though completely stopping tax evasion cannot be done in its entirety, findings from this study will proffer the strategies in tackling issues related to tax evasion.

1.2 Background of the Study

1.2.1 Overview of the Tax System in Thailand

• *Revenue Structure*

Residents of Thailand who are working and/or engaged in one form of income generating venture or the other, be they Thai or foreigners apply for a taxpayer's identification number. This is usually issued by the Revenue Department upon the presentation of Thai identification cards or foreign passport as proof. Net taxes amount to 2,141,742.4 million baht in the 2015 fiscal year, which is equivalent to 83.2 % of the estimated receipts. According to the World Bank, tax revenue in Thailand was last measured at 16.50 % of GDP in 2012. The tax system in Thailand is divided into two types, direct taxes and indirect taxes. Basically, the main revenue of taxation of state from indirect taxes is estimated at 1,463,642.4 million baht in 2015. Indirect taxes are divided into four types. They are general sales taxes (e.g. value added tax, specific business tax, and stamp duties), specific sales tax (e.g. petroleum and petroleum products, excise tax on imports, consumption tax, mining royalties, petroleum royalties, and natural resources royalties), export and import duties, and licensing fees. Tax revenues of state from direct taxes was approximately 1,118,600. million baht in 2015, which include personal income tax, corporate income tax, and petroleum income tax. Personal income tax accounted for 12 % of the gross tax (Bureau of the Budget, 2015).

Table 1.1

Tax Revenue Components

Taxes	Revenues (Million Baht)	% from Gross Taxes
Direct Taxes	1,118,600.0	43%
Personal Income Tax	312,000.0	12%
Corporate Income Tax	681,600.0	26%
Petroleum Income Tax	125,000.0	5%
Indirect Taxes	1,463,642.4	57%
General Sales Tax	846,300.0	33%
Value Added Tax	775,900.0	30%
Specific Business Tax	57,400.0	2%
Stamp Duties	13,000.0	1%
Specific Sales Tax	490,830.1	19%
Petroleum and Petroleum Products	63,800.0	2%
Excise Tax on Imports	66,400.0	3%
Consumption Tax	290,787.6	11%
Mining Royalties	1,231.1	0%
Petroleum Royalties	68,600.0	3%
Natural Resources Royalties	11.4	0%
Export – Import Duties	110,800.0	4%
License Fees	15,712.3	1%
Deductions	-440,500	-17%
Revenue Department's Rebates	-295,700	-11%
Allocation of VAT to the Provincial	-17,100	-1%
Administrative		
Organizations		
Export Compensation	-18,700	-1%
Allocation to Local Administrative	-109,000	-4%
Organizations		
Gross Taxes (Direct Taxes + Indirect Taxes)	2,582,242.4	100%
Net Taxes (Direct Taxes + Indirect Taxes – Deductions)	2,141,742.4	83%

Source: Bureau of the Budget (2015).

From table 1.1, it is noted that most of the revenue comes from indirect taxes, which accounted for 57 % of the gross tax. It is more than the direct tax is 14 % of gross tax.

Developing countries relied more heavily on indirect taxes since 1980's with the suggestions of international institutions, IMF and the World Bank. According to those institutions' view, direct taxes require both a more effective tax administration and more sophisticated taxpayers; conditions not exist in developing countries. Subsequently, by replacing direct taxes with indirect taxes, developing countries could improve macroeconomic stability and efficiency and cope with the differences to developed countries (Yonah and Margalioth, 2006). Since 1980's, 109 developing countries switched from direct to indirect taxes such as, India's total direct tax revenue declined to 13 percent in 2004 from 28 percent in 1990 (Poirson, 2006). Thailand's indirect tax share in its tax revenue grew up to 58 percent in 2003 (Sujjapongse, 2005). However, when those indirect tax reforms in developing countries are examined under the common determinants of a good tax policy which are providing efficiency and fairness, increasing government revenue and growth rate, it is revealed that indirect taxes could not satisfy those issues in developing countries. Personal income tax is a tax regime system where those who earn more pay more and vice versa. This is done taking into cognisance the distribution of wealth between the rich and the poor in the society (Chandarasorn, 2012).

• ***Personal Income Taxes System***

According to *A Guide to Thai Taxation* (Fiscal Policy Office, 2008, p. 5), the personal income tax (PIT) is “a direct tax imposed on accruable income from within and/or outside Thailand in a particular taxable year.” A person means an individual, an ordinary partnership, a non-juristic body of persons, a dead person and an exclusive wealth. Taxpayers are however categorized as resident and non-resident. A resident means a

person who has lived in Thailand for a period of not less than 180 days or more in a particular taxyear. A resident of Thailand is legally responsible to pay tax on all incomes generated within Thailand on a cash basis. This is irrespective of the money so earned and is paid as part of income from other foreign sources that is moved into Thailand in the particular year the foreign income is earned. However, a non-resident is subjected to tax on income earned from within Thailand.

Income chargeable to PIT is called 'assessable income'. Income generated from doing business in or outside Thailand and based on the amount brought in therefrom is regarded as the tax base. Assessable income is categorised into eight groups. They are, salaries and wages (comprising dividends, other equity payment and other unconventional benefits), labour and employment services so rendered, goodwill, copyright, franchise, patent, annuity, etc., interest, dividend, bonus for investors, gain on amalgamation, acquisition or winding up of a company or partnership, gain on transfer of shares, etc. Others are, property lease, breach of hire-purchase and instalment sale contracts, income from liberal professions, such as law, medicine, engineering, architecture, accountancy and fine arts, income from contractual agreements in the maintenance and construction industry, and income from other commercial ventures and other related income not mentioned above (PwC Thailand, 2014). Some deductions and allowances are permissible in the determination of the taxable income. The deductions shall however be made from the assessable income before the permissible allowances are granted. Hence, taxable income is calculated as;

$$\text{TAXABLE INCOME} = \text{Assessable Income} - \text{deductions} - \text{allowances}$$

From table 1.2 for deductible expenses, income under the categories of assessable income (1), (2) and for copyright under (3), a deduction of 40% is allowed based on a maximum of 60,000. baht. On the other hand, income under (3), other than for copyright and (4) deductions are not allowed. Income under (5), the rates of deduction vary from 10% to 30%, depending on the type of rented property. Income under (6), (7) and (8), the rates of deduction vary from 30% to 85%, in view of the type of income or the type of business. See table 1.3 for detailed allowances which are also permitted after deducting expenses.

Table 1.2

Deductible Expenses

Categories	Assessable Income	Standard Expense
1,2	Personal service and by virtue of office	40% but not exceeding 60,000 baht
3	Copyright	40% but not exceeding 60,000 baht
4	Property	
	- building and wharves	30%
	- agricultural land	20%
	- all other land	15%
	- vehicles	30%
	- any other property	10%
5	Breach of a hire-purchase contract or of a contract of instalment sale	20%
6	Service professions	
	- medical profession	60%
	- other profession	30%
7	Contract of work	70%
8	Business, commerce and others	65-85%

Source: Fiscal Policy Office (2008)

Table 1.3

Types of Allowances

Types of Allowances	Amount
Personal allowance	
Single taxpayer	30,000 baht for the taxpayer
Undivided estate	30,000 baht for the taxpayer's partner
Non-juristic partnership or body of persons	30,000 baht for each partner and not more than 60,000 baht in total
Spouse allowance	30,000 baht
Child allowance (for children below 25 years of age and studying in a school, or a minor, or an adjudged incompetent or partly-incompetent person)	15,000 baht each (limited to three children)
Education (extra allowance for child studying in schools in Thailand)	2,000 baht each child
Allowance for parents	30,000 baht each of taxpayer's and spouse's parents if such parent is above 60 years old who earns less than 30,000 baht
Life insurance premium paid by taxpayer or spouse	Exact sum to be paid by each but not more than 100,000 baht
Approved provident fund contributions paid by taxpayer or spouse	Exact sum paid at the rate not more than 15% of wage, but not exceeding 500,000 baht
Long term equity fund	Exact sum paid at the rate not more than 15% of wage, but not exceeding 500,000 baht
Home mortgage interest	Amount actually paid but not exceeding 100,000 baht
Contributions made on social insurance by the tax payer or spouse	Amount actually paid each
Contributions of benevolence	Exact amount paid on donations but not exceeding 10% of the income after standard deductions and the above allowances

Source: The Revenue Department of Thailand. (2014), *Personal Income Tax*, Retrieved from <http://www.rd.go.th/publish/6045.0.html>.

In calculating net income tax, this is to be done after deduction of expenses and allowances. The remaining balance will be used in the calculation of tax based on income earned that must be remitted to government coffers and which is a progressive tax rate. The effectiveness of the new personal income tax rates were heralded with its introduction in the first two tax years of 2013 and 2014. The Revenue Department has restructured the income tax for net income from seven steps changed to five steps process. See table 1.4 for personal income tax rates.

Table 1. 4

Personal Income Tax Rates

Net Income (Baht)	Personal Income Tax Rates (%)
0 - 150,000	Exempt
150,000 - 300,000	5
300,000 - 500,000	10
500,000 - 750,000	15
750,000 - 1,000,000	20
1,000,000 - 2,000,000	25
2,000,000 - 4,000,000	30
Over 4,000,000	35

Source: PwC Thailand (2014).

• *Tax administration*

Returns

Thailand operates a self-assessment tax system. It is a required that taxpayers publicly state their tax abilities in the itemized tax return (PND 90, PND 91) and pay at the time of filing. More so, four categories of individuals must file a tax return for revenue

generated in the previous tax year notwithstanding if there were any taxes paid. (1) a non-married individual whose income is more than 30,000 baht, (2) a non-married individual whose income is categorically stated in the salaries and wages of more than 50,000 baht, (3) a married person whose income is more than 60,000 baht, (4) a married person whose income falls under the category salaries and wages of more than 100,000 baht. If both spouses are income earners, they could decide to file their income tax return as a couple or and separate individuals (PwC Thailand, 2014).

Penalties and Surcharge

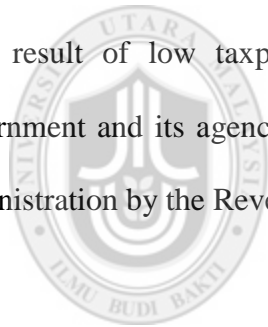
Certain fines comes with non-payment of taxes as and when due. For example, a taxpayer who is supposed to pay taxes on a specific date and doesn't pay, will, upon payment pay an addition 1.5% per month after expiration of the time from which he is supposed to pay. Also, in the event of misrepresentation of income through the filing of a wrong return, an assessment officer imposes a penalty on a taxpayer for defaulting. The rate of penalty is 100% for cases where incorrect returns are filed and a 200% penalty for not filing a return. However, the assessment officer, upon determining that the defaulting taxpayer did not deliberately evade tax could reduce the penalty by 50% save that the defaulter makes a written requests stating his/her stance. However, this can be done with the cooperation of the tax officer (Pwc Thailand, 2014).

1.3 Problem Statement

Evasion is a widespread problem in all tax systems. For example, in the United States of America, the Internal Revenue Service (IRS) estimates that about \$300 billion of taxes has not been collected due to non-compliance with the tax regime (Alm & McKee, 2006). Other countries have similar problems as that of the U.S. In 2009, it was noted that only about 9 million people filed their tax returns in Thailand out of 18 million people who were obliged to pay taxes and for about 30 million people who were in labor force (Ministry of Finance of Thailand, 2011a). More revealing is that, out of that 9 million people, only 2 million people were really paying personal income taxes. It is predicted that there are approximately 8 million people in Thailand who do not file taxes (Chandarasorn, 2012).

Interestingly, another look into the tax evasion crises in Thailand, the current Prime Minister on “Returning Happiness to the People” stated that there are about 38 million people who are income earners, and out of this number, only about 11.7 million people file tax, and only about 3 million people were really paying personal income taxes. Consequently, about 26.3 million people evade tax (“Manager newspaper”, 2015). More worrisome, as noted by Professor Kittipong Urapeepatanapong of the National Reform Council, is the fact that tax evasion has become the culture in Thailand (“Manager newspaper”, 2015). Thailand is among the three least tax compliant countries with a tax evasion rate of 53.34 % of GDP while the United States (8.6%), Switzerland (9.13%), and Austria (10.43%) are the most tax compliant countries (Tsakumis, Curatola, & Porcano, 2007).

Previous empirical endeavours focusing on income tax compliance behavior in Thailand by Chandarasorn (2012) noted that the country relies so much on indirect taxes, resulting in many tax gaps. The study also opined that corruption from tax administrators and the tax system itself would have accounted for the issues with tax evasion. Additionally, the study also opined that workers believe the personal income tax regime is very high in Thailand which is about 35%, compared to other countries which are much lower such as Nigeria, Laos, Singapore, Russia and etc. In support of Chandarasorn (2012) position, a Thai tax expert group also suggested that tax evasion is as a result of high rates of PIT, corruption for government systems, thereby leading to false declaration of income. On a relational note, Gallkiew (1985) noted that Thai citizens who evade tax are as a result of low taxpayer education, negative attitude of taxpayers toward the government and its agencies, ambiguity of the Revenue Code, and in efficiency in tax administration by the Revenue Department.



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In conclusion, tax evasion is a worldwide phenomenon (Schneider and Enste, 2000). It may have harmful effects on economic efficiency (Eisenhauer, 2008), and may cause social welfare losses (Bayer and Sutter, 2009). A more comprehensive and up-to-date research on the perceptions of taxpayers towards tax evasion is still very much needed. Learning about factors that affect tax evasion behavior will help Thai tax administration agencies increase citizen compliance, and hence, raise organizational effectiveness by increasing revenues. Comparing these results to the United States and other developed countries as well as applying the results to other similar developing countries would

contribute to the understanding of public management as citizen compliance for both academics and practitioners.

Previous studies had examined factors on tax compliance (Chandarasorn, 2012) and ethical on tax evasion (McGee, 2006), however, studies on factors related to tax evasion among Thailand taxpayers are limited. Therefore, this study examines the factors of fairness of tax system, tax rate, penalty rate, corruption, level of education and level of income as factors in determining tax evasion in Thailand. This study examines the perception of actual taxpayer from southern Thailand related to tax evasion.

1.4 Research Questions

The following are the research questions for the present study:

1. What is the relationship between fairness of tax system perception and tax evasion in Thailand?
2. What is the relationship between tax rates and tax evasion in Thailand?
3. What is the relationship between penalty rate and tax evasion in Thailand?
4. What is the relationship between corruption and tax evasion in Thailand?
5. What is the relationship between level of education and tax evasion in Thailand?
6. What is the relationship between level of income and tax evasion in Thailand?

1.5 Research Objectives

The objectives of this study are as follows:

1. To examine the relationship between fairness of tax system and tax evasion in Thailand.
2. To examine the relationship between tax rates and tax evasion in Thailand.
3. To examine the relationship between penalty rate and tax evasion in Thailand.
4. To examine the relationship between corruption and tax evasion in Thailand.
5. To examine the relationship between level of education and tax evasion in Thailand.
6. To examine the relationship between level of income and tax evasion in Thailand.

1.6 Significance of the Study

Tax evasion in Thailand is a major economic problem that the state needs to solve so as to increase revenues from taxes. Tax revenues are the largest and most significant sources of revenues for every country. If the governments can promote more compliance from taxpayers, tax revenues will increase without having to raise tax rates or expand the tax base, which could avoid political tensions. This is especially important during economic downturns.

Tax compliance concerns equity and fairness issues in public administration. If taxes are not collected from some groups within society, tax systems, bureaucrats, and the

government are not perceived as fair and ethical by its citizens, and then lose their legitimacy. In today's anticorruption era, fairness and transparency are among the most critical issues included in tax administration as governments need to be responsive to their citizens (Chadarasorn, 2012).

Consequently, the present study is expected to be useful to relevant stakeholders and key decision makers in the tax system of the country in ensuring appropriate measures are put in place to forestall negligence on the part of tax payers. The study will also help to identify reasons for tax evasion specifically, to find out why tax payers evade taxes. It is expected that when these reasons have been identified and possibly implemented, there will be an uptake in tax compliance, which will eventually lead to increase in government income. This should in turn lead to the provision of essential amenities for the populace. Finally, the present study will be useful to researchers as it will serve as a foundation or another academic frontier as it relates to Thailand's tax system.

1.7 Scope of Study

The primary aim of this study is to identify the factors resulting to tax evasion in Thailand. Specifically, the present study is intended to be conducted among staffs of universities in southern Thailand i.e. the universities in Songkhla Province. Songkhla is one of Thailand's main economic stay and education centre of seven southern provinces (Congchan, 2012). Even though, there had 79 of public universities in Thailand according to Ministry of education (Thailand). Songkhla had four universities whereby three of the universities are public universities and one is private university. It can be

said that the majority of taxpayer among the universities staff in Songkhla came from the public universities. Therefore, this study was conducted in three public universities which namely Prince of Songkhla university, Thaksin University and Songkhla Rajabhat University.

Consequently, six factors will be used to determine the relationship between the independent variables (fairness of tax system, tax rate, penalty rate, corruption, level of education and level of income) and the dependent variable (tax evasion).

1.8 Structure of the Thesis

This study is being conducted to examine the factors that determine tax evasion. The thesis is therefore divided into five chapters; chapter one contains an introduction under which the following is covered: background of the study, problem statement, research questions and objectives, significance and the scope of the study. Chapter two features the relevant literature reviews in the area of tax evasion. It also includes discussion on the relationship between tax evasion and some selected variables.

Chapter three presents the research method used, which contains the research design, population of the study, sample size, sampling techniques, data sources, data gathering, instrument used in the collection of data, reliability and validity of the instrument used, model specification and the estimation techniques of the study. Chapter four explains the data analysis, interpretation, discussion and findings of the study. Chapter five is the last

part and includes the summary, conclusions, limitation and recommendations as well as suggestions for future studies.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses and summarizes literature related to tax evasion. All the variables under study are also discuss. This chapter further discusses the comparison between tax evasion and tax avoidance based on definitional differences. The independent variables discussed here in relation to tax evasion are: fairness of tax system, tax rate, penalty rate, corruption, level of education and level of income.

2.2 Tax Evasion and Tax Avoidance

Tax evasion and tax avoidance are two common phrases used by researchers in tax administration and public finance especially when discussing non-tax compliance (Chandarasorn, 2012). Tax evasion and tax avoidance are supposedly expected to eventually reduce liabilities resulting from taxes. However, what is different between the two constructs is that tax evasion is justified within the confines of the law as tax evaders are not absolutely seen to make any offense or break any law.

Comparison between Tax Evasion and Tax Avoidance

A study by Soyode and Kajola (2006) had explained tax evasion and tax avoidance based on the nature and context of their studies which is tax evasion offenced that happen intentionally and deliberately so as not to pay taxes or reduce taxes in an amount

less than what ought to be paid. Tax evasion is an abuse of the law by which the tax will be imposed on an individual who is liable to pay tax based on an assessment of his/her level of income, but no action is being taken as required by law (Soyode & Kajola, 2006). Sandmo (2004) also submitted that tax evasion is a violation of the law. Specifically, when the taxpayer abstains from reporting his/her actual income from labor or other investments which in principle is taxable, such a person is said to be engaging in an illegal activity that makes him liable to administrative or legal action from the tax establishments. In evading taxes, one is more concerned about the likelihood of his/her actions being discovered. On the other hand, Kay (1980) is of the opinion that tax avoidance happens when the realities of the exchange are conceded. However, its been organized or exhibited in a manner that the successive assessment treatment contrasts from that proposed by the pertinent enactment. According to Abdul (2014), tax avoidance occurs when citizens lessen their tax liabilities by taking advantage of the loopholes in tax laws. Tax avoidance is considered legal, but not in its entirety. This is because it is not completely regarded as fraught with illegal activities like fraud, concealment and misrepresentation. Tax avoidance is in contradiction of the main essence of the law owing to the fact that taxpayers fail to comply with its provisions. One major reason adduced to this is to the fact that tax avoidance usually occurs in those areas where the law is vague and needs to be translated and interpreted by decision of the tax authorities.

Consequent upon the above submissions, it can be opined that tax evasion is a criminal offense by taxpayers since persons who are supposed to pay taxes do not pay

accordingly in view of their income. However, tax avoidance is the action under the tax law whereby taxpayers have used legal loopholes to pay less tax. Thus, the overarching difference between them is the legality of the taxpayer's action (Fagbemi, Uadiale & Noah, 2010).

2.3 Studies on Tax Evasion

A myriad of empirical endeavors have been done with specific focus on tax evasion. These studies however examine tax evasion from the point of view of public finance or economics. The seminal study of Allingham and Sandmo (1972) could be referred to for early studies on tax evasion. This was in a seminal article titled "Income Tax Evasion: A Theoretical Analysis". After this study, a large number of empirical contributions have been so added with different directional views. In the study by Allingham and Sandmo (1972), they noted a positive significant relationship between tax rates and evasion. This finding is in tandem with the results of Chipeta (2002) who suggested various antecedents of tax evasion. Firstly, it was noted that tax rates on income earners have a direct significant influence on the propensity to evade tax. It was additionally noted that the higher the tax rate, the higher the chances of evasion due to increases in their tax burden and hence reduces their disposable income. Secondly, the likelihood of being identified upon evading taxes also spurs the decision of a taxpayer on whether to evade or not. This is in direct relation to the level of the strictness of enforcement of tax laws (Allingham & Sandmo, 1972; Chipeta, 2002).

Yitzhaki (1974) analysed that there is a positive relationship between probability of detection, rate of penalty and reported income. More so, Azhar (1996) identified some important causes of tax evasion and suggested measures to address them while discussing some conceptual issues on tax evasion. Tanzi (1983) also suggested that in the shadow economy transactions which are mainly made in cash in order to conceal their tax obligations. Etzioni (1986) established that the foremost reason of tax evasion in USA is the notion that taxes are imbalanced. Franzoni (1998) however opined that tax evasion is an intricate phenomenon that can be overcome by bringing changes in social and moral behavior. Houston & Tran (2001) in their studies suggested that there is a negative statistical relationship between education and tax evasion. They further noted that self-employed persons are culprits in evading tax much more than ordinary employees. Molero & Pujol (2004) in their study suggested two new factors of tax evasion as guilt and shame. McGee & Smith (2006) in their research authenticated the various arguments and submissions on tax evasion. Alm & Martinez-Vazquez (2007) in a similar vein discussed the structured features of tax system, weak tax enforcement capacity, corruption, presence of informal sector in the economy and attempted to show a relationship between the informal sector and the fiscal gap. McGee & Noronha (2008) in their research on the ethical aspects of tax evasion submitted that there is a general people-based perception who noted that tax evasion is unethical and that there is a generally believed notion that tax evasion is justified in certain circumstances.

The study by Chandarasorn (2012) on tax compliance in Thailand used two research methods in a survey of 1,148 citizens in Bangkok and interviews with 15 Thai tax

experts suggested that significant determinants of tax compliance behavior in Thailand are: enforcement perceptions, fairness of the tax system perceptions, tax knowledge, and demographic characteristics, which confirm that both the traditional utility maximization and the alternative behavioral approaches are necessary for understanding tax compliance issues.

Gallkiew (1985) conducted a study on the “Problems and Propositions to Improve Direct Tax Administration in Thailand: Income Tax from Personal Service”. Questionnaires, interviews, and observation including documentary analysis for research method were used to identify four problems for personal income taxes in Thailand. The problems are noted are, low standard of education of taxpayers, negative attitude of taxpayers toward the government and the Revenue Department, ambiguity of the Revenue Code, and inefficiency in tax administration of the Revenue Department. Machamnean’s study on Anti-Avoidance Tax Measure (1999) recommends the introduction of statutory general anti-avoidance measures instead of using interpretation from the Supreme Court’s decisions. Machamnean’s suggestions are highly relevant within the context of studies on tax evasion. This is because it is better to prevent a problem before it happens. The remaining problems will be what should be stated in those measures. Machamnean recommended looking at taxpayers’ evasion actions, which result in the shift of tax burden. He also suggested the Revenue Department to announce regulations, explanations, and discussion about anti-avoidance tax measures to the public and allow disputes from related occupational organizations. Chanarong’s study in Thailand Chanarong on Anti-Tax Evasion Measures Related with Establishment of an Ordinary

Partnership or a Non-Juristic Body of Persons (2009) submitted that the amendment of the Revenue Code and associated regulations to inhibit the abuse of tax units in reducing tax burden. This is to be done by filing personal income taxes as an ordinary partnership or a non-juristic body of persons instead of individuals.

Interestingly, two seminal studies exist within the Thai context on issues relating to tax evasion. Firstly, McGee (2006) conducted a survey among Thai accounting students to get their opinion on issues relating to tax evasion. Four hypotheses were suggested in that study. They are the average respondent will be of the opinion that evading tax is sometimes ethical; tax evasion will be more conventional when the statement refers to government corruption; opposition to tax evasion will be strongest in situations portending that taxpayers are getting some kick backs in return for their money, or in situations where it is believed that there is a duty to other taxpayers to pay taxes, even if there may not be a duty to government; and females will be more strongly opposed to tax evasion than males. Analysis of the data collected showed a significant statistical support for all four hypotheses. Another interesting finding is that the respondents are of the opinion that tax evasion is more acceptable as a result of the inherent corruption in the government system and also as a result of unfair tax system. On a relational note, McGee (2006) noted that similar studies conducted in other developing countries like Guatemala, Romania, and among some international business professors showed similar results. It is in view of this that he drew his conclusions that the attitude toward tax evasion is similar across cultural and geographical differences. However, McGee's study

reflects only opinion on tax evasion from a small group of accounting students, which could not represent the attitudes of a larger Thai taxpayers' population.

Fagbemi, Uadiale and Noah (2010) study on The Ethics of Tax Evasion: Perceptual Evidence from Nigeria. They study made use of statistical test for population means and level of significance tests to evaluate the hypotheses formulated for the study. The study shows that the hypothesis that tax evasion is ethical sometimes is not accepted. The study also found that the level of tax evasion when government is corrupt is significantly higher than when it relates to other views expressed on government discrimination, unjust treatment and tax affordability. There are indications from the study that the various arguments that respondents gave to justify tax evasion include government corruption, unfair treatment of citizens, tax affordability and unfavourable tax system. They stated that the responsiveness of government in terms of accountability, human right treatment and optimal tax rate play a significant role in the payment of taxes

2.4 Relationship Between Tax Evasion and the Independent Variable

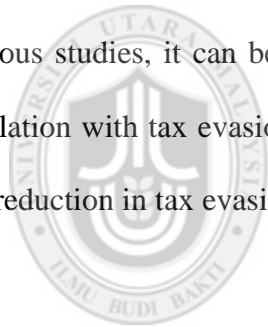
The essence of examining the relationship between the independent variable with tax evasion is to ascertain the reasons why Thai citizens evade paying taxes. The present research will try to understand how the following factors has a relationship to tax evasion; fairness of tax system, tax rate, penalty rate, corruption, level of education, and level of income. Six of the above mentioned variables have been used to conduct research within the context of the present study

2.4.1 Fairness of Tax System

The sensitivities of fairness of the tax system affect tax compliance. Slemrod (2007) suggests perceptions of the fairness of the tax system play a role in tax compliance demeanour. If tax system is perceived as fair, the social norms against tax evasion will be restored. Tax evasion then becomes more costly by incurring a higher stake of deplorable reputation if caught and lamentable conscience if not caught. In other words, tax compliance should be higher with a fairer tax system that led the society to perceive eschewing tax is a lamentable thing to do. According to Tyler (1997, p.1), due to the procedural fairness of the tax system, people are made to feel obligated to abide by the law. This is because it is legitimate and obedience to statutes and laws are paramount. In seeing that all citizens are treated equally, the tax system must be seen as fair to all irrespective of creed, ethnicity of socio-cultural and economic background. This will lead to the social norm of tax system to be positively skewed in manners that will be against tax evasion and also to restore the confidence from the performance of the government (Hanousek & Palda, 2004; Slemrod, 2003; Togler, 2003). Procedural fairness in tax systems and government administration lead people to believe that fair procedures will lead to fair distribution (Thibaut & Walker, 1975).

McGee (2006) argues that it is possible to reduce the degree of tax evasion. He suggested that this can be done through a reduction in corruption in the government system and eventually reducing the perceived unfairness of the tax system. His submissions come from the survey conducted among a group of accounting students at Thammasat University in Bangkok. An instrument consisting of 18 statements reflects

on the ethics of tax evasion. It was submitted that arguments against tax evasion is weakest in cases where the government is corrupt or where the system is perceived as being unfair. Chandarasorn (2012) also study the behavior of taxpayer in Thailand and used fairness of tax system as an independent variable in an attempt to understand the causes and problems of evasive behavior in the country. She found that fairness of tax system positively affected future tax compliance behavior. Other empirical endeavours that submitted that fairness of tax system and government greatly influences the decision of tax evasion are also important to note (Ritsema, Thomas and Gary, 2003; McGee and Ho, 2006; McGee and Rossi, 2006; McGee and Bose, 2007; McGee and 23 Lingle, 2006; McGee and An, 2007). Based on the above, and in view of the findings of the previous studies, it can be opined here that fairness of tax system will have a positive correlation with tax evasion in Thailand. That is, when the tax system is fair, there will be a reduction in tax evasion rates.



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2.4.2 Tax Rate

Clotfelter (1983) submitted that the relationship between tax rates and tax evasion is significant. This is because tax rates are very important measures that can be used to influence policy goals and because such rate changes may have a significant effect on evasion. In the study by Tanzi (1980) on the underground economy in the United States, it was submitted that tax rates are positively associated with currency holdings, thus providing empirical support for the conception that evasion rises with marginal tax rates. Other empirical studies conducted that focused on the relationship between tax rate and tax evasion are, Slehat (2009), and Gurama (2014). According to Alm (1999, p. 753),

empirical findings suggest that higher tax rates lead to less compliance with underreported income-tax rate elasticity ranging from -0.5 to -3.0. This could mean that higher tax rates increase the gains from cheating of the compliance lottery view.

However, it does not make much sense to lower marginal tax rates in order to reduce tax evasion. Allingham and Sandmo (1972) are of the opinion that, maximization of expected utility implies that evasion will tend to increase with marginal tax rates for risk-neutral individuals. Also, he found that the relationship between tax rates and evasion is positive. However, it was noted that this relationship is dependent on particular assumptions of risk aversion and the punishment for evasion. James and Moses (2012) in their studies reported a positive relationship does exist between tax rate and tax evasion. In a similar vein, Yitzhaki (1974) in their summary of the analysis of the Allingham-Sandmo tax rate model noted that tax rates has a substitution effect favoring evasion and an income effect discouraging it and that the net effect is however uncertain.

However, it is believed that high tax rates cause tax evasion will affect the behavior of taxpayers (Clotfelter, 1983; Bruce, 2000; McGee & Ho, 2006; McGee & Rossi, 2006; McGee & Lingle 2006; Gupta, 2008; Hammar, Jagers & Nordblom., 2009).

2.4.3 Penalty rate

A myriad of empirical endeavours have sought to test the vailidity of the four parameter standard model of income tax evasion since it was first proposed by Allingham and Sandmo(1972). The parameters are, level of actual income, tax rate, audit probability

and penalty rate. In a similar vein, Allingham and Sandmo (1972) in their submissions argued that a reduction in the size of tax evasion is due to an increase in the penalty. This is owed to the fact that if the penalty increases the number of taxpayers trying to who hide their income and declare in essence their actual income will eventually reduce. Alm (1999, p. 756) reports that compliance increases only slightly with an increase in penalty rate i.e. the income-fine rate elasticity of less than 0.1. However, Kirchler, Muehlbacher, Kastlunger and Wahl (2007) opined that numerous studies found no support for the increase of tax compliance from higher penalties. On another note, Devos (2008) suggested that rather than monetary penalty or court conviction, jail time and media exposure would change taxpaying behavior. Consequently, Bayer and Sutter (2009) in their submission noted that government should focus more on tax rates instead of penalties for evading taxes. This is proposed to reducing tax enforcement costs. They further argued that tax rates characteristically will lead to more tax evasion, while the impact of fines are insignificant. In view of this, the focus on fair tax system can provide more efficiency in reducing tax evasion.

According to Mikesell and Birskyte (2007, p. 1064), the effect on compliance of penalties is much lower than audit rates. Two major reasons adduced for this are, first, socio-political constraints vis-à-vis imposition of high penalties. Secondly, the effectiveness of penalties are dependent only when accompanied with higher probability of audits. Therefore, the impact of increasing fine rates may not have any significant impact if the tax authority does not enforce those penalties more strictly. Furthermore,

from the responsible taxpayer view, higher penalties might not always yield positive outcomes and could discourage voluntary compliance.

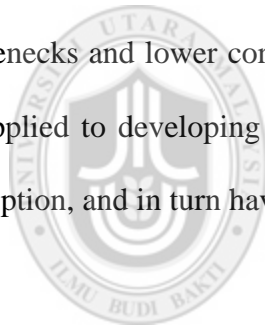
2.4.4 Corruption

Tax evasion is regarded as a display of corrupt behavior in itself. However, within the context of this study, corruption is to be seen as a bribe taken by a government official. Tax evasion is as an illegal act carried out to avoid paying taxes and by violating tax laws. Akdede (2006) found that the size of bribe so given and taken can affect tax evasion negatively. It is noted that when a bribe is sufficiently large, taxpayers prefer to pay their taxes voluntarily, not to evade taxes. Amal, Iraand Omkar (1998) conducted a study on the behavior of tax revenue net of collection costs in a government of widespread administrative corruption. Specifically they examined the possibility of a 'Laffer curve' type of outcome in such a setting. They argue that in a corrupt tax administration a rise in tax rate sets about complicated strategic moves by both taxpayers and administrators. They further noted that if tax and fine rates positively influence the level of corruption in the administration, these outcomes become more likely. In a similar study by McGee (2006) the respondents are of the opinion that tax evasion is more acceptable in the case of governmental corruption and unfair tax system.

Acconcia, Amat and Martina (2003) examined the relationships between evasions, corruption and monitoring. Their results suggested that an increase in the fines decreases tax evasion while the effect on corruption was unclear. Akdede (2006) in his submission noted that the size of bribe can negatively affect tax evasion. He further submitted that

when a bribe is sufficiently large, taxpayers are susceptible to paying their taxes voluntarily, and not to evade taxes. It is clear that when there is an increase corruption rates and amounts, their will be a corresponding increase in the ability of the tax officials to accept the bribes from the taxpayer increase, if there is no suitable reward for the tax officials to detect the evasion.

However, in the study investigating the relationships between the size of bureaucracy and tax compliance situation and the level of corruption and tax compliance, it was noted that tax compliance is positively related to the level of bureaucracy and negatively related to the level of corruption (Riahi-Belkaoui, 2008). In other words, smaller bottlenecks and lower corruption are associated with higher tax compliance. That could be applied to developing countries, which usually have bigger bureaucracy and higher corruption, and in turn have lower tax compliance.

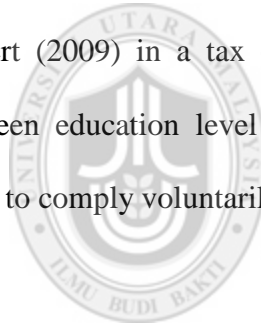


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2.4.5 Level of Education

There are a myriad of empirical endeavours that sought to understand the relationship between education level and tax evasion. Some studies will now be examined in relation to the above submissions. For example, Gallkiew (1985) explored problems in direct tax administration in Thailand. Using a well-structured questionnaire and distributed among 230 people in Bangkok and the metropolitan area, he found that people failed to file income tax proceeds because of low standard of education. His study also found support based on expert interviews conducted among 8 different people with varying levels of education. In a similar vein, Chandarasorn (2012) argues that there is no tax education in

the Thailand's curricula. Consequently, it is in place to assume that some taxpayers might not have sufficient tax knowledge, hence it is expected that tax knowledge would lead to an increase tax compliance in Thailand. In her studies, she found that education had a positively significant effect on past tax compliance behavior. People with higher education are equipped with more knowledge and skills to file tax returns more accurately. They are also more educated to the extent that they know that paying tax is a duty as citizens of a country. On another note, some studies did not find positive significant relationships with respect to tax evasion and income level. For example, Lutfi, (2009) on causes of tax evasion, in Yemen and Peter and Efiatoh (2013) found negative relationship between tax evasion and income level. On the otherhand, Ranjana and Robert (2009) in a tax evasion in NewZealand found a non-conclusive relationship between education level and tax evasion. Taxpayer knowledge therefore, influences them to comply voluntarily or otherwise.



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2.4.6 Level of Income

The level of income has a significant effect on tax compliance. Alm and McKee (1992) reported that higher income leads to higher reported income, with estimated reported income-income elasticity between 0 and 1 based on research evidences and roughly three quarter in experimental results. They found that there is a positive relationship between income level of taxpayers and tax evasion. Seren and Panades (2007) reported a positive relationship between income and non-compliance. As the level of income increase, there should be a corresponding increase in tax rate. This may in turn encourage taxpayer to avoid high layer rate by hide some of their income to shift for less

layer rate. However, Kirchler, et al. (2007) in a review of various findings on the relationship between actual income and tax compliance found that the findings are mixed. Some reported a positive relationship between actual income and tax compliance (Alm et al., 1992; Christian, 1994; Fishlow & Friedman, 1994) while others reported a negative relationship (Baldry, 1987; Collins & Plumlee, 1991; Slemrod, 1985) or no relationship (See Feinstein, 1991; Kirchler, et al., 2007).

In studying the determinants of tax evasion, some important factors that affect tax compliance are, fairness of tax system, tax rate, penalty rate, corruption, level of education, and level of income toward tax administration, tax rates, actual income levels, and demographic characteristics. More attention was given to enforcement through audits and penalties, in which many scholars studied the effects of the probability of audits and fines on tax evasion. Although less attention was given to incentives and softer motivational strategies such as making the tax system fair and convenient to improve tax compliance, it is on the rising trend. Nonetheless, there is limited comprehensive study about these determinants in Thailand. It is on this basis that this study was carried out to understand further issues related to factors that influence or causes tax evasion in Thailand.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents a discussion of the research methodology. Specifically discussed are theoretical framework, hypotheses, research design, method of data collection, questionnaire design, source of data collection, population of the study, sampling technique, variable measurement, pilot test, analysis technique, model specification and conclusion.

3.2 Theoretical Framework

Tax evasion is a problem in many countries, and many governments are poised to solve this problem. Based on a thorough review of relevant conceptual and empirical literature on tax evasion, a theoretical framework was developed to understand the reasons for the occurrence of tax evasion. Jackson and Milliron (1986) in their review of taxpayer compliance literature have identified 14 key variables commonly addressed by researchers. These variables are categorised into four types: demographic (e.g., age, gender), those that proxy for non-compliance behavior (e.g., education, income level, income source, and occupation), attitudinal (e.g., ethics, perceived fairness of the tax system, peer influence), and structural (e.g., complexity of the tax system, IRS contact, sanctions, detection probability, and tax rates). Thus, in these past researches, not only economic variables were included but sociological and psychological variables were

also incorporated. The econometric tax evasion models by Allingham and Sandmo 1972 and Srinivasan (1973) have been quoted and used in many tax evasion studies. These econometric models assume that taxpayers are rational, expected utility - maximizers, making decisions under uncertainty, In these models, taxpayers are assumed to be fully aware of different policy variables. These policy variables include tax rate, penalty rate, and probability of audit. Therefore, taxpayers' uncertainty as to their compliance decisions arises mainly due to lack of knowledge concerning whether their returns will be subsequently audited (Trivedi, 1997).

These researches are related to the causes of tax evasion in the south of Thailand. The dependent variable used in this research is tax evasion. The independent variables which are capable of affecting or explaining tax evasion as it relates to the present study are, tax system, tax rate, penalty rate, corruption, level of education, and level of income. Figure 3.1 illustrates the relationship between the independent variables and the dependent variable.

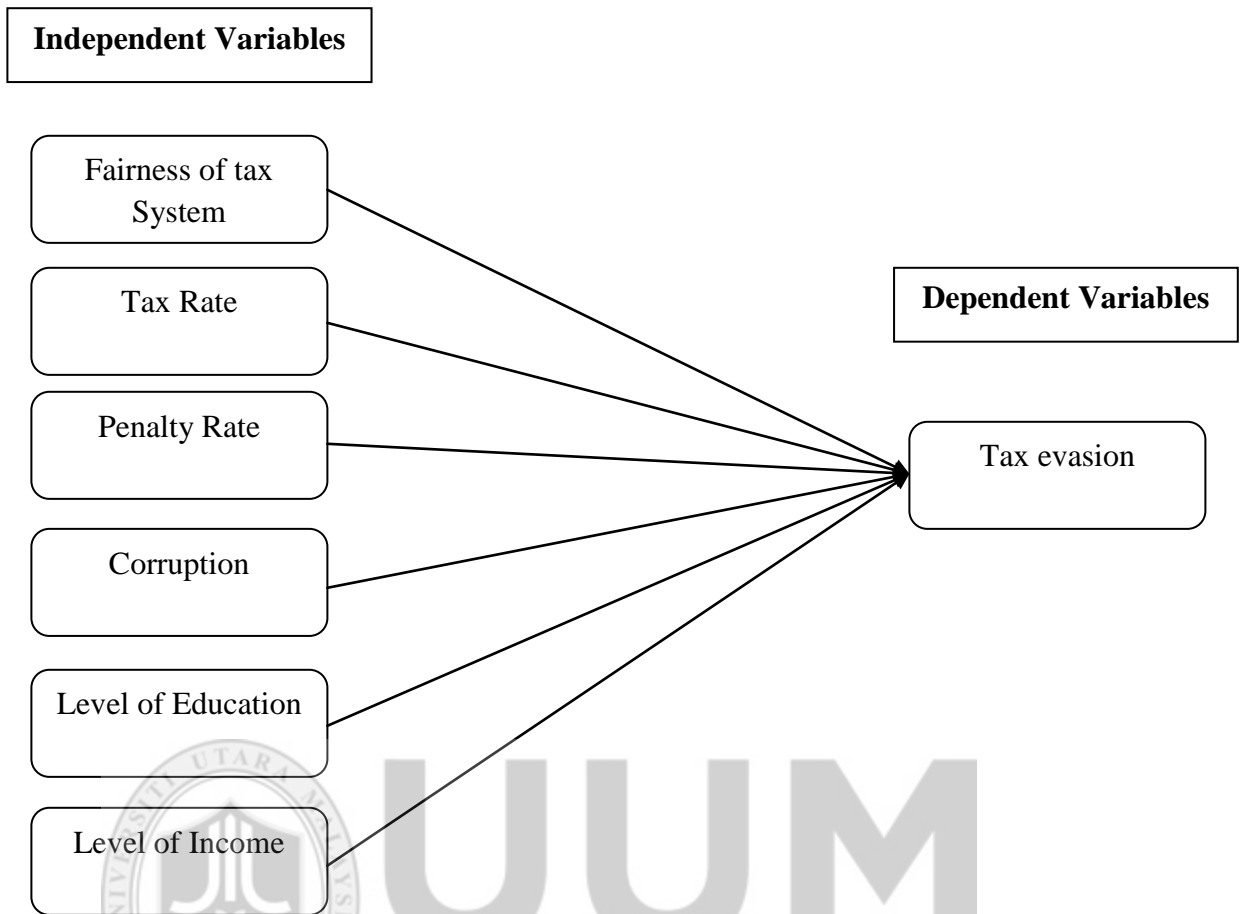


Figure 3.1

Research Frameworks for the Relationship between Variables

3.3 Hypotheses Development

In this study, fairness of tax system, tax rate, penalty rate, corruption, level of education, and level of income are the independent variables while tax evasion is the dependent variable.

3.3.1 Fairness of Tax System

Behavioral models of tax evasion, particularly noted that the perceptions of fairness of tax system affect tax compliance (Slemrod, 2007). Moreover, Chandarasorn (2012) found that the fairness of tax system positively affected future tax compliance behavior. By implication, there is a relationship between fairness of tax system and tax evasion. Similar studies in this regards are Etzioni 1986; Pirttila 1999; Torgler, 2004; McGee and Ho, 2006; McGee and Rossi, 2006; McGee and Bose, 2007; McGee and Lingle, 2006; McGee and An, 2007; Cummings, Martinez-Vazquez, McGee, and Torgler, 2009.

However, studies have proven that people evade taxes when they perceive that they are being treated unfairly (Webley et al., 1991, Cowell, 1992; Richardson, 2006). Perceptions about fairness in tax systems includes, among others, whether the rich pay a fair share, whether taxpayers should be taxed from their own earning, whether the tax rate is too high, and whether taxpayers think others evade taxes. If a tax system is perceived to be fair, the social norms against tax evasion will be strengthened. In other words, tax evasion would become a less acceptable social behavior (Chandarasorn, 2012). Thus, the hypothesis for this variable is as follows.

H₁: There is a negative relationship between fairness of tax system and tax evasion.

3.3.2 Tax Rate

Allingham and Sandmo (1972) found that the relationship between tax rates and evasion is positive. Clotfelter (1983) also found that there is a positive relationship between tax rate and tax evasion. On a related note, McGee and Ho (2006), McGee and Rossi (2006) confirmed that tax rate has a positive effect on tax evasion. What this portends is that there is a relationship between tax rates and tax evasion. On a rather different note, Kirchler (2009) found that tax rate has an ambiguous effect on tax evasion, however, it is dependent on taxpayers risk preference.

Supporters of a flat tax rate structure generally adopt the above logic. They argue that the incentive to evade will be substantially reduced by eliminating the progressive rate structure (Gutmann, 1977, p.5; Clotfelter, 1983, p. 372). In addition, according to Clotfelter's (1983) econometric analysis of Taxpayer Compliance Measurement Program (TCMP) data indicates that evasion is directly related to tax rates. Spicer and Becker (1980) found that tax rate is the most significant factors to tax evasion when the sample of the study was told that their tax rate is higher than any normal taxpayer. On another note, Lewis (1978) suggested that a whole lot of taxpayers are unaware of their marginal tax rate. If rate misperceptions are a norm, the innate appeal regarding this factor is considerably diminished. It may be clear that high tax rate would influence the decision of taxpayers. Thus, the hypothesis for this variable is as follows

H₂: There is a positive relationship between tax rates and tax evasion.

3.3.3 Penalty Rate

Penalties and punishments play very critical roles in stopping all acts that are illegal in nature for example, crimes. Researchers believe that tax evasion is a financial crime. This is because it is a violation of a country's tax laws and eventual loss or reduction of government revenue. In view of this, it is strongly suggested that tax evaders be punished in accordance with the law. Based on the above, a study by Abdul and Hannan (2014) opined that penalty rate should drastically reduce tax evasion. On another note, Allingham and Sandmo (2009) stated that the option of taxpayer to comply with tax laws is not dependent upon the probability of being detected and punished. Relatively, Slemrod (2007) noted that the probability of being caught and the severity of penalties influenced tax evasion. Compliance with tax law is, therefore, as a result of punishment and of treat of detection, and the effect of penalty rate, all put together to discourage tax evasion (Becker, 1968). Allingham and Sandmo (1972) reported that an increase in the penalty rate will reduce the rate of tax evasion. This means, there is a significant relationship between penalty rate and tax evasion. In the same manner, MacCaleb (1976), Witte and Woodbury (1985), Gupta (2008), Yaniv (2009), Cummings, et al. (2009), Kirchler (2009) reported that high penalty rate play a significant role in reducing tax evasion and eventually led to high compliance rate amongst tax payers. On another note, Scholz and Lubell's (2001) research indicated a significantly lower level of cooperation of taxpayers after higher penalties were introduced. Thus, the hypothesis for this variable is as follows:

H₃: There is a negative relationship between penalty rate and tax evasion.

3.3.4 Corruption

Corruption is not an emerging phenomenon in the global business environment. This is because it can give a negative impact to public or private organizations. Previous studies have indicated that corruption plays a key role in determining payment of taxes, as companies and individuals have not been forthright in payment of their taxes. (Akinyomi & Okpala, 2013). Consequently, taxpayers are of the view that the high level of corruption among the tax personnel, inefficient tax system and administration has led to encouraging tax payers at both the corporate and individual levels to hide their income and thus fall into the trap of tax evasion (Wadhwa & Pal, 2012). However, Tijani and Mathias (2013), discovered a negative relationship between tax evasion and corruption. What this implies is that there is an interrelated relationship between corruption and tax evasion among the taxpayers.

In addition, Wadhwa and Pal (2012) reported that 60% of the respondents in their study suggested that corruption in tax administration is the main cause of tax evasion in India. However, Tijani and Mathias (2013) found that there is a negative relationship between corruption and tax evasion. More so, Transparency International's 2014 noted that Thailand is ranked 85th in the Corruption Perception Index (Transparency International, 2014). This rank is based on a survey of 175 countries. In June 2014, the Prime Minister of Thailand, Prayut Chan-o-cha, declared a "war on corruption" (Declaration of Prime Minister of Thailand, 2014). Having made the issues of corruption one of the focus areas of his leadership. While making a presentation during his weekly TV program "Returning Happiness to the People", he described corruption as "deeply-rooted" in the

Thai society. In view of the above, it will not be out of place to suggest that corruption may influence tax evasion in Thailand. Thus, the hypothesis for this variable is as follows:

H₄: There is a positive relationship between corruption and tax evasion.

3.3.5 Level of Education

Level of education is a compliance factor, and it has to do with the ability of a taxpayer ability to comprehend and comply or not comply with the income tax laws (Jackson & Milliron, 1986). A few studies have been able to link between the level of education and tax evasion (McGee & Rossi, 2006; McGee & Bose, 2007). Specifically, Chandarasorn (2012) found that there is a statistically significant relationship between level of education and tax evasion. Park and Hyun (2003) recommended that tax education is one of the most important mechanisms that can be used to acquaint taxpayers from a non-compliance behavior. However, Houston and Tran (2001) reported a negative relationship between level of education and tax evasion. Also, Torgler (2002) stated that level of education does not have any role to play in the decision making process of a person about evading tax or not. Thus, the effect of education is ambiguous. However, highly educated people may be better informed about tax law and evasion Chandarasorn (2012). Thus, the hypothesis for this study is:

H₅: There is a positive relationship between level of education and tax evasion.

3.3.6 Level of Income

Middle income taxpayers are most compliant, while low and high level income taxpayers is relatively noncompliant to tax related matters (Witte & Woodbury, 1985). Moreover, they found that there is no significant relationship between level of income and tax evasion. John & Slemrod (2008) stated that taxpayers with a low income have the highest possibility in evading taxes. Collins and Plumlee (1991) on another note submitted that there is negative relationship between income level and tax compliance.

On the other hand, other studies such as Alm et al., 1992; Bashar et al., 2008; Christian, 1994; Devos, 2006; Fishlow & Friedman, 1994; Nor Aziah et al., 2011; Nor Ghani et al., 2012 reported that level of income have a positive relationship with tax evasion. They concluded that high income earnings that come from misconstrued and fraudulent sources encourage underreporting and increase evasion. Therefore, the hypothesis for this variable is as follows:

H₆: There is a negative relationship between level of income and tax evasion.

3.4 Research Design

The present study used quantitative research approach. It is a cross-sectional study in the data is collected and analyzed at a point of time only. Furthermore, questionnaire was used for data collection to help understand the relationship between the independent and dependent variables based on the responses from the target respondents. The use of questionnaire is one of the most important tools in a quantitative based research, as this

will help in gathering responses from target respondents within a short period of time (Sekaran, 2003). Besides, the advantage of using survey for collecting data is in view of the fact that the researcher can collect data by self-administration or by the use of research assistants. This eventually helps douse the issues of low validity and reliability. Analysis of the data so collected is also made easy and results therefrom can also be interpreted easily (Ackroyd, & Hughes, 1981).

3.5 Method of Data Collection

Data was collected through the use of self-report questionnaires that has been distributed by drop-off and pick-up method. According to Schermerhorn (2004) questionnaire not only low in cost but also will lead to more openness and truthful responses. This study has collected data through a survey using a cross-sectional method.

3.6 Questionnaire Design

The questionnaire used for the present study was structured in a way that the questions are closed-ended. This approach was used so that responses can be straight forward and easy to analyse since it is a quantitative study. The items representing each of the variables were adapted from previous studies (Chandarasorn, 2012 and Slehat, 2009) and modified accordingly to suit the present study. Section A and B relate to the information concerning the independent variables. Section C consists of the questions on dependent variable. The respondents were mostly asked for their opinions on a five-

point Likert scale under various circumstances according to the hypotheses. The questionnaires consist of 22 items. The questionnaire is attached here with as Appendix C.

3.7 Source of Data Collection

The questionnaire was drafted in English and translated into Thai language by a language expert in both language. The survey is in Thai for ease of communication. The Thai version is as shown in Appendix B. The questionnaire was distributed to employees in a public universities who have duty to pay taxes in Songkhla and Hat Yai.

Even though, there had 79 of public universities in Thailand according to Ministry of education of Thailand, this research is focusing on the public university in southern Thailand which is Songkhla. This is because Songkhla is one of Thailand's main economic stay and education centre of seven southern province (Congchan, 2012). Songkhla had four universities whereby three of the universities are public universities and one is private university. It can be said that the majority of taxpayer among the universities staff in Songkhla came from the public universities.

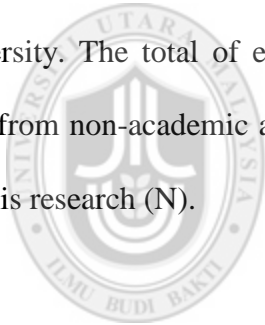
Prior to administering the questionnaire, the researcher contacted the Human Resource representatives of each university and explained to the important and essence of the research. This made the data collection process easy. Data was eventually collected in October 2015 within a 3 weeks period. The researcher obtained the completed questionnaire by hand from the respondents. A total of 361 questionnaires were

distributed to three universities in Songkhla and Hat Yai that agreed to participate in this study. A total number of 200 questionnaires representing about 55.40% of the sample were duly completed.

3.8 Population and Sampling

3.8.1 Population

Population refers to the entire group of people, events, or things that the researcher wishes to investigate (Sekaran, 2003). The population of this research is all staff working at Prince of Songkhla university, Thaksin University and Songkhla rajabhat university. The total of employee working at three universities is 6,000 including all staff from non-academic and academic staff which are representing the total population for this research (N).



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3.8.2 Sampling

According to the table for determining sample size suggested by Sahu (2013). for the population of 6,000 the sample size 361 is needed to represent the population. Because of the sample size for this researcher is small and target respondent is from various department in the organization, the researcher decided to use disproportional stratified simple random sampling.

Proportionate formula:

Multiply the group number by sample size and divide by the total number of population
 = Total Number of Respondents.

Table 3.1

Disproportionate Stratified Simple Random Sampling

Name of University	Number of Staffs	Proportionate (%)	Total number of Respondents
Prince of Songkla University	2,149	$2,149/6,000 = 36$	$36\% \times 361 = 130$
Thaksin University	2,001	$2,001/6,000 = 33$	$33\% \times 361 = 119$
Songkhla Rajabhat University	1,850	$1,850/6,000 = 31$	$31\% \times 361 = 112$
TOTAL	6,000	100	361

Table 3.2

Total number of distributed and received questionnaires

Name of University	Distributed	Received
Prince of Songkla University	130	90
Thaksin University	119	60
Songkhla Rajabhat University	112	50
TOTAL	361	200

3.9 Variables Measurement

The aim of this study is to determine the factors that influence tax evasion in Thailand. As noted in the previous sections, the present study will use a questionnaire in collecting data. The measures for the variables were adapted from past studies and adjusted to suit

the present study. These measurements are explained according to the sections in the questionnaire.

SECTION A

This section is made up of 17 items spread among the independent variables of fairness of tax system, tax rate, penalty rate, and corruption. These questions were adapted from Chandarasorn (2012) and Slehat (2009). Five points Likert scal of 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, 5= strongly agree was used. Items in this section are stated as below.

Table 3.3
Questions for Factors that Contribute to Tax Evasion

3.2.1 Fairness of Tax System

Variable	Items
Fairness of Tax Evasion	<ol style="list-style-type: none"> 1. Unfairness of tax imposing administration causes tax evasion. 2. Even if the tax imposing administration is fair the people still evade tax. 3. Not filing taxes or filing taxes lower than actual obligation because of unfairness of the tax system is acceptable in Thai society. 4. Not filing taxes or filing taxes lower than actual obligation because of unfairness of tax system is unacceptable in Thai society.

Source: Chandarasorn (2012) and Slehat (2009)

3.2.2 Tax Rate

Variable	Items
Tax rate	<ol style="list-style-type: none">1. Tax evasion will happen if the personal income tax rates are too high.2. Tax evasion still happens even if the personal income tax rates are low.3. They think that it is worth to evade taxes if the tax rates are high.4. They think that it is worth to evade taxes even if the tax rate is low

Source: Chandarasorn (2012) and Slehat (2009)

3.2.3 Penalty Rate

Variable	Items
Penalty rate	<ol style="list-style-type: none">1. Tax evasion will happen if the current penalties are too low to make the people obey tax laws.2. Tax evasion still happens even if the current penalties are strict to make the people obey tax laws.3. Tax evasion will happen if there is not enough enforcement despite the existing tax laws.4. They have the right to evade tax when they get a chance to do it

Source: Chandarasorn (2012) and Slehat (2009)

3.2.4 Corruption

Variable	Items
Corruption	<ol style="list-style-type: none"><li data-bbox="678 432 1471 512">1. Tax evasion will happen if there is too high corruption of the government or politicians.<li data-bbox="678 533 1471 613">2. Tax evasion still happens even if there is little corruption of the government or politicians.<li data-bbox="678 634 1471 714">3. Tax evasion will happen when the government taking personal gains against taxpayer's money<li data-bbox="678 735 1471 814">4. Tax evasion still happens even if the money to be collected is used wisely without corruption.<li data-bbox="678 835 1471 915">5. They think that because of corruption they have the rights to evade tax.

Source: Chandarasorn (2012) and Slehat (2009)

SECTION B

Section B elicits information on level of education and level of income to determine the relationship between independent variables and the dependent variable. The level of education variable is adopted from Chandarasorn (2012) and level of income variable is based on personal income tax rates in Thailand.

Table 3.4

Variables that Contribute to Tax Evasion

3.3.1 Level of Education

Variable	Items
Level of Education	Primary school or lower, Secondary school, Two-year College's degree, Bachelor, Master, Ph.D./Doctorate or higher

Source: Chandarasorn (2012)

3.3.2 Level of Income

Variable	Items
Level of Income	<ul style="list-style-type: none"> - Below 150,000 Baht (approximately 12,500 Baht/month) - 150,001-300,000 Baht (approximately 12,500 – 25,000 Baht/month) - 300,000-500,000 Baht (approximately 25,000 – 41,500 Baht/month) - 500,001-750,000 Baht (approximately 41,500 – 62,500 Baht/month) - 750,001-1,000,000 Baht (approximately 62,500 – 83,000 Baht/month) - 1,000,000-2,000,000 Baht (approximately 83,000 – 166,500 Baht/month) - 2,000,001-4,000,000 Baht (approximately 166,500 – 333,300 Baht/month) - Over 4,000,001 Baht and over (approximately 333,300 Baht/month)

Source: Chandarasorn (2012)

SECTION C

Dependent Variable

Section C consists of the questions related to dependent variable i.e. tax evasion. Three measures were used to define tax evasion. First, the percentage of Thai taxpayers who evade tax. Second, the acceptance level percentage of tax evasion in Thailand. Third, the percentage of the level of tax evasion in Thailand. For the three measurements, the scale from 1 - 100% was used. This measurement was assigned into ten groups which had the following nominal values: Value 1 from 1- 10%, Value 2 from 11 – 20%, Value 3 from 21 – 30%, Value 4 from 31 – 40%, Value 5 from 41 – 50%, Value 6 from 51 - 60%, Value 7 from 61 – 70%, Value 8 from 71 – 80%, Value 9 from 81 – 90%, Value 10 from 91 – 100%. The measurement was adapted from Alm and Torgler (2006) and Slehat (2009).

3.10 Pilot Test

The researcher conducted pilot test before conducting the actual data collection for this study. The purpose of conducting the pilot test is to identify the problems or constraints that the respondents might likely to encounter in understanding the contents of the questionnaire and whether the questionnaire makes sense. For the pre-test, the researcher distributed the questionnaires to three Thai students in Universiti Utara Malaysia. Upon completing the questionnaire, the feedback received from the respondents are that the questionnaire is too sensitive to Thai people (see the old questionnaire in Appendix A). The old questionnaire is developed from previous study in Jordan and Nigeria (Gurama,

2014; Slehat, 2009). Based on the response from the pre-test, the questionnaires were reworded. After the changes have been made as show in Appendix C, the researcher proceeded to do the pilot test.

In the pilot test, a sample of 30 Thai students participated. The Cronbach Alpha was used to certain the reliability of the constructs. After conducting the pilot test, it was found that the Cronbach’s Alpha value of all the variables are acceptable as they range from 0.706 to 0.859 (see Appendix D). The results are shown in Table 3.4.

Table 3.5

Reliability Results of Each Variable

Variable	No. of items	Reliability Cronbachs’ Alpha
Tax Evasion	3	.859
Fairness of Tax System	4	.734
Tax Rate	4	.706
Penalty rate	5	.739
Corruption	4	.835

3.11 Data Analysis Techniques

The statistical package for the social sciences (SPSS version 20) was used to analyse the data collected from the respondents. There are many techniques employed in the analysis, namely, screening the data before data analysis and selecting the appropriate

data analysis (Sekaran, 2003). Data screening was performed to identify data entry errors and to examine how appropriately the data meets the statistical assumptions which involves missing data, treating outliers, descriptive statistics of variables, normality linearity, homoscedasticity, independence of error, and multicollinearity.

3.11.1 Data Screening

Data screening was carried out to ensure that the results of the analysis are valid (Meyers, Gamst, & Guarino, 2012). Data screening process contains a number of steps in order to ensure that the characteristic of data may not negatively influence the results.

3.11.2 Missing Data

Checking for missing data is an essential step before testing the collected data. This process involve referring to cases where one or more variables are mistakenly entered or are not available for data analysis (Hair, Anderson, Babin, & Black, 2010). It is considered an important part before data analysis since data is often riddled with mistakes and data entry errors which completely affect the analysis results (Hair et al., 2010; Pallant, 2013). Prior to examining the research hypothesis, variables were tested for accuracy of missing values, data entry and satisfaction of the assumptions for multivariate analysis.

3.11.3 Treatment of Outliers

Treatment of outliers is an essential step after treating missing data as it will affect the result of any data analysis (Sekaran & Bougie, 2013). There are many reasons for noticing outliers which has the capability of skewing the results of a study. In the present study, 11 questionnaires has outliers issues. They were identified and removed before the final analysis.

3.11.4 Normality

It is a statistical technique that shows the shape of the distribution of the sample. It is one of the initial steps and fundamental assumption for multivariate techniques such as multiple regressions. The aim of the normality test is to ensure that the data is normally distributed. There are two common techniques used to describe the distribution of a data set, namely, skewness and kurtosis. The closer the values of these components to zero, the more the data are normally distributed (Hair et al., 2010).

3.11.5 Linearity

Linearity, which refers to the linear relationships of variables, is a statistical technique that tests the extent of change in independent variable is linked with the dependent variable. According to Hair et al. (2010), Meyers et al. (2012), and Pallant (2013), one of the ways of assessing the linearity is to run the regression and examine the residual value (scatterplots). By looking at the residual plots from the SPSS result, it indicates linearity when the plots are close to the diagonal line (Pallant, 2013).

3.11.6 Multicollinearity

Multicollinearity indicates the situation in which the independent variables are extremely correlated to one another (Sekaran & Bougie, 2013). According to Sekaran and Bougie (2013), correlation values of any study must be under the threshold of 0.70 while any correlation values that is higher than 0.70 indicates the presence of multicollinearity.

There are two measures for examining multicollinearity namely, (i) tolerance (R) value and (ii) variance inflation factor (VIF) value where the recommended value of tolerance is 0.10 and for VIF are 10 (Sekaran & Bougie, 2013; Hair et al., 2010).

3.12 Model specification and analysis

Multiple regression was run for the purpose of the present study. For the purpose of measurement, the value of the independent variables and the nominal values were assigned.. In this study, the following multiple regression models were applied:

$$\text{TE} = \beta_0 + \beta_1\text{fairness} + \beta_2\text{rate} + \beta_3\text{penalty} + \beta_4\text{corruption} + \beta_5\text{education} + \beta_6\text{income} + E$$

Where,

TE= tax evasion

fairness = fairness of tax system

rate = tax rate

penalty = penalty rate

corruption= corruption

education = level of education

income = level of income

β_0 = variables that are held constant

E = other variables which are not tested in this study

3.13 Conclusion

The present chapter has specifically discussed the methodology of the study. The next chapter will explain the results from data analysis of the research.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter discusses the finding or the result obtained from the analysis using SPSS version 20. Specifically, this chapter explains the results of data screening, respondents profile, reliability analysis, descriptive statistics and results of the hypotheses testing. As explained in the previous chapter, data screening is the steps taken to ensure that the characteristic of data may not relatively influence the results of study.

4.2 Data Screening

4.2.1 Missing Data

A frequency test has been carried out for every variable to detect any missing responses. According to this, the returned questionnaires were found to be no missing responses except for Section C (tax evasion). A reviewed of the data set showed that there were complete responses in section A (factors associated with tax evasion) and B (respondents background) of the questionnaires. On the other hand, there were missing answer on Section C item 1 (4 missings), item 2 (5 missings) and item 3 (3 missings). See Appendix E

4.2.2 Outlier Detection

Outlier is another essential step in the data screening process which have high influence on the result of any statistical data analysis. Hence, the use of any multivariate technique calls for the identification and treatment of outliers in the responses (Hair et al., 2010). The Mahalanobis distance were examined through Boxplot. According to Pallant (2013), IBM SPSS define points as outliers first, if it appears as little circle with a number attached (ID number of the case) which means it extend 1.5 box length from the edge of the box. Second, extreme points indicated with an asterisk, (*) that extend more than three box-lengths from the edge of the box. Outlier results show 11 data sets involve in this study (see figure 4.1). If points appear like this, researcher has to decide what to do with them subjectively (Pallant, 2013). These data sets have to be discarded because it is possible that these respondents might have misinterpreted the instructions that may lead to inaccurate findings (Bhatti, Hee and Sundram, 2012). However, if the researcher feels that the data set is very important for the research, it can remain for analysis (Hair et al., 2006; Pallant, 2013). For this study, the researcher subjectively removes four data sets for accurate findings. Figure 4.1 shows the result for Mahalanobis distance.

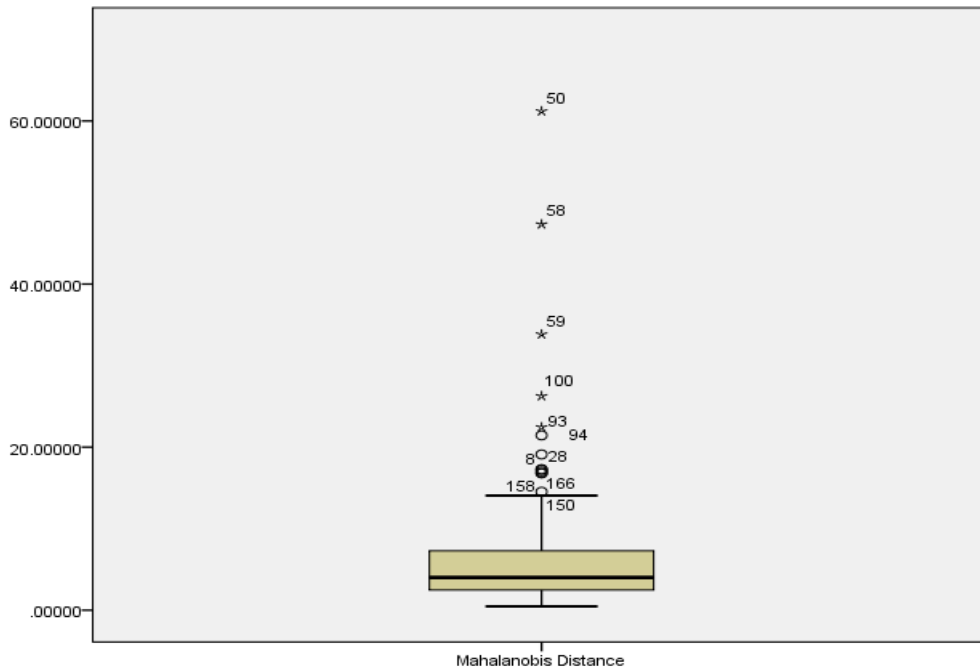


Figure 4.1

The Result for Mahalanobis Distance

4.2.3 Response Rate

Three hundred sixty one (361) questionnaires were distributed to taxpayers in Songkhla and Hat Yai. Out of 361 questionnaires, 200 were returned making the response rate of 55.40%. After a thorough checking of the questionnaire that returned, it shows that only 189 were useable for analysis.

Out of 189 questionnaires, there were some incomplete, misinterpreted or fill in with mistakes. Hence, the useable response rate is 52.35% which is considered acceptable.

Table 4.1 shows the response rate and useable questionnaire for this research. According to Sekaran (2006) the response rate of 30% is acceptable for surveys.

Table 4.1

Summary of the total questionnaires and the response rate

The sample size of the study	361
Returned questionnaire	200
Returned and usable questionnaire	189
Returned and unusable questionnaire	11
Non – returned questionnaire	181
Response rate	55.40 %
Usable response rate	52.35%

4.2.4 Normality Test

Normality is the fundamental assumption for multivariate techniques such as multiple regressions, indicating to the shape of the distribution of the data for an individual metric variable and it's identical to the normal distribution. Hair et al., (2006) said that normality as the benchmark for statistical approach. The difference in the normal distribution is supposed to be small. For the large variation, this will cause all statistical measurement resulting from the analysis to be invalidated (Hair et al., 2006).

There are many ways one could test the data distribution if it deviates from the normal distribution. One of these is Normal Q-Q plot is referred to distinguish the normality of the data. Data that has achieved the normal distribution on a normal probability plot (see appendix E) will align the plots in a straight line (Coakes & Steed, 2003). Skewness and

kurtosis however are the most popular way to use by many researchers for describing the shape of the data distribution.

Skewness is an indicator that shows to what extent a distribution of data leans from the center (symmetry) around the mean (George & Mallery, 2006). According to Hair et al., (2006), values of skewness that are outside the range of +1 to -1 imply a substantially skewed distribution. In this study, the skewness values has been investigated and found that all variables are within the +1 to -1 limit.

Kurtosis is a test of flatness or peakedness of data distribution. Negative values for kurtosis refer to shape flatter than normal while the positive value for the kurtosis refers to the data distribution more peaked than normal (George & Mallery, 2006). Similar to skewness measurements, kurtosis is considered within a normal range if it computes anywhere between +1 to -1 (George & Mallery, 2006). However, it was also recommended by Coakes and Steed (2003) that Kurtosis is acceptable to be at range of +3 to -3. Kurtosis has been investigated and found that all variables are within the +3 to -3 limit (see appendix E). Table 4.2 illustrates the skewness and kurtosis of each variable.

Table 4.2

Summary of Skewness and Kurtosis value of the variables

Variables	Skewness		Kurtosis	
	Statistics	Std. Error	Statistics	Std. Error
Fairness of Tax System	-.189	.177	1.186	.352
Tax Rate	-.257	.177	.284	.352
Penalty Rate	-.178	.177	-.385	.352
Corruption	.000	.177	-.213	.352
Tax Evasion	-.007	.178	-.548	.352

4.2.5 Testing the Linearity, Homoscedasticity and the Independence Errors

This study investigates the homoscedasticity, linearity and the independence of the errors through the examining of the scatterplot of the residuals.

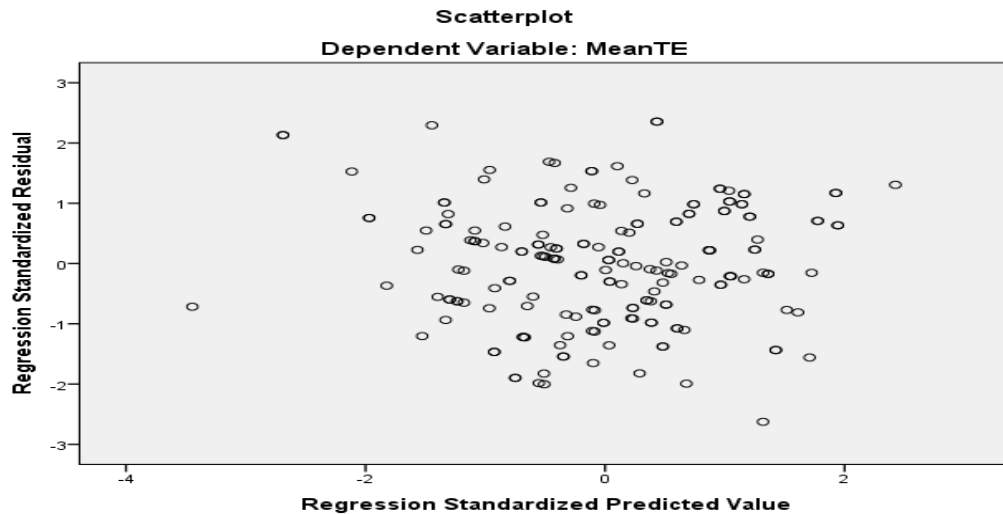


Figure 4.2

Scatterplot of the residuals (Dependent Variable: Tax Evasion)

The scatterplot in the figure 4.2 shows there is no clear relationship between the residual and the predicted value. In view of the suggestion of Hair et al., (2010), since the scatterplot showed no clear relationship between residuals and predicted values, it confirms the assumption of homoscedasticity, linearity and the independence of residuals.

4.2.6 Multicollinearity

Multicollinearity appears when any individual predictor variable is highly correlated with another group of predictor variables (Mayer, 1999). Base on the multiple regression analysis as illustrated in table 4.3, the results show that the tolerance value range between .371 to .824, and the variance inflation factor (VIF) value was ranging from 1.213 to 2.698 (see appendix I). Showing that the tolerance value is substantially greater

than 0.10 and the VIF is less than 10, it can be concluded that there are no multicollinearity among the variables.

Table 4.3

Testing for Multicollinearity on assessment of tolerance and VIF values

Variables	Tolerance	VIF
Fairness of Tax System	.549	1.820
Tax Rate	.616	1.625
Penalty Rate	.371	2.698
Corruption	.449	2.227
Level of Income	.824	1.213
Level of Education	.801	1.248

4.3 Respondents Profile

This part of this chapter shows the background of the demographic profile of the respondents who is involved in the current study. It is important and useful aspect to understand the segmentation of the data. The respondents profile includes level of education and level of income. Table 4.4 shows the details of the demographic profiles of the respondents.

Table 4.4

Demographic Profile of the Respondents

Profile	Frequency	Percentage
Level of Education		
Primary school or lower	0	0
Secondary school	13	6.9
Two-year College's degree	11	5.8
Bachelor	142	75.1
Master	22	11.6
Ph.D./Doctorate or higher	1	0.5
Annual Gross Income		
Below 150,000 Baht	36	19
150,001-300,000 Baht	124	65.6
300,000-500,000 Baht	26	13.8
500,001-750,000 Baht	3	1.6
750,001-1,000,000 Baht	0	0
1,000,000-2,000,000 Baht	0	0
2,000,001- 4,000,000 Baht	0	0
Over 4,000,001 Baht	0	0

Table 4.4 shows that majority of the respondents obtained Bachelor (75%) followed by master degree, secondary school, two year college degree, PhD and primary school. Moreover, in terms of annual gross income, 65% of the respondents earned 150,001-300,000 Baht annually.

4.4 Reliability Analysis

Reliability is defined as to what extent the measurement is free from error. The reliability analysis procedure provides information about the relationships among individual items in the scale and their internal consistency. There are many approaches for assessing the reliability such as test-retest, alternative forms and alpha coefficient also known as Cronbach's Alpha.

A value less than 0.6 are considered unsatisfactory internal consistency reliability, whereas a value exceeding 0.6 is acceptable reliability, and those over 0.8 are good. Thus, the higher the Alpha value or closer the reliability coefficient to 1.0 the higher the reliability of the measurement of items will be. In this study, all the findings resulting from reliability analysis range from .66 to .84. The variable demonstrate acceptable value as presented in table 4.5 and the Alpha value are greater than 0.7, see Appendix G. These findings indicate that all the variables demonstrate good reliability.

Table 4.5

Results of reliability analysis and variance extracted for study variables

Variable	No. of items	Reliability Cronbachs' Alpha
Tax Evasion	3	.843
Fairness of Tax System	4	.686
Tax Rate	4	.666
Penalty Rate	5	.752
Corruption	4	.666

4.5 Descriptive Statistics

In order to examine the relationship of each of the construct variables (dependent and independent), descriptive statistics, such as mean and standard deviation were used as a way of clarification. The mean value of the variables was obtained by measures on a five point Likert scale in which the greater the number of the said five point Likert scale, the greater the goodness will be for each variable. Values nearer to five are considered better, while values close to zero are considered bad. A score equal or more than 4 show a high agreement with particular criterion; a score equal; or less than 2 were considered as low, and mean score of 3 was considered as a moderate agreement. On the other hand, for the tax evasion (dependent varaibale), the mean value were obtain by measures of by 10%. Therefore, 100% are considered high while closer to 10% considered low. A descriptive analysis of all five variables is illustrated in table 4.6 the calculated values are as shown in appendix F.

Table 4.6

Descriptive Statistics for Variables

N	Component	Mean	Standard Deviation
189	Fairness of Tax System	3.3957	.64118
189	Tax Rate	3.3583	.72074
189	Penalty Rate	3.6973	.73363
189	Corruption	3.5762	.70416

Table 4.6 illustrates the mean and standard deviation of the variables model. For this study, the mean value is generally moderate in nature respectively. The mean score for fairness of tax system, tax rate, penalties, corruptions and ranging from 3.35 to 3.69 which indicates moderate agreements. On the other hand, the mean for tax evasion is above 5.1996 and considered as moderate.

The standard deviation ranging .64 to 2.03, those values imply that there is variability in answering the questionnaire among the respondents. In other words, the answers of the respondents are somehow different from one respondent to another.

4.6 Hypothesis Testing Procedure

The hypothesis testing procedure is divided into two essential parts. The first part is where the researcher examined the relationships among the variables being used in this study. The second part involves a technique used to explore the predictive ability of a set of independent variables on one continuous dependent variable. The following subsection provides further explanations of the two techniques being used and their importance for this study.

4.6.1 Pearson Correlation

Pearson correlation is a technique that is used to describe the strength of the relationship between two continuous variables. This gives an indication of the direction (whether it is positive or negative) as well as the strength of the relationship (Pallant, 2013). Simple

bivariate correlation is also known as zero-order correlation and is the most common test of linear relationship and describes coefficients with a range of possible values from +1 to -1. The value of zero implies that there is no correlation between the two variables at all, while a value closer to +1 or to -1 implies a better correlation. The perfect correlation is +1 or -1 which indicates that value of one variable can be determined precisely by knowing the value of the other variable.

A significance of $p=.05$ is generally accepted value to support hypothesis. It means that 95 items out of 100, a researcher can be sure that there is a true significant correlation between the two variables. On the other hand, there is only 5 % chance that the relationship does not truly exist. Therefore, in this study, the researcher assessed the correlation between two variables to examine a hypothesis indicating a significant positive relationship. According to Ajzen and Fishbein (1980), in social science, the r value that is greater than .20 is considered satisfactory and .30 to .50 are considered moderate correlation while those values that are larger than .50 reflect a strong correlation.

4.6.2 Regression Analysis

Regression analysis is a flexible and powerful analysis for determining the associative relationship between a dependent variable and one or more independent variables. In other words, it is used to predict the dependency of one variable on the values of the other variable (Malhotra and Stanton, 2004). There are two kinds of regressions which are simple and multiple regressions.

4.6.2.1 Multiple Regression

Multiple regression is a procedure that includes one dependent variable with two or more independent variables. In other words, the test is used to assess simultaneous impact of many independent variables on a dependent variable. This procedure helps the researcher to understand how much of the variance in the dependent variable is interpreted by a set of independent variables (Cavana *et al.*, 2001).

Based on the research questions, the research hypothesized are as follows:

H1. There is a negative relationship between fairness of tax system and tax evasion.

H2. There is a positive relationship between tax rate and tax evasion.

H3. There is a negative relationship between penalty rate and tax evasion.

H4. There is a positive relationship between corruption and tax evasion.

H5. There is a positive relationship between level of education and tax evasion.

H6. There is a negative relationship between level of income and tax evasion.

The construct variables were subjected to both correlation and multiple regression, whereas the study applied regression to tax evasion as dependent variable and fairness of tax system, tax rate, penalties, corruptions, level of education and annual gross income as independent variables.

Table 4.7

Correlation among construct variables

Variables	DV	IV1	IV2	IV3	IV4	IV5	IV6
DV-Tax Evasion	1						
IV1-Fairness of tax system	.305**	1					
IV2-Tax rate	.260**	.450**	1				
IV3-Penalty Rate	.327**	.616**	.592**	1			
IV4-Corruption	.388**	.569**	.502**	.726**	1		
IV5-Level of Education	.087**	.053	.099	.119	.110	1	
IV6-Level of Income	.069**	.035	-.054	.074	.091	.393*	1

** . Correlation is significant at the 0.01 level (2-tailed)

According to the result of the correlation conducted on the six dimensions which are the determinants of the tax evasion, it is evident that the findings show that the six dimensions are significant and positively correlated and expected a positive direction with the tax evasion at confidence level of 99% ($p < 0.01$). The variables fairness of tax system ($r = .305$, $p < 0.01$), tax rate ($r = .260$, $p < 0.01$), penalties ($r = .327$, $p < 0.01$), corruption ($r = .388$, $p < 0.01$). It was shown that corruption is the most highly correlated with the tax evasion followed in order by penalties, fairness of tax system and tax rate. On the other hand, for the selected demographic background of the respondents as an independent variables shows a positive and significant relationship but weak.

The multiple regressions was carried out to determine the independent variables as well as contribution of these dimensions; fairness of tax system, tax rate, penalties, corruption, level of education and annual gross income in predicting tax evasion as dependent variable. The findings of multiple regressions (see appendix H) based on statistics assessment are illustrated in table 4.8 and 4.9

Table 4.8

Summary of the Regression Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.655 ^a	.429	.393	.38781

a. Predictors: (Constant), fairness of tax system, tax rate, penalty rate, corruption, level of education, level of income

b. Dependent Variable: Tax evasion

The results as measured by which indicate the effect of the independent variables over the dependent variable. This explains the independent variable value of 0.429 variance in tax evasion as depicted in Table above. The adjusted R square of 39.3% indicates that the variables in this study contributed 39.3% in determining their relationship with tax evasion. The value of R square is between 0.0 and 1.0. Since the R square were not near 1.0 a low level of multicollinearity was indicated but a low R square still reveals that the predictor variable is significant in accounting for a percentage of variance, though that amount is small (Lewis-Beck, 1980).

Table 4.9

Summary of multiple regression results

Model	Unstandardized		Standardized	T	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	.023	1.115		.020	.984
Fairness of Tax System	.279	.291	.088	.957	.340
Tax Rate	.181	.245	.064	.742	.459
Penalty Rate	.078	.310	.028	.252	.802
Corruptions	.808	.293	.280	2.757	.006
Level of Education	.062	.227	.021	.274	.784
Level of Income	.100	.249	.030	.401	.689

a. Dependent Variable: Tax Evasion

Hypothesis 1 unstandardized coefficient beta (β) for fairness of tax system .279 showing that there is a positive relationship between fairness of tax system and tax evasion. The value of $P = .340$ and $t = 957$ is positive, and thus, rejected research hypothesis one (H1) that states “There is a negative relationship between fairness of tax system and tax evasion.

Hypothesis 2 stated that “there is a positive relationship between tax rate and tax evasion. Based on the analysis, results shows a positive relationship between tax rate and tax evasion with a unstandardized coefficient beta (β) of .181, $P = .459$ and t-value of .742, and therefore it supports t hypothesis 2 (H2).

Hypothesis 3 unstandardized coefficient beta (β) for penalties .078 showing that there is a positive relationship between penalty rate and tax evasion. The value of $P = .802$ and $t = 252$ is positive, and thus, rejected research hypothesis three (H3) that states “There is a negative relationship between penalties and tax evasion.

Hypothesis 4 stated that “there is a positive relationship between corruptions and tax evasion. Based on the analysis, results shows a positive and significant relationship between corruption and tax evasion with a unstandardized coefficient beta (β) of .808, $P = .006$ and t-value of 2.757, and therefore it supports hypothesis 4 (H4).

Hypothesis 5 and Hypothesis 6 unstandardized coefficient beta (β) for level of education and annual gross income is .062 and .100 respectively showing that there is a positive relationship between level of education, annual gross income and tax evasion. The value positive of $P = .784$ and .689 respectively while the t value is .274 and .401 respectively, and thus, accepted research hypothesis five (H5) that states “There is a positive relationship between level of education and tax evasion while rejected hypothesis 6 (H6) that’s states “there is a negative relationship between level of income and tax evasion. The result of hypothesis testing of determinants construct is summarized below in table 4.10

Table 4.10

Summary of hypotheses testing results from multiple regression analysis

No	Hypotheses	Results
H1	There is a negative relationship between fairness of tax system and tax evasion.	Not Supported
H2	There is a positive relationship between tax rate and tax evasion.	Supported
H3	There is a negative relationship penalty rate and tax evasion.	Not Supported
H4	There is a positive relationship between corruption and tax evasion.	Supported
H5	There is a positive relationship between level of education and tax evasion.	Supported
H6	There is a negative relationship between level of income and tax evasion.	Not Supported

4.7 Chapter Summary

The data used in this study was obtained from 189 respondents which represented a response rate of 49.6% and several tests were used to analyze the data. Normality test was carried out and showed that the variables are normally distributed. All variables obtained reliable Cronbach's alpha which gives support to the internal consistency of the study. To determine the strength of the relationship between the variables, Pearson correlation was used. Multiple regression analysis was also conducted to determine the independent relations as well as the contribution of IV's in predicting tax evasion as dependent variable. The next chapter will discuss and conclude the findings of the study.

CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.1 Introduction

This chapter summarizes and discusses the result of the examination of the relationship between the independent variables (fairness of tax system, tax rate, penalty rate, corruption, level of education, level of income) and the dependent variable i.e. tax evasion. This chapter begins with a recapitulation of the study followed by discussion regarding findings and the implication and direction for future research. This chapter ends with the conclusion of the study.

5.2 Recapitulation of the Study

This study examined the relationship between the independent variables (fairness of tax system, tax rate, penalty rate, corruption, level of education, and level of income) and the dependant variable which is tax evasion. Data was collected from three public universities in South of Thailand. Three hundred eighty-one (381) questionnaires were distributed and 200 were returned (52.49%). After a thorough check of the returned questionnaires only 189 (49.6%) were usable for analysis.

The objective of this study is to examine the relationship between tax evasion and six identified determinant variables. This objective was achieved by empirical analysis. Similarly, the research questions of the study have been answered as the relationship between the variables were established and confirmed by the findings. The level of tax

evasion was also measured and confirmed by the result as discussed in Chapter Four of this study. Therefore, both the research objectives and research questions have been addressed.

The research had been set up to accomplish the following particular objectives:

1. To examine the relationship between fairness of tax system perception and tax evasion in Thailand.
2. To examine the relationship between tax rates and tax evasion in Thailand.
3. To examine the relationship between penalty rate and tax evasion in Thailand.
4. To examine the relationship between corruption and tax evasion in Thailand.
5. To examine the relationship between level of education and tax evasion in Thailand.
6. To examine the relationship between level of income and tax evasion in Thailand.

5.3 Discussions

The purpose of this study was to examine the relationship of the variables that influence to tax evasion. The following sections explain the relationship between independent variables with tax evasion based on the finding of this study.

5.3.1 Fairness of Tax System and Tax Evasion

The first research question deals with the relationship between fairness of tax system and tax evasion. Accordingly, hypothesis one (H1) states, “There is a negative relationship between fairness of tax system and tax evasion”. In contrast, the finding of this dimension had a positive relationship with tax evasion ($\beta=.279$), and thus, rejected research hypothesis one (H1).

In addition, this study does not support the study of Lutfi (2009), Mughal and Akram (2012), Fakile and Uwuigbe (2012) who confirms the tax system have a negative relationship with tax evasion. Also, the result of Chandarasorn (2012) showed that enforcement perception, fairness of tax system were critical determinants of tax compliance. On the other hand, the result of this study significant with Slehat (2009) states that, there is positive relationship between fairness of tax system and tax evasion. Also, this means the taxpayers' perception of the tax system shows some level of concern whether fairness of tax system is efficient and effective when reporting their income for tax purposes.

5.3.2 Tax Rate and Tax Evasion

The second research question deals with the relationship between tax rate and tax evasion. Hypothesis two (H2) is stated as “There is a positive relationship between tax rate and tax evasion”. From the result obtained in the previous chapter, it appears that tax rate has a positive relationship with tax evasion with a unstandardized coefficient

beta (β) of .181, $P=459$ and t-value of .742, and therefore it supports the hypothesis 2 (H2).

The result of this study is similar to Gurama (2014), McGee and Ho (2006), McGee and Rossi (2006), Slehat (2009) that provide evidence on the positive relationship between tax rate and tax evasion. Therefore, the current study's result shows that there is a positive relationship between tax rate and tax evasion. This means that Thai taxpayers are more concerned about the rate of their taxes in their tax evasion behaviour.

5.3.3 Penalty Rate and Tax Evasion

The third research question deals with the relationship between penalty rate and tax evasion. Accordingly, hypothesis three (H3) states that "There is a negative relationship between penalty rate and tax evasion". The findings show that it has a positive relationship (unstandardized coefficient beta (β) for penalties .078). Therefore, it does not support H3. This might be due the reason that the taxpayers are not afraid of the current penalties because they believe the penalties are not strong enough in skewing their behaviors to or not to evade taxes (Chandarasorn, 2012).

According to Gupta (2008), Cummings, et al. (2009), Kirchler (2009) Slehat (2009), Yaniv (2009), stated that high penalty rate will play a significant role in reducing the tax evasion and eventually increase tax compliance.

5.3.4 Corruption and Tax Evasion

The fourth research question deals with the relationship between corruption and tax evasion. Hypothesis four (H4) states that “There is a positive relationship between corruption and tax evasion”. The study found that there is a positive relationship between corruptions and tax evasion. Based on the analysis, results show a positive and significant relationship between corruption and tax evasion with a unstandardized coefficient beta (β) of .808, $P=.006$ and t-value of 2.757, and therefore it supports the hypothesis 4 (H4).

The finding shows a positive and significant relationship between corruption and tax evasion. The result is supported by Akinyomi and Okpala (2013), Gurama (2014), and Slehat (2009). This means that the level of corruption is affecting tax evasion. The higher the corruption in the tax authorities, the more taxpayers will evade taxes.

5.3.5 Level of Education and Tax Evasion

The fifth research question deals with the relationship between level of education and tax evasion. Hypothesis five (H5) states that “There is a positive relationship between level of education and tax evasion”. The result of the analysis also shows that a positive association exists between the two variables (unstandardized coefficient beta (β) for level of education is .062) Therefore, accepted research hypothesis five (H5).

Park and Hyun (2003) recommended that tax education is one of the successful apparatus to acquaint taxpayers from a non-compliance behavior. Also, this finding is supported by Gurama (2014), and Slehat (2009).

The finding indicates that, when they have high knowledge or level of education is high, taxpayers understanding the tax laws will evade tax.

5.3.6 Level of Income and Tax Evasion

The sixth research question deals with the relationship between level of income and tax evasion. Hypothesis six (H6) states that “There is a negative relationship between level of income and tax evasion”. The findings of level of income revealed that it has a positive relationship between level of income and tax evasion (unstandardized coefficient beta (β) for level of income .100). Therefore, it does not support the H6. This means that if the level of income is higher, they may want to evade tax. In addition, this study does not support the study of Slemrod (2008) who state that there is negative relationship between income level and tax evasion. On the other hand, this findings is not support to Gurama (2009) who found that there is a positive significant relationship between level of income and tax evasion. The finding of the study was supported by previous studies of Alm and McKee (1992), Nor Aziah et al., (2006).

5.4 Theoretical Contribution

Previous studies had examined factors on tax compliance (Chandarasorn, 2012) and ethical on tax evasion (McGee, 2006), however, studies focusing on tax evasion among Thailand taxpayers are limited. Therefore, this study examines fairness of tax system, tax rate, penalty rate, corruption, level of education and level of income as factors in determining tax evasion in Thailand. This study examines the perceptions of actual taxpayers from southern Thailand related to tax evasion.

The contribution of this research from a theoretical perspective lies on determining the relationship of fairness of tax system, tax rates, penalty rate, corruption, level of education and level of income, which only one has the most significant influence on tax evasion. However, the results prove the association of the six dimensions to tax evasion. However, one of the dimensions that significantly influence tax evasion is corruption. In other context, the significance level may depend on and influence by other factors such as social, environmental, and political development of the country. However, the outcomes of the research show that all independent variables have positive relationships with tax evasion. However, the finding implies that the penalties are not strong enough, high corruption, high level of education and level of income contribute to the level of tax evasion in Thailand.

5.5 Practical Implication of the Study

From the findings of this study, it is suggested that tax evasion from Thai perspective affected the revenue of the government. In addition, findings from the study has also espoused the need for government to develop and implement more stringent enforcement strategies, tax system fairness strategies, as well as long term government administration strategies for voluntary compliance.

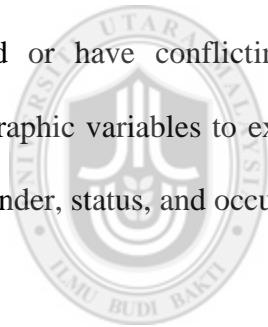
The results of the study are beneficial to practitioners in the areas of public administration and public finance in the sense that traditional utility maximization and the alternative behavioral approaches of tax compliance literature are both integrated to determine the critical determinants of tax evasion. Also, the results of the study are beneficial to the government and tax policy makers on taxpayer's perceptions related to the current tax administration system and personal income tax compliance including their tax evasion behaviors, determinants of tax evasion behavior, and strategies to decrease tax evasion. All the above findings are in line with making the Thai taxation system as effective and efficient as possible.

5.6 Limitation and Recommendation for Future Research

There are some limitations that were encountered in the course of carrying out the present study. First, due to time constraint, this study included only taxpayers in three public universities in Songkhla and Hat Yai. Although Songkhla and Hat Yai are two of the major cities in Thailand, future research could collect the data from all provinces to

reflect tax evasion perceptions of Thai taxpayers as a whole. This is true to the fact that the findings obtained from this study may not be generalized to the whole of Thailand. Second, as with other survey data, this study faces limitations from self-reporting data. The respondents may or may not tell the truth regarding their tax evasion behaviors and opinions. This might have led to some issues of non-response bias.

Lastly, this study only examined six independent variables in relation to tax evasion. This is due to the constraints faced by the author in terms of time limit to carry out this research as well as finances. Future research should consider other variables by increasing the number of independent variables to cover more aspect that have not been tested or have conflicting results. In addition, future research can include more geographic variables to examine whether they have any influence on tax evasion such as gender, status, and occupation.



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5.7 Conclusion

Tax evasion has long been a prevalent issue in many countries including Thailand whereas tax revenue is a major source of government income. If the citizens evade taxes, it will be a major loss to the government in terms of shortage in government revenue. This research was conducted to further prove the above point in order to bring to light the most important factors that are capable of reducing tax evasion within the Thai context. Only corruption has a positive significant relationship with tax evasion. This study recommends that the government should implement strategies to decrease tax

evasion in Thailand, which includes strengthening the tax administration to improve taxpayers' perceptions towards the tax authorities and the Government as a whole.



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