THE IMPACT OF CORPORATE GOVERNANCE CHARACTERISTIC ON TAX COMPLIANCE AMONG PUBLIC LISTED COMPANIES IN MALAYSIA

By

AZNIYATI BINTI MD RALIB

Research Paper Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
In Partial Fullfillment of the Requirement for the Master of Sciences
(International Accounting)

Pusat Pengajian Perakaunan
Tunku Puteri Intan Safinaz
TUNKU PUTERI INTAN SAFINAZ SCHOOL OF ACCOUNTANCY
Universiti Utara Malaysia

PERAKUAN KERJA KERTAS PENYELIDIKAN
(Certification of Research Paper)

Saya, mengaku bertandatangan, memperakukan bahawa
(I, the undersigned, certified that)
AZNIYATI MD RALIB @ MD RAGHIB (819505)

Calon untuk Ijazah Sarjana
(Candidate for the degree of)
MASTER OF SCIENCE (INTERNATIONAL ACCOUNTING)

telah mengemukakan kertas penyelidikan yang bertajuk
(has presented his/her research paper of the following title)

THE IMPACT OF CORPORATE GOVERNANCE CHARACTERISTIC ON TAX COMPLIANCE AMONG PLC IN MALAYSIA

Seperti yang tercatat di muka surat tajuk dan kulit kertas penyelidikan
(as it appears on the title page and front cover of the research paper)

Bahawa kertas penyelidikan tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan.
(that the research paper acceptable in the form and content and that a satisfactory knowledge of the field is covered by the research paper).

Nama Penyelia *(Name of Supervisor)* : DR. MOHD 'ATEF MD YUSOF

Tandatangan *(Signature)* :

DR. MOHD 'ATEF MD YUSOF
Senior Lecturer
UUM College of Business
Universiti Utara Malaysia

Tarikh *(Date)* : 28.8.18

PERMISSION TO USE

In presenting this project paper as a partial fulfilment of the requirements for a Post Graduate degree from the Universiti Utara Malaysia (UUM), I agree that the Library of this university may make it freely available for inspection. I further agree that permission for copying this dissertation/project paper in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor(s) or in their absence, by the Dean of Othman Yeop Abdullah Graduate School of Business where I did my project paper. It is understood that any copying or publication or use of this dissertation/project paper parts of it for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the UUM in any scholarly use which may be made of any material in my dissertation/project paper.

Request for permission to copy or to make other use of materials in this project paper in whole or in part should be addressed to:

Dean of Othman Yeop Abdullah Graduate School of Business
Universiti Utara Malaysia
06010 UUM Sintok
Kedah Darul Aman

ABSTRACT

Corporate income tax is the largest source of revenue to Inland Revenue Board of Malaysia (IRBM). Hence, the increase of tax non-compliance among corporate taxpayers concerns IRBM and tax authorities globally as the government loses its major revenue which adversely affects the economy. Tax evasion of large corporations using accounting manipulations implies the potential role of corporate governance against tax non-compliance. Therefore, this study attempts to determine the impact of corporate governance characteristic to tax compliance among corporate taxpayers specifically the public listed companies in Malaysia. This study was conducted on 111 tax audited cases of public listed company listed on the main market of Bursa Malaysia that had been finalised by IRBM for year of assessment 2013 and 2014. Data from their annual report were then used to determine the corporate governance characteristic of each public listed companies namely(1) board composition (2) independent director service tenure (3) separation of chairman and Chief Executive Officer (4) audit committee competency (5) non-audit service by external auditor and (6) sourcing internal audit function. Next, three models of tax compliance were developed specifically filing, reporting and payment compliance to better capture different compliance issues. Logistic regression results revealed that director service tenure has significant impact on tax compliance where public listed company with an independent director who have been in service for more than 9 years are more likely to be filing compliant. Whereas public listed company with an independent director who have been in service for less than 9 years are payment compliant. However, this study only sampled a small number of public listed companies. Therefore in order to generalize the findings due care should be exercised. This research findings contributes an added value to tax literature and tax authorities on the impact of corporate governance characteristic to specific type of tax compliance of public listed companies in Malaysia.

Keywords: corporate governance; public listed company, tax non-compliance, filing, reporting, payment

ABSTRAK

Cukai pendapatan korporat adalah sumber utama pendapatan Lembaga Hasil Dalam Negeri Malaysia (LHDNM). Oleh itu, peningkatan ketidakpatuhan cukai di kalangan pembayar cukai korporat membimbangkan LHDNM dan pihak berkuasa cukai di seluruh dunia kerana kerajaan kehilangan hasil utama yang memberi kesan negatif kepada ekonomi. Pelarian cukai oleh syarikat besar menggunakan manipulasi perakaunan menjadi petunjuk kepada potensi peranan urus tadbir korporat terhadap ketidakpatuhan cukai. Kajian ini dibuat untuk menentukan kesan tadbir urus korporat kepada kepatuhan cukai di kalangan pembayar cukai korporat ke atas 111 kes syarikat awam disenaraikan di papan utama Bursa Malaysia yang telah diaudit oleh LHDNM bagi tahun taksiran 2013 dan 2014. Data laporan tahunan digunakan untuk menentukan ciri tadbir urus korporat iaitu (1) komposisi lembaga pengarah (2) tempoh perkhidmatan pengarah bebas (3) pemisahan kuasa pengerusi dan ketua pegawai eksekutif (4) kecekapan jawatankuasa audit (5) perkhidmatan bukan audit oleh juruaudit luaran dan (6) sumber fungsi audit dalaman. Kemudian tiga model kepatuhan cukai dibangunkan iaitu pemfailan, pelaporan dan pematuhan pembayaran untuk mendapatkan gambaran isu pematuhan dengan lebih baik. Keputusan regresi logistik menunjukkan bahawa tempoh perkhidmatan pengarah bebas mempunyai kesan terhadap kepatuhan pengarah bebas di mana syarikat awam yang mempunyai pengarah bebas yang berkhidmat melebihi 9 tahun lebih cenderung untuk patuh kepada program penfailan borang cukai. Manakala syarikat awam yang mempunyai pengarah bebas yang berkhidmat kurang daripada 9 tahun lebih cenderung untuk patuh kepada pembayaran cukai. Walau bagaimanapun, kajian ini hanya merangkumi sebilangan kecil syarikat tersenarai awam dan tidak menggambarkan syarikat tersenarai awam secara keseluruhan. Oleh itu, penggunaan penemuan ini secara umum hendaklah secara berhati-hati. Penemuan penyelidikan ini menyumbang nilai tambah kepada kesusasteraan cukai dan pihak berkuasa cukai mengenai kesan ciri tadbir urus korporat kepada kategori tertentu pematuhan cukai oleh syarikat-syarikat tersenarai awam.

Kata kunci: tadbir urus korporat; syarikat tersenarai awam; ketidakpatuhan cukai, pemfailan, pelaporan, pematuhan bayaran

ACKNOWLEDGEMENTS

First and foremost, I am very grateful to my husband for his undertaking, love, patience and moral support during my course of studies.

I would like to express sincere appreciation to my supervisor, Dr Mohd 'Atef bin Md Yusof for his valuable assistance and guidance throughout the completion of this research paper. Special thanks to all lecturers and colleagues at University Utara Malaysia for their guidance and support throughout my Master journey.

I would also like to express my gratitude to the management of Inland Revenue Board of Malaysia and those involved directly or indirectly in assisting the completion of this research paper.

TABLE OF CONTENT

LIST OFTABLES

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ABBREVIATIONS

ATO	Australian Taxation Office
CEO	Chief Executive Officer
CIT	Corporate Income Tax
CMSA	Capital Market Services Act
ETR	Effective Tax Rate
FCCG	Finance Committee on Corporate Governance
GDP	Gross Domestic Product
INED	Independent Non-Executive Director
IRBM	Inland Revenue Board of Malaysia
ITA	Income Tax Act 1967
LR	Listing Requirements
MCCG	Malaysian Code on Corporate Governance
MIA	Malaysian Institute of Accountants
MSWG	Minority Shareholders Watchdog Group
OECD	Organisation for Economic Co-operation and Development
ROA	Return on Assets
SAS	Self-Assessment System
SC	Securities Commissioner
SPSS	Statistical Package for Social Science
STR	Statutory Tax Rate

CHAPTER ONE: INTRODUCTION

1.0 Background of the study

Taxation is one of the most important government tool to influence the country's economic growth and affect the company's economic activity (Romer & Romer, 2010). Both parties have conflicting interest where tax is a source of income for government while for companies, tax will reduce their net income (Mulyadi & Anwar, 2014). Recent development shows that companies no longer consider compliance function as their tax obligation (Desai & Dharmapala, 2006). This is due to the fact that taxes involves a great proportion of the company's earnings which will eventually reduce their profits (Annuar, Salihu, & Sheikh Obid, 2014). Despite the fact that there are strict laws in almost every country, companies would employ accountant, tax experts or using other means available to avoid paying high taxes (Schofield, 2015). According to Gomes (2015), companies would report a huge income but finding opportunities by way of reducing tax burden to increase the company value.

A country's economy could be impaired due to extensive effect of poor corporate governance through capital market effect and tax revenue consequences (Mohd. Amin, Md. Noor, Mastuki, & Ambali, 2011). The increase trend of accounting scandals involving large companies have shown the possibility to evade taxes using tax shelters and manipulate the accounting earnings at the same time (Desai & Dharmapala, 2009). Gary & Edmund (2002) pointed out that in Enron company case reported by Joint Committee on Taxation (JCT) of the US Congress, the manager act opportunistically for individual benefits rather than for stakeholders through the use of tax shelters in order to increase their accounting profits as well as reducing their taxable profits.

Despite of reporting US$159 billion book income, Enron did not make any payment of corporate tax in 1998 by using the tax benefits and loopholes to reduce the company's tax liability such as the creation of 692 subsidiaries in Cayman Island. This trend has been a concern to the government as tax management can be used as a tool to increase the company's performance which adversely reduce the government income. Therefore, the public authorities are in continuous battle to combat tax non-compliance through legislative reforms.

In order to understand the determinants of tax non-compliance on corporate taxpayers, several studies have been conducted worldwide. Previous studies by Desai, Dyck, & Zingales (2003), Tedds (2006), Sartori (2009), Mohd. Amin, Md. Noor, Mastuki, & Ambali (2011) suggested that there are significant impact of corporate governance on tax compliance. Corporate governance is a mechanism that control a company so it can run effectively in meeting both interest of external (government) and internal stakeholder (management) while taxes influence the company's financial decision making (Desai & Dharmapala, 2004). This implies that companies with good governance are more likely to have good internal control mechanism by producing high level of transparency and would indirectly prevent companies from conducting strategic tax avoidance or evasion (Desai & Dharmapala, 2007). Organisation for Economic Co-operation and Development (OECD) Countries in the Final Seoul Declaration has also emphasized the importance of corporate governance in deterring tax non-compliance behaviours (Sartori, 2009).

It is important to learn how corporate governance could mitigate the risks for tax non-compliance as it does provide some understanding on how to practice good corporate governance (Gomes, 2015). However, the quest to formulate the best corporate governance system that could increase tax compliance and prevent such scandal in future is an ongoing process (Desai, Dyck, & Zingales, 2003).

In Malaysia, regulatory framework on corporate governance for public listed companies are governed by the regulator and statutory bodies through law, code and regulatory requirements. Thus, in order to address the relationship between corporate governance and tax compliance, this paper attempts to study selected public listed company that were listed in the main market[1] of Bursa Malaysia with certain corporate governance characteristics and its corresponding level of tax compliance data that is filing, reporting and payment compliance. The tax compliance data were taken from Inland Revenue Board of Malaysia (IRBM) database which is not in public domain. The use of actual tax data would be beneficial as it will give clearer picture on type of corporate governance characteristic that have significant relationship with tax compliance so that policymakers would improve the existing techniques, rules and regulations using different aspect of corporate governance characteristic.

1.1 Problem statements

IRBM depends on corporate income tax (CIT) as the major source of revenue. In 2014, IRBM has collected RM6.948 billion of CIT which contributed 52 percent of the IRBM's tax collection (IRBM, 2014).

However based on the statistic in 2012 it was reported that there were 79,688 corporate tax audited cases were resolved resulting in an additional tax and penalty of RM1,591

[1] Public listed company can be categorised into (1) main market (2) ACE market and (3) LEAP market.

million, 83,093 tax audit cases in 2013 with additional tax and penalty of RM3,023 million whereas in 2014 it was reported that there were 98,615 corporate tax audited cases conducted and resolved, resulting in an additional tax and penalty of RM3,219 million (IRBM, 2014). The increase of cases and additional taxes and penalties discovered during tax audit shows the spreading of tax non-compliance activities and the total of corporate tax revenue loss in Malaysia which shown in Table 1-1 below.

Table 1-1
Corporate Tax Audit in Malaysia

	2014	2013	2012
No. of audit cases	98,615	83,093	79,688
Additional tax and penalty	RM3,219,000,000	RM3,023,000,000	RM1,591,000,000

Source: IRBM's internal statistics[2]

Although it is normally accepted that tax non-compliance exist in every country (Oh & Lim, 2011), the increase of tax non-compliance among corporate tax payers has always been a problem to the tax authorities as it represent serious revenue losses to the government and positively correlated with the level of economic activities (OECD, 2010). This has been documented in recent tax cases involving public listed companies in Malaysia such as MMC Corp Berhad which were served with notices of assessment of RM45.91 million, Aeon Credit Service (M) Berhad with RM96.82 million, Cocoaland Holdings Berhad with RM5.89 million, whereas Tenaga Nasional Berhad and Country Heights Holdings Berhad executive chairman have also been taken in recouping with unpaid taxes of of RM2.07 billion and RM22.5 million respectively (The Edge, 2017).

[2] Source from Tax Operation Department, IRBM (Annual Report 2014)

Malaysia have also experienced unfortunate collapses and losses of public listed companies due to lack of internal control such as Transmile Group Berhad, Omega Securities, Technology Resources Industris Berhad, Perwaja Steel Sdn Bhd and Malaysian Airlines System that involved in unauthorized payments, using several margin accounts to arrange off-market transactions and submitting false information to Bursa Malaysia (Mat Norwani, Mohamad, & Tamby Chek, 2011). These scandals involving the public listed companies also shows that without internal control, the companies are in the position to decrease their taxable income as well as increase their accounting earnings (Kourdoumpalou & Karagiogos, 2012). This would also indicate that internal control especially coming from good corporate governance are important factors to prevent tax non-compliance.

Several studies suggests the potential role of corporate governance in intervening tax non-compliance (Desai, Dyck, & Zingales, 2003; Desai & Dharmapala, Taxation and corporate governance: An Economic Approach, 2007; Annuar, Salihu, & Sheikh Obid, 2014; Minnick & Noga, 2010; Boussaidi & Hamed, 2015). However this study is unique as it offers the opportunity to examine the tax compliance based on the actual tax data in terms of filing, reporting and payment compliance using different corporate governance characteristic. Six corporate governance characteristic were selected based on previous literature and recommendations in Malaysian Code on Corporate Governance (MCCG) that linked to the internal control issues of a company such as board composition, independent director service tenure, separation of chairman and Chief Executive Officer (CEO), audit committee competency, non-audit service by external auditor and sourcing of internal audit function.

1.2 Research questions

The following research questions are necessary to be addressed:

(a) What is the relationship between the following corporate governance characteristic of public listed companies and tax compliance in Malaysia?

- (i) Board composition
- (ii) Independent director service tenure
- (iii) Separation of chairman and CEO
- (iv) Audit committee competency
- (v) Non-audit service by external auditor
- (vi) Sourcing internal audit function

1.3 Research objectives

The main objective is to examine the relationship between the following corporate governance characteristic and corporate tax compliance of public listed companies in Malaysia:

- (i) Board composition
- (ii) Independent director service tenure
- (iii) Separation of chairman and CEO
- (iv) Audit committee competency
- (v) Non-audit service by external auditor
- (vi) Sourcing internal audit function

1.4 Scope of the research

The sample consist of public listed companies that had been audited from the year of assessment 2013 to 2014 concentrating on three types of tax compliance namely filing tax compliance, reporting compliance and payment compliance. From the tax audit data, this study then focuses on public listed companies that were listed in the main market of Bursa Malaysia. The data of corporate governance characteristics of each public listed companies were taken from annual reports that had been submitted to Bursa Malaysia for financial year 2013 and 2014. Six established corporate governance characteristics were examined in this study and will be used as independent variables based on established literature by Cohen, Krishnamoorthy, & Wright (2004) and principles in MCCG 2012 namely (1) board composition (2) independent director service tenure (3) separation of chairman and CEO (4) audit committee competency (5) non-audit service by external auditor and (6) sourcing internal audit function.

The rationale for choosing two years of sample (2013 and 2014) is because corporate governance characteristics were selected based on the recommendations in MCCG 2012 that were only fully implemented by public listed companies in financial year ended 2013 (Securities Commission Malaysia, 2012). The latest data from financial year ended 2014 is to ensure that IRBM has ample time to conduct tax audit on companies. On average, tax audit will only takes place two years after the fiscal year[3] which involves various process from the audit process and settlement of cases. In addition, payment of tax for any tax due could extend for another two years depending on the amount of tax settlement.

The data were analysed in two stages using (1) descriptive analysis to portray the characteristics of a company by computing the mean, median, standard deviation,

[3]Internal statistic of tax audit case settled by IRBM.

minimum, maximum and coefficient of variation and (2) logistic regression analysis to provide investigation on the effect of more than one independent variables to dependent variables simultaneously.

1.5 Significance of the study

This study may benefit and contribute both theoretically and practically in the following areas:

1.5.1 Theoretical contributions

As tax non-compliance is a predominant issue and is a common problem globally, this study would also benefit tax authorities and tax researchers worldwide. Even though various studies have been conducted worldwide to test the determinants of corporate governance on tax non-compliance (Desai, Dyck, & Zingales, 2003; Tedds, 2006: Sartori, 2009; Mohd. Amin, Md. Noor, Mastuki, & Ambali, 2011), the lack of literature in the area of corporate tax non-compliance based on the actual tax audit data in Malaysia had been pointed out by scholars.

Other researchers only based on annual report that used the difference between Effective Tax Rate (ETR) and Statutory Tax Rate (STR) as proxy for corporate tax non-compliance (Desai, Dyck, & Zingales, 2003; Tedds, 2006: Sartori, 2009; Mohd. Amin, Md. Noor, Mastuki, & Ambali, 2011). This method did not reflect the real situation of tax non-compliance or the occurrence of tax evasion as it could be due to tax rebate, tax incentive or legal tax planning. Therefore, this study will provide current evidence and additional information to researchers and academicians with respect on certain corporate governance characteristic based on the actual case of tax non-compliance.

1.5.2 Practical contributions

This study will help determine the performance of public listed companies in Malaysia in respect of the quality of the corporate governance characteristic to the following users:

(a) Investors

The results of this study will give information to investors on the level of public listed companies' governance and tax compliance in Malaysia in order to make good investment decisions.

(b) Policymakers

The study will provide insights and awareness of the current problems in dealing with accounting scandals involving public listed companies and the possibility to evade taxes in Malaysia which indirectly affects the economic. The policymaker may review the existing guidelines in MCCG 2012 in order to provide further guidance to public listed companies to avoid potentially damaging problems.

(c) Tax administrator

Corporate tax payers are the major contributor to IRBM in terms of tax collection. Any changes in the corporate sectors environment will give direct impact on total IRBM revenue collection especially under the Self-Assessment System. If the corporate governance could instil discipline, understanding and awareness among the corporate community resulting in increase of tax compliance, then this study could provide answers and insights for the IRBM to develop strategies to prevent, detect or predict corporate tax non-compliance in future.

1.6 Organization of the thesis

This study is organised into five chapters. Chapter one introduces the background of the research, focusing specifically on problem statement, research question, research objective, significance and the scope of the study.

Chapter two review on the corporate tax compliance and corporate governance research and literature within Malaysia. This chapter explain the conceptual definition, theory relevant to the research and discover past studies on corporate governance and corporate tax compliance.

Chapter three presents the research methodology with detail explanation on data collection technique and procedures. This chapter covers research design, population, and sample of the study, unit of analysis, sampling technique, data analysis technique and measurement of variables. The corporate governance characteristic that are proposed to affect tax compliance among public listed companies are discussed in detail.

Chapter four presents the findings of the study comprehensively. Logistic regression is used to determine the relationship between variables, size, leverage and company's performance with tax compliance among public listed companies.

Chapter five starts with the discussion related to the findings of the study in detail. Then, this chapter compares the findings with the research objectives and questions and highlights the significant contributions of this study. Finally this chapter concludes the study, suggests direction for future research in this area and explains the contributions and limitations of the study.

CHAPTER TWO: LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.0 Introduction

This chapter covers literature review on taxation in Malaysia, corporate tax non-compliance and corporate governance. This study will also analyse the relationship between corporate governance characteristic and tax compliance. Previous researches were used as benchmark for this study to develop theoretical framework in order to answer the research objectives and research questions.

2.1 Overview of taxation in Malaysia

Tax revenue is a major contributor to Malaysia's federal government. About 80 percent of the government's revenue in 2017 are from taxes which derived from indirect taxes[4] (26.9 percent) and direct taxes (53.1 percent) (Ministry of Finance Malaysia, 2018). IRBM is a statutory body under the Ministry of Finance[5] that is responsible for collecting direct taxes.

The main component in direct taxes are corporate, individuals, petroleum, withholding taxes, stamp duty and real property gains tax which were collected through the following laws (Singh, 2011) :

(a) Income Tax Act 1967 (ITA 1967) - Income tax in Malaysia on company, partnership, sole-proprietor, individual, co-operative, association and trust;

---

[4] The Royal Malaysian Customs Department is responsible for the enforcement of indirect taxes such as goods and services tax, import duties, export duties, sales tax, service tax, excise duty and sales tax.
[5] The Malaysian Treasury (the Ministry of Finance) is the responsible ministry policies in relation to taxation.

(b) Petroleum (Income Tax) Act 1967 – Tax imposed on income from upstream petroleum operations[6]. The basis of taxation is very similar to the ITA 1967;

(c) Promotion of Investment Act 1986 – Tax incentives such as investment tax allowance, pioneer status, double deduction, infrastructure allowance and industrial adjustment allowance;

(d) Labuan Offshore Business Activity Act 1990 – Tax imposed on an offshore company that carrying out offshore business activity in or from Labuan

(e) Real Property Gain Tax 1976 – Tax chargeable on gains on disposal of real property; and

(f) The Stamp Act 1949 – Tax levied on written instruments especially on legal, financial and commercial instruments;

The focus of this study is on corporate taxation which involves income tax on companies that is governed by ITA 1967 with the support of guidelines issued by IRBM to supplement and provide further explanation on the regulations.

2.1.1 Corporate taxation in Malaysia

Corporate taxation is the main component of direct tax which contributed more than 50 percent of the Malaysia's total direct taxes collection in 2017 (Ministry of Finance Malaysia, 2018). Table 2-1 illustrates the composition of direct tax collection from 2012 to 2017. The collection of corporate tax is expected to keep on increasing as the petroleum tax decreasing over the years due to fluctuation of oil price.

[6] Downstream petroleum activities (refining petroleum and developing petroleum products) are subject to ITA 1967.

Table 2-1

Composition of Direct Tax Revenue (RM million)

Year	Direct taxes	Direct tax							
		Corporate tax		Individual tax		Petroleum tax		Other direct tax	
		RM	%	RM	%	RM	%	RM	%
2012	116,939	51,288	43.9	22,977	19.6	33,934	29.0	8,738	7.5
2013	120,523	58,175	48.3	23,055	19.1	29,753	24.7	9,540	7.9
2014	126,743	65,240	51.5	24,423	19.3	26,956	21.3	10,124	8.0
2015	111,770	63,679	57.0	26,321	23.5	11,559	10.3	10,211	9.1
2016	109,608	63,625	58.0	27,566	25.1	8,422	7.7	9,995	9.1
2017	119,699	67,822	56.7	30,089	25.1	10,937	9.1	10,851	9.1

Source: 2016 & 2018 Economic Report (Ministry of Finance Malaysia)

The main contributor of corporate income tax[7] are companies. Resident company[8] in Malaysia are taxed on income accrued or derived from Malaysia. With effective from 2004, income derived from outside Malaysia and remitted by a resident company is exempted from tax excluding industry such as banking, insurance, sea and air transport. Subsection 2(1) of the ITA 1967 defined a company as follows:

"Company means a body corporate and includes any-body of persons established with separate legal identity by or under the laws of a territory outside Malaysia and a business trust"

Corporate tax rate is one of mechanism used to generate the economic growth. Over the years the government of Malaysia have lowered the corporate tax rate to boost the economic development and to compete with other ASEAN countries in order to

[7] Corporate income tax shall be charged for a year of assessment on the chargeable income of a company, trust body, an executor of an estate of a deceased individual who domiciled outside Malaysia at the time of this death, a receiver with respect to 68(4) of the ITA 1967 applies and a limited liability partnership other than a limited liability (Paragrah 2, Schedule 1 of the ITA 1967)

[8] Resident company is determined by a company trading in Malaysia where business controls and management are exercised in Malaysia at any time during the year (Section 8 of the ITA 1967)

encourage investments locally or internationally. The summary of corporate tax rate for resident company is shown in Table 2-2 below.

Table 2-2

Corporate Tax Rates for Resident Companies

Year	Paid-up capital≤ RM2.5 million		Paid-up capital ≥ RM2.5 million
	On first RM500,000	**Subsequent balance**	
2007	20%	27%	27%
2008	20%	26%	26%
2009-2015	20%	25%	25%
2016	19%	24%	24%
2017	18%	24%	24%

Source : Schedule 1 of the ITA 1967

Another mechanism used by the government of Malaysia to boost the economic growth is by offering various tax incentives to companies such as investment tax allowance, pioneer status, double deduction, infrastructure allowance and industrial adjustment allowance. These incentives are given to specific industries as a mechanism to promote economic activities and stimulate projects that have a high value impact and emerging technologies.

In year 2001, IRBM has implemented the Self-Assessment System (SAS) that necessitates the companies to be accountable for their own tax affairs by estimating the tax payable, declaring and calculate chargeable sources of income, keeping documents and records and comply with other income tax laws and legislations (Isa, 2014). Under SAS, tax compliance become more important as penalty will be imposed if taxpayer unable to do so. However according to Oh & Lim (2011) the problem of tax non-compliance is more apparent under this system. Therefore government requires a good tax system and effective tax administration to prevent tax non-compliance as it can have a major impact on the effectiveness of tax policy and the trust of taxpayers with distributional justice.

2.1.2 Corporate tax administration in Malaysia

IRBM administer and monitor corporate taxation through the following tax administration (Singh, 2011):

(a) Ascertainment of tax liability - determined either by self-assessment[9] or officially by IRBM[10] through various process which involves the determination of tax base, submission of tax returns and issuing the assessments or deemed assessment[11].

(b) Collection of the tax - involves payment of taxes that can be made as and when the income is earned through instalment, at the time a tax return is filed or after an assessment is issued to the taxpayers.

(c) Settlement of tax disputes and the imposition of penalties – The punishment range from the imposition of penalties to imprisonment. If taxpayer disagrees with the quantum of tax payable as per (deemed) notice of assessment, a written notice of objection must be lodged to the IRBM within the stipulated time given. IRBM must then review the objection and when it cannot be resolved by two parties, the appeal would be referred to the Special Commissioner of Income Tax. Subsequent appeals can be made to the courts which act as the final interpreters and arbiters.

[9] Self-assessment system is a process where the taxpayers have to compute their own tax liability and submit the tax returns based on the tax legislation and guidelines issued by the tax authorities.
[10] The IRBM has the authority to issue additional assessment if there are adjustments to the deemed assessment arising from tax audit
[11] The filing of a tax return date will constitute as deemed assessment.

In addition to the effort to ensure that the corporate tax were collected efficiently using tax administration, IRBM has also implemented various strategies to increase tax compliance in Malaysia.

2.1.3 Strategies to taken by IRBM to increase tax compliance in Malaysia

Strategies introduced by IRBM in order to combat tax non-compliance among taxpayers are as follows:

(a) Tax audit

Audit focus is one of the strategies in the Public Finance Reform (Pemandu, 2016) to combat tax non-compliance and to encourage voluntary compliance. Previous studies between audit probability and compliance showed a positive correlation where taxpayers may only comply with the tax laws when they have information on the possibilities of being audit (Mohdali, Isa, & Yusoff, 2014). In Malaysia, tax audit activities were executed under two categories, namely (1) Field audit activity is performed to detect any measures taken by taxpayer to reduce the tax liability and (2) Desk Audit review and raise additional assessment for taxpayers who fail to report incomes or make excessive claims based on the tax return and financial statements submitted by taxpayers (IRBM, 2012).

(b) Transfer pricing audit

Transfer pricing requires that the transaction of goods, services or intangibles price between related parties whether directly or indirectly must be deal at arm's length. The arm's length principle states that transfer prices of goods, services or intangibles with the same or similar circumstances between related parties should be equivalent to prices with unrelated parties.

(c) Tax investigation

Investigation is part of the enforcement procedures undertaken by IRBM to prevent tax leakage and to increase voluntary tax compliance (IRBM, 2014). Tax investigation activities fall under two broad categories, namely (1) Civil Tax Investigations and (2) Criminal Tax Investigations. The main concern under civil tax investigations is to recover losses and to impose penalties, while criminal tax investigations would focus on gathering admissible evidence for prosecution under the ITA 1967 and other relevant legislation.

IRBM recognised the needs to continue various enforcement activities to combat the hidden economy. IRBM is currently working with other government bodies including the police, Royal Customs Department, Securities Commissioner (SC) and the Companies Commission of Malaysia to combat tax evasion.

(d) Collection of tax arrears

In order to prevent the arrears in revenue, IRBM has the responsibility to ensure tax liabilities are collected efficiently by reducing the amount of arrears in current cases to a minimal level while at the same time avoiding the new arrears.

(e) Collection of tax liability through instalment

In order to make sure taxpayers settle the tax liability on time, provision of section 107B/107C requires taxpayers to pay taxes by instalment through a notice twice a month (Form CP204 for company, cooperative and trust body while Form CP500 for other than companies) issued by the Director General of IRBM on or before the deadline based on taxpayers period basis (IRBM, 2014).

Although various strategies has been applied by IRBM, tax non-compliance is still a prevalent issue in Malaysia where companies are taking advantage of the tax loopholes in order to reduce its tax burden through excessive tax planning, tax evasion or tax avoidance. Despite the inter-governmental cooperation and exchange of information, most of the IRBM can only audit or investigate within their own territories. Therefore understanding reason for tax non-compliance is important to policy makers.

2.2 Corporate tax non-compliance

There are multiple concept, references and different ways to define tax non-compliance, but most of them have the same meaning and purpose. A prevalent and simple view in previous research is tax non-compliance represent a way of reducing tax obligation (Desai & Dharmapala, 2006) to maximize their wealth due to the fact that it lead to cash savings, increased cash flow and offers the opportunities for further investments (Annuar, Salihu, & Sheikh Obid, 2014). According to Singh (2011) failure to comply with tax laws may occur due to inadvertence, neglect, misunderstanding or deliberately intent to evade.

Tax non-compliance covers both unintentional non-compliance and intentional evasion of the taxpayer to meet the tax obligations (Alabede, Z. B. Z, & Idris, 2011). Unintentional tax non-compliance may arise from complexity of the tax laws, taxpayer negligence, difficulty of keeping accurate records, inability to obtain information whereas intentional tax non-compliance means payment of tax lesser than the law requires on actual taxable income. (Abdul, 2001).

Intentional tax non-compliance can be further divided into two types of activity; tax evasion and tax avoidance. Tax avoidance is the manipulation through reduction in tax liability legally and usually engaged by large corporations who have tax professionals advising on the interpretation of legal provisions (Abdul, 2001). Tax evasion is misreporting the nature of income or undertaking activities that is not consistent with the tax law in order to reduce the tax payable (Abdul, 2001). Silvani (1994) categorise tax evasion into two part: (1) evasion with fraud such as forging or falsifying records and (2) evasion without fraud such as underreporting their taxes without falsifying or forging records. Both tax avoidance and evasion has negative impact as the expected revenue is not collected resulting in social and political distortions and undermines the fairness or "equity" of the tax system.

2.2.1 Measurement of corporate tax compliance

ITA 1967 does not have specific definition to describe corporate tax non-compliance in Malaysia. However, taxpayers who does not comply with the rules and regulations under ITA 1967 will be considered as non-compliant taxpayers and liable to penalties, fines and imprisonment depending on severity of offences.

Kasipillai & Abdul Jabbar (2006) established that corporate tax non-compliance in Malaysia arises from: (1) Failure to submit tax returns (2) Under-reporting of taxable income (either through under-reporting of income or overstating deductions) (3) Failure to pay taxes; and (4) Failure to remit instalment payment on time. The study by Brown & Mazur (2003) suggest that tax compliance into can be categories to (1) filing compliance which measure the percentage of required returns that are timely field (2) reporting compliance which measure the percentage of true tax liability that is correctly reported and (3) payment compliance which measure the percentage of reported tax is timely paid.

The outcome from previous studies as discussed above and the regulations under the ITA 1967 have found that tax non-compliance can be categorised into three distinct types namely filing non-compliance, reporting non-compliance and payment non-compliance which will provide a comprehensive definition of tax non-compliance. The relevant penalty based on section in ITA 1967 involved for each category of tax compliance are as follows:

(a) Filing non-compliance

Under the ITA 1967, every person who is chargeable to income tax is required to file a return of his income to IRBM. Filing non-compliance occurred when the taxpayer failed to furnish the return before the tax filing dateline which can be categorised into (1) non-submission of tax return (2) late submission of tax return. Type of penalties are shown in Table 2-3:

Table 2-3
Failure to Furnish Return or Notify Chargeability

Offence	Penalty
Failure to furnish a return of income required under subsection 77(1) or 77(1A), or given notice of chargeability in accordance with subsection 77(2) or 77(3) ofITA 1967	**Subsection 112 ofITA 1967** • On conviction, a fine between RM200 and RM2,000 or imprisonment not exceeding six months or both (subsection 112(1)); or

Table 2-3 (Continued)

Offence	Penalty
	• No prosecution, but taxpayer required to pay penalty of treble the amount of tax payable (subsection 112(3))

Source: Malaysian ITA 1967

(b) Reporting non-compliance

Under the SAS, the tax return is deemed to be an assessment. The IRBM is entitled to raise an additional assessment when there are adjustments to be made arising from tax audit in which penalty will be imposed as shown in Table 2-4.

Table 2-4
Incorrect Returns and Wilful Evasion

Offence	Penalty
Submitting incorrect return of income or incorrect information on chargeability	**Subsection 113 ofITA 1967** • If convicted, a fine between RM1,000 and RM10,000 plus penalty of double the amount of tax undercharged (subsection 113(1)); or • If no prosecution, taxpayer required to pay penalty equal to the amount of tax undercharged (subsection 113(2))
Wilfully and with intent to evade or assist any other person to evade tax	**Subsection 114 of ITA 1967** • RM1,000 to RM20,000/ imprisonment / both and 300% of tax undercharged (subsection 114(1))
Assist or advise (without reasonable care) others to under declare their income.	**Subsection 114 ofITA 1967** • RM2,000 to RM20,000 / imprisonment / both (subsection 114(1A))

Source: Malaysian ITA 1967

(c) Payment non-compliance

Under SAS, the estimated tax liability of non-individual[12] needs to be determined 30 days before the start of the basis period. Revision of the estimated tax liability can be made in the sixth month as well as the ninth month of the basis period. The twelve monthly instalments would be paid starting from the second month of the basis period. Penalties are imposed for failure to remit instalment on time as shown in Table 2-5.

Table 2-5
Failure to Remit Instalment on Time

Type of taxpayer	Penalty
Other than company, trust body or co-operative society	**Subsection 107B ofITA 1967** • Payment of instalments after 30 days from the date set – the amount unpaid shall be increased by 10% without any notice being served (paragraph 107B(3)) • If the actual tax 30% higher than the revised estimate of tax – 10% increase on the difference between actual tax balances and estimated tax made (paragraph 107B(4))
Company, trust body or co-operative society	**Subsection 107C of ITA 1967** • Payment of instalments after the 10th of the month following which is an instalment is due, the amount unpaid shall be increased by 10% without any notice being served (Paragraph 107C(9)) • If the actual tax 30% higher than the revised estimate of tax – 10% increase on the difference between actual tax balances and estimated tax made (paragraph 107C(10))

Source: Malaysian ITA 1967

[12] Non individual (i.e company, trust body and a co-operative society)

Any balance of tax payable is due for payment[13] irrespective of whether or not the taxpayer is objecting or appealing against the deemed assessment. If the tax payable remains outstanding, IRBM will institute civil proceedings for the recovery of tax due. Penalties are imposed for failure to settle the balance of tax payable as shown in Table 2-6.

Table 2-6
Failure to Pay Taxes

Offence	Penalty
Failure to pay taxes assessed	**Subsection 103 ofITA 1967** • Any tax due and payable has not been paid by the due date : (a) 10% increase from the tax payable (subsection 103(3)); (b) Additional 5% increment on the balance of (a) if the payment is not made after 60 days from the final date (subsection 103(4)).

Source: Malaysian ITA 1967

2.2.2 Corporate tax compliance among large companies

Previous studies found that company size and tax non-compliance have negative relationship where tax evasion of small companies is generally higher than big companies (Hanlon, Mills, & Slemrod, 2005; Nur-Tegin, 2008; Tedds, 2010). Larger companies are more compliant than private limited companies as these companies are strictly controlled by laws. This discovery is not in line with study by Zimmerman (1983) stating the existence of political costs such as taxation would cause a company try to reduce profits by using various accounting methods. Large companies such as

[13] For company tax due is in the seventh month after the end of the basis period while for individual is on 30 April (employment income) and 30 June (business income) of the following year.

public listed companies will tends to not comply with tax due to their ability to manage income and with a wide range of accounting method as compared to small companies. This is consistent with a study by Hanlon, Mills, & Slemrod (2005) that shows larger companies have larger proposed audit deficiencies relative to 'true' tax liability.

According to Contractor (2016) large companies' decision are made with the assessment of tax implication. The magnitude of tax non-compliance covers the global operations, location and supply chain where all the decisions are affected by tax considerations. Executives in large companies consider tax alongside with business strategy to minimize the tax liability such as global operations, supply chains and location decision. One of the current tax fraud case involving large company is Plutus Payroll. The head of the Australian Taxation Office (ATO) announced that the federal Australian federal government is missing out roughly $2.5 billion in tax revenue a year from Australia's biggest company, Plutus Payroll due to tax non-compliance and alleged abuse of public office (Hutchens, 2017).

Recent tax cases concerning public listed companies in Malaysia such as MMC Corp Berhad, Aeon Credit Service (M) Berhad, Cocoaland Holdings Berhad and Country Heights Holdings Berhad have shown the significance and detrimental effect on the government revenue (The Edge, 2017). The study by (Otusanya, 2011) shows that large companies using tax havens, offshore financial centres which shaped by globalisation to facilitate the anti-social tax practices for their own financial gain. Despite the fact that tax non-compliance create significant risks such as potential legal fees, penalty being imposed as mentioned above and repercussions for reputation, the issue of tax non-compliance has never been resolved (Schofield, 2015). For that reason it is important for IRBM to understand the reasons for tax non-compliance in order to focus on the strategies to prevent tax leakage and to increase voluntary tax compliance.

There are a number of extensive studies explaining the reason for tax non-compliance. Study by Contractor (2016) shows that one of the reason is the disconnection between the government's desire to collect revenues and the desire of companies to ensure shareholder interest by 'arranging' investments to minimise tax payment. Annuar, Salihu, & Sheikh Obid (2014) confirms that cash savings would lead to increase cash flow, the opportunities for investments and the ability to increase the company's value in terms of increased shares value and high dividends. According to Engida & Baisa (2014) the determinants of tax non-compliance behavior are due to (1) economic factors such as the perceptions of government spending and probability of tax audits, (2) institutional factors such as the efficiency of the tax authority or government (3) social factors such as fairness, changes of government policies, perceptions of equity and referred groups (family and friends) (4) individual factors such as lacking of tax knowledge especially on the offences and penalties and financial constraints, (5) demographics constraint and other variables such as education, gender, income and age.

Based on previous studies as discussed above, one of the factors of tax non-compliance that can be improved is to reduce the ability of company to manipulate their earnings through tax reduction and to increase the efficiency of the tax authority or government. Therefore, this study suggested that the tax authority should focus on the corporate governance which could reduce potential conflict by aligning the interest of the companies and tax authority or government.

2.3 Corporate governance

Corporate governance have become important reforms worldwide. There are several definitions relating to corporate governance. The Cadbury Report (1992) Section 2.5 defines corporate governance as the system by which companies are directed and controlled. The corporate governance explained on the rights and responsibilities of participants in the corporations, such as the role of board, the management, shareholders, the laws and regulation in making decisions on corporate affairs (The Committee on the Financial Aspects of Corporate Governance , 1992).

Due to the prevalence of financial reporting frauds and unprecedented number of earnings manipulation by the management, corporate governance has received increasing attention in practice and academic research (Cohen, Krishnamoorthy, & Wright, 2004). The improvement of corporate governance could reduce potential conflict by aligning the interest of external and internal stakeholder. It is a mechanism that control a corporation by creating a higher level of control and transparency (Mulyadi & Anwar, 2014) and ensures that corporation resources will only be spent in activities that bring the best return to the investors (Shleifer & Vishny, 1997; Porta, Silanes, Shleifer, & Vishny, 2000). Corporate governance provides the structure to make sure that the company's objectives are set and strategies to achieve the objectives as well as performance monitoring process are determined (OECD, 2015). Companies that are well governed are able to raise the standard of the capital market and attract capital investment (Bursa Malaysia Berhad, 2013).

Sartori (2009) believed that the benefit of good principles corporate governance should be promoted by the policy makers. The Principles of Corporate Governance 2004 of OECD states that an effective legal and regulation backed by effective government agencies are necessary to ensure that corporate governance framework instilled by the corporation effectively in order to avoid the minority shareholders abuse (OECD, 2004).

2.3.1 Theory in Corporate Governance

To better understand the corporate governance, this study will discuss several theories. Each theory discussed limited aspect of governance and cannot capture the whole theoretical basis of corporate governance (Clarke, 2004). The main theoretical framework for the majority of research on corporate governance revolves around agency theory, further developing to stakeholder theory that complement the agency theory by examining the wishes of shareholders and every party linked to the organisation. Whereas stewardship is an alternative to agency theory where managers are obligated to do a good job, maximize company profits and bring good returns to stockholders. (Borlea & Achim, 2013).

(a) Agency Theory

Agency theory was formulated to describe the issues raised from agency relationship. Jensen & Heckling (1976) define agency relationship as a contract where the owner (principals) hire managers (agents) as the decision makers of the company. Shareholder is the owner of the company while the managers act as an agent to perform service on behalf of the shareholder to maximise their return. Agency problems arise when the agent act to protect their own personal interest (Jensen & Heckling, 1976). This may become a source of conflict that leads to a loss of shareholders' value where the managers tend to make decisions that are contradicting with the shareholders' interest (Dhaliwal, Huang, Moser, & Pereira, 2011)

Corporate governance is used to alleviate the agency problems especially in large companies. Principals will enact governance mechanisms to monitor manager and to avoid behaviour that is not aligned with the interest of the principal (Madison, Holt, & Kellermanns, 2015). Denis (2001) suggest that two conditions must be followed for an effective governance (1) the governance mechanism must serve to narrow the gap between managers' and shareholders' interest and (2) the mechanism must have a significant impact on corporate performance. In return for meeting the conditions, performance of the company will be increase and the interest will be align (Fama, 1980).

(b) Stakeholder Theory

Stakeholder theory by focuses on the relationship between company and a wider group of stakeholders. This theory was embedded in management in 1970 and gradually developed by Freeman (1984). Stakeholder is defined as any person/group that can be affected by the action of a company (1) internal stakeholders (directors, employee) that involved in corporate governance process and (2) external stakeholders (creditors, auditors, customers, suppliers, government agencies and community) (Freeman, 1984).

This theory suggests that the managers should take into consideration the interest of each stakeholder in its governance process by mitigating the conflicts between each stakeholder. However when there is a conflict of interest, some stakeholder must be moderated or sacrificed in order to fulfil basic obligations to other stakeholders (Heath, 2004). Corporate governance support the stakeholder theory where it refers to the process and structure used to direct and manage the company's business affairs with the objective of recognising long term shareholders value, while taking into account the interest of other stakeholder (Securities Commission Malaysia, 2007).

(c) Stewardship Theory

Stewardship theory describes the relationship between the principal and agent from a behavioural and governance perspective (Davis, Schoorman, & Donaldson, 1997). Under the stewardship theory, managers protect the interests of the shareholders and make decisions on their behalf based on altruism and the desire to serve the company and therefore align with the interest of the principle (Madison, Holt, & Kellermanns, 2015). Company that apply stewardship place the CEO and Chairman under one executive with a board comprised mostly of in-house members. The option to apply stewardship governance allows more intimate knowledge of the company's operation and commitment to success. Single leader generates one channel of communication where the company communicates the needs to the shareholders and vice versa (Davis, Schoorman, & Donaldson, 1997).

Agency and stewardship theories originate from two different principle. The basic agency problem revolves around individuals where they only consider themselves as individuals. However, stewardship theory suggest that individuals in management positions do not consider themselves as isolated and often offers maximum autonomy built on trust (Donaldson & Davis, 1991). Because of different interpretation, theories and principle, management needs to determine governance strategy that best fits its company's identity, whether it be agency, stewardship or stakeholder or a hybrid of all three.

2.3.2 Corporate Governance in Malaysia

Malaysia committed in sustaining and promoting the good culture of corporate governance. Policy makers in Malaysia recognises the value of good governance and learnt valuable lessons from the 1997 and 1998 Asian Financial Crisis. They have focused on strategies to raise the corporate governance standards and strengthen the framework (Securities Commission Malaysia, 2012).

The Finance Committee on Corporate Governance (FCCG) was established in 1999 and made two recommendation (1) the MCCG and (2) the Minority Shareholders Watchdog Group (MSWG). In 2001 MCCG then became an integral part of Bursa Malaysia (Abdul Wahab, 2010). The objective for these recommendations is to create board that can perform its responsibilities effectively and protect the interest of shareholder (Zainal Abidin, Mustaffa Kamal, & Jusoff, 2009).

Malaysia's corporate governance framework is instituted by the regulator and statutory bodies to strengthen the corporate governance framework. However the target group are public listed companies. A public listed company[14] is a company that issues share

[14] Public listed company has to follow prescribed set of rules under the Securities Commission of Malaysia Equity Guidelines and Bursa Malaysia's Listing Requirements. Public listed company can be categorised into (1) main market (2) ACE market and (3) LEAP market (Bursa Malaysia Berhad, 2017)

securities through initial public offering of shares (IPO) and traded on at least one stock exchange or in the over the counter market. A public listed company allows the market to determine the overall value of the company through daily trading (Bursa Malaysia, 2017). Even though the framework is focusing on public listed companies, non-listed entities are encouraged to implement this code on corporate governance to enhance their transparency, accountability and sustainability.

The corporate governance framework for public listed companies are as follows:

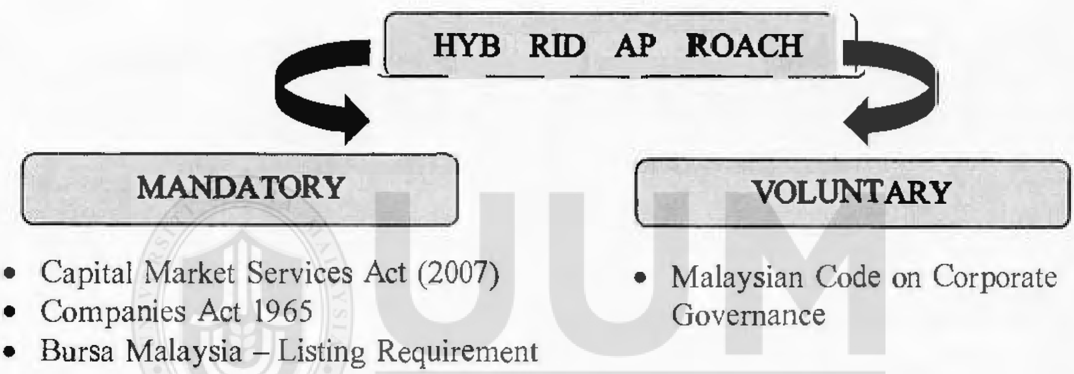

Figure 1
Malaysia Corporate Governance Regulatory Framework

The regulator and statutory bodies introduced several changes to incorporate corporate governance as follows (1) The Capital Market Services Act (CMSA) which was enforced in 2007 to enhance the investor protection by introducing new provisions to widen SCs' power to act against directors who cause wrongful loss to their company and falsify the financial statement, (2) The Companies Act 1965 sets out the procedures for companies to be formed, operated, manage and how directors and shareholders can exercise their rights and powers. Significant changes can be seen to the corporate governance framework in Malaysia when the Companies (Amendment)

Act 2007 came into operation on 15 August 2007. The enactment creates amendments, substitutions and new provisions which will have a significant impact principally on directors and lastly (3) Bursa Malaysia's Listing Requirements (LR) was developed to raise the standard of corporate governance and enhance the confidence of investor such as disclosure of recommendation under the principle set out in MCCG and provide the reasons for not following the recommendations (PricewaterhouseCoopers, 2012).

2.3.3 Malaysian Code on Corporate Governance

MCCG was introduced to strengthen the corporate governance framework. In March 2000, the first MCCG was issued, manifest the start of corporate governance reform in Malaysia. MCCG 2000 has contributed significantly in improving the corporate governance standards of Malaysian public listed companies. The Code was revised in 2007. One of the changes are to strengthen the roles of the board of directors, internal audit function and audit committee.

The launch of MCCG 2012 marked another significant milestone in corporate governance reform. MCCG 2012 underlines the principles of good governance, optimal corporate structures and internal processes. MCCG 2012 focuses on strengthening board structure and recognising the role of directors as active and responsible fiduciaries. In order to ensure the appropriate management of risks and internal controls, the additional duty of board is to ensure the company comply with laws, maintains an effective governance structure and ethical values. MCCG 2012 advocates the adoption of standards beyond the minimum prescribed by regulation.

MCCG 2012 sets out principles and recommendations on structures and processes where companies able to apply in their business transactions and culture as explained in detailed in Table 2-7.

Table 2-7

MCCG 2012 Principles

Principles	Description
1. Establish clear roles and responsibilities	(i) Clearly set out the responsibilities of the board and management (1.1) (ii) Board - Establish clear roles and responsibilities in discharging its fiduciary and leadership function (1.2) (iii) Formalize ethical standards through code of conduct and ensure compliance (1.3) (iv) Ensure company's strategies promote sustainability (1.4) (v) Board should allow members access to information and advice (1.5) (vi) Supported by suitable, qualified and competent secretary (1.6) (vii) Board– formalize, periodically review and make public its board charter (1.7)
2. Strengthen composition	(i) Nominating committee (Non-executive directors/ Majority independent) (2.1) (ii) Criteria for recruitment process and annual assessment of directors (2.2) (iii) Formal and transparent remuneration policies & procedures and retain directors (2.3)
3. Reinforce independence of independent directors	(i) Assessment of independent director annually (3.1) (ii) Tenure of independent director less than 9 years (3.2) (iii) Justify/get approval if more than 9 years (Chairman – Non exec member of the board) (3.3) (iv) Roles of Chairman and CEO– held by different individuals (3.4)

Table 2-7 (Continued)

Principles	Description
	(v) Majority independent directors if chairman non-independent director (3.5)
4. Reinforce independence of independent directors	(i) Assessment of independent director annually (3.1) (ii) Tenure of independent director less than 9 years (3.2) (iii) Justify/get approval if more than 9 years (Chairman – Non exec member of the board) (3.3) (iv) Roles of Chairman and CEO–held by different individuals (3.4) (v) Majority independent directors if chairman non-independent director (3.5)
5. Foster commitment	(i) Set the expectations on time commitment for members & protocol for accepting new directorships (4.1) (ii) Update knowledge and enhance skills of directors (4.2)
6. Uphold integrity in financial reporting	(i) AC - Financial statement comply with financial reporting standard (5.1) (ii) AC - Policies and procedures to assess the sustainability and independence of external auditors (5.2)
7. Recognize and manage risks	(i) Disclose the main feature of company's risk management framework and internal control system (6.1) (ii) Establish internal audit function – report directly to AC (6.2)
8. Ensure timely and high quality disclosure	(i) Corporate disclosure policies and procedures –compliance with Bursa Malaysia requirement (7.1) (ii) Leverage on IT in communicating with stakeholder (Establishing corporate governance in website – board charter, rights of shareholders and annual report) (7.2)
9. Strengthen relationship between company and shareholders	(i) Encourage shareholder participation at GM (8.1) (ii) Electronic poll voting (8.2) (iii) Promote effective communication and proactive engagements with shareholder (8.3)

Source: (Bursa Malaysia Berhad, 2013)

Further explanation on the corporate governance characteristic as stipulated in the principles and recommendation of MCCG 2012 which will be discussed based on previous literature in the next section.

2.3.4 Corporate governance characteristic

Corporate governance characteristic can be viewed from the combination of internal and external perspective (Zulkifli, Samad, & Ismail, 2006). The internal perspective refers to board of directors and equity ownership whereas corporate control market and legal or regulatory system are the external characteristic.

This study will focus on the widely used corporate governance characteristic in academic research by Cohen, Krishnamoorthy, & Wright (2004) and recommendations in MCCG 2012 and the extent these recommendations are applicable and practical to corporate sector.

(a) Board composition

The standard view among governance experts is that board independence is necessary for an effective governance (Jouber & Fakhfakh, 2011). Principle 3 of the MCCG 2012 encourage board to have policies and procedures to reinforce independence and effectiveness of independent directors. Bursa Malaysia definition of an independent directors is "a director who is independent of management and free from any business or other relationship which could interfere with the exercise of independent judgement or the ability to act in the best interests of an applicant or a listed issuer" (Paragraph 1.01 of the LR).

Board composition refers to ratio of independent non-executive directors (INED) compared to the total number of directors on the board of a company (Zainal Abidin, Mustaffa Kamal, & Jusoff, 2009). MCCG 2012 recommendation under the principle of board independence is that when the chairman is not independent director, the board must comprise a majority of independent directors. SC requires all public listed company have at least two directors or one third of independent directors as its board (Paragraph 15.02(3) of the LR). Diversity is important to ensure different views and perspectives and more informed decision-making. Having independent director who are experts within the field would help to provide insights of trends and future forecasts for strategic planning (Bursa Malaysia Berhad, 2013).

Study on board composition concern on issues related to the proportion of directors and the diversity of board members who bring value to the board deliberation (Cohen, Krishnamoorthy, & Wright, 2004) which in line with MCCG 2012. A study by Greco (2011) confirmed the agency theory-based which view that independent directors and insider ownership are substitute control mechanisms. Directors are more active in board that have higher proportion of independent representation and less active when directors-shareholders have direct access information and supervision. The presence of independent directors may constrain the opportunistic earnings management activity and ensure the management act responsibly and to the best interests of the stakeholders (Alves, 2011).

(b) Independent director service tenure

Another MCCG 2012 recommendation is the tenure of an independent director of not exceeding cumulative term of nine years. An independent director may continue to serve as a non-independent director after the completion of nine years of service. The reason would be long tenure can affect the independence of the director and the board need to keep their talent refreshed (Bursa Malaysia Berhad, 2013). Study by (Wiersema & Bantel, 1992) also found that longer tenure may result in declining performance due to the social cohesion between board member and the CEO.

On the contrary, study by Peasnell, Pope & Young (2004) revealed that the tenure of non-executive is negatively associated with earnings management. Long tenure directors have greater expertise, experience, high commitment and reputation. If an independent director has longer tenure, the board is more effective in preventing earnings management. Their experience allows other directors gain better understanding of the company and its people to develop better governance.

(c) Separation of Chairman and CEO

MCCG 2012 recommendation under the principle of board independence is the positions of CEO and chairman should be held by different people and chairman must be a non-executive member (Bursa Malaysia Berhad, 2016). The debate as to whether the combination or the separation of CEO roles and the chairman of the board contribute to level of company's performance within the corporate governance framework, is based on the suggestion presented by agency theory and stewardship theory (Abdul Rahman & Mohd Haniffa, 2005).

Agency theory proposed that CEO duality compromises the monitoring and control of the CEO, therefore it is bad for performance. Separation of role is important in order to ensure the balance of power between the two designations and to avoid conflict of interest (Jensen & Fama, Separation of ownership and control, 1983). When the same person hold two powerful positions, it is more likely that person use his power to select directors of his favour. Shukeri, Ong & Shaari (2012) proved that CEO duality has a negative relationship with the company's performance.

Stewardship theory in other hand, have different view where CEO duality is good due to the unity of command (Taktak & Mbarki, 2014). Combination of the two allow the CEO to have strategic vision and objectives with minimal board interference which will enhance the decision making process. Meanwhile Abdul Rahman & Mohamed Ali (2006), Hashim & S. (2008) and Elsayed (2007) found that in general CEO duality has no impact on company performance. However, the impact is found to vary across industries when the model include industry type and CEO duality.

(d) Audit committee competency

One of the principle under MCCG 2012 issued by the SC is that the board should make sure that stakeholder will able to rely on financial statements as a source of information. Financial expertise of audit committee is very important in order to enhance the financial reporting quality. MCCG 2012 recommends that audit committees should comprise of members with financial expertise who ensures that the financial statements of a company is reliable. One of the audit committee member must fulfil the financial expertise requirement under the LR (Bursa Malaysia Berhad, 2013).

According to the agency theory, the financial expertise of audit committee enhances earnings quality (Al-Rassas & Kamardin, 2015). Xie, Davidson & Dadalt (2003) and Baxter & Cotter (2008) found that audit committees financial expertise decreases earnings management. Alzeban (2015) research on Influence of Audit Committee Industry Expertise on Internal Audit, revealed that the quality of internal audit is enhanced when there is audit committee member that have industry and audit expertise. With regards to Malaysian companies, Md Yusof (2010) found that there is evidence that audit committee with financial expertise would lead to high earnings quality.

(e) Non audit service by external auditor

External auditors play a vital role to form an opinion and identify the financial risk that may result in financial statements adjustment and report to the shareholders at general meetings (Bursa Malaysia Berhad, 2013). MCCG 2012 recommends that the Audit Committee should review and monitor the independence and sustainability of external auditors.

Policies that govern the non-audit services with the listing of services that are prohibited should be establish unless safeguards are in place. Ideally, non-audit services should not be performed when it is specifically prohibited by regulatory bodies and the charges are minimal as compared to the audit fees. The provision of non-audit services can impair the independence of external auditors (Bursa Malaysia Securites Berhad, 2013). Frankel, Johnson & Nelson (2002) found that non-audit service fees is associated with higher earnings management. However Dechow, Ge & Schrand (2010) show that investment in non-audit services should increase the auditor's capability to detect earnings management. Antle, Gordon, Narayanamoorthy & Zhou (2006) also found evidence that the level of abnormal accrual will decrease with non-audit services fees.

(f) Sourcing internal audit function

An important element of corporate governance is to ensure good internal control system embedded in a company that mitigates organisational risk and to achieve corporate objectives. Internal audit played a significant role in the implementation of corporate governance when assessing the management's control practices effectiveness (Hermanson & Rittenberg, 2003).

MCCG 2012 supports the roles of internal audit function as an independent board of audit committee. The role of internal audit function has been enforced by Paragraph 15.27 of the Listing Requirements where a listed issuer must establish an independent internal audit function that reports directly to the audit committee and disclose whether the internal audit function is (1) in-house or (2) outsourced where internal audit services by independent accounting or audit firms (Carcello, Hermanson, & Raghunandan, 2005). Investment in the internal audit function enable the company to establish stronger controls over financial reporting and at the same time reducing the control problems (Lin, Pizzini, Vargus, & Bardhan, 2011).

Maintaining internal audit requires investment in developing internal audit personnel professionally by recruiting, training with the latest methodology and technology. These significant amount of investment have forced companies to consider alternative due to economic pressure which is outsourcing. These changes have caused concern to stakeholder on the potential lack of internal auditors' independence and objectivity.

A study by Vecchio & Clinton (2003) have shown that in-house internal audit function has greater protection of proprietary information, internal monitoring and audit operations control to avoid associated risks from outsiders However James (2003) have different findings where in-house internal auditor are less independent and it is hard for an employee to be independent from the management. Results from a study by Al-Rassas & Kamardin (2015) suggest that outsourcing internal audit function relate to lower earnings management.

2.4 Corporate governance and tax compliance

There has been huge set of studies analysing the various effects that corporate governance has on a company as discussed earlier. However, previous study on the relationship between corporate governance and taxes are not as wide (Mohd. Amin, Md. Noor, Mastuki, & Ambali, 2011). This is due to the history of separation between the study of taxation and corporate governance (Desai & Dharmapala, Taxation and corporate governance: An Economic Approach, 2007). Corporate finance study have not incorporated the possibility of agency problems in their analyses and treated taxes only as market imperfections that influence the dividend policies and capital structure (Desai & Dharmapala, Taxation and corporate governance: An Economic Approach, 2007).

This study will discuss the findings from previous literature on relationship between corporate governance and tax compliance globally and in Malaysia as follows:

(a) Internationally

The relationship between corporate governance and taxation have received attention in recent years due to current global financial crisis that involves tax avoidance and tax evasion (Desai & Dharmapala, Taxation and corporate governance: An Economic Approach, 2007). Countries are introducing legislation and standards that require large business to cooperate by providing greater transparency in their financial reporting such as analysis of tax positions. Investors suggesting that the shareholders and boards should consider procedures to review and supervise tax activities within firms (Desai & Dharmapala, 2006). Many large corporation have changed their corporate governance approach, tax compliance and business ethics (OECD, 2009).

These development have called for researchers to examine the link of tax non-compliance in an agency context hoping to generate insights into the tax policies and corporate governance effects. Schofield (2015) suggest that corporate governance and taxes combined are more effective. According to Sartori (2009), structures of corporate governance will determine how a company meet its tax obligations. A good corporate governance company will provide transparency and this would indirectly prevent managers from planning tax strategic behaviours (Desai & Dharmapala, Taxation and corporate governance: An Economic Approach, 2007).

Desai & Dharmapala (2007) study shows that incorporating agency problems into the corporate tax avoidance analysis will leads to a different conclusion theoretically and empirically. Agency theory may be used to consider what motivates the agent to act and by understanding the mechanisms that create the tax avoidance in order to help the companies to develop an improved corporate policy. Corporate governance can be used to redirect the behaviour of the agent and to realign with the principal's interests.

However according to Boussaidi & Hamed (2015), agency theory does not provide detailed explanation on the relationship between corporate governance and tax non-compliance. Agency theory only focus on the link between managers and shareholders which can affect the level of tax aggressiveness. Another theory suggested by Boussaidi & Hamed (2015) is the stakeholder theory that focuses on the relationship between firm and the stakeholders. Desai, Dyck & Zingales (2003) support the theory and suggest that corporate governance and taxation can be seen as three parties which are the state, insiders (managers) and outside shareholder (stakeholder). The state (tax administration) who enforces the influences of tax on the relationship between managers and stakeholder, while the relationship between managers and stakeholders (agency conflict) influences the corporate taxation system.

The corporate governance view of taxation can be tested in various settings such as the tax system characteristic, type of tax avoidance and the environment of corporate governance (Desai & Dharmapala, Taxation and corporate governance: An Economic Approach, 2007). According to Desai, Dyck & Zingales (2003), corporate governances system plays an important part to determine the tax revenue sensitivity to changes in tax enforcement and structure of tax rates. Desai, Dyck & Zingales (2004) found that to assess corporate tax reform, policy maker should look into the pre-existing corporate governance situation. Countries with good governance able to use aggressive taxes to continuously improve corporate governance, meanwhile poor governance countries should avoid using taxes to improve corporate governance, as this might have a reverse impact. When it is difficult to divert the income due to strong corporate governance, tax rates and tax revenues have more direct relation which is called the Laffer-curve effect. On the other hand, poorly-governed firms are more likely to reduce tax payments and subsequently getting the economic benefits personally (Bebchuk & Fried, 2004). It is fairly easy to divert the income in an ineffective corporate governance, where the manager will shelter the income to avoid taxation which will lead to reduction of reported income.

Minnick & Noga (2010) note that tax management can be a complex[15] and it gives opportunity for the managers to pursue their own interest that may have benefits for short or long term. In their conclusion, governance plays an important part in tax management where tax management strategies are determined based on the companies' governance structures. Desai, Dyck & Zingales (2003) study found that good corporate governance enable the company with high level of ownership to enhance tax compliance as they gain more benefit compared to tax sheltering. This finding also was supported by Sartori (2009) where he found that corporate governance has positive impact on corporate tax compliance. In order to increase the manager's compliance with the tax system (without tax planning strategies to minimize company's tax obligation), policy maker should focus on good corporate governance principles to align the interests with higher level of transparency.

Recent development shows that CEO and board of large companies are incorporating tax risk management as one of the company's corporate governance. Several tax administrations such as Australia, Canada and Chile have developed initiatives that

[15] Example, to be an effective tax management, the company may invest in tax haven where they do not require accounting information or adopt complex corporate structures.

support and encourage large businesses to consider corporate governance and enhanced the relationships that support tax risk management (OECD, 2009). Based on the experience in these three countries, large companies have corporate governance that are good and more transparent where tax administrations can expect fewer audit interventions resulting in greater certainty.

(b) Malaysia

Currently there is very minimal study available on the interaction between corporate governance and taxation in Malaysia. A study by Mohd. Amin, Md. Noor, Mastuki, & Ambali (2011) has found an empirical evidence that audit committee competency and board size has significant positive impact on tax compliance. The study also supported that there are significant differences on the level of corporate tax compliance among Malaysian public listed companies before and after the revision of MCCG in 2007.

Nik Ab Rahman (2011) study on public listed company from year 2000 to 2009 using ETR showed that corporate governance characteristic i.e board size and institutional investor are negatively related to tax non-compliance. These findings is supported by Mulyadi & Anwar (2014) where they further confirmed that there is significant impact of corporate governance to earnings management and tax management. The study suggest that when the company use earnings management practice to control its income, this will have an impact on the tax at the same time. In addition, a study by (Muhamed, 2014) showed that certain corporate governance characteristic do have positive relationship with tax compliance such as chairman independence and separation of power between CEO and chairman.

The relationship between corporate governance and tax compliance will be discussed further by focusing on the specific characteristic of corporate governance that have relationship with tax compliance.

2.5 Corporate governance characteristic and tax compliance

Over the past years, studies that examine the relationship between tax and corporate governance have increase such as board size, board of director composition, company size, ownership structure, corporate governance and tax environment changes, equity risk incentives and tax planning activities and the role of executives to determine the level of tax evasion or avoidance (Desai & Dharmapala, 2006; Lanis and Richardson, 2011 and Chen et al, 2010). Research by Desai & Dharmapala (2009) shows that the tax avoidance actions can be linked with diversionary activities such as earnings manipulation. Therefore the previous study on the relationship between corporate governance and earnings management can also be indirectly linked to tax non-compliance.

For the purpose of this study, the relationship between corporate governance characteristic and tax compliance in this study will be examined as follows:

2.5.1 Board composition and tax compliance

Taxation is one of the crucial decisions that has to be made by the board of director, whether to pay tax that will reduce the company's profit or to avoid paying tax which will increase the profit but getting the risk of being penalised by the tax authority in the future (Khaoula & Mohamed Ali, 2012). However not much attention had been paid to understand how board composition would influence the corporate tax planning of a company. The board composition is important as it ensures that board attend to the common interest of all stakeholder and has the responsibility to fulfil the tax obligations of the company as they involved directly in corporate tax planning strategy (Erle, 2008). Study by Minnick & Noga (2010) found that independent directors has the power to reinforce tax planning as they are able to provide useful knowledge due to their experience.

Study on board composition relationship with tax compliance shows that higher proportion of independent members on the board reduces the likelihood of tax avoidance or aggressiveness (Lanis & Richardson, 2011). Independent directors should recognise that there are potential costs associated with extreme tax positions and, consequently, should attempt to mitigate extreme tax avoidance (Armstrong, Blouin, Jagolinzer, & Larcker, 2015). Yeung (2010) suggest that increase in board independency will decrease the tax aggressiveness which indicates that the company follows the government tax policy under good corporate governance. Beasly (1996) shows that the inclusion of a high proportion of independent directors prevent fraudulent action and the study also found that the percentage of outside directors on board in fraud-company is lower compared to non-fraudulent company in United States of American context.

Based on these findings from previous literature and the recommendation from MCCG 2012, it is expected that higher proportion of non-executive directors will deter the likelihood of tax non-compliance. As such, this study proposed the following hypothesis:

H_1 : There is a positive relationship between board composition (higher proportion of non-executive directors) and tax compliance.

2.5.2 Independent director service tenure and tax compliance

As discussed previously, study by Wiersema & Bantel (1992) found that the outcome of longer tenure is declining performance due to the social cohesion between board member and the CEO and this will result in earnings management. However in contrast, the study by Peasnell, Pope & Young (2004) revealed that the tenure of non-executive is negatively associated with earnings management. The board is more effective in preventing earnings management when the independent director has longer service. There are no empirical studies on tenure of independent director in relation to non-compliance has been found. Nevertheless the research by Desai & Dharmapala (2009) shows that the tax avoidance actions can be linked with diversionary activities such as earnings manipulation. Therefore the previous study on the relationship between the service tenure of independent director and earnings management can also be indirectly linked to tax non-compliance.

Because of the conflict between MCCG principles and the empirical evidence on the issue of governance and earnings management, this study proposed no directional expectations between tenure of independent directors and tax compliance:

H_2: There is a relationship between independent director service tenure and tax compliance.

2.5.3 Separation of Chairman and CEO and tax compliance

Previous literature suggest that weak governance of a company occurs when one person holding the CEO position that is responsible in running the business and at the same time act as the chairperson of the board that is responsible for monitoring and evaluating managerial action (Lam & Lee, 2008). Empirical studies in relation to tax compliance shows that CEO duality influences the likelihood of tax planning and reducing the effective tax rates activities (Khaoula & Mohamed Ali, 2012) as duality positions are able to create concentrated power which leads to the decision that gives personal best interest. Minnick & Noga (2010) suggest that companies with duality in CEO position have higher tax expenses and less tax management.

Based on these findings from previous literature and the recommendation from MCCG 2012, it is expected that separation of chairman and CEO will deter the likelihood of tax non-compliance. As such, this study proposed the following hypothesis:

H_3 : There is a positive relationship between separation of chairman and CEO and tax compliance.

2.5.4 Audit Committee competency and tax compliance

As discussed previously, conferring to the agency theory, it is found that audit committee competency enhances earnings quality and decreases earnings management (Al-Rassas & Kamardin, 2015; Xie, Davidson & Dadalt, 2003; and Baxter & Cotter, 2008). With regards to Malaysian companies, Md Yusof, (2010) found that there is evidence that audit committee with financial expertise would lead to high earnings quality. According to a study by Mohd. Amin, Md. Noor, Mastuki, & Ambali (2011), one the purpose ofMCCG 2007 revision is to enhance the board and Audit Committee function. From the analysis it is found that audit committee competency has significant impact on corporate tax compliance. The empirical study have shown that corporate tax non-compliance is lower if the Audit Committee Chairman has an auditing or accounting background either education of practical experience.

Based on these findings from previous literature and the recommendation from MCCG 2012, it is expected that audit committee financial expertise will deter the likelihood of tax non-compliance. As such, this study proposed the following hypothesis:

H_4: There is a positive relationship between AC competency and tax compliance

2.5.5 Non audit service by external auditor and tax compliance

External auditor is an important mechanism to ensure that the financial statement is true and fair view of the actual activities of a company (Haron, 2009). Therefore non-audit services should not be performed as it can impair the independence of external auditors (Bursa Malaysia Securites Berhad, 2013). Empirical studies in relation to tax compliance have shown that a company will less likely to be tax aggressive if they appoint auditor that have a low proportion of non-audit services (Richardson, Taylor, & Lanis, 2013). Lisowsky, Robinson, & Schimdt (2010) disagreed and suggest that external auditor view their clients as important and this lead to a strong independence effect which does not enable the company to render tax shelter activity. The reason for providing non-audit service is that the external auditor may have detailed knowledge of their clients' business operation, corporate structure and financial and therefore able to provide better service in order to improve the client's business.

Because of the conflict between MCCG principles and the empirical evidence on the issue of governance, this study proposed no directional expectations between the external auditor non-audit services and tax compliance as follows:

H_5: There is a relationship between non-audit service by external auditor and tax compliance

2.5.6 Sourcing Internal Audit Function and tax compliance

As discussed previously, it is shown that in-house internal audit function has greater protection of proprietary information, internal monitoring and audit operations control to avoid associated risks from outsiders (Vecchio & Clinton, 2003). This view is supported by Al-Rassas & Kamardin (2015) where outsourcing internal audit function relate to lower earnings management. However another study have different findings where in-house internal auditor are less independent and it is hard for an employee to be independent from the management (James, 2003).

Although there are no empirical studies on internal audit function in relation to tax compliance has been found, the research by Desai & Dharmapala (2009) shows that the tax avoidance actions can be combined and seen with diversified activities such as earnings manipulation. Therefore the previous study on the relationship between internal audit function and earnings management can be indirectly linked to tax non-compliance.

Because of the conflict between MCCG principles and the empirical evidence on the issue of governance, this study no directional expectations between the internal audit function independence and tax compliance. As such, this study proposed the following hypothesis:

H_6 : There is a relationship between sourcing the internal audit function and tax compliance

2.6 Summary of hypotheses

The hypotheses developed based on the literature review above are summarized and listed out at Table 2-8 below:

Table 2-8
Summary of Hypotheses

	Hypothesis
H_1	There is a positive relationship between board composition (higher proportion of independent director) and tax compliance
H_2	There is a non-directional relationship between independent director service tenure and tax compliance
H_3	There is a positive relationship between separation of chairman and CEO and tax compliance
H_4	There is a positive relationship between audit committee competency and tax compliance
H_5	There is a non-directional relationship between non-audit service by external auditor and tax compliance
H_6	There is a non-directional relationship between sourcing internal audit function and tax compliance

2.7 Summary

This chapter discusses the relationship between corporate governance characteristic and tax compliance supported by previous researchers' empirical result. It also highlight the relationship between every independent variable and dependent variable that stated in the review of the literature. The relevant theories was outlined in this chapter and thereafter is concluded by providing the expected sign between both dependent and independent variable in term of hypothesis. The methodology will be conducted and discussed in next chapter.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

This chapter will explain the methodology used in the study which includes research framework, hypotheses development, research design, measurements of variables, data collection procedures, research population, sampling technique and techniques of data analysis.

3.1 Research framework

This study develops new models to examine the relationship of corporate governance and tax compliance on public listed company based on previous literatures (Brown & Mazur, 2003; Mohd. Amin, Md. Noor, Mastuki, & Ambali, 2011). Three models involved in this study which are filing compliance, reporting compliance and payment compliance as presented in Figure 2.

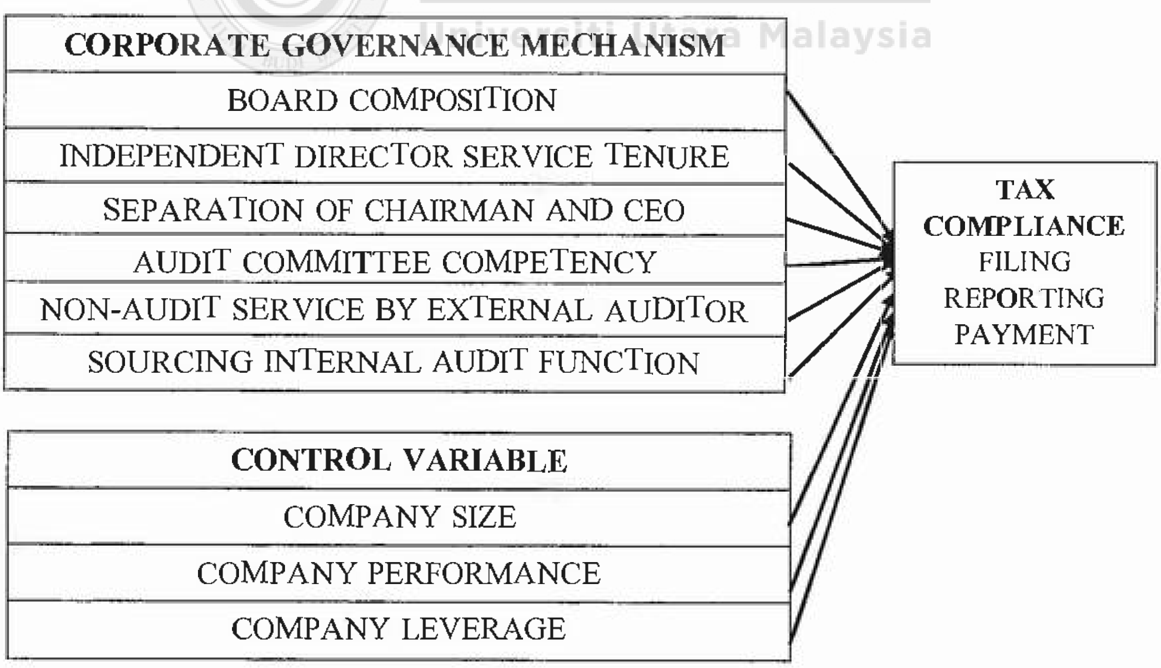

Figure 2
Theoretical Framework

3.2 Research design

This study applies commonly used research design which is quantitative methodology using secondary data which is tax data from IRBM and annual report of the public listed companies. This method is concurred with previous studies to potray the level of tax compliance among public listed companies (Rice, 1992; Hanlon, Mills, & Slemrod, 2007; Mohd Yusof, Lai, & Yap, 2014). The method of analysis for this study are (I) descriptive research using annual report and tax data to portray the characteristics of a company and (2) logistic regression analysis to know the impact of a specific relationship. The reason for using these type of analyses are discussed in techniques of data analysis in paragraph 3.6.

3.3 Measurement of variables

This section discusses on the measurement of the dependent and independent variables.

3.3.1 Measurement of dependent variables

Based on the study by Brown & Mazur (2003) and Kasipillai & Abdul Jabbar (2006), this study grouped tax compliance into three models:

(a) Filing compliance model

Filing compliance is measured based on the company that has been imposed with penalties under section 112 of the ITA 1967 for not submitting the required return forms for the year 2013 and 2014 to IRBM in the prescribed period. For the purpose of this study, the filing compliance is measured and coded as "0" if there are penalties under section 112 of the ITA 1967 (non-compliance) and "1" if there is no penalty under section 112 of the ITA 1967 (compliance).

(b) Reporting compliance model

Reporting compliance is measured based on the company that had been imposed with penalties under section 113 of the ITA 1967 for submitting incorrect return of income or incorrect information on chargeability for the year 2013 and 2014. For the purpose of this study, the reporting compliance is measured and coded as "0" if there are penalties under section 113 of the ITA 1967 (non-compliance) and "1" if there is no penalty under section 113 of the ITA 1967 (compliance).

(c) Payment compliance model

Payment compliance is measured based on the company that has been fined under section 103 for failure to pay taxes assessed for the year 2013 and 2014 or fined under subsection 107C of the ITA 1967 for failure to remit instalment on time or the actual tax 30% higher than the revised estimate of tax. For the purpose of this study, the reporting compliance is measured and coded as "0" if there are penalties under section 103, 107C(9) or 107C(10) of the ITA 1967 (non-compliance) and "1" if there is no penalty under section 103, 107C(9) or 107C(10) of the ITA 1967 (compliance).

3.3.2 Measurement of Independent Variables

Corporate governance characteristics are measured individually in this study as follows:

(a) Board composition

SC requires all public listed companies to have at least two directors or one third of its board are independent directors (whichever is the higher) (Paragraph 15.02(3) of the Listing Requirement). For the purpose of this study, board composition are measured based on the ratio of INED to the total number of directors in the board in this manner (1) less than 34 percent (2) 34 to 67 percent (3) more than 67 percent.

(b) Independent director service tenure

Under the principle of board independence MCCG 2012, independent director tenure should not be more than a cumulative term of nine years. For the purpose of this study, the tenure of independent director is measured and coded as "0" if the tenure is more than nine years cumulatively (not complied with MCCG 2012) and "1" if the tenure is less than nine years and below (complied with MCCG 2012).

(c) Separation of chairman and CEO

Under the principle of board independence MCCG 2012, the Chairman of the board and CEO or Managing Director position held by separate individual to avoid conflict of interest and reduce the opportunity for self- interest decision. For the purpose of this study, duality is measured and coded as "0" (not complied with MCCG 2012) and "1" if separation of chairman and CEO exists (complied with MCCG 2012).

(d) Audit committee competency

At least one member must fulfil the financial expertise requirement under the Paragraph 15.09 of Listing Requirements where the audit committee must be of no fewer than 3 members and at least a member must be with the Malaysian Institute of Accountants (MIA) (Bursa Malaysia Berhad, 2013). Audit committee competency is measured and coded as "0" if there is no member of audit committee that registered with MIA (not complied with MCCG 2012) and "1" if there is member of audit committee that registered with MIA (complied with MCCG 2012).

(e) External auditor non-audit service

The Audit Committee should establish policies that govern the non-audit services contract and procedures to avoid impairment of the independence of external auditor. For the purpose of this study, external auditor of non-audit service is measured and coded as "0" if there is non-audit service provided (not complied with MCCG 2012) and "1" if non-audit service is not provided (complied with MCCG 2012).

(f) Sourcing internal audit function

An internal audit function should provide assurance that the internal controls are operating effectively according to the standards set by professional bodies. Internal auditors of a company should also conduct reviews regularly to determine the effectiveness of the governance and internal controls processes as well as understand the risk management. Current economic pressures and increased resources has given the company choices or alternative of whether to hire more competent personnel (in-house) or consider outsourcing. These have caused concern on the independence of internal auditors. Therefore for the purpose of this study internal audit function is measured and coded as "0" for outsourced and "1" is for in-house.

3.3.3 Measurement of Control Variables

Control variables are used to control factors that affecting tax compliance but are independent from the corporate governance variables. Control variable balance the effect across subjects and groups to avoid potential problem in relation to variables bias (Lanis & Richardson, 2011). For the purpose of this study, company size, performance and leverage level are chosen as control variables as there are changes in tax policy that may affect the tax non-compliance. The measurement used in each control variables are as follows:

(a) Company size

Study by Ettredge, Johnstone, Stone, & Wang (2010) found that company size is important factor for better governance. Larger company are better performer in terms of diversifying risk (Abdul Wahab, 2010). Rice (1992) found a positive relationship between company size and tax non-compliance. For the purpose of this study, company size are measured based on total asset based on studies by Watts & Zimmerman (1986), and Zemzem & Ftouhi (2013).

(b) Company performance

Performance level in this study is measured based on Return on Asset Ratio (ROA) based on the study Mohd Mokhtar & Yusoff (2009). ROA is measured as pre-tax income divided by total assets. It shows the ability of a company to utilise their assets and measure the efficiency of the company in generating profits which also affect tax planning strategies (Hossan & Habib, 2010). The higher the ROA, the better utilisation of company's assets.

(c) Company leverage level

Leverage is a significant factor in terms of managerial actions as it affect firm performance and reduce the cost (Abdul Wahab, 2010). In addition, Lisowsky (2010) study shows that performance is positively associated with tax aggressiveness. Leverage level of a company is measured based on the ratio of total debt over total shareholders' equity (Zainal Abidin, Mustaffa Kamal, & Jusoff, 2009).

3.3.4 Summary of Variables Measurement

The variables measurement are summarised and listed out at Table 3-1 below:

Table 3-1
Summary of Variables

Variable	Description	Items
Dependent	Filing compliance	Penalties under section 112 of the ITA 1967 - 0 No penalties under section 112 of the ITA 1967 - 1
	Reporting compliance	Penalties under section 113 and 114 of the ITA 1967 - 0 No penalties under section 113 and 114 of the ITA 1967 - 1
	Payment compliance	Fine under section 103, 107C(9) or 107C(10) of the ITA 1967 - 0 No fine under section 103, 107C(9) or 107C(10) of the ITA 1967 - 1
Independent	Board composition	Less than 34% INED 34%-67% INED More than 67% INED
	Service tenure	> 9 years without justification– 0 ≤ 9 years – 1
	Separation of Chairman and CEO	Duality– 0 Separation - 1
	Audit Committee (AC)	Non MIA member – 0 MIA member - 1
	External Auditor (EA) - Non audit service	Perform non audit service – 0 Not perform non audit service -1
Independent	Sourcing Internal Audit Function (IAF)	Outsource - 0 In-house - 1
Control	Company size Company performance Company leverage	Total asset Return on Asset Ratio Ratio of total debt over total shareholders' equity

3.4 Data collection procedures

This study uses secondary data which is the actual tax audit data for year of assessment 2013 and 2014 which includes desk audit, external audit and collection. This data represent the audited and resolved public listed companies' cases in Malaysia in general. In order to get the data, an application in writing to the Director General of IRBM (DGIR) has to be submitted through Operational Tax Department of IRBM. Upon receiving the approval from DGIR, the Operational Tax Department then provides corporate tax audited cases that was finalized in 2013 and 2014. Preliminary screening were done manually to extract the public listed company data from other corporate tax cases.

Based on the tax data, this study then collects data from public listed companies' annual report for year 2013 and 2014. These data were then evaluated on the extent of their compliance based on the recommendations of MCCG 2012 as public listed companies in Malaysia are required to comply with MCCG 2012 requirements which fall under the listing requirement regulated by Bursa Malaysia. These data will be used as corporate governance attributes to understand the effect of corporate governance on corporate tax compliance based on the assumption that companies will not significantly change throughout the years. The financial information data such as company size, performance and leverage are also taken from the annual reports.

3.5 Research population and sampling technique

With the aim to examine the relationship between corporate governance and tax compliance in Malaysia, this study focused on public listed company due to the fact that public listed company's corporate governance are governed through law, code and regulatory requirements set by the regulator, CS and statutory bodies.

The target population in this study are public listed companies that were listed in the main market of Bursa Malaysia for year 2013 and 2014 as MCCG was revised in year 2012. These public listed companies was selected because the Board had continuously monitor companies that were listed in Bursa Malaysia in order for them to meet its listing requirements.

The sample was extracted from the list of public listed companies that were audited for year of assessment 2013 and 2014. The sample may be charged with either penalties under section 112 of the ITA 1967 for not submitting the required return forms to IRBM in the prescribed period (filing non-compliance), penalties under section 113 of the ITA 1967 for submitting incorrect return of income or incorrect information on chargeability (reporting non-compliance) or were fined under section 103 for failure to pay taxes assessed and 107C of the ITA 1967 for failure to remit instalment on time (payment non-compliance). The sample selected that has been charged with penalties as mentioned above should be a general representative of tax non-compliant companies in Malaysia.

The IRBM tax personnel has extracted 677 public listed company tax audit cases consist of two years data which is 420 cases in year of assessment 2013 and 257 cases in year of assessment 2014. Next stage were to exclude (1) companies that are not in the main market of Bursa Malaysia (2) companies with different regulatory such as financial sector and (3) companies that have changed the accounting period in 2013 and 2014. Using the industrial code, the sample is then categorized into subgroup. As a result 111 samples were selected which comprise of 64 cases in 2013 and 49 cases in 2014 as explained in Table 3-2 below:

Table 3-2
Sample Size for Year 2013 and 2014

Sectors[16]	**Year 2013**	**Year 2014**	**Total Sample**	**Percentage**
Construction	2	3	5	4.50
Consumer	10	10	20	18.02
Industrial products	19	8	27	24.32
Plantation	3	7	10	9.01
Properties	8	6	14	12.61
Technology	3	0	3	2.70
Trading/Services	18	14	32	28.83
Total	**63**	**48**	**111**	**100.00**

3.6 Techniques of data analysis

Statistical Package for the Social Science (SPSS) is being used to analyse data collected in this study. The following analysis are conducted in this paper:

3.6.1 Descriptive analysis

Descriptive statistics will be used to analyses the characteristic of corporate governance attributes, control variables and tax compliance measures to present the data like frequency, mean, median, mode, range, percentage, ratio, standard deviation, minimum, maximum and coefficient of variation.

[16] Category of sectors are in accordance with the classification of public listed companies from Bursa Malaysia (Appendix 1).

3.6.2 Logistic Regression Analysis

Logistic regression is used when there was only two groups of dependent variables (binary) (Pallant, 2010). Logistic regression provides investigation on the effect of multiple independent variables on dependent variables simultaneously. It predict the impact of several independent variables on dependent variables. It is also used when independent variables are correlated with each other. Logistic regression is more preferable as it does not require assumptions such as homoscedasticity and normality and is easier to interpret (Tabachnick & Fidell, 1996; Hair, Black, Babin, Anderson, & Tatham, 2006).

The following logistic regression analysis was used to investigate the impact of corporate governance characteristic on three model of corporate tax compliance:

FILCOMP = Filing compliance

REPCOMP = Reporting compliance

PMTCOMP = Payment compliance

$$\textbf{Logit}\left(\frac{FILCOMP}{1-TAXCOMP}\right) = b_0 + b_1BCOMP + b_2DIRSERV + b_3CHAIRCEO + b_4AUDCOM + b_5EXTAUD + b_6IAF + b_7CSIZE + b_8CPERFORM + b_9CLEVERAGE + e$$

$$\textbf{Logit}\left(\frac{REPCOMP}{1-TAXCOMP}\right) = b_0 + b_1BCOMP + b_2DIRSERV + b_3CHAIRCEO + b_4AUDCOM + b_5EXTAUD + b_6IAF + b_7CSIZE + b_8CPERFORM + b_9CLEVERAGE + e$$

$$\text{Logit}\left(\frac{PMTCOMP}{1-TAXCOMP}\right) = b_0 + b_1BCOMP + b_2DIRSERV + b_3CHAIRCEO + b_4AUDCOM + b_5EXTAUD + b_6IAF + b_7CSIZE + b_8CPERFORM + b_9CLEVERAGE + b_{10}DUMMYINDUSTRIES + e$$

The independent variables are defined as follows:

BCOMP = the percentage of external or INED in board

DIRSERV = a dummy number with a value of '0' if the directors' service tenure of 9 years and above, and a value of '1' otherwise

CHAIRCEO = a dummy number with a value of '0' if duality, and a value of '1' if otherwise

AUDCOM = a dummy number with a value of '0' if no Audit Committee that has member of an accounting body or association, and a value of '1' if otherwise

EXTAUD = a dummy number with a value of '0' if the External Auditor perform non-audit service, and a value of '1' otherwise

IAF = a dummy number with a value of '0' if the company has Outsourced Internal Audit Function, and a value of '1' if otherwise

CSIZE = the logarithm of total assets.

CPERFORM = the logarithm of return on asset ratio

CLEVERAGE = the logarithm of the company's ratio of total debt over total shareholders' equity

3.7 Summary

The board governance characteristic and control variables are mainly collected from company's annual report for the year 2013 and 2014 whereas the tax compliance data are collected from the actual tax data in relation to the year of assessment 2013 and 2014. Subsequently, the research design are discuss in this chapter as well.

CHAPTER FOUR: DATA ANALYSIS AND EMPIRICAL FINDINGS

4.0 Introduction

This chapter presents the findings and results of the study which include data analysis and data interpretation. In order to accomplish the research objective, the study carried out two types of analysis, namely descriptive analysis and inferential analysis. In the first part of this chapter discusses the type of public listed companies using descriptive analysis which shows the frequencies of distribution. Then it deliberates on results and explanation on the inferential analysis concentrating on logistic regressions. This analysis is used to investigate the relationship between the independent and dependent variables in order to validate the hypotheses. The data collected in this study have been processed and analysed using SPSS software.

4.1 Descriptive analysis

Descriptive analysis was performed to describe the characteristic of corporate governance, tax compliance, company size, company performance and company leverage by analysing the data such as percentage, frequency, mean, median, mode, range, ratio, standard deviation, minimum and maximum.

4.1.1 The profile of public listed company

Table 3-2 provide the breakdown of public listed company selected for the purpose of this study based on industry sectors in the main market of Bursa Malaysia. The table shows that the highest sector is trading and service (28.83%) followed by industrial products (24.32%).

Table 4-1 describe the profile of public listed companies in terms of company size, company performance and company's leverage. The result indicate that more than 62 percent of the total sample has total asset value between RM100 million to RM1,000 million. As for company performance, majority of the public listed companies have recorded Return on Assets (ROA) ratio between 0 to 20 percent which formed 63 percent of the total sample. Lastly, is the total debt over total shareholders' equity ratio which were used to measure the level of company's leverage. The statistic shows that majority of public listed companies (88 percent) have less than 1.35 debt over equity ratio.

Table 4-1
Percentage of Sample for Year 2013 and 2014

Variables	**Items**	**No of companies**			**Percentage**
		2013	**2014**	**Total**	**(%)**
Company size (total asset)	<100 million	18	9	27	**24**
	100 – 1,000 million	38	30	68	**61**
	>1,000 million	7	9	16	**14**
	Total	**63**	**48**	**111**	**100**
Company performance (Return on Asset Ratio)	<0%	16	9	25	**23**
	0-20%	41	28	68	**61**
	>20%	6	11	17	**16**
	Total	**63**	**48**	**111**	**100**
Company leverage (ratio of total debt over total shareholders' equity)	<1.35	55	43	98	**88**
	1.35-2.70	7	4	11	**10**
	2.70-4.05	1	1	2	**2**
	>4.05	0	0	0	**0**
	Total	**63**	**48**	**111**	**100**

Table 4-2 provide further analysis on the company size where the average total assets of public listed company is RM1,702.82 million whereas the biggest public listed company is RM90,936.40 million. The mean of company's performance (return on asset ratio) 8.3 percent indicates the efficiency of management utilizing its asset base. Meanwhile the average of company's leverage (debt to equity ratio) is 0.52 indicating that most of public listed companies has taken on relatively little debt and thus have low risk and greater stability.

Table 4-2
Descriptive Statistic – Control Variables Year 2013 And 2014

Variables	Minimum	Maximum	Mean	Standard Deviation	N
CSIZE	39.16	90,936.40	1,702.82	8,936.66	111
CPERFORM	-0.80	1.53	0.0830	0.22872	111
CLEVERAGE	0.00	3.08	0.5191	0.67200	111

CSIZE represent company size is measured based on total asset. **CPERFORM** represent performance level is measured based on Return on Asset Ratio. **CLEVERAGE** represent leverage level of a company is measured based on the ratio of total debt over total shareholders' equity.

4.1.2 Corporate governance characteristic

Table 4-3 provides descriptive statistics for independent variables to understand the corporate governance characteristic of the public listed company in this study. 75 percent of the public listed company has range of 34 percent to 67 percent of INED. This shows that most public listed company in Malaysia comply with the requirement of SC to have independent directors of at least two directors or one third of its board. Meanwhile, 66 percent of the public listed company engaged independent director that have been in service for more than nine years which is not in accordance with the SC requirement. On the other hand 84 percent of the public listed company applied separation of chairman of the board of director and the CEO following the SC requirement. Furthermore most of the audit committee of public listed company has MIA membership (95 percent) and all public listed company have an internal audit function internally or outsource and 80 percent of the external auditor of the public listed company provides non-audit service.

Table 4-3

Percentage of Independent Variables for Year 2013 And 2014

Variables	Items	No. of Companies 2013	2014	Total	%
Board composition (BCOMP)	Less than 34% INED	16	5	**21**	**19**
	34%-67% INED	43	40	**83**	**75**
	More than 67% INED	4	3	7	**6**
	Total	**63**	**48**	**111**	**100**
Service tenure (DIRSERV)	≤ 9 years	24	14	**38**	**34**
	> 9 years	39	34	73	**66**
	Total	**63**	**48**	**111**	**100**
Separation of Chairman and CEO (CHAIRCEO)	Separation	51	42	93	**84**
	Duality	12	6	**18**	**16**
	Total	**63**	**48**	**111**	**100**
Audit Committee Competency (AUDCOM)	MIA member	58	48	**106**	**95**
	Non MIA member	5	0	**5**	**5**
	Total	63	48	111	**100**
Non audit service by external auditor (EXTAUD)	Not perform non audit service	16	6	**22**	20
	Perform non audit service	47	42	**89**	80
	Total	**63**	**48**	**111**	**100**
Internal Audit Function (IAF)	In-house	33	25	58	**52**
	Outsource	30	23	53	**48**
	Total	**63**	**48**	**111**	**100**

BCOMP represent board composition is refers to the percentage of INED to the total number of directors in the board. **DIRSERV** represent independent director service tenure. **CHAIRCEO** represent separation of chairman and CEO. **AUDCOM** represent audit committee competency. **EXTAUD** represent non-audit service by external auditor is measured. **IAF** represent sourcing internal audit function whether outsourced or in-house.

Table 4-4 represent further analysis on descriptive statistics as detailed out in the table, the mean, maximum and standard deviation for board composition (continuous variables[17]). The board composition mean value is 0.4746 which shows that on average 47.46 percent of the director in public listed companies are INED.

Table 4-4
Descriptive Statistic for Board Composition

Variables	Minimum	Maximum	Mean	Standard Deviation	N
IV					
BCOMP	0.25	0.83	0.4746	0.12318	111

4.1.3 Tax compliance

Table 4-5 presents descriptive statistic for dependent variables to present the type of tax compliance based on industry. From the overall view, the percentage of tax compliance among public listed company are higher than non-compliance. Reporting compliance is reported at 82 percent, followed by 53.2 percent for both filing and payment compliance. It also shows that the highest tax non-compliance activities involving public listed companies on the main market of Bursa Malaysia is the filing and payment which covers 46.8 percent of the samples for each variable. This is followed by reporting non-compliance at 18 percent.

4.2 Logistic regression analysis

Logistic regression is used when the dependent variables are categorical (Pallant, 2010). It can be used to assess the contribution of each individual variable and test the predictive power of each variable. Three models involved in this study namely filing compliance, reporting compliance and payment compliance.

[17] Statistic such as mean, mean, median, mode, range, ratio, standard deviation, minimum and maximum are not appropriate for categorical variables (Pallant, 2010).

Table 4-5

Tax Compliance by Sector

Sectors	Filing				Reporting				Payment				Total[18]
	Compliance		Non-compliance		Compliance		Non-compliance		Compliance		Non-compliance		
Construction	3	5.1%	2	3.8%	4	4.4%	1	5%	1	2%	4	8%	5
Consumer	13	22.0%	7	13.5%	15	16.5%	5	25%	9	15%	11	21%	20
Industrial products	10	16.9%	17	32.7%	26	28.6%	1	5%	18	31%	9	17%	27
Plantation	6	10.2%	4	7.7%	10	11.0%	0	0%	4	7%	6	12%	10
Properties	6	10.2%	8	15.4%	8	8.8%	6	30%	9	15%	5	10%	14
Technology	0	0.0%	3	5.8%	2	2.2%	1	5%	3	5%	0	0%	3
Trading/Services	21	35.6%	11	21.2%	26	28.6%	6	30%	15	25%	17	33%	32
Total	**59**		**52**		**91**		**20**		**59**		**52**		**111**
	111				**111**				**111**				
Percentage (%)	**53.2**		**46.8%**		**82**		**18%**		**53.2**		**46.8%**		

Filing non-compliance is measured based on the company that has been imposed with penalties under section 112 of the ITA 1967 for not submitting the required return forms for the year of assessment 2013 and 2014 in the prescribed period.

Reporting non-compliance is measured based on the company that has been imposed with penalties under section 113 of the ITA 1967 for submitting incorrect return of income or incorrect information on chargeability for the year of assessment 2013 and 2014.

Payment non-compliance is measured based the company that has been fined under section 103 for failure to pay taxes assessed for the year of assessment 2013 and 2014 or fined under subsection 107C of the ITA 1967 for failure to remit instalment on time or the actual tax 30% higher than the revised estimate of tax.

[18] Total represents the total of public listed companies in each sector for each category of tax compliance.

4.2.1 Filing compliance

Direct logistic regression was used to determine the impact of corporate governance characteristic on filing compliance of public listed company. The model have six independent variables (board composition, independent director service tenure, separation of chairman and CEO, audit committee competency, non-audit service by external auditor and sourcing internal audit function) and three control variables (company size, company performance and company leverage level). This study assumes that good corporate governance will leads to filing compliance. Preliminary assumption testing was conducted to check for multicollinearity with no serious violation noted (Refer Appendix 6).

Using the logistic regression, the model was tested for goodness-of-fit. The model was explained as a whole between 14.5 percent (Cox and Snell R square) and 19.4 percent (Nagelkerke R squares) of the variance in tax compliance status. The chi-square value for the Hosmer-Lemeshow Test is 9.6159 with significance level of .329 which is larger than 0.05. This indicate support for the model which was able to distinguish between public listed company that is compliant and non-compliant. Details of the overall model's goodness-of-fit are shown in Table 4-6.

Table 4-6
Overall Model's Goodness-of-Fit Test (N=111) – Filing Compliance

Test	R^2	X^2	*df*	*p*
Hosmer and Lemeshow Test		9.159	8	.329*
Cox & Snell R Square	.145			
Nagelkerke R Square	.194			

Note: *Significance level is at p>0.05

The assessment would also explain on the model ability to predict the correct category for each variable. Table 4-7 shows the prediction for compliant public listed company was more accurate than for non-compliant public listed company. Using the model, 64.6 percent of the sample were correctly classified.

Table 4-7
The Observed and Predicted Frequencies for Filing Compliance

Observed	Predicted		Percentage Correct
	Filing non-Compliance	**Filing compliance**	
Filing non-compliance	39	20	66.1
Filing compliance	11	41	78.8
Overall percentage correct			72.1

Note: The cut-off value is 0.500.

According to the results presented in Table 4-8, only one of the independent variables made a unique contribution that is statistically significant to the model (DISERV) at p=.001. The Wald test[19] indicates that the highest value is for DIRSERV (10.517). The B values indicate that DIRSERV has a negative relationship with filing compliance. Specifically public listed company that has independent director who has been in service for more than 9 years are more likely to be filing compliance.

The DIRSERV record the odds ratio[20] of .213 which indicates that the longer service tenure of independent director service tenure of more than nine years, the less likely the company involved in tax non-compliance. As there are small number of outcome,

[19] Wald statistic is a parametric statistical that test the significance of particular explanatory variables with a known probability distribution (a chi-square distribution). It is used to determine *b* coefficient that is significantly different from zero in a logistic regression model (Field, 2009). "0" coefficient indicate that it has no impact on the dependent variable (Hair, Black, Babin, Anderson, & Tatham, 2006)
[20] Odds ratio represents the change in one of the categories of outcome when the value of a predictor increases by one unit (Tabbachnick and Fidell (2007)).

this association should be interpreted with caution. Therefore in order to generate a more precise estimate of effect, a larger study is needed. Detailed results on the logistic regression are shown in Table 4-8.

Table 4-8
Logistic Regression Predicting the Impact of Corporate Governance on Filing Compliance

	B	S.E.	Wald	df	Sig.	Odds Ratio	95% C.I.for Odds Ratio Lower	Upper
BCOMP	-.574	1.737	.109	1	.741	.564	.019	16.977
DIRSERV	-1.548	.477	10.517	1	.001	.213	.083	.542
CHAIRCEO	.283	.568	.248	1	.619	1.327	.436	4.041
AUDCOM	.998	1.200	.691	1	.406	2.713	.258	28.509
EXTAUD	.504	.550	.839	1	.360	1.656	.563	4.871
IAFINOUT	-.078	.437	.032	1	.858	.925	.392	2.179
CSIZE	.000	.000	.220	1	.639	1.000	1.000	1.000
CPERFORM	-.646	.950	.463	1	.496	.524	.082	3.371
CLEVERAGE	.258	.323	.638	1	.425	1.295	.687	2.440
Constant	-.723	1.584	.208	1	.648	.485		

Note: *Significance level is at $p<0.05$

4.2.2 Reporting compliance

Direct logistic regression was used to determine the impact of corporate governance characteristic on the reporting tax compliance of public listed companies. The model have six independent variables (board composition, independent director service tenure, separation of chairman and CEO, audit committee competency, non-audit service by external auditor and sourcing internal audit function) and three control variables (company size, company performance and company leverage level). This study assumes that good corporate governance will leads to reporting compliance. Preliminary assumption testing was conducted to check for multicollinearity with no serious violation noted (Refer Appendix 6).

Using the logistic regression, the model was tested for goodness-of-fit. The model was explained as a whole between 8.7 percent (Cox and Snell R square) and 14.2 percent (Nagelkerke R squares) of the variance in tax compliance status. The chi-square value for the Hosmer-Lemeshow Test is 8.957 with significance level of .784. This value is larger than 0.05 therefore indicating support for the model which was able to distinguish between public listed company that is non-compliant and compliant. The overall model's goodness-of-fit and model summary tables are shown in Table 4-9.

Table 4-9

Overall Model's Goodness-of-Fit Test (N=111) – Reporting Compliance

Test	R^2	X^2	*df*	*p*
Hosmer and Lemeshow Test		4.748	8	.784*
Cox & Snell R Square	.087			
Nagelkerke R Square	.142			

Note: *Significance level is at p>0.05

The assessment would also explain on the model ability to predict the correct category for each variable. Table 4-10 shows the prediction for compliant public listed company was more accurate than for non-compliant public listed company. Using the model, 82 percent of the sample were correctly classified.

Table 4-10

The Observed and Predicted Frequencies for Reporting Compliance

Observed	Predicted		Percentage Correct
	Reporting non-Compliance	Reporting compliance	
Reporting non-compliance	91	1	100.0
Reporting compliance	20	1	0.0
Overall percentage correct			82.0

Note: The cut-off value is 0.500.

Detailed results on the logistic regression for reporting compliance are shown in Table 4-11. None of the independent variables made significant contribution.

Table 4-11
Logistic Regression Predicting the Impact of Corporate Governance on Reporting Compliance

	B	S.E.	Wald	df	Sig.	Odds Ratio	95% C.I.for Odds Ratio Lower	Upper
BCOMP	-2.294	2.276	1.015	1	.314	.101	.001	8.739
DIRSERV	-.252	.583	.187	1	.666	.778	.248	2.436
CHAIRCEO	.560	.730	.588	1	.443	1.751	.418	7.324
AUDCOM	19.210	16024.711	.000	1	.999	220231 160.04	.000	.
EXTAUD	.316	.646	.239	1	.625	1.371	.387	4.862
IAFINOUT	.344	.572	.361	1	.548	1.410	.460	4.325
CSIZE	.000	.000	.918	1	.338	1.000	1.000	1.000
CPERFORM	-2.395	1.516	2.495	1	.114	.091	.005	1.780
CLEVERAGE	-.024	.415	.003	1	.954	.976	.433	2.202
Constant	-19.825	16024.711	.000	1	.999	.000		

4.2.3 Payment compliance

Direct logistic regression was used to determine the impact of corporate governance characteristic on the payment tax compliance of public listed companies. The model contained six independent variables (board composition, independent director service tenure, separation of chairman and CEO, audit committee competency, non-audit service by external auditor and sourcing internal audit function) and three control variables (company size, company performance and company leverage level). This study assumes that good corporate governance will leads to payment compliance. Preliminary assumption testing was conducted to check for multicollinearity with no serious violation noted (Refer Appendix 6).

Using the logistic regression, the model was tested for goodness-of-fit. The model was explained as a whole between 10.5 percent (Cox and Snell R square) and 14 percent (Nagelkerke R squares) of the variance in tax compliance status. The chi-square value for the Hosmer-Lemeshow Test is 4.370 with significance level of .822. This value is larger than 0.05 therefore indicating support for the model which was able to distinguish between public listed company that is compliant and non-compliant. Details of the overall model's goodness-of-fit and model summary tables are shown in Table 4-12.

Table 4-12
Overall Model's Goodness-of-Fit Test (N=111) – Payment Compliance

Test	R^2	X^2	*df*	*p*
Hosmer and Lemeshow Test		4.370	8	.822*
Cox & Snell R Square	.105			
Nagelkerke R Square	.140			

Note: *Significance level is at $p>0.05$

The assessment would also explain on the model ability to predict the correct category for each variable. Table 4-13 shows the prediction for non-compliant public listed company was more accurate than for compliant public listed company. Using the model, 62.8 percent of the sample were correctly classified.

Table 4-13
The Observed and Predicted Frequencies for Payment Compliance

Observed	**Predicted**		**Percentage Correct**
	Payment non-Compliance	**Payment compliance**	
Payment non-compliance	44	15	74.6
Payment compliance	26	26	50.0
Overall percentage correct			63.1

Note: The cut-off value is 0.500.

According to the results presented in Table 4-14, only one of the independent variables made a unique contribution that is statistically significant to the model (DISERV). The Wald test indicates that the highest value is for DIRSERV (6.132). The B values indicate that DIRSERV has a positive relationship with filing compliance. Specifically the shorter service tenure of independent director, the more likely the public listed company will be payment compliance.

The DIRSERV recording an odds ratio of3.014 which indicates that the shorter period of an independent director service tenure, the more likely public listed company is payment non-compliant, controlling for other factors in the model. Detailed results on the logistic regression are shown in Table 4-16.

Table 4-14
Logistic Regression Predicting the Impact Of Corporate Governance on Payment Compliance

	B	S.E.	Wald	df	Sig.	Odds Ratio	95% C.I.for Odds Ratio Lower	Upper
BCOMP	1.207	1.682	.515	1	.473	3.343	.124	90.423
DIRSERV	1.103	.446	6.132	1	.013	3.014	1.259	7.217
CHAIRCEO	-.363	.559	.421	1	.516	.696	.232	2.082
AUDCOM	-1.361	1.162	1.371	1	.242	.257	.026	2.501
EXTAUD	-.398	.547	.529	1	.467	.672	.230	1.962
IAFINOUT	-.036	.428	.007	1	.933	.965	.417	2.232
CSIZE	.000	.000	.260	1	.610	1.000	1.000	1.000
CPERFORM	1.434	1.030	1.939	1	.164	4.195	.558	31.564
CLEVERAGE	.014	.312	.002	1	.964	1.014	.550	1.868
Constant	.522	1.531	.116	1	.733	1.685		

Note: *Significance level is at p<0.05

4.3 Summary

From the examination of link between corporate governance characteristic and tax non-compliance in Malaysia, it is found there is a negative relation between director service tenure and filing compliance but a positive relation with payment compliance.

Table 4-15

Summary of Logistic Regression Analysis Interpretation

Dependent Variable	Independent Variable	Relationship Direction	Significant Value	Result on Hypothesis
FILCOMP	BCOMP	Positive	.741	Negative
	DIRSERV	Positive/ Negative	.001*	Negative
	CHAIRCEO	Positive	.619	Positive
	AUDCOM	Positive	.406	Positive
	EXTCOM	Positive/ Negative	.360	Positive
	IAFINOUT	Positive/ Negative	.858	Negative

*Significant level is at p<0.05

Dependent Variable	Independent Variable	Relationship Direction	Significant Value	Result on Hypothesis
REPCOMP	BCOMP	Positive	.314	Negative
	DIRSERV	Positive/ Negative	.666	Negative
	CHAIRCEO	Positive	.443	Positive
	AUDCOM	Positive	.999	Positive
	EXTCOM	Positive/ Negative	.625	Positive
	IAFINOUT	Positive/ Negative	.548	Positive

Dependent Variable	Independent Variable	Relationship Direction	Significant Value	Result on Hypothesis
PMTCOMP	BCOMP	Positive	.473	Positive
	DIRSERV	Positive/ Negative	.013*	Positive
	CHAIRCEO	Positive	.516	Negative

Table 4-5 (Continued)

Dependent Variable	Independent Variable	Relationship Direction	Significant Value	Result on Hypothesis
PMTCOMP	AUDCOM	Positive	.242	Negative
	EXTCOM	Positive/ Negative	.467	Negative
	IAFINOUT	Positive/ Negative	.933	Negative

*Significant level ia at p<0.05

CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATION

5.0 Introduction

This final chapter discuss the major findings from the statistical analysis conducted in Chapter Four in measuring the extent of relationship between corporate governance characteristic with tax compliance. Subsequently implications and limitation of the study and recommendations for future research will be discussed further.

5.1 Discussion on findings

The primary aim of this paper is to provide additional value to the current literature by examining the importance of corporate governance aspects with tax compliance. This study attempts to expand the literature by analysing the tax compliance data from IRBM database and information from the annual report using the SPSS statistical tools. Corporate governance characteristic and tax compliance data was collected from 2013 to 2014 which consist of 111 public listed company from the main market of Bursa Malaysia.

This study then construct data set that covers the profile of taxpayer, tax compliance data of each category and corporate governance characteristic for every public listed companies involved. Logistic regression were used to investigate the relationship between corporate governance characteristic and tax compliance in Malaysia. Three models of tax compliance were involved namely filing compliance, reporting compliance and payment compliance.

5.1.1 Descriptive analysis

The analysis illustrates in Table 3-2 shows that the highest audited sector of public listed companies were from trading and service sector with 32 companies (28.8 percent). The plausible explanation was that this sector dominates the proportion of public listed companies in Malaysia. It was reported that services sector contributed about 55 percent of the Malaysia's gross domestic product (GDP) (55.2 percent in 2013 and 55.3 percent in 2014). The strong growth of service sector was supported by strong domestic consumption and investment activities (Ministry of Finance, Malaysia, 2014).

The data from annual report in Table 4-3 shows that most of public listed companies followed the principle under MCCG 2012 namely two directors or one third of the board as independent directors, applied separation of chairman of the board of director and the CEO, audit committee that has MIA membership, internal audit function whether in-house or outsourced. In contrast, it is also discovered that most public listed companies have independent directors that had been in service for more than nine years and the external auditor of the public listed company that provides non-audit service which are not in accordance with the SC requirement under MCCG 2012.

Tax compliance data in Table 4-5 demonstrate that most of public listed companies had complied with income tax reporting requirement which stands at 82 percent. Conversely, both filing and payment compliance data shows that only 53.2 percent of the public listed companies were tax compliant.

5.1.2 Logistic regression

A summary of findings is presented in this study by referring to the research question as Chapter One. Six hypotheses were developed to investigate the relationship between corporate governance and tax compliance in Malaysia using three different tax compliance model namely filing compliance, reporting compliance and payment compliance.

(a) The relationship between corporate governance characteristic and filing compliance

The analysis showed that the highest industry involved in filing non-compliance were from industrial products sector (32.7 percent). The complexity of tax and control system of industrial product was perceived as the rationale for filing non-compliance among this sector. Industrial sector enjoy various tax incentives such as pioneer status, reinvestment allowance, income tax allowance and double deduction. Due to the complexity of the tax system and lack of knowledge on the current tax law, public listed company have to appoint tax professional to complete their tax return. However, relying on inefficient tax professionals will probably lead to filing non-compliance especially during the peak season of filing dateline.

From the logistic regression analysis, it is found that only one corporate governance characteristic has significant result which is the independent director service tenure (DIRESRV). The B values indicate that DIRSERV has a negative relationship with filing compliance indicating that independent director who have been in service for more than 9 years are more likely to be filing compliance. This finding implied that longer tenure directors have greater expertise, experience, high commitment and reputation. If an independent director has longer tenure, the board is more effective in preventing tax non-compliance. Their experience allows other directors gain better understanding of the company and its people to develop better governance and subsequently preventing earnings management and tax non-compliance. From another viewpoint, this also indicate that independent director who have been in service less than 9 years tend to be filing non-compliance due to lack of experience and expertise in dealing with tax administration.

The other reason may be due to the fact that no benefit can be gained by public listed company for not complying with the filing of tax return. This finding is in line with the study by Peasnell, Pope & Young (2004) on the relationship between service tenure of independent director and earnings management where it is not anticipated a big corporate taxpayers would intentionally fail to submit their tax return due to their immense presence in Malaysia. However, due to the fact that there are small number of sample, this association should be interpreted with caution. To generate more precise estimate of effect a larger study is needed.

Excluding the above corporate governance characteristic, the logistic regression results clarifies that the independent and control variables shows largely insignificant correlation with filing compliance of public listed companies. This suggests that filing compliance is not necessarily influenced by corporate governance characteristic (board composition, separation of chairman and CEO, audit committee competency, non-audit service by external auditor and sourcing internal audit function) as well as company size, company performance and leverage level.

(b) The relationship between corporate governance characteristic and reporting compliance

The analysis showed that the highest industry involved in reporting non-compliance were from properties and trading/service sector (28.6 percent in each sector). This may be due to the fact that these sectors enjoy fewer incentives as opposed to other sector which contributed to inequity and non-neutrality in current corporate tax system where these sectors are paying more taxes compared to other country. Consequently higher reporting non-compliance were reported where these sector seek method to lower the amount of tax liability through tax planning, tax avoidance or tax evasion.

The logistic regression results clarifies that independent and control variables shows largely insignificant correlation with reporting compliance of public listed companies. This suggests that reporting compliance is not necessarily influenced by corporate governance characteristic (board composition, independent director service tenure, separation of chairman and CEO, audit committee competency, non-audit service by external auditor and sourcing internal audit function) as well as company size, company performance and leverage level. Public listed company would not intentionally under reporting their income due to their immense presence in Malaysia as a big corporate taxpayers. Furthermore the strict tax audit and investigation done by IRBM could be the contribution for insignificance of reporting compliance.

Even though all of the variables were insignificant, it is noted that most of the result shows positive relationship between corporate governance characteristic and reporting compliance. This is consistent with the previous studies where public listed companies that have higher corporate governance quality will subsequently reduce the risk of tax non-compliance.

(c) The relationship between corporate governance characteristic and payment compliance

The analysis showed that the highest industry involved in payment compliance is trading/service sector (33 percent). One of the reason is that this sector dominates the proportion of public listed companies in Malaysia. Another potential reason is that this sector believes that they could avoid paying taxes without being caught by the authorities which has been proved by the high statistic of reporting non-compliance. After being penalised with back dated taxes, they would probably face problem financially to settle the taxes owed. This would lead to higher payment non-compliance in trading/service sector.

From the logistic regression analysis, this study sees one significant result which is the service tenure of independent director (DIRSERV). The B values indicate that DIRSERV has a positive relationship with payment compliance. This indicated that independent director who have been in service for less than 9 years are more likely to be payment compliance. The result shows that payment tax compliance is higher if the service tenure of independent director is less than 9 years. More importantly this finding also supports one of the main objectives of MCCG 2012 to increase the board independence and study by Wiersema and Bantel (1992) where long tenure can impair independence of the director. Another reason may be due to that not much benefit can be gained for payment non-compliance as the income has already been reported and any unpaid amount would be subject to penalty just in a matter of time through legal action. However, due to the fact that there are small number of sample, this association should be interpreted with caution. To generate more precise estimate, a larger and extensive study is needed.

Other than the above corporate governance characteristic, the logistic regression results clarifies that independent control variables shows largely insignificant correlation with payment compliance of public listed companies. This suggests that payment compliance is not necessarily influenced by corporate governance characteristic (board composition, separation of chairman and CEO, audit committee competency, non-audit service by external auditor and sourcing internal audit function) as well as company size, company performance and leverage level.

(d) Summary

The logistic regression analysis has tested the impact of corporate governance characteristic as recommended by MCCG 2012. This study has found an empirical evidence to affirm that there are significant differences on the level of corporate tax compliance among Malaysian public listed companies depending on the type of tax compliance i.e filing, reporting or payment compliance.

The regression analysis results provide significant and negative relationship between independent director service tenure and filing compliance. In detail, this finding implied that the longer service tenure of independent directors, the greater expertise, experience, and reputation which permits other directors to gain better knowledge and understanding of the company or industry and would indirectly avoid non-compliance behaviour. This finding also suggest that independent director who has been in service less than 9 years tend to be filing non-compliance due to their lack of experience and expertise in dealing with tax administration or due to the complexity of tax issues as the highest industry involved is industrial product that enjoy various tax incentives.

Conversely the same regression analysis provide significant and positive relationship between independent director service tenure and payment compliance. The reason may be due to not much benefit can be gained for payment non-compliance as the income has already been reported and any unpaid amount would be subject to penalty due to close monitoring of tax authorities. This study also provide insignificant relationship between corporate governance characteristic and reporting compliance. From the results and analysis above it is found that corporate governance characteristic has significant impact on tax compliance depending on the type of compliance i.e filing, reporting or payment.

5.2 Theoretical and practical contribution

This study may benefit and contribute to both theoretically and practically in the following areas:

5.2.1 Theoretical contribution

This study presents a multitude areas of tax compliance that should be considered by corporate governance expertise and academician i.e filing, reporting and payment compliance. Having an understanding on the specific type of tax compliance issues either filing, reporting or payment can be useful and recommends greater awareness on the importance of tax issues. This study also provide the preliminary findings on the impact of independent director service tenure to the level of tax compliance of a public listed company. Hopefully the finding will provide more current picture on the type of corporate governance characteristic that affect the tax compliance of a company and will be able to fill the gap between these two fields. When two disciplines have a common goal, the combination of corporate governance characteristic and tax will be more effective.

5.2.2 Practical contribution

The empirical findings from this study provide positive input to the relevant regulators and authorities to further strengthen the best practice of corporate governance characteristic. Regulators should also educate the companies to continuously maintain and promote good governance practices. The efforts by regulators to strengthen the Code by the MCCG 2012 was not directly to increase the level of corporate tax compliance but this study has provides some empirical evidence where the corporate tax compliance does have a significant relationship with corporate governance characteristic.

In order to broaden the tax revenue collection and reforms to the tax system, it is also suggested that tax authority to look at the other areas that needs improvement. Current practice of IRBM is to detect tax non-compliance based on the analysis of company's financial statements. Understanding the relationship between corporate governance especially on the board of directors' characteristic and tax non-compliance from the field of corporate governance will help to provide an answer and reinforces the results of other studies that claim the tax authority is able to use the corporate governance characteristic as an indicator to detect tax non-compliance. This study is able to contribute by showing that the same characteristic of corporate governance will have different impact on different type of tax compliance. Therefore the IRBM will be able to understand what motivates a company to deter certain type of tax compliance.

5.3 Limitation of the study

The main limitation of this study is the small number of samples of 111 public listed companies in year 2013 and 2014. However, there were studies that used small number of samples such as Ho & Williams (2003) study comprises about 84 to 108 companies for each of the countries, and Judge, Erez, Bono & Thoresen (2003) study comprises of 111 firms. The small sample size may be insufficient to result in statistical significance for the main hypothesis. The choice of 111 companies in this study is more manageable due to the fact the variables are numerous and items that need to be collected.

Another limitations of this study is the observed year which consist of only two year of studies. The two-year study would not provide an insight on the trends of tax non-compliance activities among public listed companies. However it does provide an indicator on how certain corporate governance characteristics influence the tax non-compliance.

5.4 Direction for future research

This study highlights the potential areas and direction for future research. Firstly, future studies could investigate more on the board of directors' attributes especially on service tenure of independent director. In order to manage the risk of having longer service tenure of independent director, it is also suggested that the companies to provide training on tax issue for directors involved. An increase level in education may increase the tax awareness and demand for corporate tax accountability. The IRBM could work with the SC to ensure that directors must attend tax related training. This is in line with the requirement of Bursa Malaysia where companies are now mandated to disclose training/course/seminar attended by directors (Bursa Malaysia Berhad, 2013).

This study would also suggest that companies to disclose the outcomes of their recent tax position i.e tax audits, tax payments in their prospectus to enable the companies to be listed in Bursa Malaysia for the purpose of transparency and protection of the investors. After being listed, the companies must also publish the tax audits outcome on the web site of Bursa Malaysia. This regulation has been successful implemented in Greece where public companies are required to publish tax audit results (Kourdoumpalou & Karagiogos, 2012). This method would most likely reduce the incentive of managers to engage in aggressive tax planning strategies as the market would receive a signal on the possibility of misleading of profits from the stakeholder.

To further enhance the generalizability of the findings it would be more meaningful to extend the sample to all the companies listed on Bursa Malaysia. Another potential area is the comparative analysis on the relationship between corporate governance and tax non-compliance between Malaysia and other countries with similar settings.

5.5 Conclusion

From the observation of 111 public listed companies, this study found that majority of the public listed companies had followed the recommendations proposed by MCCG 2012. Whether these good practice would reduce the risk of tax non-compliance cannot be concluded in this study. However, this study is able to see a pattern in terms of relationship between corporate governance characteristic and tax non-compliance using the actual tax non-compliance data from IRBM. It is found that service tenure of independent director do have significant relationship with tax non-compliance depending on the type of tax compliance involved i.e filing, reporting or payment.

As a caveat, these findings does not generalise to overall population such as small medium company, non-profit organisation, cooperation and the likes. However if the tax non-compliance is evident at public listed companies level with such regulations on governance, then it is suspected that such practice would exhibit worse problem in other population as well. Therefore, further study on the effect of other corporate governance characteristic on tax compliance would give us better understanding of this subject. It is hoped that the finding of this study would provide benefits in terms of safeguarding the shareholder interest of public listed companies and improving the direct tax collection system in Malaysia.

REFERENCES

Abdul Rahman, R., & Fairuzana, H. M. (2006). Board, audit committee, culture, and earnings management: Malaysian evidence. *Managerial Auditing Journal 21(7)*, 783-803.

Abdul Rahman, R., & Mohd Haniffa, R. (2005). The effect of role duality on corporate performance in Malaysia. *Corporate Ownership and Control*, Vol. 2 Issue 2, pp. 40-47.

Abdul Wahab, E. (2010). Corporate governance reform in Malaysia: Compliance institutional investors and firm performance. *Lambert Academic Publishing GmbH & Co.KG.*

Abdul, M. (2001). Personal Income Tax Non-Compliance in Malaysia. *Victoria University, Melbourne*, 1-242.

Alabede, J., Z. B. Z, & Idris, K. (2011). Determinants of tax compliance behaviour: A proposed model for Nigeria. *International Research Journal of Finance and Economics*, 78.

Al-Rassas, A., & Kamardin, H. (2015). Internal and external audit attributes, audit committee characteristics, ownership concentration and earnings quality: evidence from Malaysia. *Mediterranean Journal of Social Sciences VO 6 No 3*, 458-470.

Alves, S. (2011). The effect of the board structure on earnings management: Evidence from Portugal. *Journal of Financial Reporting & Accounting*, 9(2), 141-160.

Alzeban, A. (2015). Influence of audit committee industry expertise on internal audit. *International Journal of Business and Management*, Vol. 10, No. 4.

Annuar, H. A., Salihu, I., & Sheikh Obid, S. (2014). Corporate ownership, governance and tax avoidance: An interactive effects. *ScienceDirect*, 152.

Antle, R., Gordon, E., Narayanamoorthy, G., & Zhou, L. (2006). The joint determination of audit fees, non-audit fees, and abnormal accruals. *Review of Quantitative Finance and Accounting*, Volume 27, Issue 3, pp. 235-266.

Armstrong, S. C., Blouin, J. L., Jagolinzer, D. A., & Larcker, F. D. (2015). Corporate governance, incentives and tax avoidance. *Journal of Accounting and Economics*, 60, 1-17.

Asian Development Bank. (2014). *ASEAN corporat governance scorecard: Country reports and assessment 2013-2014.* Thailand: Asian Development Bank.

Baxter, P., & Cotter, J. (2008). Audit comittees and earnings quality. *Accounting & Finance*, Vol. 49, Issue 2, pp. 267-290.

Bebchuk, L. A., & Fried, J. M. (2004). Pay without performance: The unfulfilled promise of executive compensation. *Harvard University Press*, UC Berkeley Public Law Research Paper No. 537783.

Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance*, 14, 257-273.

Borlea, S., & Achim, M. (2013). Theories of corporate governance. *Studia Universitatis Vasile Goldis Arad.*

Boussaidi, A., & Hamed, M. S. (2015). The impact of governance mechanisms on tax aggressiveness: empirical evidence from Tunisian context. *Journal of Asian Business Strategy*, 1-13.

Brezeanu, P., & Stanculescu, A. (2008). Corporate governance models. *Annals of the University of Petrosani, Economics 8(1)*, 15-18.

Brown, R. F., & Mazur, M. J. (2003). IRS's comprehensive approach to compliance measurement. *National Tax Journal.*

Bursa Malaysia Berhad. (2017). A practical guide to listing on Bursa Malaysia. *Bursa Malaysia Berhad.*

Bursa Malaysia Berhad. (2013). *Corporate governance guide - 2nd edition.* Bursa Malaysia Berhad.

Bursa Malaysia Berhad. (2015). *2015 Analysis of corporate governance disclosures in annual reports.* Bursa Malaysia Berhad.

Bursa Malaysia Berhad. (15 August, 2016). *www.bursamalaysia.com.* Retrieved from Bursa Malaysia: http://www.bursamalaysia.com/market/listed-companies/list-of-companies/main-market/

Carcello, J., Hermanson, D., & Raghunandan, K. (2005). Factors associated with US public companies' investment in internal auditing. *Accounting Horizons*, 19(2), 69-84.

Che Haat, M. H., Mahenthiran, R. A., & S., H. A. (2008). Corporate governance, transperancy and performance of Malaysian companies. *Managerial Auditing Journal*, 744-778.

Chen, K. Y., & Zhou, J. (2007). Audit committee, board characteristics, and auditor switch decisions by Andersen's clients. *Contemporary Accounting Research 24*, No. 4 1085-1117.

Clarke, T. (2004). Theories of corporate governance; the philosophical foundations of corporate governance. *Oxon.*

Cohen, J., Krishnamoorthy, G., & Wright, A. (2004). The corporate governance mosaic and financial reporting quality. *Journal of Accounting Literature*, 87-152.

Contractor, F. (2016). Tax avoidance by multinational companies: method, policies and ethics. *Rutger Business Review.*

Davis, J., Schoorman, F., & Donaldson, L. (1997). Toward a stewardhip theory of management. *Academy of Management Review.*

Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, 50(2010) pp. 344-401.

Desai, M., & Dharmapala, D. (2004). Corporate tax avoidance and high powered incentives. *SSRN eLibrary.*

Desai, M., & Dharmapala, D. (2006). Earnings management and corporate tax shelters. *ResearchGate.*

Desai, M., & Dharmapala, D. (2007). Corporate tax avoidance and firm value. *The Review of Economics and Statistic*, Vol. 91, No. 3, Pages 537-546.

Desai, M., & Dharmapala, D. (2007). Taxation and corporate governance: An Economic Approach.

Desai, M., & Dharmapala, D. (2009). Earnings Management, Corporate Tax Shelters, and Book-Tax Alignment. *National Tax Journal*, 183.

Desai, M., Dyck, A., & Zingales, L. (2003). Corporate governance and taxation. *American Law & Economics Association Annual Meetings 2004*, Paper 75.

Desai, M., Dyck, A., & Zingales, L. (2004). Theft and taxes. *ECGI Working Paper Series in Finance*, 1-46.

Devos, K. (2014). Extension of Economic Deterrence Model. http://link.springer.com/chapter/10.1007%2F978-94-007-7476-6_3. Retrieved from SpringerLink: http://link.springer.com/chapter/10.1007%2F978-94-007-7476-6_3

Dhaliwal, D. S., Huang, S. X., Moser, W. J., & Pereira, R. (2011). Corporate tax avoidance and the level and valuation of firm cash holdings. *SSRN Electronic Journal.*

Donaldson, L., & Davis, J. (1991). Stewardship theory or agency theory; CEO governance and shareholder returns. *Academy of Management Review.*

Elsayed, K. K. (2007). Does CEO duality really affect corporate performance? *Corporate Governance: An International Review*, Vol. 15, Issue 6, pp. 1203-1214.

Engida, T. G., & Baisa, G. A. (2014). Factors influencing taxpayers' compliance with the tax system: An empirical study in Mekelle City, Ethiopia. *eJournal ofTax Research*, 433-452.

Erle, B. (2008). Tax risk management and board responsibility. *Tax and Corporate Governance.*

Ettredge, M. L., Johnstone, K. M., Stone, M. S., & Wang, Q. (2010). The effects of firm size, corporate governance quality, and bad news on disclosure compliance. *Review of Accounting Studies, Forthcoming.*

Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy.*

Field, A. (2009). *Discovering statistic using SPSS.* London: SAGE Publications Ltd.

Frankel, R., Johnson, M., & Nelson, K. (2002). The relation between auditors' fees for non-audit services and earnings management. *The Accounting Review* , Vol. 77 (Supplement): 71-105.

Freeman, E. (1984). *Strategic management: a stakeholder approach.* Pitman Business and Public Policy.

Gary, A. M., & Edmund, O. (2002). Did Enron pay taxes? Using accounting information to decipher tax status. *Tax analyst special report*, Doc 2002-19158.

Gomes, A. P. (2015). Corporate governance characteristics as a stimulus tax management. *ISSN*, 1-20.

Greco, G. (2011). Determinants of board and audit committee meeting frequency: Evidence from Italian listed companies. *Managerial Audit Journal*, Vol. 26, No. 3, pp. 208-229.

Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate data analysis (6th edition).* New Jersey: Pearson Education Inc.

Hanlon, M., Mills, L., & Slemrod, J. (2007). An empirical examination of corporate tax non-compliance. *Taxing Corporate Income in the 21st Century.*

Haron, H. (2009). Corporate governance failure: how would effective internal and external monitoring mechanism help? *Universiti Sains Malaysia.*

Hashim, H. A., & S., S. D. (2008). Board independence, CEO duality and accrual management: Malaysian evidence. *Asian Journal of Business and Accounting*, 27-46.

Heath, J. (2004). Stakeholder theory, corporate governance and public management: what can the history of state-run enterprises teach us in the post-Enron era. *Journal of Business Ethic.*

Hermanson, D. R., & Rittenberg, L. E. (2003). Chapter 2 Internal audit and organizational governance. *The Institute of Internal Auditors Research Foundation*, 32.

Ho, C., & Williams, S. (2003). International comparative analysis of the association between board structure and the efficiency of value added by a firm from its physical capital and intelectual capital resources. *The International Journal of Accounting.*

Hossan, F., & Habib, M. (2010). Performance evaluation and ratio analysis of pharmaceutical company in Bangladesh. *Department of Economic and Informatic University West.*

Hutchens, G. (5 July, 2017). Corporate tax non-compliance costing government $2.5billion. *The Guardian.*

IRBM. (2012). Annual Report.

IRBM. (2013). Annual Report.

IRBM. (2014). Annual Report.

IRBM. (2014). Annual Report.

IRBM. (2015). *Tax audit framework (Amendment 1/2015).*

Isa, K. (2014). Tax complexities in the Malaysian corporate tax system: Minimise to maximise. *International Journal of Law and Management*, pp. 50-65.

James, K. (2003). The effects of internal audit structure on perceived financial statement fraud prevention. *Accounting Horizons*, 17(4), 315-327.

Jensen, M. C., & Fama, E. F. (1983). Separation of ownership and control. *Journal of Law and Economics*, Vol. 26, No. 2 pp. 301-325.

Jensen, M. C., & Heckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics 3*, 305-360.

Jouber, H., & Fakhfakh, H. (2011). Earnings management and board oversight: An international comparison. *Managerial Auditing Journal*, 27(1), 66-86.

Judge, T., Erez, A., Bono, J., & Thoresen, C. (2003). The core self-evaluation scale : development of a measure. *Personnel Psychology.*

Kamardin, H., & Haron, H. (2011). Internal corporate governance and board performance in monitoring roles. *Journal of Financial Reporting and Accounting.*

Kasipillai, J., & Abdul Jabbar, H. (2006). Gender and ethnicity differences in tax compliance. *Asian Academy of Management Journal*, Vo. 11, No. 2, 73-88.

Khaoula, A., & Mohamed Ali, Z. (2012). The board of directors and the corporate tax planning: Empirical evidence from Tunisia. *Internal Journal of Accounting and Financial Reporting*, Vol. 2, No. 2.

Kourdoumpalou, S., & Karagiogos, T. (2012). Extent of corporate tax evasion when taxable earnings and accounting earnings councide. *Managerial Auditing Journal*, Vol. 27 Iss 3 pp. 228-250.

Lam, T., & Lee, S. (2008). CEO duality and firm performance: evidence from Hong Kong. *Corporate Governance.*

Lanis, R., & Richardson, G. (2011). The effect of board of director composition on corporate tax aggressiveness. *Journal of Accounting and Public Policy*, 30(1), Elsevire 50-70.

Li, J. (1994). Ownership structure and board composition: A multi-country test of agency theory predictions. *Managerial and Decision Economics 15*, 359-368.

Lin, S., Pizzini, M., Vargus, M., & Bardhan, I. R. (2011). The role of the internal audit function in the disclosure of material weaknesses. *The Accounting Review* , Vol. 86, No. 1, pp. 287-323.

Lisowsky, P., Robinson, L., & Schimdt, A. (2010). An examination of FIN 48: tax shelters, auditor independence and corporate governance. *Universiti of Illinois at Urbana-Champaign.*

Madison, K., Holt, D., & Kellermanns, F. (2015). Viewing family firm behavior and governance through the lens of agency and stewardship theories. *Sage Journal.*

Mahentrian, S., & Kasipillai, J. (2011). Influence of Ownership Structure, Corporate Governance, and Culture on Tax Policy: Evidence from Malaysia. *SSRN.*

Mat Norwani, N., Mohamad, Z., & Tamby Chek, I. (2011). Corporate governance failure and its impact on financial reporting within selected companies. *International Journal of Business and Social Science.*

Mat Yasin, F., & Nelson, S. P. (2012). Audit committee and internal audit: Implications on audit quality. *International Journal of Economics, Management and Accounting*, 187-218.

Md Yusof, M. (2010). Does Audit Committee Constraint Discretionary Accruals in MESDAQ Listed Companies? . *International Journal of Business and Social Science* , Vol. 1 No. 3.

Ministry of Finance, Malaysia. (2014). *Economic Report 2014/2015.* Ministry of Finance, Malaysia.

Ministry of Finance Malaysia. (2018). *2018 Economic Report.* Putrajaya: Ministry of Finance Malaysia, Federal Government Administrative Centre.

Minnick, K., & Noga, T. (2010). Do corporate governance characteristics influence tax management? *Journal of Corporate Finance*, Vol. 16, No. 5, pp. 703-718.

Minnick, K., & Noga, T. (2010). Do corporate governance characteristics influence tax management? *Journal of Corporate Finance.*

Modugu, K. P., & Anyanduba, J. O. (2014). Impact of Tax Audit on Tax Compliance in Nigeria. *International Journal of Business and Social Science.*

Mohd Mokhtar, S. S., & Yusoff, R. Z. (2009). Exploring the relationship of key strategic orientations towards sustainable organizational performance. *International Journal of Business Science and Applied Management 2(1)*, 79-87.

Mohd Yusof, N., Lai, M. L., & Yap, B. W. (2014). *Tax non-compliance among SMCs in Malaysia : tax audit evidence.* Journal of Applied Accounting Research.

Mohd. Amin, S., Md. Noor, R., Mastuki, N., & Ambali, A. (2011). Corporate governance and tax compliance. *IEEE Symposium on Business, Engineering and Industrial Applications* (pp. 117-122). Langkawi: IEEE.

Mohdali, R., Isa, K., & Yusoff, S. H. (2014). The impact of threat of punishment on tax compliance and non-compliance attitudes in Malaysia. *Procedia - Social and Behavioral Science 164*, 291-297.

Muhamed, Z. (2014). The impact of corporate governance on public listed companies' tax compliance. *Universiti Putra Malaysia.*

Mulyadi, M. S., & Anwar, Y. (2014). Corporate Governance, Earnings Management and Tax Management. *ScienceDirect*, 363-366.

Nik Ab Rahman, N. (2011). Corporate governance and tax aggressiveness: evidence from Malaysia. 1-136.

Nur-Tegin, K. (2008). Determinants of business tax compliance. *The B.E. Journal of Economic Analysis & Policy.*

OECD. (2004). *OECD principles of corporate governance.* France: OECD Publications Service.

OECD. (2009). *Corporate governance and tax risk management.* Centre For Tax Policy and Administration.

OECD. (2010). Understanding and influencing taxpayers' compliance behaviour. *Forum on tax administration: Small/medium enterprise (SME) compliance subgroup* (pp. 1-46). Centre for Tax Policy and Administration (CTPA).

OECD. (2015). *G20/OECD principles of corporate governance.* Ankara: OECD.

Oh, T. H., & Lim, M. S. (2011). Behavioral intention of tax non-compliance among sole-proprietors in Malaysia. *International Journal of Business and Social Science.*

Oh, T., & Lim, M. (2011). Behavioral intention of tax non-compliance among sole-proprietors in Malaysia. *International Journal of Business and Social Science.*

Otusanya, O. (2011). The role of multinational companies in tax evasion and tax avoidance: The case of Nigeria. *Critical Perspectives on Accounting.*

Pallant, J. (2010). SPSS Survival manual: A step by step guide to data analysis using SPSS. *Journal of Advanced Nursing*, Vol. 3rd, pp. 352.

Peasnell, K. V., Pope, P., & Young, S. (2004). Board monitoring and earnings management: do outside directors influence abnormal accruals? *Journal of Business Finance & Accounting*, 32(7-8): 1311-1346.

Pemandu. (13 10, 2016). *Unit Pengurusan Prestasi dan Pelaksanaan.* Retrieved from Economic Transformation Programme: http://etp.pemandu.gov.my/Public_Finance_Reform-@-Public_Finance_Reform_(PFR).aspx

Porta, R. L., Silanes, L. d., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. *Journal of Financial Economics 58*, 3-27.

Prawitt, D., Smith, J., & Wood, D. (2009). Internal audit quality and earnings management. *Account. Rev*, 84(4): 1255-1280.

PricewaterhouseCoopers. (2004). *Tax risk management.* London: PricewaterhouseCoopers LLP.

PricewaterhouseCoopers. (2012). *PWC Alert - Malaysian code on corporate governance 2012.* PricewaterhouseCoopers Associates Sdn Bhd.

Rice, E. (1992). The corporate tax gap: Evidence on tax compliance by small corporations. *University of Michigan Press.*

Richardson, G., Taylor, G., & Lanis, R. (2013). The impact of board of director oversight characteristic on corporate tax aggressiveness: An empirical analysis. *J. Account. Public Policy 32*, 68-88.

Romer, C., & Romer, D. (2010). The macroeconomic effects of tax changes: estimates based on a new measure of fiscal shocks. *American Economic Review*, 763-801.

Salleh, N. M., Che Haat, M., & Salleh, Z. (2012). The effectiveness of audit committee. *International Conference on Management, Economics and Finance (ICMEF 2012)* (pp. pp. 316-317). Kuching, Malaysia: Global Research.

Sartori, N. (2009). Corporate governance dynamics and tax compliance. *Social Science Research Network*, 1-27.

Schofield, M. (2015). *Corporate governance and tax: stronger together.* Governance Lab.

Securities Commission Malaysia. (2007). Finance committee on corporate governance: Malaysia code on corporate governance. *Securities Commission Malaysia.*

Securities Commission Malaysia. (2012). *Malaysian code on corporate governance.* Securities Commission Malaysia.

Securities Commission of Malaysia. (2012). *Malaysian Code of Corporate Governance.* Securites Commission of Malaysia.

Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, Vol. LII, No. 2.

Shukeri, S., Ong, W., & Shaari, M. (2012). Does board of director's characteristics affect firm performance? Evidence from Malaysia public listed companies. *International Business Research*, Vol. 5, No. 9.

Singh, V. (2011). *Veerinder on taxation.* CCH Asia Pte Ltd.

Smith, J. L., & Wood, D. A. (2008). Internal Audit Quality and Earnings Management. *SSRN*, 25.

Tabachnick, B., & Fidell, L. (1996). *Using multivariate statistics.* New York: HarperCollins College Publishers.

Taha, R., & Loganathan, N. (2008). Causality between tax revenue and government spending in Malaysia. *The International Journal of Business and Finance Research*, Vol. 2, No. 2.

Taktak, N. B., & Mbarki, I. (2014). Board characteristics, external auditing quality and earnings management; Evidence from Tunisian banks. *Journal of Accounting in Emerging Economies*, Vo. 4, No. 1, 2014 pp. 79-96.

Tedds, L. (2006). Tax non-compliance and corporate governance: a comparative study. *University of Manitoba.*

Tedds, L. (2010). Keeping it off the books; an empirical investigation of firms that engage in tax evasion. *Applied Economics.*

The Committee on the Financial Aspects of Corporate Governance . (1992). *Report of the committee on the Financial aspects of corporate governance.* London: The Committee on the Financial Aspects of Corporate Governance .

The Edge. (29 December, 2017). *MMC Corp slapped with RM45.9m tax bill.* Retrieved from The Edge Markets: http://www.theedgemarkets.com/article/mmc-corp-slapped-rm459m-tax-bill

Vecchio, S., & Clinton, B. (2003). Co-sourcing and other alternatives in acquiring internal auditing services. *Internal Auditing-Boston-Warren Gorham and Lamont Incorporated*, 18(3), 33-39.

Watts, R. L., & Zimmerman, J. L. (1986). *Positive Accounting Theory.* London: Prentice-Hall.

Wiersema, M. F., & Bantel, K. A. (1992). Top management team demography and corporate strategic change. *The Academy of Management Journal*, Vol. 35, No. 1.

Xie, B., Davidson, W. N., & Dadalt, P. J. (2003). Earnings management and corporate governance: the role of the board and the audit committee. *Journal of Corporate Finance 9*, 295-316.

Yeung, C. (2010). Effects of corporate governance on tax aggressiveness. *An Honours Degree Project, Hong Kong Baptist University*, 26-27.

Zainal Abidin, Z., Mustaffa Kamal, N., & Jusoff, K. (2009). Board structure and corporate performance in Malaysia. *International Journal of Economics and Finance*, Vol. 1, No. 1.

Zemzem, A., & Ftouhi, K. (2013). The effects of board of directors' characteristic on tax aggressiveness. *Research Journal of Finance and Accounting*, Vol. 4, No. 4.

Zimmerman, J. (1983). Taxes and firm size. *Journal of Accounting and Economics.*

Zulkifli, A. b., Samad, M. b., & Ismail, M. I. (2006). *Corporate governance in Malaysia.* Retrieved from http://www.micg.net/research/CORPORATE%20GOVERNANCE%20IN%20MALAYSIA%20-%20MICG.

APPENDICES

APPENDIX 1: CLASSIFICATION OF PUBLIC LISTED COMPANIES IN THE MAIN MARKET

SECTOR	DEFINITION
Consumer Products	Companies manufacture materials or components into new products for consumer use
Construction	Companies engage in constructing any form of structure including roads and railroads
Closed-End Funds	Close-ended investment entities
Exchange Traded Funds	Open-ended investment entities
Finance	Companies that provide services in activities of obtaining and redistributing funds, in the form of deposits by Central Banks and other monetary institutions, insurance and other activities auxiliary to financial intermediation
Hotels	Companies that provide hospitality services in the form of accommodation, meals and drinks
Industrial Products	Companies manufacture materials or components into new products for industrial use
Infrastructure Project	Infrastructure project companies
Mining	Companies engage in exploration extraction, dressing and beneficiating of minerals
Plantations	Companies engage in the cultivation, planting and/or replanting of crops. The processing of agricultural products in factories on farms and plantations is also included if it is not feasible to report separately this activity from production of crops
Properties	Companies invest directly or indirectly in real estate through management or ownership
Real Estate Investment Trusts	Real estate investment trusts or corporation (REITs)
Special Purpose Acquisition Company	Special purpose acquisition companies
Trading/Services	Companies engage in distribution of products and provision of services other than financial services, e.g banking and insurance
Technologies	Companies that provide information technology solutions

Source : Bursa Malaysia

APPENDIX 2: DESCRIPTIVE ANALYSIS

Frequencies

FILCOMP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Filing compliance	59	53.2	53.2	53.2
	Filing non-compliance	52	46.8	46.8	100.0
	Total	111	100.0	100.0	

REPCOMP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Reporting compliance	91	82.0	82.0	82.0
	Reporting non-compliance	20	18.0	18.0	100.0
	Total	111	100.0	100.0	

PMTCOMP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Payment compliance	59	53.2	53.2	53.2
	Payment non-compliance	52	46.8	46.8	100.0
	Total	111	100.0	100.0	

SECTOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	CONSTRUCTION	5	4.5	4.5	4.5
	CONSUMER	20	18.0	18.0	22.5
	IND-PRODUCT	27	24.3	24.3	46.8
	PLANTATION	10	9.0	9.0	55.9
	PROPERTIES	14	12.6	12.6	68.5
	TECHNOLOGY	3	2.7	2.7	71.2
	TRADING/SERVICE	32	28.8	28.8	100.0
	Total	111	100.0	100.0	

DIRSERV

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	> 9 years	38	34.2	34.2	34.2
	< 9 years	73	65.8	65.8	100.0
	Total	111	100.0	100.0	

CHAIRCEO

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Duality	93	83.8	83.8	83.8
	Separation	18	16.2	16.2	100.0
	Total	111	100.0	100.0	

AUDCOM

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Non MIA member	106	95.5	95.5	95.5
	MIA member	5	4.5	4.5	100.0
	Total	111	100.0	100.0	

EXTAUD

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Perform non audit service	22	19.8	19.8	19.8
	Not perform non audit service	89	80.2	80.2	100.0
	Total	111	100.0	100.0	

IAFINOUT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Outsourced	53	47.7	47.7	47.7
	In-house	58	52.3	52.3	100.0
	Total	111	100.0	100.0	

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CSIZE	111	39160000.00	90936400000.00	1702820992.3333	8936659976.77018
CPERFORM	111	-.80	1.53	.0830	.22872
CLEVERAGE	111	.00	3.08	.5191	.67200
Valid N (listwise)	111				

Statistics

BCOMP

N	Valid	111
	Missing	0
Mean		.4746
Median		.4444
Std. Deviation		.12318
Minimum		.25
Maximum		.83
Sum		52.68

APPENDIX 3: LOGISTIC REGRESSION (FILING COMPLIANCE MODEL)

Logistic Regression

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	111	100.0
	Missing Cases	0	.0
	Total	111	100.0
Unselected Cases		0	.0
Total		111	100.0

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
Filing non-compliance	0
Filing compliance	1

Categorical Variables Codings

		Frequency	Parameter coding (1)
IAFINOUT	Outsourced	53	1.000
	In-house	58	.000
CHAIRCEO	Duality	93	1.000
	Separation	18	.000
AUDCOM	Non MIA member	106	1.000
	MIA member	5	.000
EXTAUD	Perform non audit service	22	1.000
	Not perform non audit service	89	.000
DIRSERV	> 9 years	38	1.000
	<9 years	73	.000

Block 0: Beginning Block

Classification Table[a,b]

	Observed		Predicted FILCOMP: Filing non-compliance	Predicted FILCOMP: Filing compliance	Percentage Correct
Step 0	FILCOMP	Filing non-compliance	59	0	100.0
		Filing compliance	52	0	.0
	Overall Percentage				53.2

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-.126	.190	.441	1	.507	.881

Variables not in the Equation[a]

			Score	df	Sig.
Step 0	Variables	BCOMP	.124	1	.725
		DIRSERV(1)	12.449	1	.000
		CHAIRCEO(1)	.050	1	.823
		AUDCOM(1)	1.516	1	.218
		EXTAUD(1)	1.652	1	.199
		IAFINOUT(1)	1.160	1	.281
		CSIZE	.543	1	.461
		CPERFORM	.080	1	.778
		CLEVERAGE	1.349	1	.246

a. Residual Chi-Squares are not computed because of redundancies.

Block 1: Method= Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	17.386	9	.043
	Block	17.386	9	.043
	Model	17.386	9	.043

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	136.050[a]	.145	.194

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	9.159	8	.329

Contingency Table for Hosmer and Lemeshow Test

		FILCOMP = Filing n-compliance		FILCOMP = Filing compliance		
		Observed	Expected	Observed	Expected	Total
Step 1	1	10	9.175	1	1.825	11
	2	9	8.617	2	2.383	11
	3	5	8.128	6	2.872	11
	4	9	6.747	2	4.253	11
	5	7	5.519	4	5.481	11
	6	4	5.022	7	5.978	11
	7	4	4.720	7	6.280	11
	8	4	4.343	7	6.657	11
	9	3	3.727	8	7.273	11
	10	4	3.001	8	8.999	12

Classification Table[a]

	Observed		Predicted: FILCOMP: Filing non-compliance	Predicted: FILCOMP: Filing compliance	Predicted: Percentage Correct
Step 1	FILCOMP	Filing non-compliance	39	20	66.1
		Filing compliance	11	41	78.8
	Overall Percentage				72.1

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	BCOMP	-.574	1.737	.109	1	.741	.564	.019	16.977
	DIRSERV(1)	-1.548	.477	10.517	1	.001	.213	.083	.542
	CHAIRCEO(1)	.283	.568	.248	1	.619	1.327	.436	4.041
	AUDCOM(1)	.998	1.200	.691	1	.406	2.713	.258	28.509
	EXTAUD(1)	.504	.550	.839	1	.360	1.656	.563	4.871
	IAFINOUT(1)	-.078	.437	.032	1	.858	.925	.392	2.179
	CSIZE	.000	.000	.220	1	.639	1.000	1.000	1.000
	CPERFORM	-.646	.950	.463	1	.496	.524	.082	3.371
	CLEVERAGE	.258	.323	.638	1	.425	1.295	.687	2.440
	Constant	-.723	1.584	.208	1	.648	.485		

a. Variable(s) entered on step 1: BCOMP, DIRSERV, CHAIRCEO, AUDCOM, EXTAUD, IAFINOUT, CSIZE, CPERFORM, CLEVERAGE.

APPENDIX 4: LOGISTIC REGRESSION (REPORTING COMPLIANCE MODEL)

Logistic Regression

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	111	100.0
	Missing Cases	0	.0
	Total	111	100.0
Unselected Cases		0	.0
Total		111	100.0

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
Reporting compliance	0
Reporting non-compliance	1

Categorical Variables Codings

		Frequency	Parameter coding (1)
IAFINOUT	Outsourced	53	1.000
	In-house	58	.000
CHAIRCEO	Duality	93	1.000
	Separation	18	.000
AUDCOM	Non MIA member	106	1.000
	MIA member	5	.000
EXTAUD	Perform non audit service	22	1.000
	Not perform non audit service	89	.000
DIRSERV	> 9 years	38	1.000
	< 9 years	73	.000

Block 0: Beginning Block

Classification Table[a,b]

			Predicted		
			REPCOMP		
	Observed		Reporting no-compliance	Reporting compliance	Percentage Correct
Step 0	REPCOMP	Reporting non-compliance	91	0	100.0
		Reporting compliance	20	0	.0
	Overall Percentage				82.0

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-1.515	.247	37.640	1	.000	.220

Variables not in the Equation[a]

			Score	df	Sig.
Step 0	Variables	BCOMP	.773	1	.379
		DIRSERV(1)	.006	1	.936
		CHAIRCEO(1)	.027	1	.871
		AUDCOM(1)	1.151	1	.283
		EXTAUD(1)	.412	1	.521
		IAFINOUT(1)	1.468	1	.226
		CSIZE	.573	1	.449
		CPERFORM	2.679	1	.102
		CLEVERAGE	.004	1	.952

a. Residual Chi-Squares are not computed because of redundancies.

Block 1: Method= Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	10.058	9	.346
	Block	10.058	9	.346
	Model	10.058	9	.346

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	94.652[a]	.087	.142

a. Estimation terminated at iteration number 20 because maximum iterations has been reached. Final solution cannot be found.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	4.748	8	.784

Contingency Table for Hosmer and Lemeshow Test

		REPCOMP = Reporting non-compliance		REPCOMP = Reporting compliance		
		Observed	Expected	Observed	Expected	Total
Step 1	1	11	10.956	0	.044	11
	2	11	10.254	0	.746	11
	3	9	9.809	2	1.191	11
	4	9	9.591	2	1.409	11
	5	9	9.255	2	1.745	11
	6	8	8.850	3	2.150	11
	7	10	8.560	1	2.440	11
	8	9	8.291	2	2.709	11
	9	9	7.990	2	3.010	11
	10	6	7.443	6	4.557	12

Classification Table[a]

	Observed		Predicted REPCOMP: Reporting non-compliance	Predicted REPCOMP: Reporting compliance	Percentage Correct
Step 1	REPCOMP	Reporting non-compliance	90	1	98.9
		Reporting compliance	19	1	5.0
	Overall Percentage				82.0

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B) Lower	95% C.I.for EXP(B) Upper
Step 1[a]	BCOMP	-2.294	2.276	1.015	1	.314	.101	.001	8.739
	DIRSERV(1)	-.252	.583	.187	1	.666	.778	.248	2.436
	CHAIRCEO(1)	.560	.730	.588	1	.443	1.751	.418	7.324
	AUDCOM(1)	19.210	16024.711	.000	1	.999	220231160.046	.000	.
	EXTAUD(1)	.316	.646	.239	1	.625	1.371	.387	4.862
	IAFINOUT(1)	.344	.572	.361	1	.548	1.410	.460	4.325
	CSIZE	.000	.000	.918	1	.338	1.000	1.000	1.000
	CPERFORM	-2.395	1.516	2.495	1	.114	.091	.005	1.780
	CLEVERAGE	-.024	.415	.003	1	.954	.976	.433	2.202
	Constant	-19.825	16024.711	.000	1	.999	.000		

a. Variable(s) entered on step 1: BCOMP, DIRSERV, CHAIRCEO, AUDCOM, EXTAUD, IAFINOUT, CSIZE, CPERFORM, CLEVERAGE.

Casewise List[b]

Case	Selected Status[a]	Observed REPCOMP	Predicted	Predicted Group	Temporary Variable Resid	ZResid
2	S	1**	.162	0	.838	2.278
4	S	1**	.143	0	.857	2.451
35	S	1**	.143	0	.857	2.443
38	S	1**	.117	0	.883	2.751
42	S	1**	.125	0	.875	2.643
93	S	1**	.097	0	.903	3.047

a. S = Selected, U = Unselected cases, and ** = Misclassified cases.

b. Cases with studentized residuals greater than 2.000 are listed.

APPENDIX 5: LOGISTIC REGRESSION (PAYMENT COMPLIANCE MODEL)

Logistic Regression

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	111	100.0
	Missing Cases	0	.0
	Total	111	100.0
Unselected Cases		0	.0
Total		111	100.0

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
Payment non-compliance	0
Payment compliance	1

Categorical Variables Codings

		Frequency	Parameter coding (1)
IAFINOUT	Outsourced	53	1.000
	In-house	58	.000
CHAIRCEO	Duality	93	1.000
	Separation	18	.000
AUDCOM	Non MIA member	106	1.000
	MIA member	5	.000
EXTAUD	Perform non audit service	22	1.000
	Not perform non audit service	89	.000
DIRSERV	> 9 years	38	1.000
	<9 years	73	.000

Block 0: Beginning Block

Classification Table[a,b]

			Predicted		
			PMTCOMP		
	Observed		Payment non-compliance	Payment compliance	Percentage Correct
Step 0	PMTCOMP	Payment non-compliance	59	0	100.0
		Payment compliance	52	0	.0
	Overall Percentage				53.2

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-.126	.190	.441	1	.507	.881

Variables not in the Equation[a]

			Score	df	Sig.
Step 0	Variables	BCOMP	.394	1	.530
		DIRSERV(1)	6.174	1	.013
		CHAIRCEO(1)	.086	1	.770
		AUDCOM(1)	2.311	1	.128
		EXTAUD(1)	1.211	1	.271
		IAFINOUT(1)	.199	1	.656
		CSIZE	.271	1	.603
		CPERFORM	1.235	1	.266
		CLEVERAGE	.277	1	.599

a. Residual Chi-Squares are not computed because of redundancies.

Block 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	12.275	9	.198
	Block	12.275	9	.198
	Model	12.275	9	.198

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	141.162[a]	.105	.140

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	4.370	8	.822

Contingency Table for Hosmer and Lemeshow Test

		PMTCOMP = Payment non-compliance		PMTCOMP = Payment compliance		
		Observed	Expected	Observed	Expected	Total
Step 1	1	8	8.323	3	2.677	11
	2	6	7.627	5	3.373	11
	3	9	7.309	2	3.691	11
	4	6	7.057	5	3.943	11
	5	7	6.501	4	4.499	11
	6	6	5.975	5	5.025	11
	7	5	5.150	6	5.850	11
	8	6	4.320	5	6.680	11
	9	4	3.813	7	7.187	11
	10	2	2.925	10	9.075	12

Classification Table[a]

Observed			Predicted: PMTCOMP: Payment non-compliance	Predicted: PMTCOMP: Payment compliance	Predicted: Percentage Correct
Step 1	PMTCOMP	Payment compliance	44	15	74.6
		Payment non-compliance	26	26	50.0
	Overall Percentage				63.1

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B) Lower	95% C.I.for EXP(B) Upper
Step 1[a]	BCOMP	1.207	1.682	.515	1	.473	3.343	.124	90.423
	DIRSERV(1)	1.103	.446	6.132	1	.013	3.014	1.259	7.217
	CHAIRCEO(1)	-.363	.559	.421	1	.516	.696	.232	2.082
	AUDCOM(1)	-1.361	1.162	1.371	1	.242	.257	.026	2.501
	EXTAUD(1)	-.398	.547	.529	1	.467	.672	.230	1.962
	IAFINOUT(1)	-.036	.428	.007	1	.933	.965	.417	2.232
	CSIZE	.000	.000	.260	1	.610	1.000	1.000	1.000
	CPERFORM	1.434	1.030	1.939	1	.164	4.195	.558	31.564
	CLEVERAGE	.014	.312	.002	1	.964	1.014	.550	1.868
	Constant	.522	1.531	.116	1	.733	1.685		

a. Variable(s) entered on step 1: BCOMP, DIRSERV, CHAIRCEO, AUDCOM, EXTAUD, IAFINOUT, CSIZE, CPERFORM, CLEVERAGE.

Casewise List[a]

a. The casewise plot is not produced because no outliers were found.

APPENDIX 6: MULTICOLLINEARITY ANALYSIS

Model		Collinearity Statistics Tolerance	VIF
1	(Constant)		
	BCOMP	.965	1.037
	DIRSERV	.903	1.108
	CHAIRCEO	.943	1.060
	AUDCOM	.977	1.023
	EXTAUD	.904	1.106
	IAFINOUT	.877	1.140
	CSIZE	.915	1.093
	CPERFORM	.846	1.182
	CLEVERAGE	.901	1.110

a. Dependent Variable: FILCOMP

Model		Collinearity Statistics Tolerance	VIF
1	(Constant)		
	BCOMP	.965	1.037
	DIRSERV	.903	1.108
	CHAIRCEO	.943	1.060
	AUDCOM	.977	1.023
	EXTAUD	.904	1.106
	IAFINOUT	.877	1.140
	CSIZE	.915	1.093
	CPERFORM	.846	1.182
	CLEVERAGE	.901	1.110

a. Dependent Variable: REPCOMP

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	BCOMP	.965	1.037
	DIRSERV	.903	1.108
	CHAIRCEO	.943	1.060
	AUDCOM	.977	1.023
	EXTAUD	.904	1.106
	IAFINOUT	.877	1.140
	CSIZE	.915	1.093
	CPERFORM	.846	1.182
	CLEVERAGE	.901	1.110

a. Dependent Variable: PMTCOMP