

**THE IMPACT OF CORPORATE GOVERNANCE ON
CORPORATE TAX AVOIDANCE IN MALAYSIA**

KOAY GUO YAO

**FACULTY OF BUSINESS AND ECONOMICS
GRADUATE SCHOOL OF BUSINESS
UNIVERSITI MALAYA
KUALA LUMPUR**

2022

**THE IMPACT OF CORPORATE GOVERNANCE ON
CORPORATE TAX AVOIDANCE IN MALAYSIA**

KOAY GUO YAO

**DISSERTATION SUBMITTED IN PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF ACCOUNTING
(REPORTING AND MANAGEMENT
ACCOUNTABILITY)**

**FACULTY OF BUSINESS AND ECONOMICS
GRADUATE SCHOOL OF BUSINESS
UNIVERSITI MALAYA
KUALA LUMPUR**

2022

UNIVERSITI MALAYA
ORIGINAL LITERARY WORK DECLARATION

Name of Candidate: **Koay Guo Yao**

Matric No: **S2032765**

Name of Degree: **Master of Accounting (Reporting and Management Accountability)**

Title of Project Paper/Research Report/Dissertation/Thesis ("this Work"): **The Impact of Corporate Governance on Corporate Tax Avoidance in Malaysia**

Field of Study: **Accounting and Taxation**

I do solemnly and sincerely declare that:

- (1) I am the sole author/writer of this Work;
- (2) This Work is original;
- (3) Any use of any work in which copyright exists was done by way of fair dealing and for permitted purposes and any excerpt or extract from, or reference to or reproduction of any copyright work has been disclosed expressly and sufficiently and the title of the Work and its authorship have been acknowledged in this Work;
- (4) I do not have any actual knowledge nor do I ought reasonably to know that the making of this work constitutes an infringement of any copyright work;
- (5) I hereby assign all and every rights in the copyright to this Work to the Universiti Malaya ("UM"), who henceforth shall be owner of the copyright in this Work and that any reproduction or use in any form or by any means whatsoever is prohibited without the written consent of UM having been first had and obtained;
- (6) I am fully aware that if in the course of making this Work, I have infringed any copyright whether intentionally or otherwise, I may be subject to legal action or any other action as may be determined by UM.

Candidate's Signature

Date: 04-10-2022

Subscribed and solemnly declared before,

Witness's Signature

Date: 04-10-2022

THE IMPACT OF CORPORATE GOVERNANCE ON CORPORATE TAX AVOIDANCE IN MALAYSIA

ABSTRACT

The purpose of this study is to examine the relationship between corporate governance and corporate tax avoidance in Malaysia. This study analyses a sample of 387 firm-year observations from large listed companies on Bursa Malaysia across the 2016 – 2020 period using a fixed effect panel least squares regression model. It reveals that CEO compensation has a significant positive relationship with corporate tax avoidance, which shows that higher pay could induce and motivate CEOs to engage in more tax avoidance activities for their companies. However, little evidence is documented on the impact of other corporate governance structures, including board gender diversity, on a company's tax avoidance level. This suggests that corporate governance has limited influence on a company's tax compliance matters in Malaysia, contrary to evidence mainly from developed countries. While this study, as with other quantitative studies, may not be able to explain the reality of the results, the authors provided rather comprehensive explanations on the findings to help with one's understanding on the topic. This study contributes in extending the literature of tax research in Malaysia, and enriches the literature on governance and tax by providing unique evidence and insights from a developing country. To the best of the authors' knowledge, this study is also the first to examine the effects of board gender diversity on corporate tax avoidance in Malaysia.

Keywords: corporate governance, corporate tax avoidance, CEO compensation, board gender diversity, Malaysia

**KESAN TADBIR URUS KORPORAT TERHADAP PENGELAKAN CUKAI
KORPORAT DI MALAYSIA**

ABSTRAK

Kajian ini bertujuan menyiasat hubungan antara tadbir urus korporat dengan pengelakan cukai korporat di Malaysia. Sampel sebanyak 387 pemerhatian dari syarikat-syarikat besar di Bursa Malaysia dalam tempoh 2016 – 2020 dianalisis menggunakan model regresi. Hubungan positif yang signifikan antara pampasan CEO dengan pengelakan cukai korporat menunjukkan bahawa gaji yang lebih tinggi mampu mendorong seseorang CEO untuk melibatkan diri dalam aktiviti pengelakan cukai korporat. Alat tadbir urus korporat lain pula, termasuk kepelbagaian jantina lembaga pengarah, tiada hubungan yang ketara dengan pengelakan cukai korporat. Bertentangan dengan sastera yang terdiri terutamanya dari negara-negara maju, kajian ini mendapati bahawa tadbir urus korporat mempunyai pengaruh yang terhad ke atas pematuhan cukai sesebuah syarikat di negara membangun. Biarpun kajian ini, seperti kajian-kajian kuantitatif lain, mungkin tidak dapat menelitikan sebab-sebab di sebalik keputusan yang diperolehi, penulis telah merumuskan penjelasan atas keputusan kajian ini bagi membantu pemahaman pembaca. Kajian ini memberi sumbangan dengan memperluaskan penyelidikan cukai di Malaysia serta memperkaya sastera berkenaan tadbir urus dan cukai dengan memperkenalkan bukti dan pandangan unik dari sebuah negara membangun. Dalam pengetahuan penulis, kajian ini adalah yang pertama untuk menyiasat kesan kepelbagaian jantina lembaga pengarah atas pengelakan cukai korporat di Malaysia.

Kata Kunci: *tadbir urus korporat, pengelakan cukai korporat, pampasan CEO, kepelbagaian jantina lembaga pengarah, Malaysia*

ACKNOWLEDGEMENTS

Above all, I praise and thank Buddha and Guan Yin Bodhisattva for granting me blessings of knowledge, wisdom, and enlightenment to succeed and excel in all academic pursuits, including completion of this dissertation.

Next, I express my deepest gratitude to my research supervisor, Dr. Noor Sharoja Sapiei. I am very grateful to Dr. Sharoja for her continuous assistance and guidance over the writing of my dissertation, and I truly appreciate Dr. Sharoja for taking time out of her busy schedule to do so. I was fortunate to have the opportunity to work with Dr. Sharoja, which without her help, I would not have been able to complete my dissertation smoothly.

I am also thankful to my internal assessors, Assoc. Prof. Dr. Mazni Abdullah, Dr. Mohd. Haniff Zainuldin, and Dr. Azlina Abdul Jalil, for reviewing and offering constructive feedback on my research. Their reviews have certainly helped me in identifying flaws which I overlooked or were unaware of, and in improving my overall work.

Additionally, I would like to thank all my lecturers, who have contributed in any ways, on the completion of my dissertation.

I would also like to acknowledge the assistance of the school's support staff and librarians for their help in various administrative and technical matters.

Finally, I would be remiss in not mentioning my family, especially my parents, and friends, who have supported me along the way.

Thank you very much. May you be well and happy always.

TABLE OF CONTENTS

Abstract.....	iii
<i>Abstrak</i>	iv
Acknowledgements.....	v
Table of Contents.....	vi
List of Figures.....	xi
List of Tables.....	xii
List of Symbols and Abbreviations.....	xiii
List of Appendices.....	xv
CHAPTER 1: INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.2 Problem Statement.....	2
1.2.1 The Global Context.....	2
1.2.2 The Malaysian Context.....	8
1.3 Research Gap.....	16
1.4 Research Questions and Research Objectives.....	19
1.4.1 Research Questions.....	20
1.4.2 Research Objectives.....	20
1.5 Research Significance.....	20
CHAPTER 2: LITERATURE REVIEW.....	23
2.1 Corporate Taxation in Malaysia.....	23

2.2 Corporate Governance in Malaysia.....	25
2.2.1 CEO Incentives and Characteristics.....	28
2.2.1.1 CEO Compensation.....	28
2.2.1.2 CEO Duality.....	29
2.2.2 Board Composition.....	30
2.2.2.1 Board Size.....	30
2.2.2.2 Board Independence.....	30
2.2.2.3 Board Gender Diversity.....	30
2.2.3 Ownership Structure.....	31
2.2.3.1 Foreign Ownership.....	31
2.3 Theoretical Underpinning: Agency Theory.....	33
2.4 Literature Review and Hypothesis Development.....	36
2.4.1 CEO Incentives and Characteristics.....	37
2.4.1.1 CEO Compensation.....	37
2.4.1.2 CEO Duality.....	42
2.4.2 Board Composition.....	44
2.4.2.1 Board Size.....	45
2.4.2.2 Board Independence.....	46
2.4.2.3 Board Gender Diversity.....	49
2.4.3 Ownership Structure.....	51
2.4.3.1 Foreign Ownership.....	51
CHAPTER 3: METHODOLOGY.....	54
3.1 Research Design.....	54

3.2 Research Model.....	54
3.3 Research Framework.....	56
3.4 Measurement of Variables.....	57
3.4.1 Dependent Variable.....	58
3.4.2 Independent Variables.....	59
3.4.3 Control Variables.....	62
3.4.3.1 Firm Size.....	63
3.4.3.2 Capital Intensity.....	64
3.4.3.3 Leverage.....	65
3.4.3.4 Profitability.....	65
3.4.4 Firm and Year Fixed Effects.....	66
3.5 Sample.....	66
3.5.1 Initial Sample.....	66
3.5.2 Final Sample.....	68
3.6 Data Collection.....	69
3.7 Data Analysis.....	69
3.7.1 Descriptive Analysis.....	69
3.7.2 Correlation Analysis.....	70
3.7.3 Multiple Regression Analysis.....	70
CHAPTER 4: RESULTS.....	71
4.1 Descriptive Analysis.....	71
4.1.1 Dependent Variable.....	71
4.1.2 Independent Variables.....	72

4.1.2.1 CEO Incentives and Characteristics.....	72
4.1.2.2 Board Composition.....	72
4.1.2.3 Ownership Structure.....	73
4.1.3 Control Variables.....	74
4.2 Correlation Analysis.....	75
4.2.1 Independent Variables and Dependent Variable.....	76
4.2.2 Control Variables and Dependent Variable.....	76
4.3 Assumptions Tests.....	77
4.3.1 Multicollinearity.....	78
4.3.2 Autocorrelation.....	79
4.3.3 Homoscedasticity.....	79
4.3.4 Normality.....	79
4.4 Multiple Regression Analysis.....	80
4.4.1 Hausman Test.....	80
4.4.2 Fixed Effect Panel Least Squares Regression.....	81
4.5 Robustness Analysis.....	83
CHAPTER 5: DISCUSSION.....	86
5.1 Hypothesis Testing.....	86
5.2 Discussion.....	87
5.2.1 Independent Variables.....	87
5.2.1.1 CEO Compensation (SALARY).....	87
5.2.1.2 CEO Duality (DUALITY).....	90
5.2.1.3 Board Size (BSIZE).....	91

5.2.1.4 Board Independence (BIND).....	92
5.2.1.5 Board Gender Diversity (BGD).....	94
5.2.1.6 Foreign Ownership (FOREIGN).....	98
5.2.2 Control Variables.....	99
5.2.2.1 Firm Size (FSIZE).....	100
5.2.2.2 Capital Intensity (CAPINT).....	101
5.2.2.3 Leverage (LEV).....	102
5.2.2.4 Profitability (PROFIT).....	103
CHAPTER 6: CONCLUSION.....	105
6.1 Contributions to Knowledge.....	107
6.2 Implications to Practice.....	109
6.3 Limitations.....	112
6.4 Suggestions for Future Research.....	115
References.....	118
Appendix.....	130

LIST OF FIGURES

Figure 3.1: Research Framework.....	56
-------------------------------------	----

Universiti Malaya

LIST OF TABLES

Table 1.1:	Malaysian Government Revenue – Direct Tax (in RM billion).....	9
Table 1.2:	Malaysian Government Revenue – Direct Tax (in %).	9
Table 1.3:	Company Tax Audit in Malaysia.....	10
Table 1.4:	Foreign Direct Investments (FDIs) in Southeast Asia (ASEAN).....	11
Table 1.5:	Company Tax Rates in Southeast Asia (ASEAN) in Year 2021.....	12
Table 1.6:	Corporate Governance and Corporate Tax Avoidance Studies in Malaysia.....	16
Table 3.1:	Measurement of Variables.....	57
Table 3.2:	Sample Selection Criteria.....	68
Table 4.1:	Descriptive Statistics of Variables.....	71
Table 4.2:	Correlation Matrix.....	75
Table 4.3:	Assumptions Tests.....	77
Table 4.4:	Hausman Test.....	80
Table 4.5:	Fixed Effect Panel Least Squares Regression Results.....	81
Table 5.1:	Hypothesis Testing.....	86

LIST OF SYMBOLS AND ABBREVIATIONS

1MDB	: 1 Malaysia Development Berhad
ACCA	: Association of Chartered Certified Accountants
AG	: Auditor General
ASEAN	: Association of Southeast Asian Nations
BEPS	: Base Erosion and Profit Shifting
BNM	: <i>Bank Negara Malaysia</i> (Central Bank of Malaysia)
BTD	: Book-Tax Difference
CARE	: Comprehend, Apply, and Report
CbCR	: Country-by-Country Reporting
CEO	: Chief Executive Officer
CFO	: Chief Financial Officer
COVID-19	: Coronavirus Disease 2019
CRS	: Common Reporting Standards
DETR	: Effective Tax Rate Differential
DGIR	: Director General of Inland Revenue Board of Malaysia
ESR	: Earnings Stripping Rule
ETR	: Effective Tax Rate
FDI	: Foreign Direct Investment
FTSE	: Financial Times Stock Exchange
G20	: Group of Twenty
GAAR	: General Anti-Avoidance Rule
IRBM	: Inland Revenue Board of Malaysia
ITA	: Income Tax Act

MACC	: Malaysian Anti-Corruption Commission
MAP	: Mutual Agreement Procedures
MCCG	: Malaysian Code on Corporate Governance
MIDA	: Malaysian Investment Development Authority
MOF	: Ministry of Finance
NGO	: Non-Governmental Organisation
OAS	: Official Assessment System
OECD	: Organisation for Economic Co-operation and Development
PLC	: Public Listed Company
PPE	: Property, Plant, and Equipment
PwC	: PricewaterhouseCoopers
REIT	: Real Estate Investment Trust
RPGT	: Real Property Gains Tax
SAS	: Self-Assessment System
SC	: Securities Commission
SME	: Small and Medium Enterprise
SOE	: State-owned Enterprise
STR	: Statutory Tax Rate
TP	: Transfer Pricing
U.K.	: United Kingdom
U.S.	: United States
UNCTAD	: United Nations Conference on Trade and Development
VIF	: Variance Inflation Factor

LIST OF APPENDICES

Appendix A:	100 Largest Companies on FTSE Bursa Malaysia.....	130
-------------	---	-----

Universiti Malaya

CHAPTER 1: INTRODUCTION

1.1 Background of the Study

Tax is the most fundamental form of government revenue (Wang, Xu, Sun & Cullinan, 2020). It is levied through official administration and rules to afford public costs and to implement fiscal policies vital to maintain a country's political, economic, and social interests (Mahenthiran & Kasipillai, 2012; Ariffin, 2013). On contrary, tax represents one of the most important costs for companies which reduces companies' cash flows, and thus, shareholders' income (Wang et al., 2020). Hence, the interests of the governments and those of the companies contradict on tax matters, whereby governments work to maximise tax collection; while companies attempt to minimise tax payment. Tax, as a factor considered by companies and affecting companies' financial decision-making, leads to companies performing tax avoidance in pursuit of increasing firm's value (Desai & Dharmapala, 2006). However, management of companies might not act to engage in corporate tax avoidance to increase shareholder's value due to conflict of interests, whereby the risk of engaging in such activities resembles a benefit for shareholders; but not necessarily for managers. In case of agency conflict, corporate governance is required to resolve the conflict, so that managers act in the interest of shareholders. As an example, properly incentivising managers for the additional risk they bear to carry out tax avoidance activities for the sake of shareholders. In other words, corporate governance is believed and expected to have a significant impact on corporate tax avoidance (Kovermann & Velte, 2019).

1.2 Problem Statement

1.2.1 The Global Context

In recent years, corporate tax avoidance has accelerated, with large corporations such as Apple, Facebook, and Starbucks being exposed, which creates the impression that corporate tax avoidance is now a widespread phenomenon, and in its most aggressive forms (Kovermann & Velte, 2019). Corporate tax avoidance has transmuted so sophisticated today (Desai & Dharmapala, 2006), which may be partly attributed to the change in technological landscape as companies deploy technology in tax planning in this digital era (Organisation for Economic Co-operation and Development [OECD], 2021a). In fact, corporate tax avoidance has been here for a long time ever since the inception of taxes, and the issue is prevalent in every society which collect taxes. Some longstanding examples may include Enron, Tyco, and WorldCom (Mgammal, Bardai & Ismail, 2018; Kovermann & Velte, 2019).

Corporate tax avoidance is an act where companies retain cash resources within their organisations which would otherwise flow to the government. It may take the form of a legal tax planning, such as structuring business activities within the scope of the tax law; and an illegal tax evasion, which is doing so through violating the law (Wang et al., 2020). However, there is no universal definition of, or constructs for, tax avoidance. The definition of the term, “tax avoidance”, is used differently in communities and conditions, and the term is used interchangeably with terms like “tax aggressiveness”, “tax sheltering”, and “tax non-compliance” across literatures (Hanlon & Heitzman, 2010). As it is often difficult to distinguish between legal tax planning and illegal tax evasion, Dyreng, Hanlon and Maydew (2008) defined that all transactions which reduce a company’s tax liability relative to its pre-tax income is equivalent to tax avoidance. Following Dyreng et al. (2008) conceptually, Hanlon and Heitzman (2010) defined tax avoidance as “a continuum of tax planning

strategies where... at one end lower explicit tax (is) perfectly legal, then terms such as... ‘evasion’... would be closer to the other end” (p. 137). As a company moves away from full tax compliance, its tax avoidance level increases and becomes more aggressive. Hanlon and Heitzman (2010)’s definition on tax avoidance is widely adopted in later articles (for example, Armstrong, Blouin & Larcker, 2012; Rego & Wilson, 2012; Francis, Hasan, Wu & Yan, 2014; Taylor & Richardson, 2014; Salihu, Annuar & Obid, 2015; Richardson, Taylor & Lanis, 2016; Lanis & Richardson, 2018; McClure, Lanis, Wells & Govendir, 2018; and Kubick, Lockhart & Robinson, 2020). Consistent with the trend, this paper defines corporate tax avoidance as any corporate activities which reduce a company’s explicit tax, regardless of whether they are legal or illegal, and aggressive or not.

Tax avoidance is especially prevalent among corporate taxpayers because of the magnitude of corporate taxes (Annuar, Salihu & Obid, 2014). Besides that, companies have broader opportunities to avoid taxes, especially those with extensive foreign operations. These companies may exploit tax laws and tax rates differentials between jurisdictions, and gain tax advantage (or simply, reduce tax obligation) from any loopholes and mismatch (Zimmerman, 1983; Rego, 2003; Ariffin, 2013; Hope, Ma & Thomas, 2013; Kasim & Saad, 2019). For example, they may locate their operations in countries with relatively low tax rates, take advantage from tax incentives offered by host countries, and shift income from a high-tax to a low-tax country artificially (Zimmerman, 1983; Rego, 2003; Hope et al., 2013; Kasim & Saad, 2019). Empirical studies on large companies in the United States (U.S.) confirmed that companies indeed utilise the extensiveness of their foreign operations to pay lower taxes (Mills, Erickson & Maydew, 1998; Kinney & Lawrence, 2000; Rego, 2003).

Authorities and organisations around the world have recognised that tax avoidance worldwide has threatened government revenues. In the U.S., the U.S. Senate estimated a

revenue loss from tax avoidance by U.S. based companies to be about \$100 billion per year. The sum of revenue loss in many other countries runs into billions of Euros (OECD, 2021d). Particularly, due to base erosion and profit shifting (BEPS), which is the practice of exploiting gaps between tax systems, countries suffer a loss in revenue of \$100 billion to \$240 billion every year, or equal to 4% to 10% of the global corporate income tax (OECD, 2021b). As corporate tax avoidance lowers governments' revenue, governments have lesser resources for the provision of public goods, services, and infrastructure, such as education and healthcare, which causes a negative impact on affected societies, thereby lowering the societies' living standards (OECD, 2021d).

Consequently, the war between tax collectors and (corporate) taxpayers has become more apparent. Governments worldwide have orchestrated coordinated actions, through the OECD and Group of Twenty (G20), to curb corporate tax avoidance (OECD, 2021d). As at end of year 2021, a total of 141 developed and developing countries have collaborated under the OECD/G20 Inclusive Framework on BEPS which aims to end BEPS and restore trust in domestic and international tax systems. "15 Actions" were designed and implemented under the framework to improve the coherence of international tax rules (OECD, 2021b). To name a few, the "15 Actions" include "Action 1: Tax Challenges Arising from Digitalisation" aimed at dealing with a large range of tax challenges arising as a result of the digitalisation of the economy and to develop consensus-based solutions, "Action 2: Neutralising the Effects of Hybrid Mismatch Arrangements" which objects to prevent hybrid mismatch arrangements from being used for BEPS while minimising the impact on cross-border trade and investment, and "Action 3: Controlled Foreign Company" which purports to reduce the incentive of taxpayers to shift income from their market country to foreign subsidiaries in a low tax jurisdiction (OECD, 2021c).

Apart from political interest, corporate tax avoidance has caught increasing attention by the public. As an example, Starbucks in the United Kingdom (U.K.) faced a public relation furore for not paying its British corporate income taxes in year 2012. Starbucks boasted its profitable growth to investors, yet in its 15 years of U.K. operations, it had paid British corporate income taxes only once. The company used a combination of legal tax avoidance practices, such as transfer pricing, royalty payments, and interest expenses, to shift its taxable income to other Starbucks subsidiaries which it would be taxed at lower rates. Although legal, such practices were accused as being unethical and undermined the spirit of the law. Public protests were held, demonstrating a genuine public outrage that large companies are allowed to avoid taxes at the expense of the public with essential services cut. In the period immediately following the drama (in year 2013), the company reported its first ever decline in U.K. sales (Campbell & Helleloid, 2016).

In step with growing political and public interests, there is a rise in studies concerning corporate tax avoidance in the academia. For instance, Dyreng, Hoopes and Wilde (2016) confirmed the impact of activists on a company's tax policy, revealing that subsequent to being named by non-governmental organisations (NGOs) on public shaming lists for tax non-compliance matters, companies reduce their tax avoidance activities. In Austin and Wilson (2017), consumers are also found to influence a company's tax decisions. Consumers assume a monitoring role, and companies perceived by consumers as prominent and valuable faced a greater public pressure to engage in lesser tax avoidance activities. This is because valuable brands have the greatest exposure to reputational damage from unwanted public scrutiny. On a wider scale, Hasan, Hoi, Wu and Zhang (2017) hypothesised that social capital, measured by strength of civic norms and density of social networks, facilitates a norm-consistent behaviour. As a result, Hasan et al. (2017) discovered that U.S. firms headquartered in

counties with stronger social capital avoid lesser taxes, showing that attitudes of local communities could provide environmental influence constraining corporate tax avoidance.

Above that, there are many corporate tax avoidance studies focusing on uncovering factors which cause the non-compliance phenomenon (Wilde & Wilson, 2018; Kovermann & Velte, 2019). Corporate tax avoidance, if undertaken successfully, could increase a company's cash flows and after-tax income, which is expected to be in the interest of shareholders; and whether a company's management act in shareholders' interest, relies on corporate governance. Thus, whether corporate tax avoidance is performed by managers in the interest of shareholders is expected to be a function of corporate governance. Therefore, corporate governance has been incorporated into studies relating to corporate tax avoidance, and the impact of corporate governance on corporate tax avoidance has become a topical subject in extensive research (Kovermann & Velte, 2019).

The separation of ownership and control in companies lead to the existence of information asymmetry. This sparks conflict between the principals (shareholders) and the agents (managers), which is commonly known as the principal-agent conflict or agency conflict. Agency conflict occurs when managers abuse the company's interest in pursuit of their own self-interest on account of the capital suppliers. To resolve agency conflict, corporate governance plays an important role. Common corporate governance mechanisms include aligning incentives of managers to shareholders', proper structuring of the board of directors such as its size and independence, and shareholdings by outsiders and the market for company control. Good corporate governance should provide proper incentives for management and the board to pursue objectives in line with the company's and shareholders' interests. This is important to improve consistency of managerial behaviour and reduce any divergent behaviour, while mitigating agency costs arising from agency conflict such as costs

to oversee management. In short, corporate governance constitutes a system of mechanisms which ensures management runs the company for the benefits and in the interests of its shareholders (Jensen & Meckling, 1976; Fama, 1980; Fama & Jensen, 1983; Jensen, 1993).

In fact, it was Hanlon and Heitzman (2010) who called for more examination of corporate governance as a potential factor influencing corporate tax avoidance. In response to their call, a plethora of articles examining the relationship between corporate governance and corporate tax avoidance were published over the past decade (Wilde & Wilson, 2018; Kovermann & Velte, 2019). The numerous aspects of corporate governance examined include management incentives and characteristics (for example, Desai & Dharmapala, 2006; Minnick & Noga, 2010; Rego & Wilson, 2012; Armstrong et al., 2012; Armstrong, Blouin, Jagolinzer & Larcker, 2015), board composition (for example, Lanis & Richardson, 2011; Richardson, Lanis & Taylor, 2015; Richardson et al., 2016; Lanis & Richardson, 2018; McClure et al., 2018), and ownership structure (for example, Kinney & Lawrence, 2000; Demircuc-Kunt & Huizinga, 2001; Salihu et al., 2015; Alkurdi & Mardini, 2020; Hasan, Kim, Teng & Wu, 2022), among others.

Apart from Hanlon and Heitzman (2010), there are also several other related reviews published. The earliest review is probably Shackelford and Shevlin (2001). Shackelford and Shevlin (2001) stated that tax research was dominated by policy analyses and legal studies; while tax papers were hardly seen in general interest accounting journals, up to the mid-1980s. Thus, they called for more research in the area, including research on the determinants of tax avoidance. Most initial work investigated firm-level characteristics as potential determinants of tax avoidance (for example, McGee & Stickney, 1982; Zimmerman, 1983; Gupta & Newberry, 1997; Mills et al., 1998; Kim & Limpaphayom, 1998; Derashid & Zhang, 2003; Rego, 2003). After nearly a decade, Hanlon and Heitzman (2010), in their seminal

review, specified for more work studying corporate governance as a potential determinant of corporate tax avoidance. As aforementioned, many articles headed the call from Hanlon and Heitzman (2010), and examined the impact of corporate governance on corporate tax avoidance. Recent reviews, namely Wilde & Wilson (2018), Kovermann & Velte (2019), Tang (2020), and Wang et al. (2020), summarised key takeaways from this line of research. While Kovermann and Velte (2019)'s scope of survey focused solely on the relationship between corporate governance and corporate tax avoidance, other present reviews also summarised findings from different areas of tax research, such as research on the impact of firm characteristics on corporate tax avoidance (Wilde & Wilson, 2018; Tang, 2020; Wang et al., 2020). However, in spite of the surge in studies, research has mostly been conducted in developed contexts, and remain limited in developing countries (Kovermann & Velte, 2019; Wang et al., 2020).

1.2.2 The Malaysian Context

As a developing country, Malaysia depends on direct income tax as its major source of revenue. As the main component of the government's revenue, direct income tax is fundamental for the country's economic development and social stability (Kasim & Saad, 2019).

Table 1.1 Malaysian Government Revenue – Direct Tax (in RM billion)

(RM billion)/year	2014	2015	2016	2017	2018
Direct Tax	126.743	111.770	109.608	119.699	127.713
Income Tax	118.996	103.985	102.308	111.906	119.442
Company	65.240	63.679	63.625	67.822	72.475
Individual	24.423	26.321	27.566	30.089	32.234
Petroleum	26.956	11.559	8.422	10.937	11.445
Withholding	2.377	2.426	2.695	3.058	3.288
Others (incl. RPGT and Stamp Duty)	7.747	7.785	7.300	7.793	8.271

(Ministry of Finance Malaysia [MOF Malaysia], 2018)

As presented in Table 1.1, the Inland Revenue Board of Malaysia (IRBM) collected a total of RM127.713 billion direct taxes in year 2018, whereby RM119.442 billion were direct income taxes. Among the RM119.442 billion of direct income taxes, RM72.475 billion were company income taxes. In other words, company income taxes constituted 60.68% of the total direct income taxes, and 56.75% of the total direct taxes, in year 2018.

Table 1.2 Malaysian Government Revenue – Direct Tax (in %)

(%)/year	2014	2015	2016	2017	2018
Direct Tax	100.00	100.00	100.00	100.00	100.00
Income Tax	93.89	93.03	93.34	93.49	93.52
Company	51.47	56.97	58.05	56.66	56.75
Individual	19.27	23.55	25.15	25.14	25.24
Petroleum	21.27	10.34	7.68	9.14	8.96
Withholding	1.88	2.17	2.46	2.55	2.57
Others (incl. RPGT and Stamp Duty)	6.11	6.97	6.66	6.51	6.48

(MOF Malaysia, 2018)

As shown in Table 1.2, company income taxes contributed more than half of the country's total direct taxes in the past 5 years (2014: 51.47%; 2015: 56.97%; 2016: 58.05%; 2017: 56.66%; 2018: 56.75%). Clearly, company income tax is the highest contributor to the government's revenue. To illustrate, company income tax contributes 56.75% of total direct taxes in year 2018, which is double the individual income tax (25.24%), and far higher than petroleum tax (8.96%), withholding tax (2.57%), as well as real property gains tax (RPGT) and stamp duty (6.48%).

As company income tax becomes the largest contributor to the developing country's revenue, its huge reliance on company income tax suggests an increasingly serious concern for corporate tax avoidance (OECD, 2021b).

Table 1.3 Company Tax Audit in Malaysia

	2013	2014	2015	2016	2017
Number of Cases Resolved	83,093	98,615	138,203	161,760	178,583
Taxes and Penalties Collected (RM billion)	3.024	2.308	7.784	N/A	N/A

(IRBM, 2018)

Kasim and Saad (2019), able to retrieve tax return form data from IRBM to model effective tax rates (ETRs) of companies in Malaysia, revealed that Malaysian companies are indeed associated with corporate tax avoidance with their ETRs below the statutory tax rates (STRs) stipulated as per the Malaysian Income Tax Act 1967 (ITA 1967). Thus, although company income tax collection has been increasing over the years, the Malaysian authority is still concerned as the number of tax avoiders is also increasing. As presented in Table 1.3, IRBM has therefore performed and resolved an increasing number of tax audit cases year-by-year, from 83,093 cases in year 2013 to more than double at 178,583 cases in year 2017. The additional taxes and penalties collected by IRBM from company tax audit also leaped

from RM3.024 billion in year 2013 and RM2.308 billion in year 2014 to RM7.784 billion in year 2015 (IRBM, 2018). In early of year 2022, the Auditor General Report (AG Report) published by the National Audit Department of Malaysia revealed that there are taxes and penalties amounting to RM16.35 billion (which is more than twice of that in year 2015) that IRBM can expect to collect in the year (New Straits Times, 2022).

Table 1.4 Foreign Direct Investments (FDIs) in Southeast Asia (ASEAN)

(\$ million)/year	2016	2017	2018	2019	2020
Malaysia	11,336	9,399	7,618	7,813	3,483
Brunei	-150	460	382	275	577
Timor-Leste	5	7	48	75	72
Laos	935	1,686	1,320	557	968
Cambodia	2,476	2,786	3,208	3,662	3,625
Thailand	2,491	7,875	11,144	3,063	-6,100
Myanmar	2,989	4,341	3,554	2,766	1,834
Indonesia	3,921	20,579	20,563	23,883	18,581
Philippines	6,915	8,704	6,602	8,671	6,542
Vietnam	12,600	14,100	15,500	16,120	15,800
Singapore	70,221	84,671	75,969	114,162	90,562

(United Nations Conference on Trade and Development [UNCTAD], 2021a)

Additionally, companies, especially companies with foreign links, associating with tax avoidance is particularly concerning for Malaysia. This is because Malaysia relies heavily on FDIs to spur the economic growth of the country as a developing nation. The Malaysian government has been actively promoting FDIs over the years as FDIs could widen the local tax base, and contribute to the government's revenue in terms of company income taxes from companies operating in Malaysia, and individual income taxes from employment created as a result of FDIs (Kasim & Saad, 2019). Evidently in Table 1.4, Malaysia has been steadily receiving net FDI inflows, and is one of the economies which received high FDI inflows in the Southeast Asian region, in the past years. Malaysia ranked third in year 2016, fourth in year 2017, fifth in years 2018 and 2019, and sixth in year 2020, among the 11 ASEAN

countries, in terms of net FDI inflows over the five years. To be specific, Malaysia invited \$11,336 million, \$9,399 million, \$7,618 million, \$7,813 million, and \$3,483 million of FDIs into the country in year 2016, 2017, 2018, 2019, and 2020, respectively. While these inputs may be admirable for Malaysia as a developing economy, companies are argued to structure their businesses in such a way to avoid taxes. Consistent with early U.S. researches (Mills et al., 1998; Kinney & Lawrence, 2000; Rego, 2003), later studies in Malaysia (Noor, Mastuki & Bardai, 2008; Ariffin, 2013; and Kasim & Saad, 2019) documented evidence of companies operating in Malaysia avoiding taxes exploiting their foreign scale of operations.

Table 1.5 Company Tax Rates in Southeast Asia (ASEAN) in Year 2021

Countries	Company Tax Rates in Year 2021 (%)
Timor-Leste	10
Singapore	17
Brunei	18.5
Cambodia	20
Laos	20
Thailand	20
Vietnam	20
Indonesia	22
Malaysia	24
Myanmar	25
Philippines	30

(OECD, 2021e; Tax Foundation, 2021)

Furthermore, despite the gradual reduction in company income tax rate from 40% in year 1988 to 24% starting year 2016 aimed at being more globally competitive to attract FDIs, Malaysia's company income tax rate of 24% might still be considered high and not competitive. As shown in Table 1.5, Malaysia, compared to its peers in ASEAN, has a higher company tax rate than 8 out of 10 neighbour countries, and a lower rate than only 2 countries. Timor-Leste has the lowest company tax rate in the region at 10%, followed by Singapore at

17%, Brunei at 18.5%, Cambodia, Laos, Thailand, and Vietnam at 20%, and Indonesia at 22%. Myanmar has a slightly higher company tax rate, compared to Malaysia, at 25%; while Philippines has the highest company tax rate among all ASEAN countries at 30%. Malaysia's 24% company tax rate is also higher than the average company tax rate of 19.62% in the Asian continent (Tax Foundation, 2021), and not to mention, higher than the known tax havens such as Bahamas, Bermuda, Jersey, Cayman Islands, and British Virgin Islands which have a 0% rate (OECD, 2021e; Tax Foundation, 2021). Thus, it is reasonable to think that Malaysia is one of those high-tax host countries which is likely to fall victim to higher rates of corporate tax avoidance.

Recently, due to the COVID-19 pandemic and global financial crisis, Malaysia's FDI dipped from \$7,813 million in year 2019 to approximately \$3,483 million in year 2020, in line with the global investment landscape where global FDI has fallen by 35% from \$1.5 trillion in year 2019 to \$1 trillion in year 2020, a record low since year 2005 (Malaysian Investment Development Authority [MIDA], 2021b; UNCTAD, 2021b). This has put further stress on the country's already weakened fiscal position borne by the 1 Malaysia Development Berhad (1MDB) scandal which might explain the decreasing trend of Malaysia's FDI as presented in Table 1.4. In year 2020, famed credit rating agency Fitch, unimpressed with Malaysia's fiscal management, downgraded Malaysia's credit rating from A- to BBB+ for the first time since the Asian Financial Crisis back in year 1997; while in year 2021, then-Prime Minister Tan Sri Dato' Haji Mahiaddin Yasin claimed that the Malaysian government does not have much money left after a series of economic stimulus and social support packages totalling RM380 billion were initiated to resuscitate the Malaysian economy and help the people suffering amidst the pandemic. The government's relief was about 23% of the country's GDP in year 2020, higher than its ASEAN neighbours

such as Philippines (6%), Indonesia (11%), and Thailand (16%) (Channel News Asia, 2021; Malay Mail, 2021). More pertinently, tax revenue has also fallen after a downturn in corporate earnings across most sectors of the economy. Compared to a total direct tax collection of RM134.7 billion in year 2019, total direct tax collection dropped by RM19.6 billion to RM115.1 billion in year 2020. Among that, RM63.7 billion of company income tax in year 2019 slipped by RM4.3 billion to RM59.4 billion in year 2020. This is roughly a 21% shortfall from the original estimate of RM75.5 billion by the government (MOF Malaysia, 2021).

Thus, the Malaysian government is especially in need for income to sustain the economic and social needs of the country in hard times like this, and the present tax regime cannot afford to lose more due to corporate tax avoidance particularly under the prevailing circumstances. In year 2021, the government announced that it would impose a special one-off tax named “*Cukai Makmur*” (Prosperity Tax) on companies which have generated exceptionally high income due to the pandemic, whereby the first RM100 million chargeable income of these companies would be taxed at the existing rate of 24%, and any income in excess of RM100 million would be taxed at a 33% rate, in year of assessment 2022 (PricewaterhouseCoopers [PwC], 2021).

While Malaysia depends highly on company income tax to support and sustain its economy and society, it suffers from corporate tax avoidance at the same time. The increasing number of company tax audit cases, and the many aggressive movements and collaborations the government and authority have taken in and out of the country, confirms the severity of corporate tax avoidance, the seriousness of the government and authority to tackle the issue, as well as the importance for empirical research on the corporate tax avoidance phenomenon in Malaysia.

As discussed above in Section 1.2.1, many studies have found that corporate governance affects corporate tax avoidance. However, most of these studies were carried out in developed countries. Therefore, it may be important and interesting to conduct a research to examine the relationship between corporate governance and corporate tax avoidance in a developing country context, namely Malaysia. As Malaysia continues to promote greater internalisation of corporate governance in companies, particularly emphasising the critical roles of the companies' management and board of directors, it becomes imperative to examine whether various internal corporate governance mechanisms do influence corporate tax avoidance among Malaysian companies or not; and if the answer is yes, whether these various governance mechanisms help to curb corporate tax avoidance in the country or otherwise. With these insights, suggestions on actions to reduce corporate tax avoidance and increase tax income in Malaysia could be proposed to ensure the stability and sustainability of the country.

Hence, referring to the Malaysian Code on Corporate Governance (MCCG), this study selects several relevant internal corporate governance mechanisms, namely CEO compensation, CEO duality, board size, board independence, and board gender diversity, as proxies of corporate governance. In addition, foreign ownership is also included as a corporate governance variable, as it has been proven to act as an effective governance mechanisms on corporate tax avoidance in Malaysia (see Salihu et al., 2015). The MCCG and the selected internal corporate governance mechanisms are discussed in detail in Section 2.2.

1.3 Research Gap

Reiterating discussions in Section 1.2, despite the topic being important and interesting, research on the relationship between corporate governance and corporate tax avoidance is mainly restricted to the developed countries context, particularly the U.S. (for example, Desai & Dharmapala, 2006; Minnick & Noga, 2010; Rego & Wilson, 2012; Armstrong et al., 2012; Armstrong et al., 2015). While there is a growing number of research in developing countries (for example, Chan, Mo & Zhou, 2013; Hoseini, Gerayli & Valiyan, 2019; Agyei, Marfo-Yiadom, Ansong & Idun, 2020; Kusbandiyah, Norwani & Jusoh, 2021; Arora & Gill, 2022), studies in the U.S. continue to dominate, and those in the developing countries context remain scarce (Kovermann & Velte, 2019; Wang et al., 2020).

Table 1.6 Corporate Governance and Corporate Tax Avoidance Studies in Malaysia

Articles	Years Examined	Variables Examined					
		CEO Compensation	CEO Duality	Board Size	Board Independence	Board Gender Diversity	Foreign Ownership
Mahenthiran and Kasipillai (2012)	2006 – 2008	✓	✓	✓	✓		
Salihu, Annuar and Obid (2015)	2009 – 2011						✓
Wahab, Ariff, Marzuki and Sanusi (2017)	2000 – 2009		✓	✓	✓		

To the best of the authors' knowledge, studies which have investigated the relationship between corporate governance and corporate tax avoidance in Malaysia (to be exact, where corporate governance acted as independent variable, and corporate tax avoidance as dependent variable) were Mahenthiran and Kasipillai (2012), Salihu et al. (2015), and Wahab et al. (2017), as presented in Table 1.6.

Of the six corporate governance variables identified for this study, two variables were examined in only one of the three related Malaysian articles – Mahenthiran and Kasipillai (2012) investigated the relationship between executive compensation and corporate ETRs and tax planning; while Salihu et al. (2015) looked at the impact of foreign ownership on corporate tax avoidance, in Malaysia. Three variables, namely CEO duality, board size, and board independence, were included in two articles, Mahenthiran and Kasipillai (2012) and Wahab et al. (2017). One variable, board gender diversity, had not been studied on its effects on corporate tax avoidance in any Malaysian articles. Clearly, empirical evidence on the relationship between corporate governance on corporate tax avoidance in Malaysia is very limited. Thus, this study aims to cover for the lack of study, putting together all the aforementioned variables to test. To the best of the authors' knowledge, this study is the first to examine the effects of board gender diversity on tax compliance matters in Malaysia.

Above that, as Mahenthiran and Kasipillai (2012) is the sole study to have examined the impact of executive compensation on corporate tax avoidance in Malaysia, they measured executive compensation as a percentage to sales (a relative measure), which may not be as straightforward and logical as studies like Halioui et al. (2016), Powers et al. (2016), and Huang et al. (2018) which all measured executive compensation directly as the total remuneration paid to the executive (an absolute measure). Thus, this study uses the latter to

measure CEO compensation which it believes to be a more direct measurement to confirm the finding from Mahenthiran and Kasipillai (2012).

While the number of related Malaysian studies is very few and empirical evidence very little, some results from the articles contradict those of the mainstream. Specifically, Mahenthiran and Kasipillai (2012) and Wahab et al. (2017) failed to document any significant findings on the impact of CEO duality and board independence on corporate tax avoidance in Malaysia, when many other studies revealed them as significant determinants. Certain findings by the articles also conflict with one another, whereby Wahab et al. (2017) discovered a significant impact of board size on corporate tax avoidance in Malaysia; while Mahenthiran and Kasipillai (2012) found it to be insignificant.

Aside of that, these studies would unavoidably suffer from a loss of relevance as time passes – Mahenthiran and Kasipillai (2012) used data from years 2006 to 2008; Salihu et al. (2015) from 2009 to 2011; and Wahab et al. (2017) from 2000 to 2009. This may be a reason for why they reported mostly insignificant findings on the effectiveness of corporate governance on a company's tax policy. As Malaysia published its first Code on Corporate Governance, MCCG, in year 2000, the periods studied by these articles may be too early as it may take time for regulatory changes to yield the intended effects and results. Thus, this study uses a more recent time frame to examine the impact of corporate governance on corporate tax avoidance in Malaysia from years 2016 to 2020, where the corporate tax avoidance phenomenon is also said to be more aggressive and widespread. This study period also includes a year of financial crisis, which is year 2020, caused by the unprecedented COVID-19 pandemic. With changes in the governance, tax, and economic environment in Malaysia over recent years, this study expects to report new evidence from the recent study period.

Long story short, this study hopes to cover for the lack of study, and to provide new evidence and insights, on the governance and tax topic, in a developing country context. To be exact, this study puts together various corporate governance determinants identified from the MCCG and across studies, namely CEO compensation, CEO duality, board size, board independence, board gender diversity, and foreign ownership, to determine their collective impact on corporate tax avoidance in Malaysia. As far as the authors are aware, this study is the first to examine the effectiveness of a gender-diverse board on a firm's tax planning in Malaysia. The inclusion of the board gender diversity variable is consistent with the trend in literature in recent years which is important and interesting. This study examines the relationship between corporate governance and corporate tax avoidance in Malaysia during a more recent, and thus more relevant, time frame, encompassing 5 years from 2016 to 2020. In these years, Malaysian firms were using revised versions of the MCCG, particularly MCCG 2012 for 2016, and MCCG 2017 for 2017 – 2020. Corporate tax avoidance has also become more prevalent in recent years. Thus, new evidence may be reported from the recent study period, following efforts by the Malaysian authorities to improve and enhance corporate governance in the country, and with changes in the tax landscape. Interestingly, as the study period includes year 2020 – a year of pandemic and global recession, this study may see different results from those documented in earlier study periods.

1.4 Research Questions and Research Objectives

The aim of this study is to examine the impact of corporate governance on corporate tax avoidance in Malaysia. As discussed above, six corporate governance mechanisms were identified as explanatory variables of corporate governance. Accordingly, the research questions and the corresponding research objectives for this study are formulated as below:

1.4.1 Research Questions

This study seeks to answer the research questions as follows:

1. Does CEO compensation impact corporate tax avoidance in Malaysia?
2. Does CEO duality impact corporate tax avoidance in Malaysia?
3. Does board size impact corporate tax avoidance in Malaysia?
4. Does board independence impact corporate tax avoidance in Malaysia?
5. Does board gender diversity impact corporate tax avoidance in Malaysia?
6. Does foreign ownership impact corporate tax avoidance in Malaysia?

1.4.2 Research Objectives

The research objectives which correspond to the research questions are as follows:

1. To examine the impact of CEO compensation on corporate tax avoidance in Malaysia.
2. To examine the impact of CEO duality on corporate tax avoidance in Malaysia.
3. To examine the impact of board size on corporate tax avoidance in Malaysia.
4. To examine the impact of board independence on corporate tax avoidance in Malaysia.
5. To examine the impact of board gender diversity on corporate tax avoidance in Malaysia.
6. To examine the impact of foreign ownership on corporate tax avoidance in Malaysia.

1.5 Research Significance

As empirical research on the relationship between corporate governance and corporate tax avoidance is largely conducted in developed countries, and limited in developing countries, this study would extend the literature by conducting a research in a developing country, Malaysia.

Malaysia is chosen as the subject of this study not only because of the emerging nature of its economy, but also that it is relevant in terms of both corporate governance and corporate tax avoidance. Corporate governance in developing economies is often criticised to be weak, so governance issues such as agency conflict is more prominent. Malaysia has also been proven to suffer from corporate tax avoidance (Kasim & Saad, 2019), and that a developing nation would likely experience a greater hit from corporate tax avoidance due to its weaker ability to afford a loss in government revenue (OECD, 2021d). Moreover, the Malaysian economy is highly dependent on foreign activities which were found to be closely related to corporate tax avoidance (Noor et al., 2008; Ariffin, 2013; Kasim & Saad, 2019). When these issues become prevalent, there is a dearth of study concerning the area. Thus, Malaysia not only provides an ideal setting for the examination of corporate governance and corporate tax avoidance, but it is also imperative to conduct such a study in the country.

Given that Malaysia's economy and market environment are rather different from that of developed countries and the U.S., study in this setting could enrich the tax literature, adding to tax research by examination of an emerging economy. Findings from this study could also potentially be generalised to other emerging economies which share similar market characteristics and cultural traits as Malaysia, such as those in the ASEAN region.

As discussed above, some related studies in the Malaysian context have produced either contradicting or insignificant results. Thus, this study would provide further empirical investigation, putting together all corporate governance variables identified, and using a recent and relevant set of data. It is expected this study could provide new evidence and create new insights into the topic.

Based upon a theoretical underpinning (which would be discussed in Section 2.3), this study attempts to adopt and produce additional evidence on the principal-agent model in corporate tax planning, and provide theoretical contributions by either further substantiating or repudiating the agency theory propositions.

Lastly, this study could deliver practical insights to interested parties, including market participants and policymakers. Through establishing objective evidence, this study could allow a better understanding on the association between corporate governance and corporate tax avoidance in Malaysia. Thus, relevant stakeholders may make informed decisions, such as to formulate better policies.

In Chapter 2, the theory which the study is based upon is discussed, and a comprehensive literature review of the topic is provided. In Chapter 3, the study's research methodology is proposed, including the study's design, model, framework, variables, samples, collection, and analysis of data. Findings from the analyses, which include descriptive analysis, correlation analysis, and regression analysis, are presented in Chapter 4; followed by a detailed discussion of the findings in Chapter 5. Finally, in Chapter 6, the study is concluded with contributions, implications, and limitations acknowledged, and suggestions for future work proposed.

CHAPTER 2: LITERATURE REVIEW

2.1 Corporate Taxation in Malaysia

The Malaysian government has imposed and implemented various tax policies aimed at increasing government revenue and/or reducing corporate tax avoidance over the years.

To begin with, the ITA 1967 has long been enacted to highlight the importance of tax collection in Malaysia, and that the Malaysian government pays serious attention to tax avoidance (Wahab et al., 2017). As per Section 140 of the ITA 1967, the Director General of IRBM (DGIR) is empowered to disregard any transactions which have the effects of altering the tax incidence, and to make necessary adjustments to counteract these effects, as well as to revise and impose tax liability on those concerned (ITA, 1967). Before year 2010, there were only a few litigation cases concerning Section 140, which reflects the cautious approach of the authority in invoking this general anti-avoidance rule (GAAR). After year 2010, there was a spike of cases relating to Section 140, which signals a paradigm shift, and that Section 140 is “very much under the radar” (PwC, 2014, p. 2) of the authority. In the landmark case of *Syarikat Ibraco-Peremba Sdn. Bhd. v. Ketua Pengarah Hasil Dalam Negeri* (2013), or simply the *Ibraco-Peremba* case, the DGIR invoked Section 140 of the ITA 1967 to disregard transactions made by *Ibraco-Peremba* as the company entered into transactions through shell companies with no commercial reasons, but the sole purpose to avoid taxes from the disposal of properties. The Court of Appeal agreed and delivered a landmark judgment dealing with the application of Section 140, ITA 1967 which decision is now binding on lower courts (PwC, 2014).

Back in year 2001, IRBM introduced the Self-Assessment System (SAS) in replacement of the Official Assessment System (OAS) in hope of encouraging and increasing the rate of

voluntary compliance. Under the SAS regime, taxpayers hold the responsibility to assess their own tax liabilities in compliance of the tax law. Unfortunately, as taxpayers are responsible to assess their own taxes, they become motivated to plan their tax activities to reduce their tax liabilities, which adds on to the tax avoidance problem (Noor, Fadzillah & Mastuki, 2010; Ariffin, 2013; Wahab et al., 2017). An empirical research by Noor et al. (2010) to examine the corporate ETR levels during the OAS and SAS regimes in Malaysia revealed that corporate ETRs are below the STRs in both regimes, but the ETRs during the SAS regime is even lower than that of the OAS regime.

In year 2017, the Central Bank of Malaysia (*Bank Negara Malaysia*, BNM), Malaysian Anti-Corruption Commission (MACC), and IRBM formed a strategic alliance to combat tax avoidance and other financial crimes. In a joint statement, it was stated that the tri-partite effort is aimed to increase the national revenue, build a country free from corruption and power abuse, and preserve the integrity and public confidence in the Malaysian financial system. Quoting then-DGIR Dato' Sri Dr. Sabin Samitah, "...this strategic alliance is a necessary step towards reducing tax leakages..." (BNM, 2017).

Whereas at the international level, IRBM constantly keeps itself updated with developments in the global tax system to protect the nation's tax revenue source and curb tax avoidance. IRBM consistently updates and streamlines tax laws, regulations, and guidelines in accordance with current developments and needs. Among the regularly updated include the Common Reporting Standards (CRS) Rules and Guidelines, Country-by-Country Reporting (CbCR) Rules and Guidelines, Mutual Agreement Procedures (MAP) Guidelines, and Transfer Pricing (TP) Rules and Guidelines (IRBM, 2018). Malaysia is also one of the 141 countries collaborating under the OECD/G20 Inclusive Framework on BEPS (OECD, 2021b).

2.2 Corporate Governance in Malaysia

In year 2000, Malaysia established and issued the Malaysian Code on Corporate Governance (MCCG) as part of the Malaysian stock market (FTSE Bursa Malaysia) listing requirements. The issuance of the MCCG marks an important milestone of corporate governance in Malaysia. The MCCG was issued in response of the Asian Financial Crisis 1997 which is believed to be attributed to the lack of good corporate governance among companies, and it has become an important part of the Malaysian capital market framework today. Malaysia is also one of the first East Asia countries to receive its own Code on Corporate Governance. The MCCG is said to be significant in corporate governance reform, and has influenced corporate governance practices of companies positively, in Malaysia (Wahab, How & Verhoeven, 2007; MCCG, 2021).

The MCCG represents a set of global corporate governance principles and practices beyond the minimum required by law and those prescribed by FTSE Bursa Malaysia. It is both constructive and flexible as it acknowledges that there are corporate governance aspects where statutes and regulations are necessary, while there are some aspects where self-regulation complemented by market regulation is more appropriate. To ensure the Code is relevant and aligned with internationally-recognised standards, the MCCG was reviewed and revised four times since its birth in year 2000, in years 2007, 2012, 2017, and 2021 (MCCG, 2021).

In year 2007, the revised MCCG proposed that appointed directors should be qualified in terms of knowledge, skills, experience, professionalism, and integrity, and stressed that all assessments and evaluations conducted by the nominating committee should be documented (MCCG, 2007).

In year 2012, revisions included areas such as the composition, roles, and responsibilities of the board of directors, and the remuneration, independence, and commitment of directors. For instance, the board is required to establish formal, transparent remuneration policies and procedures, and these should be disclosed in the companies' annual reports. In the case where a company's board chairman is not independent, the board should comprise a majority of independent directors. The board is also expected to establish a policy formalising its approach to boardroom diversity, and to take steps to ensure that female candidates are sought as part of its recruitment exercise. The revisions recognised the function of directors as active and efficient fiduciaries, and provided principles focused on facilitating improvement of the boards to develop greater effectiveness and higher sense of responsibility within the boards to oversee the business in order to protect the interest of shareholders. It also emphasised the need to strengthen the relationship between the company and its shareholders, and for the management and board to discharge their duties and manage the company's resources in the best interests of the company and shareholders (MCCG, 2012).

In year 2017, the MCCG introduced significant changes and recommendations. The MCCG employed the Comprehend, Apply, and Report (CARE) approach, shifting from the "comply or explain" method to an "apply or explain an alternative" method. In addition, the MCCG adopted a proportionate application on companies based on size, whereby certain practices were only applicable to large companies. "Large companies" were defined as companies listed on the FTSE Bursa Malaysia Top 100 Index, and those with at least RM2 billion of market capitalisation, at the beginning of the companies' financial year. A company identified as a large company should remain such a status throughout the year, regardless of any changes such as dropping out from the Top 100 Index or falling below the prescribed capitalisation threshold, and should continue to apply those practices. While certain practices

were targeted for large companies, other listed companies were also encouraged to embrace those practices to achieve greater excellence in corporate governance; and while the MCCG was targeted for listed companies, the MCCG 2017 now explicitly encouraged non-listed entities such as state-owned enterprises (SOEs) as well as small and medium enterprises (SMEs) to embrace the Code for enhanced accountability, transparency, and sustainability (MCCG, 2017).

The MCCG 2017, consistent with the Malaysian Companies Act 2016 which specified a requirement for all directors' fees, benefits payable, compensation for loss of employment (if any) in a public company, whether listed or not, to be approved in the general meeting with shareholders, introduced an additional disclosure requirement to enhance the transparency of management and board remuneration. While the MCCG 2012 required the disclosure of companies' remuneration policies and procedures on companies' annual reports, the MCCG 2017 required such information be made available on companies' websites. Details of the remuneration paid to directors and the top 5 senior management personnel, including all salary, bonus, benefits-in-kind, fee, and other emoluments, should also be disclosed on a named basis. In terms of board composition, the MCCG 2017 stated that at least half of the board must be built up of independent directors; and for large companies, a majority of the board. Not only the MCCG 2017 emphasised the importance of board independence, but also board diversity. In line with the global trend on promoting gender equality, the MCCG 2017 set the requirement that the board of large companies must be made up with at least 30% of female directors. It also encouraged general companies to include women participation at both the board and management levels (Association of Chartered Certified Accountants [ACCA], 2017; MCCG, 2017).

In the most recent update, which is in year 2021, the MCCG 2021 continued to focus on, among others, board policies and processes on the nomination, selection, and appointment of directors. By the end of year 2020, women participation on boards stood at 25.3% for large companies. Thus, to accelerate the progress of women participation, the MCCG 2021 continued to highlight and recommend these companies to have a board with at least 30% of female directors. As companies navigate and sail through the recovery period of the COVID-19 pandemic, the MCCG 2021 also stressed the role of the senior management and board in addressing sustainability issues, risks, and opportunities, as well as in integrating sustainability in the strategies and operations of the company. The first batch of companies which would adopt these new practices, or simply the MCCG 2021, are those with a financial year end of 31 December 2021 (MCCG, 2021; Securities Commission of Malaysia [SC Malaysia], 2021).

2.2.1 CEO Incentives and Characteristics

2.2.1.1 CEO Compensation

A remuneration package should be well-structured; and a well-structured remuneration package should be linked to the company's strategic objectives, and which rewards contributions to the company's long-term success. A pay policy which does not link remuneration to the company's strategy and performance weakens the company's corporate governance, and diminishes shareholders' returns. A fair remuneration is also critical to motivate and retain management, thus to ensure business stability and growth. Therefore, an appropriate remuneration which reflects the different roles and responsibilities borne by the different individuals, their knowledge, skills and experience, the demands and complexities of the business, among others, should be designed. Remuneration policies and procedures, including remuneration paid, should also be disclosed, to allow shareholders to have adequate

information in assessing whether the remuneration of these individuals commensurate with their respective roles and responsibilities, and to make informed decisions when voting for the approval of their remuneration (MCCG, 2012; MCCG, 2017; MCCG, 2021).

2.2.1.2 CEO Duality

The positions of the chairman of the board and the CEO of a company should be separated and held by different individuals. The separation of the two positions is crucial to promote segregation of duties, whereby the board chairman is responsible in leading the board of directors in collective oversight of management, while the CEO remains focused on managing the company's business and day-to-day operations. This ensures accountability where no one person can dominate the board's discussions and influence the board's decision-making. The division of responsibilities should therefore be defined clearly in the board charter. It must be warned that having the same person assume the positions of the board chairman and the CEO would cause a heightened risk of self-review which impairs the objectivity of the board chairman when deliberating on observations and recommendations from the board committee. Thus, to ensure effective governance, which is to ensure an existence of a check-and-balance within the company, it is not recommended for a CEO to at the same time assume position of the board chairman (MCCG, 2012; MCCG, 2017; MCCG, 2021).

2.2.2 Board Composition

2.2.2.1 Board Size

The MCCG does not specify the recommended size for a board of directors, or simply the number of directors in a board. Though, companies are advised to examine its board size in accordance with their purpose, objectives, and strategies, to determine the optimal board number for governance effectiveness (FTSE Bursa Malaysia, 2017).

2.2.2.2 Board Independence

To reiterate, the MCCG 2012 stated that, if the board chairman is not an independent director, then the board should comprise of a majority of independent directors; while in the revised MCCGs (MCCG 2017 and MCCG 2021), all companies are required to have at least 50% of independent directors on the board, and large companies to have more than 50%. A board with a majority of independent directors would permit a more effective oversight over management because of its increased independence and objectivity. A director, whether independent or not, should be judged not only based on his/her background and current activities, but also whether s/he can act independently of management (MCCG, 2012; MCCG, 2017; MCCG, 2021).

2.2.2.3 Board Gender Diversity

“Numerous studies have proven the business case for board diversity, in particular the participation of women on boards” (MCCG, 2021, p. 37). With that regard, and in step with the international trend on promoting gender equality, MCCG 2017 and MCCG 2021 explicitly called for due regard to be given to diversity in gender, among others, in the appointment of the board and management. The Code set a requirement for large companies to have at least 30% of female directors on the board, and if the composition is below that,

the board should disclose actions to be taken, together with a proposed timeframe to achieve the target percentage. A “reasonable” timeframe is stated to be “three years or less” (MCCG, 2021, p. 12). Companies are also expected to disclose explicitly their policies, targets, and measures to hit those targets, on board gender diversity, in their annual reports (MCCG, 2012; MCCG, 2017; MCCG, 2021).

2.2.3 Ownership Structure

2.2.3.1 Foreign Ownership

Foreign ownership, whether through direct investments, equity ownership, joint ventures, mergers and acquisitions, represents foreign investors’ interest. Developing economies seeking for rapid growth are very much in favour of these foreign investments as they not only bring about robust stock value, but also improved productivity and superior performance, to the host countries. On another hand, foreign investors inject funds into developing nations for various strategic objectives, such as to access new markets, exploit resources, enjoy lower labour and operational costs, and of course, to reap tax benefits (Salihu et al., 2015).

While it seems desirable, foreign inflows into developing economies have unfortunately become a cause for concern (Salihu et al., 2015). This is because, as aforementioned, companies with foreign links can and were exposed to use the extensiveness of their foreign operations to perform tax avoidance, such as shifting profits across international outlets to reduce tax burdens in host countries (Mills et al., 1998; Kinney & Lawrence, 2000; Rego, 2003). Malaysian studies, namely Noor et al. (2008), Ariffin (2013), Kasim & Saad (2019), all revealed that companies with extensive foreign operations tend to avoid more taxes in Malaysia because they have better avenues to do so.

Worse, Malaysia has already been reducing its tax rates over the years to the existing rate of 24%, and providing many direct and indirect tax incentives to these companies, both of which would have already reduced the government's potential tax revenue. Examples of tax incentives provided by the Malaysian government to companies include pioneer status, investment tax allowance, and reinvestment allowance (Hamzah, Hamid, Zawawi, Yusup & Azali, 2020; MIDA, 2021a). Tax policies are common means used by Asian governments to achieve the dual objective of economic (such as capital markets with strong companies) and social (such as high employment) development (Mahenthiran & Kasipillai, 2012). Unfortunately, it was found that companies in Malaysia actively seek to exploit opportunities presented by these tax incentives to lower their tax obligations. Strategies used to abuse tax incentives include flouting of qualifying conditions, manipulating non-qualifying activities, over-valuing of assets, making fictitious investments, and transfer pricing (Hamzah et al., 2020).

As companies operating in Malaysia become tax-avoidant, the costs-and-benefits consideration of having foreign investments is altered, and the residual benefits in affected emerging economies would be impacted negatively. This also shows how foreign ownership, or simply foreign shareholders, can exert effective monitoring and pressure on companies' management to serve their interest (Salihu et al., 2015). Given the fact that foreign ownership has a governance effect on corporate tax avoidance in Malaysia, it is deemed necessary and important to include foreign ownership as a corporate governance variable in this study. In addition, provided the high rate of FDI inflows into the country, it would be worthwhile to investigate whether foreign ownership in fact plays a role in investee-companies' tax policies.

2.3 Theoretical Underpinning: Agency Theory

Agency theory (Jensen & Meckling, 1976) is the most widespread approach in empirical research on corporate governance and corporate tax avoidance. The separation between ownership and control lies at the heart of the theory, and is central to all predictions concerning corporate tax avoidance (Kovermann & Velte, 2019).

Corporate tax avoidance is a double-edged sword. On one hand, corporate tax avoidance can be a value-enhancing activity which brings benefits in terms of increasing cash flows available to companies and maximising wealth for shareholders such as in the form of distributable dividends. On the other hand, it is a risky activity which imposes costs such as penalties if caught. Therefore, corporate tax avoidance requires a costs-and-benefits consideration (Hanlon & Heitzman, 2010; Kovermann & Velte, 2019; Wang et al., 2020).

Generally, prior studies view corporate tax avoidance as a value-enhancing activity as it reduces companies' tax liabilities, which in turn increases the companies' cash flows and shareholders' income. The cash savings provide companies with opportunities to carry out further investments which may enhance the firm's value. As a result, shareholder's value is also improved with increases in earnings per share and distributable profits (Wang et al., 2020). Besides that, corporate tax avoidance may be a substitute for companies' debt financing, where the cash savings may be used by companies to finance projects without the need to borrow funds. This reduces companies' risks of bankruptcy, default, and covenant violation, thus decreases companies' overall cost of debt, and increases credit quality (DeAngelo & Masulis, 1980; Graham & Tucker, 2006; Lim, 2011).

While corporate tax avoidance reduces companies' tax costs, it is done at the expense of governments' tax revenue. Therefore, if companies' tax avoidance activities are detected and caught by the authorities such as tax agencies and external auditors, then corporate tax avoidance can increase the costs of companies, making it a risky endeavour. Corporate tax avoidance can cause restatements of companies' tax liabilities and penalties which may be costly, as well as reputational damage (Kovermann & Velte, 2019; Wang et al., 2020). As the general public becomes aware of such social irresponsibility, the companies' legitimacy would be questioned and threatened as corporate tax avoidance is an act detrimental to the economic and social well-being which is against the public interest (Campbell & Helleloid, 2016). Empirical studies have also shown how the revelation of the news where a company engages in corporate tax avoidance can lead to adverse capital market consequences such as investors' assessment of firm's value, heightened stock price crash risk, and decline in stock price (Frischmann, Shevlin & Wilson, 2008; Hanlon & Slemrod, 2009; Kim, Li & Zhang, 2011; O'Donovan, Wagner & Zeume, 2019). Consequently, this would also lead companies to higher bank loan spreads and more stringent loan terms, which aggravates financial distress risk (Hasan, Hoi, Wu & Zhang, 2014). Above that, companies would certainly need to incur direct costs for tax management, such as management remuneration and consultant fees, which possess an opportunity cost as resources invested in tax management could have been used in other income-generating investments (Minnick & Noga, 2010; Seidman & Stomberg, 2017).

Since corporate tax avoidance can be beneficial yet risky, do shareholders favour such a practice? The classic agency theory assumes principals (shareholders) to hold their wealth in highly-diversified portfolios, so they would be rather risk-neutral, and favour activities which add to their wealth (Jensen & Meckling, 1976). With the assumption that shareholders are

risk-neutral, it is expected that shareholders prefer agents (managers) to focus on wealth-maximising activities, and in this case, on minimising taxes (Hanlon & Heitzman, 2010; Kovermann & Velte, 2019). However, this may not apply to shareholders who hold more concentrated portfolios and whose risks are not well-diversified. This type of shareholders, known as blockholders, may be rather risk-averse, and favour a lower level of tax avoidance (Kovermann & Velte, 2019).

Regardless of the shareholders' choice on corporate tax avoidance, the level of tax avoidance is ultimately chosen by the managers. Due to agency conflict, where the interests of shareholders as owners and managers as controllers of the company contradict, managers may act against the interest of shareholders, and select a tax avoidance level against that desired by shareholders (Kovermann & Velte, 2019). Agency conflict arises with respect to corporate tax avoidance because shareholders and managers evaluate the costs and benefits of corporate tax avoidance differently (Desai & Dharmapala, 2006). For instance, as consequences are borne by managers instead of shareholders, managers are likely to be risk-averse to protect their own interest, and are less likely to act effectively on high taxes in the company (Hanlon & Heitzman, 2010).

According to agency theory, strong corporate governance, such as incentives alignment to properly compensate managers for the risk they assume, and effective monitoring, is required to solve agency conflict (Jensen & Meckling, 1976). Thus, if effective corporate governance is in place, managers are more likely to select the tax avoidance level favoured by shareholders (Kovermann & Velte, 2019).

In short, agency theory assumes shareholders to be risk-neutral, and would prefer activities which add to their wealth, such as tax avoidance activities. However, as managers are risk-averse, and the ones to carry out such activities, they may act against shareholders' preference, and engage in lesser tax avoidance activities. If proper corporate governance is put in place to ensure managers act in the best interest of shareholders, then stronger corporate governance would lead to higher corporate tax avoidance; and weaker corporate governance would witness lower corporate tax avoidance. Thus, corporate governance is expected to have a significant influence on corporate tax avoidance (Kovermann & Velte, 2019). Therefore, this study adopts agency theory as its lens to understand the relationship between corporate governance and corporate tax avoidance.

2.4 Literature Review and Hypothesis Development

Corporate governance functions as a tool to shape and monitor managerial behaviour, including corporate tax avoidance behaviour. As various corporate governance mechanisms, such as management incentives, management characteristics, and board composition, all interact to either encourage or discourage managers on making corporate tax avoidance decisions, companies are likely to exhibit different tax planning behaviour as managers respond to the distinct features of governance in their companies. Thus, both corporate governance and corporate tax avoidance are thought to have a relationship. Over the past decade, literatures examining corporate governance as a potential factor influencing corporate tax avoidance have therefore surged (Wilde & Wilson, 2018; Kovermann & Velte, 2019; Tang, 2020; Wang et al., 2020). In the following, literatures which have examined various corporate governance mechanisms and their impact on corporate tax avoidance are summarised, and hypotheses on the relationship between the corporate governance mechanisms and corporate tax avoidance are developed.

2.4.1 CEO Incentives and Characteristics

2.4.1.1 CEO Compensation

Agency theory proposes that managerial behaviour relies on the extent of the alignment between managerial incentives and shareholders' interest (Jensen & Meckling, 1976). If managerial incentives align the managers' and shareholders' interests, and if shareholders favour corporate tax avoidance, then agency theory would predict a positive relationship between managerial incentives and corporate tax avoidance (Wang et al., 2020).

Consistent with the agency theory prediction, an abundance of research documented that higher executive compensation is indeed associated with higher tax avoidance levels (for example, Minnick & Noga, 2010; Armstrong et al., 2012; Rego & Wilson, 2012; Mahenthiran & Kasipillai, 2012; Armstrong et al., 2015; Xian, Sun & Zhang, 2015; Zolotoy, O'Sullivan, Martin & Wiseman, 2021). In the U.S., Minnick and Noga (2010), Armstrong et al. (2012), Rego and Wilson (2012), and Armstrong et al. (2015), all discovered that executive compensation induced management to engage in more aggressive tax planning behaviour. Minnick and Noga (2010) said that greater incentives encouraged managers to invest in long-term tax-reducing plans which is beneficial to long-run shareholder's value; while Armstrong et al. (2012) interpreted the finding as managers being provided with incentives to reduce companies' tax expense levels; and Rego and Wilson (2012) expressed that managers expect higher personal benefits from increased tax avoidance levels. Armstrong et al. (2015) found that relatively high levels of risk-taking equity incentives had the potential to motivate managers to invest in risky tax avoidance activities even beyond that expected by shareholders. Xian et al. (2015) also discovered that executive compensation increased companies' book-tax difference (BTD), proving that compensation acts as an effective tool to promote the desired managerial practices. In Malaysia, Mahenthiran and

Kasipillai (2012) revealed that a higher level of executive compensation led to higher long-term tax planning to reduce ETR. Interestingly, a recent study by Zolotoy et al. (2021) found that CEO stock option incentives were positively related to corporate tax avoidance when a company's ETR was anticipated to be above that of its peers, and negative when its ETR was below the tax rate of peer companies, demonstrating that CEO acts to balance the demands.

Contrary to the agency theory point of view, Desai and Dharmapala (2006), Halioui et al. (2016), Huang et al. (2018), Jbir, Neifar and Fourati (2021), and Arora and Gill (2022) documented that higher executive compensation led to lower tax avoidance levels. Desai and Dharmapala (2006) discovered a negative relationship between equity compensation and corporate tax avoidance, and proposed a “managerial rent extraction” theory to explain their finding. As corporate non-transparency is a precondition for corporate tax avoidance, the opaqueness opens rooms for managerial rent diversion at the same time. Obfuscatory actions, such as the creation of complex structures to avoid taxes, tend to facilitate diversion. For instance, set up of tax haven subsidiaries and use of off-balance sheet financing which cloud shareholders' view may be necessary to effectively avoid taxes. As corporate tax avoidance increases available cash, it may induce managers to misuse the resources for sub-optimal objectives, such as those relating to management opportunism. Citing corporate malfeasance at Enron and Tyco as examples, the complex tax avoidance activities at these companies created sufficient obscurity which allowed for managerial self-dealing. In brief, Desai and Dharmapala (2006) opposed the view that managers are induced by incentives to avoid taxes, rather the increase in executive compensation aimed to align shareholders-managers interests has the primary effect of inducing managers to reduce the level of diversion, and avoid less taxes. Jbir et al. (2021) whom documented a negative relationship between CEO compensation and corporate tax avoidance agreed with Desai and Dharmapala (2006)'s

interpretation, and explained their finding as managers becoming less opportunistic when they receive higher levels of incentive. Halioui et al. (2016) whose study was carried out in a Western context, and Huang et al. (2018) whose research was conducted in the East, both documented a negative relationship of CEO salary and CEO stock options with corporate tax avoidance. Halioui et al. (2016) explained that a higher pay led CEOs to adopt loss frames, and to engage in a lower level of tax avoidance to reduce exposure to a risky situation; while Huang et al. (2018) clarified that cash compensation encouraged CEOs to focus on short-term goals instead of the long-term, so they were less inclined to engage in corporate tax avoidance which is harmful for the short-run but beneficial for the long-run. Huang et al. (2018) further proposed that cash compensation is often subject to stricter market scrutiny, so companies paying higher cash compensation face greater external pressure, specifically pressure of adverse selection in the market, to reduce their tax avoidance activities. Arora and Gill (2022) whom found a negative impact of fixed executive compensation on corporate tax avoidance arrived at a similar conclusion in the case of Indian firms. They explained that the fixed component of executive compensation comprises of mainly salary paid in cash, and the mostly cash-based fixed payment implicates the risk-averse behaviour in Indian firms.

While much empirical evidence was in line with the idea that properly incentivised executives engage in greater corporate tax avoidance, some studies provided otherwise. To address the mixed results, Seidman and Stomberg (2017) re-examined the negative relationship between equity compensation and corporate tax avoidance, and revealed that the relationship between the two variables is more negative when companies' marginal benefit from corporate tax avoidance is lower. Their results challenged the interpretation that managerial rent extraction is a widespread behaviour.

Several studies have examined some specific properties of compensation and their impact on corporate tax avoidance (for example, Phillips, 2003; Gaertner, 2014; Taylor & Richardson, 2014; Powers, Robinson & Stomberg, 2016). Phillips (2003) discovered that business unit managers compensated based on an after-tax measure tend to reduce corporate ETRs, while Gaertner (2014) and Powers et al. (2016) found the same for CEOs. When companies' management are compensated on an after-tax basis, the managers have a stronger incentive to decrease tax expense in order to increase their own remuneration. In addition, Powers et al. (2016) found that when CEOs' performance bonuses were measured based on a cash-flows metric, rather than an earnings metric, CEOs tend to report lower corporate ETRs. Taylor and Richardson (2014) also documented that performance-based incentives of key management personnel have a positive relationship with corporate tax avoidance.

More recently, research has extended into looking at various other forms of incentive, and their impact on corporate tax avoidance (for example, Kubick & Masli, 2016; Chi, Huang & Sanchez, 2017; Campbell, Guan, Li & Zheng, 2020; Kubick et al., 2020). Kubick and Masli (2016) examined tournament incentives, and revealed that competition among executives for a higher promotion in the company has a positive effect on corporate tax avoidance. This suggests that tournament incentives promote managerial risk-taking where managers seek to improve their performance by enhancing the firm's value which in turn also improve their chances at being promoted to a higher position. Chi et al. (2017) investigated the influence of debt compensation, such as deferred compensation and pension, and found that if companies pay a substantial part of the CEO's compensation in the future, then corporate tax avoidance would be lower. Kubick et al. (2020) discovered the same for CFOs. As debt compensation works different from equity compensation, a greater inside debt holding by managers would increase their risk of failing to receive their compensation, and dampen their

risk appetite. Thus, they would not increase the firm's risk by engaging in risky activities like corporate tax avoidance, which would in turn increase their own risk, to protect their own interest. Kubick et al. (2020) added that the inverse relation between managers' inside debts and corporate tax avoidance is magnified by financial distress, as the firm's risk and managers' risk of not getting paid is leveraged. Campbell et al. (2020) inspected the association between severance pay, which is a payment managers would receive if terminated involuntarily, and corporate tax avoidance. They documented a positive relationship between severance pay and corporate tax avoidance, which shows severance pay resembling a form of efficient contracting that provides contractual protection to CEOs who would otherwise be risk-averse due to fear of personal consequences. Especially for CEOs who face greater career concerns, such as being less experienced, facing shareholders' monitoring, and managing companies with higher idiosyncratic risk, severance pay provides an even stronger tax planning incentive to CEOs.

In brief, plenty of studies have unanimously proved that executive compensation can alter managerial behaviour and managerial risk-taking, particularly in corporate tax avoidance. Therefore, it is reasonable to believe that a higher pay can align a CEO's interest to that of shareholders', and induce the CEO to engage in greater corporate tax avoidance to increase the firm's and shareholder's value. Thus, this study hypothesises a significant positive relationship between CEO compensation and corporate tax avoidance.

H_{1a}: There is a significant positive relationship between CEO compensation and corporate tax avoidance in Malaysia.

2.4.1.2 CEO Duality

CEO duality is a situation where a same person holds both the positions as the CEO of the company and the chairman of the company's board of directors. On one hand, it is argued that the combined leadership is more effective and efficient in ensuring the company's strategy is formulated and implemented with better coordination, while avoiding potential rivalry in the company, as well as eliminating confusion of having two spokespersons. On the other hand, agency theory proposed the separation of the two positions as an individual who assumes both positions at one time can act with self-serving bias. As one of the many duties of the board chairman is to oversee the hiring, termination, and compensation of the executives, an executive who is also the board chairman "oversees" him-/her-self. This impairs the executive's objectivity, the board's effective monitoring ability, and the firm's check-and-balance to align shareholders-managers interests. When the leadership is concentrated in a sole decision-maker, it becomes difficult for the board to challenge his/her tax proposal. Thus, CEO duality signals a weak corporate governance (Jensen, 1993; Chan et al., 2013; Wahab et al., 2017).

Researches which have studied the role of CEO duality as a corporate governance mechanism and the tax outcome it leads to include Minnick and Noga (2010), Mahenthiran and Kasipillai (2012), Chan et al. (2013), Halioui et al. (2016), Wahab et al. (2017), Chang, Huang, Ting and Chang (2019), Chytis, Tasios and Filos (2020), Boussaidi and Hamed-Sidhom (2021), Amri, Douagi and Guedrib (2022), and Kolas and Koumanakos (2022). Minnick and Noga (2010) was probably the first to include CEO duality as a corporate governance variable when studying tax planning. However, they did not document any significant result, and argued that there is no reason for a company leader who is both the CEO and board chairman among American firms to engage in corporate tax avoidance.

Similarly, Mahenthiran and Kasipillai (2012) and Wahab et al. (2017) were unable to find a significant relationship between CEO duality and corporate tax avoidance in Malaysia; while Amri et al. (2022) was unable to do so in Tunisia. These studies also did not explain why CEO duality has little effect on a company's tax avoidance level.

Nonetheless, there were studies which did discover an association between CEO duality and corporate tax avoidance, whether a positive association (for example, Chan et al., 2013; Halioui et al., 2016; Chang et al., 2019), or a negative one (for example, Chytis et al., 2020, Boussaidi & Hamed-Sidhom, 2021; Kolias & Koumanakos, 2022). Studies by Chan et al. (2013) and Chang et al. (2019) on Chinese firms confirmed the significant positive association of CEO duality with corporate tax avoidance. In particular, Chang et al. (2019) discovered that female holding both positions of CEO and board chairman tend to engage in more tax avoidance activities. Chan et al. (2013) put forward that CEO duality strengthens the relationship between the executive team and the board, and weakens the governance role of the board, so a tax avoidance strategy can be easily passed and implemented. Even if board members wish to oppose the strategy, they are incapable of doing so. Halioui et al. (2016) contributed evidence from the West that CEO duality significantly and positively impacts corporate tax avoidance in American firms, suggesting that CEO duality boosts CEOs' opportunistic behaviour and in turn companies' tax avoidance level.

Although Chytis et al. (2020)'s finding on CEO duality contrasts with empirical findings by concurrent research, it supported the agency theory prediction, that is CEO duality causes lower corporate tax avoidance. When a CEO is also a board chairman, s/he controls the board, which obstructs the board to execute its governance role effectively. Thus, the CEO who is assumed to be risk-averse can carry out less tax avoidance activities without obstacles, which opposes shareholders' preference. Consistent with Chytis et al. (2020), Kolias and

Koumanakos (2022) whose research was also conducted in the Greek environment documented finding in line with that by Chytis et al. (2020) and thus with what the mainstream agency theory proposes. They suggest that duality power encourages managerial risk-aversion which in turn discourages corporate tax avoidance. Boussaidi and Hamed-Sidhom (2021) found the same (a negative relationship) between CEO duality and corporate tax avoidance among Tunisian firms.

In short, it is thought that the positions of a CEO and a board chairman must be separated for effective governance in a company. If a company does not separate the two functions, and the CEO is at the same time the board chairman, then s/he may control the board. In other words, the board loses control over the CEO. Therefore, a CEO who is assumed to be risk-averse according to agency theory may engage in a lower tax avoidance level to protect him-/her-self from unnecessary risk of personal consequences. Thus, the hypothesis is formulated as follows:

H_{1b}: There is a significant negative relationship between CEO duality and corporate tax avoidance in Malaysia.

2.4.2 Board Composition

Apart from managerial incentives and characteristics, the board of directors is one of the main corporate governance mechanisms, and it has a very important role to play in a company's governance (Fama, 1980; Fama & Jensen, 1983; Jensen, 1993). Shareholders delegate the control function to the board of directors, who then delegate most management functions to the managers (Fama & Jensen, 1983). Therefore, the board of directors assumes a central role to protect shareholders' interest and maximise shareholders' wealth, including in companies' tax management (Minnick & Noga, 2010; Wahab et al., 2017). To ensure the

effectiveness of the board, the composition of the board of directors is an important factor to consider (Fama, 1980; Fama & Jensen, 1983; Jensen, 1993), and companies with different board structures may pursue different tax strategies (Minnick & Noga, 2010; Wahab et al., 2017). The board composition to consider which would affect the board's governance effectiveness may include board size, board independence, and board gender diversity.

2.4.2.1 Board Size

Board size is considered as an important element of the board's characteristics. The number of directors on the board should be optimal, and determined in such a way to ensure that enough members are present to respond to the board's duties and perform various board functions (Hoseini et al., 2019).

There are two competing views in debate of the perfect board size. First, it is thought that a larger board is better because board size can be seen as a proxy of directors' expertise. That is, the larger the size of the board, the greater the collective expertise of the directors. A larger board is also said to be capable of exercising a more effective monitoring as the oversight responsibility can be shared over a greater number of directors. Hoseini et al. (2019) supported this line of thought, providing empirical evidence that a larger board size is associated with greater corporate tax avoidance.

Postulated by agency theory, the opposing view advocates that a larger board is less relevant and its control less effective, and it becomes difficult to control the CEO (Jensen, 1993). This side of view is of the opinion that a greater number of directors would just lead to long arguments over policies due to multiple views and various motives which impairs the speed of decision-making and the effectiveness of the board in exercising its monitoring role, while a smaller size increases the overall efficiency of the board. Articles which documented

supporting evidence that a larger board size reduces the likelihood of corporate tax avoidance include Halioui et al. (2016), Wahab et al. (2017), and Salhi, Jabr and Jarboui (2020).

In sum, empirical evidence has been mixed about board size and corporate tax avoidance, whereby many hands can either make work light, or otherwise. This study, consistent with the agency theory, predicts that a larger board size would cause the board to lose its relevance and effectiveness on governance, thus managers could act against shareholder's interest, and avoid lesser taxes.

H_{2a}: There is a significant negative relationship between board size and corporate tax avoidance in Malaysia.

2.4.2.2 Board Independence

Independent director is the most important function on the board in overseeing companies' management as the more independent the director, the more willing s/he is to monitor the managers. An independent director is someone who is free from any ties with significant shareholders and managers, so s/he can exercise his/her duties objectively without bias and prejudice. Therefore, agency theory calls for the mixture of insiders and outsiders on companies' boards as the inclusion of outside directors can increase the board's independence and competition among the board's directors in pursuing shareholders' interest (Fama, 1980; Fama & Jensen, 1983).

Following the agency theory assumption that shareholders are risk-neutral and favour corporate tax avoidance as long as it does not possess an inappropriate risk, independent boards are expected to act in the interest of shareholders to increase the tax avoidance level. In this vein, Richardson et al. (2015), McClure et al. (2018), Chytis et al. (2020), and Boussaidi and Hamed-Sidhom (2021) all documented that the higher the percentage of

outside directors on the board, the greater the corporate tax avoidance, demonstrating that board independence plays to the advantage of shareholders, and exerts pressure on managers to reduce companies' ETRs. Richardson et al. (2015) whose research was focused on financially-distressed firms explained that independent directors act to protect shareholders' interest by increasing corporate tax avoidance as a response to financial distress, shifting away financial distress risk from shareholders to debtholders. McClure et al. (2018) and Chytis et al. (2020) whose studies also spanned the years of financial crisis found a positive relationship between board independence and corporate tax avoidance during crisis years, and a decline in tax avoidance activities in post-crisis years. This shows that independent directors may help in promoting a tax planning strategy, offering their useful knowledge and unique experience to encourage more aggressive tax planning activities (Richardson et al., 2015; McClure et al., 2018; Chytis et al., 2020).

On contrary, Lanis and Richardson (2011) who covered only pre-crisis years, and included firms mainly on the more aggressive end of the corporate tax avoidance continuum as their samples, documented that an independent board reduces the level of tax avoidance in a company. Lanis and Richardson (2011) thought that independent directors are unlikely to collude with managers, rather they are likely to monitor deviation to preserve shareholders' wealth. Thus, reducing corporate tax avoidance may be better for shareholders in non-crisis times, as corporate tax avoidance would then be associated with an inappropriate level of risk. Although Lanis and Richardson (2011) documented a finding opposite to that by Richardson et al. (2015), McClure et al. (2018), and Chytis et al. (2020), they all provided that independent boards improve decision-making quality and protect shareholders' interest, whereby independent directors increase corporate tax avoidance during financial distress years, and decrease during non-financial distress years. The independent board evaluates the

company's tax plan and strategy, considering both costs and benefits of engaging in tax avoidance activities, then accept them if they are beneficial; and reject them if they are not. Lanis and Richardson (2018), Alkurdi and Mardini (2020), and Salhi et al. (2020) were among the articles which also documented a negative relationship between board independence and corporate tax avoidance. Similarly, these articles viewed the reduction in corporate tax avoidance due to an increase in board independence as effectiveness, instead of ineffectiveness, of governance. It is said that an independent board exercise its authority to constrain dysfunctional managerial behaviour which is detrimental to the company, such as engaging in excessive corporate tax avoidance.

Perhaps finding from Armstrong et al. (2015) could explain the conflicting results documented by the many articles. Armstrong et al. (2015) found a more complex pattern between board independence and corporate tax avoidance, whereby board independence increases corporate tax avoidance when the company's tax avoidance level is low, and decreases corporate tax avoidance when the company's level of tax avoidance is high. This proves that independent directors work in shareholders' interest by optimising the firm's risk level to an appropriate and acceptable level.

As it can be seen, there is a pretty balanced support on whether board independence increases or reduces corporate tax avoidance. Nevertheless, whether independent directors promote or curb tax avoidance activities, they are always believed to do so with the purpose of protecting the interest of shareholders. This study proposes that, with all other things being equal, if the board is independent, and that shareholders prefer tax avoidance, then the board is likely to encourage managers to increase the company's tax avoidance activities.

H_{2b}: There is a significant positive relationship between board independence and corporate tax avoidance in Malaysia.

2.4.2.3 Board Gender Diversity

Lately, gender diversity has become popular in corporate governance thinking, not only because of gender equality trends, but female directors were also said to be effective stewardess in corporate governance. Female directors were found to act in a similar fashion to independent directors, providing effective oversight and monitoring of the board. They were also found to be more risk-averse compared to male directors, more independent in thinking, facilitate more informed decisions, and possess higher ethics and moral standards, which in turn leverage the board's transparency and trustworthiness. Therefore, a gender-diverse board is said to provide tougher corporate governance (Richardson et al., 2016). Studies in recent years have also begun to examine the governance role of women on corporate tax avoidance (for example, Francis et al., 2014; Richardson et al., 2016; Chang et al., 2019; Damayanti & Supramono, 2019; Hoseini et al., 2019; Jarboui, Saad & Riguen, 2020; Riguen, Salhi & Jarboui, 2020; Salhi et al., 2020; Boussaidi & Hamed-Sidhom, 2021; Dakhli, 2021; Ahmed, Temouri, Jones & Pereira, 2022; Garcia-Blandon, Argiles-Bosch, Ravenda & Castillo-Merino, 2022; Iazzi, Vacca, Maizza & Schiavone, 2022).

Compared to their male counterparts, Francis et al. (2014) discovered that female CFOs are less tax aggressive; Hoseini et al. (2019), Jarboui et al. (2020), Salhi et al. (2020), Boussaidi and Hamed-Sidhom (2021), Dakhli (2021), and Ahmed et al. (2022) found that female directors reduce the tax avoidance level; while Richardson et al. (2016) documented that both female CFOs and female directors exert significant influence on curbing corporate tax avoidance. With a large sample of 23,178 firms from nearly 100 countries, Damayanti and Supramono (2019) underscored that the presence of both female owners and female managers play a positive role on corporate tax compliance. Riguen et al. (2020) investigated board gender diversity as a moderator, and showed that women on board accentuates the

negative relationship between audit quality and corporate tax avoidance. This indicates that female directors demand a higher audit quality, such as audit specialisation, which enhances the credibility and reliability of the financial reports, and in turn dampens opportunistic behaviour of managers on corporate tax avoidance. Ahmed et al. (2022) examined the effects of board gender diversity on the likelihood of a firm to own a tax haven subsidiary, and indicated that the propensity of a firm to operate a tax island subsidiary reduces with every appointment of a female director.

Collectively, these articles thought that females work on reducing the firm's risk-taking to an acceptable level, thus the reduction in corporate tax avoidance, which is a risky activity (Francis et al., 2014; Richardson et al., 2016; Damayanti & Supramono, 2019; Hoseini et al., 2019; Jarboui et al., 2020; Riguen et al., 2020; Salhi et al., 2020; Boussaidi & Hamed-Sidhom, 2021; Dakhli, 2021). It was also demonstrated that females are more ethical, transparent, and rigorous in monitoring a company's financial and tax policies (Richardson et al., 2016; Salhi et al., 2020; Dakhli, 2021). Compared to males, females are said to have different traits in general (Jarboui et al., 2020). For instance, females tend to be more risk-averse and conservative, particularly on corporate reporting and other financial-related matters, relative to men (Richardson et al., 2016; Dakhli, 2021); and females are more communal in nature, while males have greater agent characteristics such as dominance (Jarboui et al., 2020).

While all other studies upheld the positive role of females on corporate tax compliance, Chang et al. (2019), Garcia-Blandon et al. (2022), and Iazzi et al. (2022) documented otherwise. Contrary to most empirical evidence that females favour ethical behaviour in business, Chang et al. (2019) discovered that female CEOs in Chinese firms possess the same tax avoidance behaviour and perform the same tax avoidance level as male CEOs. Female CEOs with political background tend to engage in even more tax avoidance activities. Thus,

Chang et al. (2019) concluded that their findings opposed the traditional western thinking, and that females are no less risk-averse than their male colleagues. Garcia-Blandon et al. (2022) and Iazzi et al. (2022) also found that female directors increase tax avoidance activities in Norwegian and Italian firms respectively. While Garcia-Blandon et al. (2022) sees the positive relationship negatively as female directors being ineffective, Iazzi et al. (2022) interpreted it as women on board working effectively in corporate risk assessment and tax strategy.

On the ground that female directors are equivalent to independent directors (Richardson et al., 2016), this study predicts a positive relationship between board gender diversity and corporate tax avoidance, consistent with how a positive relationship is hypothesised between board independence and corporate tax avoidance. Assuming shareholders are risk-neutral and desire corporate tax avoidance, female directors who act like independent directors should protect shareholders' interest, and call for more tax avoidance activities.

H_{2c}: There is a significant positive relationship between board gender diversity and corporate tax avoidance in Malaysia.

2.4.3 Ownership Structure

2.4.3.1 Foreign Ownership

As foreign shareholders make investments to yield profits, they are expected to be in favour of corporate tax avoidance. However, benefits such as tax and cash savings from corporate tax avoidance accrue primarily to the shareholders, while increasing risk on the part of managers. Due to conflict of interests between the two parties, managers who hold the control of the company may choose not to engage in corporate tax avoidance as the shareholders desire. In this case, foreign shareholders can act as an effective corporate

governance mechanism, acting as a form of “external” monitoring to exert pressure on managers to increase the company’s tax avoidance level (Aggarwal, Erel, Ferreira & Matos, 2011; Salihu et al., 2015).

Early research in the U.S. discovered that companies with substantial foreign ownership were indeed more tax avoidant (Kinney & Lawrence, 2000). Kinney and Lawrence (2000) found that the higher the foreign ownership of the U.S. firms, the lower the tax burden of the firms through means of profit shifting. Demircuc-Kunt and Huizinga (2001)’s study covered a great scope, examining taxes between domestic- and foreign-owned banks in 80 developed and developing countries. Compared to banks operating domestically, banks with foreign links tend to pay lower taxes in their host countries. Similar to Kinney and Lawrence (2000), they found that these tax-avoidant banks used profit shifting strategies to avoid taxes. Salihu et al. (2015) expressed that it is surprising that foreign ownership is positively related to corporate tax avoidance even in the banking industry which is supposed to be stricter in nature with stringent rules and regulations, let alone the other sectors. Performed an investigation in the Malaysian market, Salihu et al. (2015) agreed that foreign ownership has a positive relationship with corporate tax avoidance. Companies substantially owned by foreign shareholders, relative to those owned by mainly domestic shareholders, avoided more taxes. Alkurdi and Mardini (2020) continued to prove the same in a developing context. Alkurdi and Mardini (2020) whose study was based in Jordan confirmed that the greater the foreign ownership, the greater the corporate tax avoidance.

As with all other variables, there is a study which documented contradicting findings. Hasan et al. (2022) found robust evidence that foreign ownership is negatively associated with corporate tax avoidance. They explained that the negative association is dominated by foreign ownership from countries with higher tax morale and stronger shareholder protection.

In spite of the conflicting findings, Hasan et al. (2022) also confirmed the active role of foreign owners in manipulating a company's tax policy.

Therefore, foreign ownership is believed to serve as an effective corporate governance tool, which would be capable of ensuring managers act in the interest of shareholders, and engage in higher levels of corporate tax avoidance.

H₃: There is a significant positive relationship between foreign ownership and corporate tax avoidance in Malaysia.

CHAPTER 3: METHODOLOGY

3.1 Research Design

This study takes a quantitative approach to validate its six research objectives set in Section 1.4.2 and to test its corresponding six hypotheses developed in Section 2.4 utilising a multiple regression analysis.

3.2 Research Model

To validate the research objectives and test the hypotheses, the regression equation is established as follows:

$$\begin{aligned} \text{ETR} = & \beta_0 + \beta_1 \text{SALARY} + \beta_2 \text{DUALITY} + \beta_3 \text{BSIZE} + \beta_4 \text{BIND} + \beta_5 \text{BGD} + \beta_6 \text{FOREIGN} \\ & + \beta_7 \text{FSIZE} + \beta_8 \text{CAPINT} + \beta_9 \text{LEV} + \beta_{10} \text{PROFIT} + \text{Firm Fixed Effect} + \text{Year Fixed Effect} \\ & + \epsilon \end{aligned}$$

whereby

ETR = Corporate tax avoidance

β_0 = Constant intercept

β_1 SALARY = CEO compensation

β_2 DUALITY = CEO duality

β_3 BSIZE = Board size

β_4 BIND = Board independence

β_5 BGD = Board gender diversity

β_6 FOREIGN = Foreign ownership

β_7 FSIZE = Firm size

β_8 CAPINT = Capital intensity

β_9 LEV = Leverage

β_{10} PROFIT = Profitability

ϵ = Error term

Universiti Malaya

3.3 Research Framework

To illustrate, this study has a research framework as below:

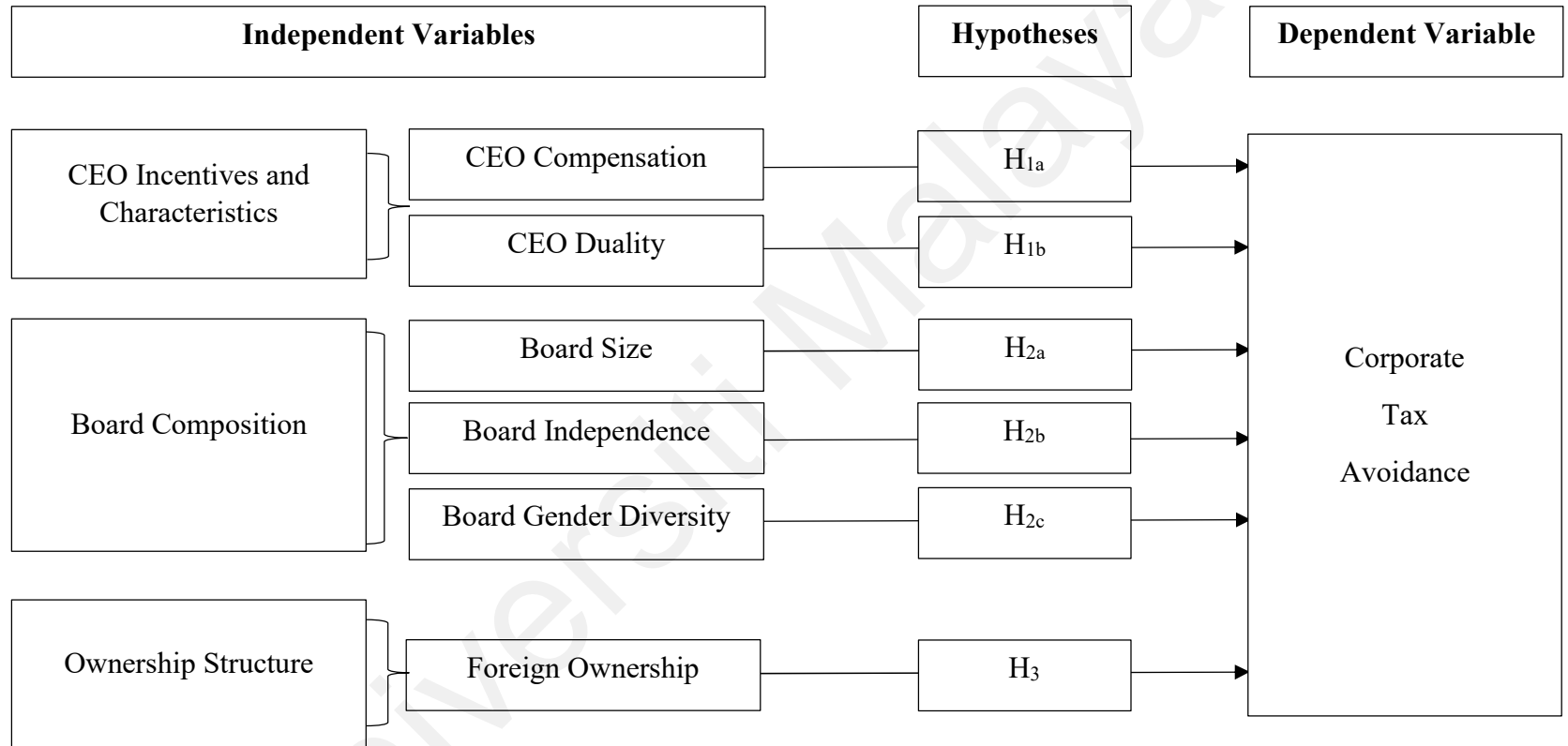


Figure 3.1 Research Framework

3.4 Measurement of Variables

Variables in this study can be classified into dependent, independent, and control variables. The abbreviations and measurements of these variables, and sources the measurements are derived from, are summarised in Table 3.1.

Table 3.1 Measurement of Variables

Variables	Abbreviations	Measurements	Sources
Dependent Variable			
Corporate tax avoidance	ETR	Total income tax expense / Profit before tax	Hanlon & Heitzman, 2010
Independent Variables			
CEO compensation	SALARY	CEO total remuneration in thousands of Ringgit Malaysia (RM '000)	Halioui et al., 2016; Powers et al., 2016; Huang et al., 2018
CEO duality	DUALITY	Dummy, 1 if CEO is also board chairman; 0 if otherwise	Chan et al., 2013; Halioui et al., 2016; Boussaidi & Hamed-Sidhom, 2021; Amri et al., 2022
Board size	BSIZE	Total number of directors on board	Halioui et al., 2016; Hoseini et al., 2019; Salhi et al., 2020; Amri et al., 2022
Board independence	BIND	Percentage of independent directors on board	Lanis & Richardson, 2011; Armstrong et al., 2015; Alkurdi & Mardini, 2020; Chytis et al., 2020; Salhi et al., 2020; Boussaidi & Hamed-Sidhom, 2021
Board gender diversity	BGD	Percentage of female directors on board	Jarboui et al., 2020; Riguen et al., 2020; Salhi et al., 2020; Boussaidi & Hamed-Sidhom, 2021; Dakhli, 2022; Iazzi et al., 2022
Foreign ownership	FOREIGN	Percentage of foreign directors on board	Salihu et al., 2015

Table 3.1, continued

Variables	Abbreviations	Measurements	Sources
Control Variables			
Firm size	FSIZE	Natural logarithm of total assets	Derashid & Zhang, 2003; Noor et al., 2008; Wilson, 2009; Lisowsky, 2010; Kasim & Saad, 2019
Capital intensity	CAPINT	Property, plant, and equipment (PPE) / Total assets	Gupta & Newberry, 1997; Mills et al., 1998; Derashid & Zhang, 2003; Noor et al., 2010
Leverage	LEV	Total debt / Total equity	Derashid & Zhang, 2003; Noor et al., 2010; Kasim & Saad, 2019
Profitability	PROFIT	Net income / Total assets	Gupta & Newberry, 1997; Derashid & Zhang, 2003; Noor et al., 2008; Noor et al., 2010

3.4.1 Dependent Variable

The dependent variable of this study is corporate tax avoidance, and it is measured by effective tax rate (ETR). Referring to Hanlon and Heitzman (2010), this study computes ETR as the ratio of total income tax expense to profit before tax. A lower ETR indicates a higher likelihood that a company engages in some form and extent of tax avoidance activities, particularly for companies which ETRs are below the STR of 24% as per ITA 1967.

Measuring corporate tax avoidance by ETR is consistent with most other studies in this stream of tax research. ETR is a commonly used measure for corporate tax avoidance. For instance, recent academic research using ETR as its measure include Powers et al. (2016), Wahab et al. (2017), Hoseini et al. (2019), Alkurdi and Mardini (2020), Jarboui et al. (2020), Riguen et al. (2020), Salhi et al. (2020), Boussaidi and Hamed-Sidhom (2021), and Dakhli (2021). ETR is broadly used because it can capture the ability of a company to reduce its

current tax liability relative to its pre-tax income, or simply, can reflect a company's actual tax burden (Hanlon & Heitzman, 2010).

3.4.2 Independent Variables

This study consists of six main independent variables which are all corporate governance variables. As illustrated in Figure 3.1, these corporate governance variables can be sub-classified into three categories, namely CEO incentives and characteristics, board composition, and ownership structure. Under the CEO incentives and characteristics category are CEO compensation (SALARY) and CEO duality (DUALITY); while under the category of board composition include board size (BSIZE), board independence (BIND), as well as board gender diversity (BGD); and under the category of ownership structure is foreign ownership (FOREIGN).

For CEO incentives and characteristics, CEO compensation (SALARY) is measured as the company CEO's total remuneration in thousands of Ringgit Malaysia (RM '000) (Halioui et al., 2016; Powers et al., 2016; Huang et al., 2018); while CEO duality (DUALITY) is measured with dummy values, where "1" indicates CEO duality (where the company CEO is also the board chairman), and "0" indicates otherwise (where the positions of CEO and board chairman are held by different persons) (Chan et al., 2013; Halioui et al., 2016; Boussaidi & Hamed-Sidhom, 2021; Amri et al., 2022).

Typically, literatures measure management compensation based on equity compensation (for example, Minnick & Noga, 2010; Armstrong et al., 2012; Rego & Wilson, 2012; Armstrong et al., 2015). However, CEO compensation is measured based on cash compensation in this study. This is because compensation policies in emerging markets are mainly and commonly in cash form (Mahenthiran & Kasipillai, 2012; Huang et al., 2018;

Arora & Gill, 2022). Thus, it seems more appropriate to measure CEO compensation based on cash compensation in this study. A standard remuneration package paid to management in Malaysia should include all salary, bonus, benefit-in-kind, fee, and other emoluments (MCCG, 2021). As aforementioned, Mahenthiran and Kasipillai (2012) was, as far as the authors are aware, the only study which has examined the impact of executive compensation on companies' ETRs and tax planning in Malaysia. Perhaps Mahenthiran and Kasipillai (2012) intended to use executive compensation as an approximate of management power, they measured executive compensation as a percentage to total sales. Rather than a relative measure, this study uses an absolute measure – the amount of the total remuneration paid to the CEO – to calculate executive compensation, consistent with studies such as Halioui et al. (2016), Powers et al. (2016), and Huang et al. (2018), which this study argues is more direct, logical, and straightforward, to confirm the findings documented in Mahenthiran and Kasipillai (2012).

Furthermore, literatures investigating management compensation have used either business unit managers' (for example, Phillips, 2003; Desai & Dharmapala, 2006), tax directors' (for example, Armstrong et al., 2012), CFOs' (for example, Rego & Wilson, 2012; Kubick & Masli, 2016; Chang et al., 2019; Arora & Gill, 2022), and mostly CEOs' (for example, Phillips, 2003; Desai & Dharmapala, 2006; Rego & Wilson, 2012; Gaertner, 2014; Halioui et al., 2016; Kubick & Masli, 2016; Powers et al., 2016; Chi et al., 2017; Chang et al., 2019; Jbir et al., 2021; Arora & Gill, 2022) compensation to measure management compensation. Although there have been studies which proved that other executives, besides CEOs, may also influence a company's tax policy, this study chooses to measure CEO compensation because of a few justifications. While executives and managers aside of the CEO may influence corporate policies and decisions concerning tax, the CEO is believed to

wield the greatest power and has the most significant influence on such policies and decisions. This is because, regardless of whether the CEO has or do not have the expertise to develop and implement tax strategies, and whether s/he is directly involved in tax management or not, the CEO can influence the tax planning process by setting the tone at the top. In other words, it is ultimately the CEO who determines the company's overall tax policy. Empirical evidence from Phillips (2003), Desai and Dharmapala (2006), Rego and Wilson (2012), Halioui et al. (2016), and Jbir et al. (2021) all presented that CEOs exert significant influence on corporate tax planning. Chi et al. (2017) also found that the impact of debt compensation on corporate tax avoidance is larger for CEO than for CFO, suggesting that while both the CEO and CFO influence corporate tax policies to certain extent, the CEO plays a more critical role than the CFO in deciding the company's tax avoidance level and activities. Following the argument put forth by Powers et al. (2016) that because the CEO evaluates the CFO's performance, so that the CEO's incentives should dominate those of the CFO and other executives, this study selects CEO compensation as the most appropriate measurement.

In terms of board composition, board size (BSIZE) is counted based on the number of directors sitting on the board (Halioui et al., 2016; Hoseini et al., 2019; Salhi et al., 2020; Amri et al., 2022); board independence (BIND) is calculated based on the percentage of independent directors on board (Lanis & Richardson, 2011; Armstrong et al., 2015; Alkurdi & Mardini, 2020; Chytis et al., 2020; Salhi et al., 2020; Boussaidi & Hamed-Sidhom, 2021); while board gender diversity (BGD) represents the proportion of female directors on board (Jarboui et al., 2020; Riguen et al., 2020; Salhi et al., 2020; Boussaidi & Hamed-Sidhom, 2021; Dakhli, 2022; Iazzi et al., 2022). Measurements for the board composition variables are rather self-explanatory and consistent across literatures.

For ownership structure, foreign ownership (FOREIGN) is measured by the percentage of foreign directors on board (Salihu et al., 2015). This study acknowledges that the percentage of foreign owners (shareholders) in the company is a more commonly used measurement. Unfortunately, due to data constraints, this study uses the percentage of foreign directors on board as an alternative measure. The alternative measure is chosen because Salihu et al. (2015) whose study was conducted in Malaysia documented that both measures, which are the percentage of foreign directors, and the percentage of foreign shareholders, produced consistently significant results. It is also thought that foreign directors represent and would act in the interest of foreign shareholders. Thus, this study expects either measure to yield the same result.

3.4.3 Control Variables

Earlier corporate tax avoidance studies have examined firm characteristics as potential factors influencing corporate tax avoidance (Hanlon & Heitzman, 2010; Wilde & Wilson, 2018; Wang et al., 2020). These studies have confirmed that firm characteristics indeed have significant influence on corporate tax avoidance (for example, McGee & Stickney, 1982; Zimmerman, 1983; Gupta & Newberry, 1997; Kim & Limpaphayom, 1998; Mills et al., 1998; Derashid & Zhang, 2003; Rego, 2003). Thus, recent studies which investigated the impact of corporate governance on corporate tax avoidance have included firm characteristics as control variables (for example, Minnick & Noga, 2010; Chan et al., 2013; Salihu et al., 2015; Halioui et al., 2016; Wahab et al., 2017; Salhi et al., 2020; Boussaidi & Hamed-Sidhom, 2021; Dakhli, 2021; Jbir et al., 2021; Amri et al., 2022; Arora & Gill, 2022; Garcia-Blandon et al., 2022; Iazzi et al., 2022; Kolias & Koumanakos, 2022). Following prior literatures, this study includes four firm characteristic variables, which have been proven to have a relationship with corporate tax avoidance, as control variables. These control variables are

firm size (FSIZE), capital intensity (CAPINT), leverage (LEV), and profitability (PROFIT). They are meant to capture the variations in firm characteristics across companies which may affect a company's tax avoidance level, and to mitigate the effects arising from these variations. A recent research in Malaysia, Kasim and Saad (2019) also proposed firm size, capital intensity, leverage, and profitability as potential determinants of tax avoidance among Malaysian companies. Muhmad, Haat, Taha, Rashid and Muhmad (2020) documented the same findings as Kasim and Saad (2019) that capital intensity, leverage, and profitability significantly influence corporate tax avoidance of public listed companies (PLCs) in Malaysia. Thus, the choice of these control variables is deemed appropriate and necessary.

3.4.3.1 Firm Size

Firm size (FSIZE), if measured in total assets can be distorting due to the magnitude, so it is transformed into the natural logarithm of total assets, in line with Derashid and Zhang (2003), Noor et al. (2008), Wilson (2009), Lisowsky (2010), and Kasim and Saad (2019). The size of the firm is likely to impact the level of tax avoidance in that firm. On one hand, a larger firm is believed to perform better in terms of corporate tax avoidance because it has more available resources to diversify risk and greater expertise in corporate tax planning. The sheer size of a larger firm also grants the firm political and economic power, such as economies of scale, compared to a smaller firm, which may help on the tax side (Zimmerman, 1983; Rego, 2003; Wilson, 2009; Lisowsky, 2010). Early studies in Malaysia, namely Kim and Limpaphayom (1998) as well as Derashid and Zhang (2003), supported this notion by documenting a negative association between firm size and firm's ETR. On the other hand, based on the political cost hypothesis, a larger firm is said to be subjected to a heightened level of political and public scrutiny which causes the larger firm to engage in lower corporate tax avoidance (Mills et al., 1998). Later studies in Malaysia, including Noor et al. (2008),

Noor et al. (2010), and Kasim and Saad (2019), supported the political cost theory, and documented a positive relationship between firm size and its ETR. While findings have been mixed, it is certain that firm size has a significant impact on corporate tax avoidance.

3.4.3.2 Capital Intensity

Capital intensity (CAPINT) is proxied as a company's level of investments in long-term, tangible assets (to be exact, PPE) which may influence the company's ETR. It is measured as the ratio of PPE to total assets (Gupta & Newberry, 1997; Mills et al., 1998; Derashid & Zhang, 2003; Noor et al., 2010). Capital investments bring about tax benefits, such as accelerating capital allowances and investment tax credits, to a company. Thus, capital investment is expected to have a significant inverse impact on a company's ETR. Capital intensive companies are also more affected by the differences in accounting and tax treatment on depreciation of assets which have a reduction effect on ETR (McGee & Stickney, 1982; Gupta & Newberry, 1997; Mills et al., 1998). In Malaysia, Derashid and Zhang (2003), Noor et al. (2008), Noor et al. (2010), Rashid, Noor, Mastuki and Bardai (2015), and Muhmad et al. (2020) discovered that greater investments in fixed assets by companies led to lower corporate ETRs. However, Kasim and Saad (2019) found that capital intensive companies faced higher ETRs in Malaysia, suggesting that Malaysian companies did not utilise their tax savings gained from the write-off of long-term, tangible assets. Although results remain ambiguous, various studies have confirmed the significant influence of capital intensity on corporate tax avoidance.

3.4.3.3 Leverage

Leverage (LEV) is measured as total debt over total equity (Derashid & Zhang, 2003; Noor et al., 2010; Kasim & Saad, 2019). Aside of a company's capital investments, the company's capital structure is also thought to have a significant impact on the company's tax avoidance level. Higher leverage in a company translates into higher interest expense for that company. As interest expense on loans is tax-deductible, higher interest expense means higher tax deductions. Thus, a highly-leveraged firm, compared to one with a lower gearing level, may have a lower ETR because tax-deductible interest expense acts as a tax shield from debt financing for the firm (McGee & Stickney, 1982; Gupta & Newberry, 1997). Unitedly, Derashid and Zhang (2003), Noor et al. (2008), Noor et al. (2010), Rashid et al. (2015), Kasim and Saad (2019), and Muhmad et al. (2020) revealed that highly-leverage companies in Malaysia have lower ETRs, indicating that Malaysian companies may be utilising their interest expenses to deduct their tax liabilities. Thus, leverage is also included as a control variable in this study in view of its significant impact on a company's level of tax avoidance.

3.4.3.4 Profitability

Lastly, this study includes profitability (PROFIT) as a control variable to control for companies' overall performance and tease out any specific effects of tax management. It is measured with return on assets (ROA), which is the ratio of net income to total assets (Gupta & Newberry, 1997; Derashid & Zhang, 2003; Noor et al., 2008; Noor et al., 2010). Gupta and Newberry (1997) and Rego (2003) documented ROA as an important determinant of corporate ETRs. Similarly, Derashid and Zhang (2003), Noor et al. (2008), Noor et al. (2010), Kasim and Saad (2019), and Muhmad et al. (2020) all discovered that profitable companies in Malaysia indeed paid lower ETRs. This shows that profitable companies have greater

incentives and resources to engage in tax avoidance activities, such as utilising tax credits and deductions more efficiently, relative to less profitable companies.

3.4.4 Firm and Year Fixed Effects

In addition to the set of control variables, this study includes firm and year fixed effects in its research model, referring to Desai and Dharmapala (2006), Rego and Wilson (2012), Jarboui et al. (2020), Riguen et al. (2020), Dakhli (2021), and Zolotoy et al. (2021).

Firm fixed effect is included to capture any unobserved heterogeneity across firms. It is used to address the concern that there might be some unobserved firm characteristics which explain a firm's governance and ETR that are not captured by the control variables, or simply, to control for correlated omitted variables (Desai & Dharmapala, 2006; Rego & Wilson, 2012; Riguen et al., 2020; Zolotoy et al., 2021). The stationary firm attributes which may be captured by firm fixed effect include firm-specific strategies, culture, executive ability, tax-related technology, and industry (Kubick & Masli, 2016; Zolotoy et al., 2021).

While all time-constant firm attributes are controlled through firm fixed effect, any time-varying firm characteristics are controlled with year fixed effect. Year fixed effect controls for the potential impact from changes in the macro-economic environment, such as time-specific tax policies, regulations, and enforcement (Wahab et al., 2017; Zolotoy et al., 2021).

3.5 Sample

3.5.1 Initial Sample

This study selects the 100 largest companies listed on FTSE Bursa Malaysia as its sample. This is because large listed companies have greater incentives to engage in corporate tax avoidance due to the magnitude of their tax liabilities (Annur et al., 2014). Large PLCs also

possess greater ability and resources to avoid taxes because of their sheer size (Zimmerman, 1983; Kim & Limpaphayom, 1998; Derashid & Zhang, 2003; Rego, 2003) and foreign operations extensiveness (Mills et al., 1998; Rego, 2003; Noor et al., 2008; Ariffin, 2013; Kasim & Saad, 2019). Therefore, it is important to look into these large companies. It is also interesting to probe into large PLCs because of their high profiles and that they are more often to be portrayed as aggressive tax dodgers than any other companies. Above that, corporate governance is particularly important for large listed companies as the separation of ownership and control, and thus agency conflict, is more apparent and typical in publicly traded companies. Moreover, companies trading publicly on stock exchanges are more exposed to capital market pressure, such as pressure from foreign sources (Kovermann & Velte, 2019). Thus, it is deemed ideal to test the hypotheses relating to corporate governance and corporate tax avoidance on these large PLCs in Malaysia.

As explained in Section 1.3, this study has a time frame of 5 years, from years 2016 to 2020, because there is a lack of recent study in Malaysia, thus the use of a more recent study period adds to the relevance of the study. A 5-year period is also rather longitudinal to offset any potential effects which may arise due to changes in the governance, tax, and economy environment. The study's time frame also includes a year of financial crisis, which is year 2020, thus new evidence may be expected from the study period. In addition, similar to Salihu et al. (2015) who focused on a period of time (years 2009 to 2011) where corporate tax rate remained stable at 25% over the period, this study concentrates on the period of years 2016 to 2020 given the steady corporate tax rate of 24% throughout the period being studied. This study agrees with Salihu et al. (2015) that the stability in corporate tax rates can assist in better interpretation of findings. Moreover, a longer study period helps to minimise missing data occurrences and provide a more sizable sample.

3.5.2 Final Sample

After all data are collected as outlined in Section 3.6, the dataset is cleaned based on the sample selection criteria shown in Table 3.2.

Table 3.2 Sample Selection Criteria

100 Largest Companies on FTSE Bursa Malaysia	100
<i>Multiply</i> : Number of Years	(x) 5
Total Firm-Year Observations	500
<i>Less</i> : Negative ETR	(-) 34
<i>Less</i> : ETR > 1	(-) 3
<i>Less</i> : Missing Years	(-) 21
<i>Less</i> : Missing Data (Compensation Data)	(-) 55
Final Firm-Year Observations	387

Starting with an initial sample of 500 firm-year observations (100 firms x 5 years), 34 observations with negative ETR are excluded. A negative ETR is either due to a negative numerator (a negative tax expense, or tax credits), or a negative denominator (a negative pre-tax income, or simply, a loss). A negative ETR does not contain any economic meaning, and would distort the measurement of a company's tax burden, which could easily skew the results (Gupta & Newberry, 1997; Zimmerman, 1983; Minnick & Noga, 2010). For the same reason, 3 observations with ETR > 1 were rejected. In addition, 21 missing observations due to incomplete years, and 55 observations with missing data (compensation data), are eliminated. Thus, the final sample of the study resulted in a set of unbalanced data which yielded a total number of 387 firm-year observations from 100 companies over the years of 2016 to 2020. The final dataset is winsorised at the 1st and 99th percentile to fix for extreme outliers which might affect the results, consistent with Armstrong et al. (2012), Rego and Wilson (2012), Richardson et al. (2015), Xian et al. (2015), Kubick and Masli (2016), Chi et al. (2017), Huang et al. (2018), Lanis and Richardson (2018), McClure et al. (2018),

Campbell et al. (2019), Chang et al. (2019), Kubick et al. (2020), Zolotoy et al. (2021), Arora and Gill (2022), and Garcia-Blandon et al. (2022).

3.6 Data Collection

This study makes use of secondary data, where all data required to measure all variables for all sample companies are extracted manually from the companies' published annual reports, audited financial statements, and corporate governance reports (if available) on the FTSE Bursa Malaysia official website (<https://www.bursamalaysia.com>). Although hand-collecting data is challenging and inconvenient, it ensures the quality of data used in this study. As listed companies' annual reports and corporate governance reports are open to public (and thus public scrutiny), and their financial statements audited by qualified auditors, it can be reasonably assured that data provided from these reports are accurate and complete.

3.7 Data Analysis

The final dataset produced in Section 3.5.2 is uploaded to the EViews 12.0 software for analysis, which includes descriptive analysis, correlation analysis, and multiple regression analysis.

3.7.1 Descriptive Analysis

Descriptive analysis is used to produce a set of statistics which summarise and describe the data. The descriptive statistics provide the characteristics of the variables, including the measures of central tendency (mean and median), and the measures of dispersion and variability (minimum, maximum, variance, and standard deviation), of the dependent, independent, and control variables.

3.7.2 Correlation Analysis

Correlation analysis measures the relationship between two variables, which is the relationship of an independent variable (for example, CEO compensation) and the dependent variable (corporate tax avoidance). It suggests the direction of the relationship, whether positive or negative, and the strength of the direction within a range of -1 (perfect negative correlation) to +1 (perfect positive correlation). It is also used to measure the relationship between independent variables (and control variables) to identify any potential multicollinearity issues.

3.7.3 Multiple Regression Analysis

Multiple regression analysis is used to predict the value of the dependent variable based on a set of independent variables. In this study, it is to investigate the predictive ability of the research model on the variation of ETR as a proxy of the corporate governance mechanisms in companies listed in Malaysia.

CHAPTER 4: RESULTS

4.1 Descriptive Analysis

Table 4.1 Descriptive Statistics of Variables

Variables	Mean	Median	Minimum	Maximum	Std. Deviation	Variance
Dependent Variable						
ETR	21.7710	21.7864	0.0000	65.7154	11.4788	131.7636
Independent Variables						
SALARY	7,077.09	3,840.00	335.61	96,875.60	13,305.07	177,024,961.19
DUALITY	0.0749	0.0000	0.0000	1.0000	0.2636	0.0695
BSIZE	8.6150	9.0000	5.0000	13.0000	2.0281	4.1130
BIND	52.6323	54.5455	28.5714	84.1111	12.1099	146.6498
BGD	21.8333	22.2222	0.0000	50.0000	12.2812	150.8272
FOREIGN	11.7239	0.0000	0.0000	66.6667	16.1112	259.5721
Control Variables						
FSIZE	22.9210	22.8267	19.7442	27.3299	1.8203	3.3135
CAPINT	26.6967	27.2208	0.1059	72.6227	20.8846	436.1668
LEV	2.0805	0.9372	0.0688	9.6002	2.6537	7.0424
PROFIT	7.4951	4.9746	0.2162	42.7838	7.7594	60.2088

Below, the characteristics of the study's variables as presented in Table 4.1 are examined.

4.1.1 Dependent Variable

The dependent variable, corporate tax avoidance, measured by ETR, has a mean of 21.77%. This signifies that large listed companies in Malaysia engage in some sort of tax planning activities as the ETR of 21.77% is below the STR of 24% from years 2016 to 2020. The variability of the tax avoidance level measured by ETR is 11.4788. The rate obtained (21.77%) is close to that measured in Salihu et al. (2015) at 22.68% whose study was based on the top 100 listed companies in Malaysia from year 2009 to 2011. It is proposed that although the ETR lower than the STR may be due to the utilisation of tax incentives, it may also signal the presence of more aggressive forms of tax planning activity in the companies.

4.1.2 Independent Variables

4.1.2.1 CEO Incentives and Characteristics

The compensation of CEOs (SALARY) for the 100 largest companies on FTSE Bursa Malaysia, measured in thousands of RM, has an average of 7,077.09, ranging from a minimum of 335.61 to a maximum of 96,875.60, with a standard deviation of 13,305.07. As CEO duality (DUALITY) is a dichotomous variable, its minimum is a “0” which indicates that a company separates the positions of its CEO and board chairman, and its maximum is a “1” which indicates that a company’s CEO and board chairman are held by a same person. The low mean of 0.0749 which is closer to “0” than “1” suggests that most companies separate the functions between their CEOs and board chairmen in accordance with the MCCG, which is also confirmed by the median of 0.0000. To compare, Wahab et al. (2017) recorded that 35.5% of companies in Malaysia did not separate the functions of CEO and board chairman in years 2000 to 2009. Relative to the mere 7.49% reported for years 2016 to 2020 in this study, it seems like more companies have started to adopt the practice proposed by the MCCG to separate the positions of CEO and board chairman.

4.1.2.2 Board Composition

The board size (BSIZE) of the large PLCs in Malaysia ranges from a minimum of 5 members to a maximum of 13 members, with a mean and median of 8.62 and 9 members respectively. For board independence (BIND), the lowest independence percentage recorded is 28.57%, while the highest is 84.11%. The mean (median) for BIND is 52.63% (54.55%), consistent with that proposed by the MCCG which states that large companies should have more than half independent directors on board (MCCG, 2017; MCCG, 2021). By comparison, Wahab et al. (2017) recorded a BIND percentage of 33.73% in years 2000 to 2009, while

Mahenthiran & Kasipillai (2012) reported a BIND percentage of 43% from year 2006 to 2008, in Malaysia. There seems to be a constant increment in BIND, whereby this study recorded a BIND percentage of 52.63% for years 2016 to 2020 in Malaysia. Similar to the reduction in CEO duality, the increase in board independence may indicate an improvement in the application of corporate governance among listed companies in Malaysia, and signal the compliance with and the effectiveness of the MCCG. In terms of board gender diversity (BGD), the lowest diversity percentage is as low as 0.00%, where the board is completely dominated by men, and the highest is only as high as 50.00%, where the board is balanced in terms of the number of female and male directors. In other words, no company has a board with a majority of female directors. BGD has a mean (median) of 21.83% (22.22%), which is below that recommended in the MCCG where a board should comprise of at least 30% of female directors. The recorded mean (21.83%) is, however, close to that disclosed by FTSE Bursa Malaysia at 25.3%. At end of year 2020, women participation on board in large companies stood at 25.3%, failing to meet the MCCG target of 30% (MCCG, 2021; SC Malaysia, 2021).

4.1.2.3 Ownership Structure

Foreign ownership (FOREIGN) of the large Malaysian PLCs, measured by the proportion of foreign directors on board, shows a minimum of 0.00% and a maximum of 66.67%. The mean is 11.72%, and the median is 0.00% which suggests that many companies do not have any foreign directors on their boards. Salihu et al. (2015) who used the percentage of foreign directors on board as one of the measurements for FOREIGN recorded a minimum of 0.00%, a maximum of 60.00%, and a mean of 7.01%, for the top 100 Malaysian listed companies in years 2009 to 2011. According to Salihu et al. (2015), a higher percentage of foreign directors

on board for these large companies suggests a higher probability of these foreign directors influencing the companies' decision-making in favour of the foreign owners.

4.1.3 Control Variables

Firm size (FSIZE) measured as the natural logarithm of total assets of the companies is as low as 19.7442 to as high as 27.3299, with an average and median of 22.9210 and 22.8267 respectively. Capital intensity (CAPINT) measured by the ratio of PPE to total assets shows a minimum of 0.11% and a maximum of 72.62%. The large discrepancy between the minimum and maximum is probably due to the different nature of the companies. For instance, a company operating in the financial industry is usually less capital intensive, compared to companies in other industries. The mean (median) for CAPINT is 26.70% (27.22%). Leverage (LEV), which is essentially the debt-to-equity-ratio, also sees a huge gap between the minimum (0.07) and maximum (9.60). Similarly, this is likely because of the different nature of different company. A financial company, for instance, sources its funds mostly via debts, thus the higher debt-to-equity ratio relative to companies from other sectors. The mean and median for LEV is 2.08 and 0.94 respectively. The difference between the minimum (0.22%) and maximum (42.78%) of the profitability (PROFIT) of the companies is smaller, with a mean (median) of 7.50% (4.97%).

4.2 Correlation Analysis

Table 4.2 Correlation Matrix

Variables	ETR	SALARY	DUALITY	BSIZE	BIND	BGD	FOREIGN	FSIZE	CAPINT	LEV	PROFIT
ETR	1										
SALARY	0.048	1									
DUALITY	-0.082	0.399***	1								
BSIZE	0.168***	0.036	-0.086*	1							
BIND	-0.045	0.111**	0.010	-0.036	1						
BGD	-0.048	-0.176***	-0.175***	0.151***	0.153***	1					
FOREIGN	0.103**	-0.054	-0.009	-0.085*	-0.035	0.030	1				
FSIZE	0.133***	0.304***	-0.131***	0.357***	0.248***	0.205***	-0.045	1			
CAPINT	-0.051	0.060	0.125**	0.198***	-0.149***	-0.017	-0.094*	-0.140***	1		
LEV	0.118**	0.086*	-0.161***	0.060	0.255***	0.137***	0.172***	0.594***	-0.420***	1	
PROFIT	-0.200***	-0.142***	0.019	-0.284***	-0.097*	-0.018	0.243***	-0.615***	0.086*	-0.282***	1

Notes: ***, **, and * represent significance levels of 0.01, 0.05, and 0.10, respectively.

Table 4.2 presents the correlations among variables.

4.2.1 Independent Variables and Dependent Variable

A positive correlation is documented between SALARY and ETR, BSIZE and ETR, as well as FOREIGN and ETR; while a negative correlation is discovered between DUALITY and ETR, BIND and ETR, as well as BGD and ETR. The correlations for the board composition variables, namely BSIZE, BIND, and BGD, move in the expected directions with ETR; whereas SALARY, DUALITY, and FOREIGN move in the opposite directions than those anticipated. However, only BSIZE and FOREIGN have a significant correlation with ETR at the 1% and 5% significance levels respectively; while the other variables (SALARY, DUALITY, BIND, and BGD) have no significant correlation with ETR. This suggests that a larger board and a greater foreign ownership in the company lead to higher ETR, or in other words, lower corporate tax avoidance.

4.2.2 Control Variables and Dependent Variable

FSIZE and LEV both have a positive correlation with ETR; while CAPINT and PROFIT have a negative correlation with ETR. Among the four control variables, FSIZE and PROFIT have a significant correlation with ETR at the 1% level, LEV at the 5% level, whereas CAPINT has an insignificant correlation with ETR. This means that a larger firm and a more leveraged firm pay higher taxes, while a more profitable firm pay lower taxes.

Nevertheless, the correlations are merely initial indication of the possible associations of the independent variables (and control variables) with the dependent variable.

4.3 Assumptions Tests

Table 4.3 Assumptions Tests

Variables	Variance Inflation Factor (VIF)	Tolerance Value	
Independent Variables			
SALARY	1.537	0.651	
DUALITY	1.333	0.750	
BSIZE	1.295	0.772	
BIND	1.137	0.880	
BGD	1.175	0.851	
FOREIGN	1.151	0.869	
Control Variables			
FSIZE	3.236	0.309	
CAPINT	1.324	0.756	
LEV	2.057	0.486	
PROFIT	1.854	0.539	
Tests	Statistic	Chi-Sq. Statistic	Prob.
Durbin-Watson	2.2627		
Breusch-Pagan		117.886	0.000
Shapiro-Wilk	0.9189		0.000
Kolmogorov-Smirnov	0.1164		0.000

To ensure the validity and robustness of the research model, assumptions underlying the model were tested prior to the analysis. This includes testing for multicollinearity, as well as autocorrelation, homoscedasticity, and normality of error terms. Ideally, the variables in the model should not be highly correlated with one another, while the error terms should be independent of and identical to each other, and normally distributed. To identify and determine highly correlated variables, correlation coefficients and variance inflation factor (VIF) are used. The Durbin-Watson test is used to test for autocorrelation, while the Breusch-Pagan test is applied for homoscedasticity testing, of error terms. To test for normality of error terms, both Shapiro-Wilk and Kolmogorov-Smirnov tests are used. Results from these tests are summarised in Table 4.3.

4.3.1 Multicollinearity

As multicollinearity undermines the statistical significance of the variables, this study checks for the potential existence of multicollinearity among its independent and control variables. The correlations among independent variables are small, where all correlations among independent variables are within >-0.2 and <0.2 , with the only exception being the correlation between SALARY and DUALITY at 0.399. The correlations among independent and control variables are also small, which are all within >-0.4 and <0.4 , with the strongest correlation being between BSIZE and FSIZE at 0.357. The correlations among control variables themselves are greater, with the greatest being between FSIZE and PROFIT at -0.615, followed by FSIZE and LEV at 0.594, as well as CAPINT and LEV at -0.420. According to Field (2009), the correlation magnitude should not be ≤ -0.8 or ≥ 0.8 to avert any multicollinearity problems. Since the greatest correlation magnitude documented among all variables is at -0.615 which is within the acceptable threshold, it is safe to say that there is no multicollinearity issue here.

To confirm that there is no multicollinearity issue, this study checks further by computing the VIF and tolerance value for the independent and control variables. According to the proposed threshold, the variables should have a VIF not higher than 10.0 and a tolerance value not lower than 0.20 to be free from potential multicollinearity (Field, 2009). Findings shown in Table 4.3 are consistent with those found in the correlation matrix in Table 4.2. To illustrate, the VIFs of independent variables are not substantially higher than 1.0, and their tolerance values substantially higher than 0.20; while the VIFs of control variables are higher, and their tolerance values lower. For independent variables, SALARY has the highest VIF (1.537) and the lowest tolerance value (0.615); whereas for control variables, it is FSIZE which has the highest VIF (3.236) and the lowest tolerance value (0.309). Nonetheless, they are still much within the acceptable boundary as their VIFs are lower than 10.0 and tolerance values higher than 0.20. Hence,

based on the correlation coefficients, VIFs, and tolerance values, it can be reasonably assured that the independent and control variables in the research model are not highly correlated with one another, and that the model is free from multicollinearity.

4.3.2 Autocorrelation

As tabulated in Table 4.3, the Durbin-Watson test for autocorrelation has a value of 2.2627, which is between the acceptable range of 1.5 and 2.5 ($1.5 < 2.2627 < 2.5$). Thus, it is safe to conclude that the error terms are not auto-correlated, and that there is no serial correlation in the model.

4.3.3 Homoscedasticity

The Breusch-Pagan test for homoscedasticity, however, showed a presence of heteroscedasticity in the model, whereby chi-square statistics of the Breusch-Pagan test has a p-value lower than 0.5 ($0.000 < 0.05$). In other words, the error terms are not homogenous. To overcome the heteroscedasticity problem, this study adopts heteroscedasticity-consistent robust standard errors known as Huber White estimators (White, 1980) in its model. Some studies which have adopted White (1980)'s robust standard errors are Lanis and Richardson (2011), Taylor and Richardson (2014), Richardson et al. (2016), Lanis and Richardson (2018), and Chytis et al. (2020).

4.3.4 Normality

The Shapiro-Wilk and Kolmogorov-Smirnov tests for normality also presented an existence of non-normality in the model. Both tests document p-values lower than 0.5 ($0.000 < 0.05$), which means that error terms in the model are not normally distributed. Nevertheless, the deviation from normality is not extreme. Thus, the violation of the normality assumption is unlikely to pose a significant threat on the validity of the research

model and its findings. In other words, it does not affect the regression model as the best linear unbiased estimator.

4.4 Multiple Regression Analysis

4.4.1 Hausman Test

Table 4.4 Hausman Test

Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
30.1060	10	0.0008

The Hausman test is performed to determine whether a fixed effect model or a random effect model is more appropriate for this study. The central assumption of the Hausman test is that the independent variables are uncorrelated with the random effect. As shown in Table 4.4, the statistic provides little evidence against the assumption ($p\text{-value} = 0.0008 < 0.05$). Thus, the more appropriate model for the study would be a fixed effect model.

4.4.2 Fixed Effect Panel Least Squares Regression

Table 4.5 Fixed Effect Panel Least Squares Regression Results

Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	213.5795	850.4503	-1.3728	0.1709
Independent Variables				
SALARY	-0.0004	0.0001	-3.3399	0.0010***
DUALITY	-2.3370	2.4633	-0.9487	0.3436
BSIZE	0.4092	0.4193	0.9758	0.3300
BIND	0.0103	0.0598	0.1724	0.8632
BGD	-0.0882	0.0632	-1.3954	0.1640
FOREIGN	-0.0466	0.0778	-0.5995	0.5493
Control Variables				
FSIZE	-7.7719	2.4377	-3.1882	0.0016***
CAPINT	-0.1744	0.0784	-2.2240	0.0269**
LEV	2.8561	1.0976	2.6022	0.0098***
PROFIT	-0.3232	0.1277	-2.5316	0.0119**
R-squared	0.7155		F-statistic	6.8188
Adjusted R-squared	0.6106		Prob. (F-statistic)	0.0000

Notes:

1. The table shows results of the panel least squares regression with firm and year fixed effects and robust standard errors.
2. Dependent variable = ETR.
3. ***, **, and * represent significance levels of 0.01, 0.05, and 0.10, respectively.

Results of the fixed effect panel least squares regression analysis are tabulated in Table 4.5. The regression model has a R-squared of 0.72, which implies that variables in the model account for 72% of the variance in the dependent variable which is corporate tax avoidance. The overall regression model is statistically significant, where $F = 6.82$, $p < 0.001$, indicating that the proposed model successfully explains the determinants of the dependent variable, corporate tax avoidance.

Among the independent variables, or corporate governance variables, SALARY, DUALITY, BGD, and FOREIGN have a positive relationship with corporate tax avoidance. As tabulated in Table 4.5, an increase in these variables causes a decrease in ETR, which insinuates an increase in corporate tax avoidance. On contrary, BSIZE and

BIND have a negative relationship with corporate tax avoidance. As Table 4.5 presents, an increase in board size and board independence leads to an increase in ETR, implying a reduction in corporate tax avoidance. In brief, of all corporate governance variables, SALARY, DUALITY, BGD, and FOREIGN seem to promote corporate tax avoidance, while BSIZE and BIND have an effect on curbing corporate tax avoidance. However, only one of the independent variables is proven significant, which is SALARY. SALARY has a significant positive relationship with corporate tax avoidance ($p < 0.01$). It is documented that, with every increase in a constant unit of SALARY, ETR reduces by 0.0004, which indicates an increase in corporate tax avoidance. Other independent variables, including DUALITY, BSIZE, BIND, BGD, and FOREIGN, provided little evidence of being significant determinants of the dependent variable, corporate tax avoidance.

In terms of the control variables, or firm characteristic variables, FSIZE, CAPINT, and PROFIT have a positive relationship with corporate tax avoidance; whereas LEV has a negative relationship with corporate tax avoidance. Consistent with prior studies in Malaysia (for example, Kim & Limpaphayom, 1998; Derashid & Zhang, 2003; Noor et al., 2008; Noor et al., 2010; Rashid et al., 2015; Kasim & Saad, 2019; Muhmad et al., 2020), all firm characteristic variables documented a significant relationship with corporate tax avoidance. FSIZE and LEV are significant at the 1% level, while CAPINT and PROFIT are significant at the 5% level. This suggests that companies which are larger, have greater capital intensity, and have higher profitability tend to engage in more tax avoidance activities; while those which are more leveraged carry out lesser corporate tax avoidance.

4.5 Robustness Analysis

A variety of robustness tests were performed to check for the robustness of the primary findings.

First, this study verifies whether the results remain intact when ETR is replaced by another measurement, namely ETR differential (DETR). DETR is measured by the difference between the STR and the company's ETR (Hanlon & Heitzman, 2010). The regression is re-estimated using DETR as a proxy of corporate tax avoidance, and results remain very much the same to those previously reported in Table 4.5. That is, CEO compensation remains a significant determinant, while CEO duality, board size, board independence, board gender diversity, and foreign ownership remain insignificant determinants, of corporate tax avoidance.

Next, this study re-runs its analysis, excluding firms from the financial sector. Many studies exclude firms in the financial industry or include only non-financial firms as their samples because they argue that financial firms are subject to different market regulations and trading mechanisms (Lanis & Richardson, 2018; Jarboui et al., 2020; Kubick et al., 2020; Riguen et al., 2020; Dakhli, 2021; Jbir et al., 2021). Some assert that their accounting and reporting environment differ from that in other industries (Hoseini et al., 2019; Jarboui et al., 2020; Riguen et al., 2020; Koliass & Koumanakos, 2022), and their assets and liabilities are of different nature (Huang et al., 2018). Financial institutions are also seen as flow-through entities which do not pay company income taxes (Chi et al., 2017). In brief, the financial industry is said to have regulatory and institutional differences which may affect the industry's tax avoidance measures (McClure et al., 2018). Additionally, Powers et al. (2016) proposed that the CEO's incentive to engage in corporate tax avoidance is limited and unclear in financial firms. For instance, CEOs of real estate investment trusts (REITs) may have very little and low incentive to allocate resources for avoiding taxes. Thus, this study identifies whether a sample firm is from the

financial sector or not based on its classification on FTSE Bursa Malaysia, and removes 16 financial firms identified from the sample. Financial institutions may include banking, finance, and investment firms (Hoseini et al., 2019). Results from the analysis without financial firms led to the same conclusions.

Finally, as some prior studies revealed the effects of CEO personal attributes on a firm's tax planning (for example, Minnick & Noga, 2010; Richardson et al., 2016; Jbir et al., 2021), we included several CEO personal characteristic variables as additional control variables and re-run the analysis. This includes CEO age, CEO tenure, CEO education, CEO expertise, and CEO nationality. Minnick and Noga (2010) contended that CEO age may be a governance variable which affects how a firm is managed; while Lanis and Richardson (2011) claimed that CEOs with longer tenure and many years of experience may exert significant power which includes influencing the board's appointments and decisions on financial misconduct. Thus, this study controls for CEO age and CEO tenure, following Minnick and Noga (2010) as well as Lanis and Richardson (2011) respectively. Besides the CEO's experience (proxied by age and tenure), his/her knowledge and skills (proxied by education and expertise) may also affect his/her ability on the firm's tax management. Law and Mills (2017) used MBA education to proxy for a CEO's financial sophistication, and argued that a more financially sophisticated CEO may avoid more taxes. While an MBA degree may not necessarily translate into a CEO having accounting (or tax) knowledge, this study also includes a CEO expertise variable for that purpose. As Jbir et al. (2021) suggested, CEOs with financial background may better manage their companies' income taxes and may do so more actively. Lastly, it is believed that the CEO's upbringing could influence his/her value and personality, including in business. According to Jbir et al. (2021), foreign talents are generally more opportunistic and aggressive in managing of firms (and taxes). Thus, this study re-runs its analysis with the aforementioned variables. CEO age is measured by the age of the CEO; while CEO tenure

is measured by the number of years in office of the CEO. CEO education, CEO expertise, and CEO nationality, are all measured with dichotomous variables. For CEO education, '1' equals to the CEO having an MBA degree, '0' if otherwise; for CEO expertise, '1' indicates that the CEO have accounting, finance, and/or tax knowledge, '0' if otherwise; whereas for CEO nationality, '1' identifies that the CEO is not a Malaysian, and '0' if otherwise. All data were collected from companies' annual reports. Findings from the analysis are robust to the inclusion of additional control variables, namely CEO personal characteristic variables. Specifically, this study continues to find a significant positive relationship between CEO compensation and corporate tax avoidance, and insignificant relationship between other corporate governance variables and corporate tax avoidance.

For brevity, results of robustness tests are not tabulated.

CHAPTER 5: DISCUSSION

5.1 Hypothesis Testing

In Chapter 5, results from the multiple regression analysis tabulated in Table 4.5 (Section 4.4), would be discussed comprehensively. Whether the results support or do not support the hypotheses developed in Section 2.4, and whether the results reinforce or refute the theoretical propositions, would be discussed accordingly. Whether or not the results are consistent across literatures would also be discussed, and possible explanations for each of the results would be provided.

Table 5.1 Hypothesis Testing

Variables	Hypotheses	Expected Relationship with Corporate Tax Avoidance	Actual Relationship with Corporate Tax Avoidance	Significance	Findings
SALARY	H _{1a}	+	+	Yes	Supported
DUALITY	H _{1b}	-	+	No	Not Supported
BSIZE	H _{2a}	-	-	No	Not Supported
BIND	H _{2b}	+	-	No	Not Supported
BGD	H _{2c}	+	+	No	Not Supported
FOREIGN	H ₃	+	+	No	Not Supported

Note: “+” denotes a positive relationship; “-” denotes a negative relationship.

As summarised in Table 5.1, 4 out of 6 hypotheses (H_{1a}, H_{2a}, H_{2c}, and H₃) move in the directions as expected, while the other 2 hypotheses (H_{1b} and H_{2b}) move in the opposite direction from that anticipated. However, only SALARY is found to have a significant relationship with corporate tax avoidance. Thus, only H_{1a} is supported, whereas H_{1b}, H_{2a}, H_{2b}, H_{2c}, and H₃ are not supported.

The insignificant finding on the role of corporate governance on corporate tax avoidance in Malaysia is consistent with Mahenthiran and Kasipillai (2012) and Wahab et al. (2017). Mahenthiran and Kasipillai (2012) and Wahab et al. (2017) conducted their studies on Malaysian companies from years 2006 to 2008 and 2000 to 2009 respectively, and documented limited finding on the impact of corporate governance on corporate tax avoidance in the Malaysian companies. While this study expects to find new evidence with the recent study period covering years 2016 to 2020 in view of development in the country's governance, tax, and market context, it did not discover anything surprising (different). This study agrees with Wahab et al. (2017) that the inconclusive findings could be a signal of weak corporate governance in the country, thus it has little effect on influencing companies' tax policies. The increased compliance with the MCCG did not translate into effectiveness of corporate governance. Similarly, Mgamal et al. (2018), a Malaysian study which examined the impact of corporate governance on corporate tax disclosure also documented that corporate governance does not significantly influence a company's tax matters, particularly tax disclosure. Each of the study's findings is explained in detail in the section that follows.

5.2 Discussion

5.2.1 Independent Variables

5.2.1.1 CEO Compensation (SALARY)

As presented in Table 4.5, findings documented that CEO compensation (SALARY) has a significant positive relationship with corporate tax avoidance at the 1% level. The result provides supportive evidence for H_{1a} which predicted a significant positive relationship between CEO compensation and corporate tax avoidance, and since H_{1a} is developed based on agency theory, the result also substantiates the agency theory prediction. To reiterate, agency theory proposes that if managers are properly

compensated, then they are more likely to act in the interest of shareholders (Jensen & Meckling, 1976), which in this case, to engage in more tax avoidance activities (Wang et al., 2020).

The significant positive finding corroborates with that discovered by Mahenthiran and Kasipillai (2012). As discussed above, Mahenthiran and Kasipillai (2012) is a related study in the Malaysian context. Using data from the Malaysian PLCs in years 2006 to 2008, they found that a higher level of executive compensation promotes a higher level of long-term tax planning to lower ETRs in those companies. The same findings between both studies which documented a significant association between executive compensation and corporate tax avoidance in Malaysia confirmed that CEOs of Malaysian companies do exert significant influence on companies' tax planning strategies, and subsequently companies' tax payments to the Malaysian government.

The finding is also consistent with most other studies, including Minnick and Noga (2010), Armstrong et al. (2012), Rego and Wilson (2012), Armstrong et al. (2015), Xian et al., (2015), and Zolotoy et al. (2021), which all discovered that higher executive compensation leads to greater corporate tax avoidance. This shows that higher executive compensation provides higher risk-taking incentive which encourage and induce executives to undertake more risky activities including to reduce companies' tax expense and invest in long-term tax planning (Minnick & Noga, 2010; Armstrong et al., 2012; Rego & Wilson, 2012; Armstrong et al., 2015; Xian et al., 2015; Zolotoy et al., 2021). As Rego and Wilson (2012) explained, CEOs paid with higher cash compensation are often compensated with higher risk incentives as these executives have higher risk aversion. Similarly, this study documents that higher pay compensates Malaysian CEOs for their greater risk undertaking which alters their behaviour and willingness to engage in risky activities. Thus, it induces otherwise risk-averse CEOs to carry out more tax avoidance activities. The finding also confirms the agency theory propositions that a proper

incentive alignment can reduce agency conflict and align interests of shareholders and managers.

As summarised in the literature review, several studies found that managers compensated on an after-tax basis tend to reduce companies' ETRs (Phillips, 2003; Gaertner, 2014; Taylor & Richardson, 2014; Powers et al., 2016). They demonstrated that managers evaluated based on after-tax measures reduce companies' tax expenses in order to increase their own remuneration. In particular, Gaertner (2014) presented that CEOs demand between 5.2% to 13.3% more in cash compensation to cover for the additional risk they bear for being evaluated on companies' tax performance, and that the use of an after-tax CEO incentive led to a significant decrease in companies' ETRs; while Taylor and Richardson (2014) showed that companies which CEOs have a proportionately greater amount of performance-based incentives from at-risk cash-based payments witnessed lower ETRs, as executives whose cash compensation are more at risk because they are tied closely to after-tax earnings are encouraged to significantly avoid taxes. Although it is uncertain whether the Malaysian CEOs are rewarded on an after-tax basis or not, it is not uncommon for the executives' remuneration to include performance-based incentives such as bonuses in Malaysia. Thus, in line with Phillips (2003), Gaertner (2014), Taylor and Richardson (2014), and Powers et al. (2016), it is possible that CEOs in Malaysia participate in more corporate tax planning activities to improve their performance through maximising companies' and shareholders' value, thus their chances in receiving higher incentives.

5.2.1.2 CEO Duality (DUALITY)

Findings propose that CEO duality (DUALITY) has a positive relationship with corporate tax avoidance. However, findings provide little evidence on the significance of the relationship, which do not support H_{1b} that predicts a significant negative relationship between CEO duality and corporate tax avoidance. The finding also repudiates the agency theory prediction.

Based on the authors' observation from the Malaysian companies' annual reports, it is discovered that the companies which did not separate the roles of CEO and board chairman seemed to have a similar characteristic. That is, the companies' executive chairmen were essentially the founder, co-founder, or successor of the companies. Thus, it is reasonable to believe that the executive chairmen are more willing to take on higher risks, relative to CEOs who are technically employees, and to carry out more tax avoidance activities. Grounded on upper echelons theory and behavioural decision theory, Li and Tang (2010) revealed that a founder-CEO indeed has a tendency to take more risks than an agent-CEO, which confirms that CEO status does affect a CEO's firm risk taking. While agency theory proposes that CEOs are generally risk-averse, Li and Tang (2010) hypothesised and documented significant evidence that CEO duality interacts with CEO hubris, and CEOs with high hubris, or simply exaggerated self-confidence and pride, tend to overestimate their risky strategies and increase their firm risk taking.

The positive relationship documented between CEO duality and corporate tax avoidance is consistent with Chan et al. (2013), Halioui et al. (2016), and Chang et al. (2019). As Halioui et al. (2016) proposed, this study believes that the positive relationship may signal that CEO duality leverages the opportunistic behaviour of CEOs to increase the companies' tax avoidance level in Malaysia. Additionally, when the same person serves as both the CEO and board chairman of the company, the duality services negatively impact the quality of the board services, where the board is unable to freely

exercise their governance and oversight role, and unable to reject the CEO's aggressive tax plan even if it wishes to (Chan et al., 2013).

Nevertheless, the positive relationship documented is insignificant. The lack of significance is in line with Minnick and Noga (2010), Mahenthiran and Kasipillai (2012), Wahab et al. (2017), Amri et al. (2022), among which Mahenthiran and Kasipillai (2012) and Wahab et al. (2017) were also carried out in a Malaysian setting.

5.2.1.3 Board Size (BSIZE)

Results show that board size (BSIZE) has a negative relationship with corporate tax avoidance, though the relationship is insignificant. Thus, it does not support H_{2a}.

The negative relationship found is consistent with Halioui et al. (2016), Wahab et al. (2017), and Salhi et al. (2020) which documented a negative relationship between board size and corporate tax avoidance. According to agency theory, the negative relationship suggests that the larger the board size, the less relevant the board becomes, and the less effective its controls are, thus the board fails to control the CEO, as well as to protect and promote the interest of the shareholders (Jensen, 1993), which in this case fails to increase tax avoidance activities. In contrast, Halioui et al. (2016), Wahab et al. (2017), and Salhi et al. (2020) viewed the negative relationship as the board being effective. They proposed that a larger board pools various resources, such as knowledge, skills, and experience, which act as a monitoring mechanism that controls for corporate tax avoidance to reduce the companies' risks of reputational damage and litigation.

Nonetheless, same as Minnick and Noga (2010), Mahenthiran and Kasipillai (2012), Agyei et al. (2020), Chytis et al. (2020), and Amri et al. (2022), the study documented an insignificant relationship between board size and corporate tax avoidance. This indicates that the size of the board does not affect a company's tax planning activities in Malaysia,

and that the optimal board size for greater performance in the company may be contingent to the company's characteristics and needs.

5.2.1.4 Board Independence (BIND)

Results also show an insignificant negative relationship between board independence (BIND) and corporate tax avoidance. Thus, it also does not provide support to H_{2b}.

While there seems to be a consistent increment in board independence among Malaysian companies when comparing descriptive statistics recorded by Mahenthiran and Kasipillai (2012), Wahab et al., (2017), and this study, which may indicate a constant and improved compliance of the MCCG in Malaysian companies, this study still fails to lodge a significant finding on the effectiveness of the corporate governance mechanism on the companies' tax compliance matters after Mahenthiran and Kasipillai (2012) and Wahab et al. (2017). The negative relationship found also does not support that predicted by agency theory which hypothesises that a more independent board should have been more capable in promoting the interest of the shareholders, that is to engage in more tax avoidance activities.

Among the articles which also documented an insignificant finding between the two variables are Zhou (2011), Halioui et al. (2016), Kusbandiyah et al. (2021), and Sunarto, Widjaja and Oktaviani (2021). Zhou (2011) whose study was conducted in the Chinese context, explained that the insignificant finding is due to China being a developing country and its corporate governance mechanisms still at an infant stage compared to a developed country such as the U.S. Therefore, the independent directors do not work to mitigate or at least reduce the conflict between shareholders and managers. Rather, they are often considered for the compliance of regulations, the establishment of reputation, and the generation of resources. Moreover, the independent directors are usually prior executives of current-serving companies or retirees in any subsidiaries. As expertise are

essential in corporate tax planning, the participation of the independent directors who are hardly tax experts can be inactive, which reduces the effectiveness of their monitoring role. Also, as the independent directors have lesser insights on the company's operations, a large number of outsiders can create a wider gap between the board and the management. Thus, as Zhou (2011) puts it, the independent directors are "more decorative than functional" (p. 41). Consistent with Zhou (2011)'s "developing" explanations, Mahenthiran and Kasipillai (2012), Wahab et al. (2017), Kusbandiyah et al. (2021), and Sunarto et al. (2021) whose studies were all based on a developing setting reported an insignificant finding between board independence and corporate tax avoidance. From an Indonesian context, Kusbandiyah et al. (2021) proposed that independent directors are yet to have a balanced role with other executive directors. Therefore, the board independence cannot exercise their supervisory roles effectively, and accommodate to the interests of various shareholders, whether majority, minority, or public, to achieve good corporate governance. As final decision-making, including those related to corporate tax planning, is ultimately made by the managers, it can also be difficult for the independent directors to carry out internal supervision directly and properly. As Jensen (1993) suggests, information asymmetry exists between the board of directors and the management team, which restricts the effectiveness of the former. For instance, CEOs often determine the information and agenda shared with the board, and that information may be limited, which hinders the ability of even the board's top talents to oversee the company's strategy and evaluate the CEO's performance. A slightly more "optimistic" explanation on the insignificant finding is presumably due to the independent directors focusing on the monitoring of other management policies such as those related to corporate performance and profitability, instead of corporate tax planning policies. Thus, this study proposes that the independent boards in Malaysian companies, at worst, failed to execute their monitoring roles and responsibilities on companies' tax policies; and at

best, carried out their oversight roles on other aspects of the company instead of tax-related matters.

While Zhou (2011) proposed that the insignificant impact of board independence on corporate tax avoidance is likely due to differences in corporate governance between developed and developing countries, Salhi et al. (2020) advanced that it can be due to differences in corporate culture between Western and Eastern countries. Salhi et al. (2020)'s research consisted of two samples: a British sample and a Japanese sample. They found a significant relationship between board independence and corporate tax avoidance for the British sample, but an insignificant relationship for their Japanese sample. Salhi et al. (2020) explained that Japanese companies started to adopt rules inspired by North American standards to structure their board of directors, but the American style of corporate governance standards do not seem to fit into the Japanese culture. In Japanese companies, absolute loyalty is upheld in exchange of a contract, and the questioning of authority and expressing of disagreement are traditionally unlikely. This may be the case for Malaysia, a country known for its high power distance. Power distance is people's perception on inequality in a society regarding power distribution. In the Malaysian society, people tend to accept a hierarchical distribution of power, and they know their place and roles in the hierarchy. People living in a high power distance society believe there is a huge emotional distance between themselves and those higher in the hierarchy. This may also apply to the organisational context. Organisations with a high power distance culture are often hierarchical, with decision-making centralised at the top. Either out of respect or fear, people of lower ranks hardly question the decision-making capability nor challenge decisions of the top management (Seno, Hashim, Taha & Hamid, 2021). A culture like this may have been the cause for the board's ineffectiveness. According to Jensen (1993), board culture can be an extremely important factor for board failure. Specifically, Jensen (1993) said that a culture with "great emphasis on politeness

and courtesy at the expense of truth and frankness... is... a cause of failure in the... system” (p. 41). Moreover, CEOs are likely defensive, and unlikely to proactively seek the monitoring and criticism of the board themselves. Thus, a culture which encourages consent and discourages tension only grants CEOs the power to virtually control the board, resulting in ineffectiveness of the board. Such a culture also leads the board to fall into complacency and hibernation during prosperous times in the firm. This makes it very difficult for the board to detect and respond early to any potential signs of failure within the management team. In addition, Jensen (1993) stated that the board is often motivated only when there are substantial legal liabilities, adverse media publicities, or political and regulatory threats. Hence, this study regards the respectful and considerate culture in Malaysian boards as another possible cause of board failure.

5.2.1.5 Board Gender Diversity (BGD)

Board gender diversity (BGD) is reported to have a positive relationship with corporate tax avoidance, though it is insignificant. This does not support H_{2c} .

The positive relationship documented between board gender diversity and corporate tax avoidance which suggests that female directors promote tax avoidance activities complements that discovered by Chang et al. (2019), Garcia-Blandon et al. (2022), and Iazzi et al. (2022), but rebuts that found in many other studies including Francis et al. (2014), Richardson et al. (2016), Damayanti and Supramono (2019), Hoseini et al. (2019), Jarboui et al. (2020), Riguen et al. (2020), Salhi et al. (2020), Boussaidi and Hamed-Sidhom (2021), Dakhli (2021), and Ahmed et al. (2022). As Garcia-Blandon et al. (2022) explained, the governance and gender issues are different around the world, whereby the board of directors have different roles in countries with different legal traditions, and females also hold different values in different countries. As the functions and functioning of the board, and the values of females, vary across the globe, one cannot expect board gender diversity to have the same effect everywhere.

In China, Chang et al. (2019) found that female CEOs and CFOs are not more risk averse, and not less tax aggressive, than male CEOs and CFOs. They defended their positive finding with the argument of socialist feminism, stating that female and male executives perform equally because they experienced the same Marxism socialisation process in the country. Consistent with Chang et al. (2019), this study reported finding which opposes evidence from the West. However, as Malaysia did not experience a socialisation process like China, it is unclear how feminism is developed among female directors (or females in general) in Malaysia, if feminism is to be the answer for why female directors tend to act equally as male directors and engage in corporate tax avoidance. Perhaps it was the impact of globalisation.

Further, Garcia-Blandon et al. (2022) interpreted their positive result as female directors acting ineffectively. They discovered that corporate tax avoidance increased after the appointment of many female directors in Norway, and argued that this is triggered by a mandatory quota on board gender. While the appointment of female directors was voluntary in most other previous studies, most appointments were mandated by law in their study context. Anticipated by a limited supply view, they asserted that board gender quotas increased the demand for qualified female directors without a proportionate increase in their supply. Therefore, male directors who were more competent may be substituted by female directors who were less competent. As a consequence, the quotas led to a negative impact on the board's effectiveness, and managers can carry out aggressive tax activities easily. As Malaysia has also imposed a mandatory quota on board gender, and as this study has also documented an increase in corporate tax avoidance from the increase in board gender diversity, it may be reasonable to think that Garcia-Blandon et al. (2022)'s explanations are also applicable to the Malaysian context.

From an agency theory viewpoint which assumes shareholders to be risk-neutral and desire wealth-maximising activities (in this case, tax-minimising activities), and assuming female directors act in the same fashion as independent directors though, the positive result would be seen as effective as female directors protect and promote the interest of the shareholders. This is consistent with Iazzi et al. (2022)'s interpretations on their positive finding. They contended that women have a strategic role in the boardroom to monitor a firm's cost and risk while improving the firm's financial performance.

Regardless of whether the positive finding means Malaysian female directors are effective or not, the relationship documented is not significant. The insignificant impact of female directors on companies' tax policy may be due to their low representation on board. As described in the descriptive analysis, the board gender diversity of the sample companies has a mean of 21.83% which is below the 30% target set by the MCCG. There are also boards with 0% female representatives, and none has a board with a majority of female directors. The maximum percentage of female directors on board is 50%, where the board is shared equally between males and females. In other words, no company has a board which is dominated by females. This may suggest why female directors on board can hardly influence their companies' tax policies. Similar to the explanations proposed for an independent board, the insignificant influence of a diverse board on companies' tax planning activities could, at best, be because of the diverse board working on other management policies instead of tax policies; and at worst, be due to the diverse board being ineffective. For instance, the inclusion of females on the board of directors could simply be an act for compliance, reputation, and resources. Companies which include female directors on their boards may send out a positive signal to the market as female presence on board may be seen as better corporate governance, and may satisfy the legitimacy request from the public by showing that they uphold gender equality. In such

cases, signalling theory and legitimacy theory may better explain the organisational phenomena.

5.2.1.6 Foreign Ownership (FOREIGN)

Foreign ownership (FOREIGN) has an insignificant positive relationship with corporate tax avoidance. Thus, it does not support H₃.

The insignificant finding is congruent with Kusbandiyah et al. (2021). The insignificant impact of foreign ownership is probably due to the low number of foreign representatives in the Malaysian companies. To be specific, the non-influence of foreign directors on corporate tax avoidance is because the number of foreign directors in the companies is not dominant with a mean of 11.72% and a median of 0.00% which indicates that most Malaysian companies do not have any foreign representatives, so they are not able to monitor their companies effectively. Thus, this may explain why foreign ownership failed to influence the company's tax avoidance level as anticipated in Malaysia.

However, Salihu et al. (2015) whose study was carried out in Malaysia from years 2009 to 2011, and used the percentage of foreign directors on board as one of the measurements for foreign ownership, revealed a significant positive influence of foreign ownership on corporate tax avoidance. This study attributes the contradicting findings (in terms of significance) to the measurement used. To illustrate, this study relies on an alternative measurement, which is the percentage of foreign directors on board, as proxy of foreign ownership, instead of a more direct measurement, which is the proportion of foreign owners in the company, due to data constraints.

Although this study did not find any significance on the association between foreign ownership and corporate tax avoidance, it continues to document a positive influence of foreign ownership on a company's tax avoidance activities in Malaysia as that uncovered in Salihu et al. (2015). In other words, the greater the foreign ownership, the greater the corporate tax avoidance. The positive relationship suggests that foreign ownership works in overseeing companies to increase the extent of companies' tax avoidance activities which is in line with agency theory, but in contrast with legitimacy theory. Foreign ownership of companies seems to place a stronger emphasis on the costs-and-benefits consideration of corporate tax avoidance, but a weaker one on the organisations' legitimacy issues (Salihu et al., 2015).

5.2.2 Control Variables

While most independent (corporate governance) variables were proven to be insignificant determinants of corporate tax avoidance in Malaysia, all four control (firm characteristic) variables, namely firm size (FSIZE), capital intensity (CAPINT), leverage (LEV), and profitability (PROFIT), have significant relationships with corporate tax avoidance as anticipated. This is consistent with Mahenthiran and Kasipillai (2012) and Wahab et al. (2017), both who have documented mainly insignificant results from corporate governance, but mostly significant results from company-specific characteristics, on corporate tax avoidance, in Malaysia. In addition, this is also in line with Mgamal et al. (2018) who have discovered insignificant findings from corporate governance, but significant ones from firm characteristics, on corporate tax disclosure, in the Malaysian setting. This study continues to confirm the impact of firm characteristics on corporate tax avoidance in Malaysia, and the significant findings prove the importance to include these firm characteristic variables as controls in the study. Specifically, FSIZE, CAPINT, and PROFIT have a significant positive relationship with corporate tax avoidance, while LEV has a significant negative relationship with corporate tax

avoidance. FSIZE and LEV are significant with corporate tax avoidance at the 1% level, whereas CAPINT and PROFIT are significant at the 5% level. This suggests that a larger company, a more capital-intensive company, and a more profitable company are likely to engage in greater corporate tax avoidance, while a more leveraged company is likely to reduce the company's tax avoidance level. In other words, while FSIZE, CAPINT, and PROFIT promotes corporate tax avoidance, LEV curbs corporate tax avoidance. The documented findings on control variables in this study are mostly consistent with the other studies conducted in Malaysia (for example, Kim & Limpaphayom, 1998; Derashid & Zhang, 2003; Noor et al., 2008; Noor et al., 2010; Rashid et al., 2015; Kasim & Saad, 2019; Muhmad et al., 2020), except for LEV, which would be discussed sequentially in the following.

5.2.2.1 Firm Size (FSIZE)

Firm size (FSIZE) is found to be significantly ($p < 0.01$) and positively related to corporate tax avoidance in Malaysia. This is consistent with Kim and Limpaphayom (1998) and Derashid and Zhang (2003), but not with Noor et al. (2008), Noor et al. (2010), and Kasim and Saad (2019). In other words, the finding is in line with the "industrial policy hypothesis", but not with the "political cost hypothesis". The political cost hypothesis views firm size as a proxy of political cost, where larger companies are more prone to government and public scrutiny, so they reduce their tax avoidance level and pay more taxes (Noor et al., 2008; Noor et al., 2010; Kasim & Saad, 2019). On contrary, the industrial policy hypothesis suggests that the industrial policy in the country promotes and protects selected companies and sectors, particularly large ones, so larger companies may rather safely lower their ETRs. In this case, the policies in the country do not disadvantage large companies as that proposed by the political cost hypothesis (Kim & Limpaphayom, 1998; Derashid & Zhang, 2003). This may be true for Malaysia as a developing country. As a developing nation, Malaysia provides various incentives to

invite investments into the country, and these incentives such as pioneer status, investment tax allowance, and reinvestment allowance are usually more applicable for larger companies (Hamzah et al., 2020; MIDA, 2021a).

5.2.2.2 Capital Intensity (CAPINT)

Finding presented that capital intensity (CAPINT) has a significant positive relationship with corporate tax avoidance ($p < 0.05$). This is in line with most studies in Malaysia, namely Derashid and Zhang (2003), Noor et al. (2008), Noor et al. (2010), Rashid et al. (2015), and Muhmad et al. (2020), and contradicts with Kasim and Saad (2019). Kasim and Saad (2019) documented that more capital-intensive companies pay higher ETRs in Malaysia, suggesting that the Malaysian companies did not utilise their tax savings from the write-off of fixed assets over their economic lives, which is rather counter-intuitive. This study, together with Derashid and Zhang (2003), Noor et al. (2008), Noor et al. (2010), Rashid et al. (2015), and Muhmad et al. (2020), proposed otherwise. Finding from this study provides evidence that higher capital investments lead to higher depreciable costs, or capital allowances, which then lead to lower ETRs. The rationale for the provision of such incentives is to encourage companies to expand their business facilities in the capital market, whereby the rapid development of the capital market is believed to be able to drive the movements of infrastructure development in the local capital market. Therefore, corporate taxpayers benefit from tax incentives provided for business transaction activities related to capital intensity. This is also consistent with the explanations put forth for firm size, whereby the tax system in Malaysia provides incentives to improve the competitiveness of the country's market (Derashid & Zhang, 2003; Noor et al., 2008; Noor et al., 2010; Rashid et al., 2015; Muhmad et al., 2020).

5.2.2.3 Leverage (LEV)

Unanimously, Derashid and Zhang (2003), Noor et al. (2008), Noor et al. (2010), Rashid et al. (2015), Kasim and Saad (2019), and Muhmad et al. (2020) all documented a significant positive relationship between leverage and corporate tax avoidance in Malaysia. They suggest that highly-leveraged companies pay lower ETRs as companies with greater debts have higher interest expenses which can be used for tax deductions, or simply used as interest tax shield, to reduce their tax liabilities. Kasim and Saad (2019) added that this supported the assertion that companies utilised thin capitalisation as one of their tax avoidance methods. In contrast to all these studies, this study found a significant negative relationship between leverage and corporate tax avoidance ($p < 0.01$), which this study admits is rather counter-intuitive to the notion that debt-financing is an effective tax shield. To make sense of the contradicting finding, this study advances that the negative result is probably due to the enhancement in regulations and enforcement concerning thin capitalisation in the country, which may have dampened the intention and motivation of companies to use interest expenses as an effective tool to reduce taxes, if not for their inability to do so. Malaysia introduced Section 140C to the ITA 1967, effective 1st July 2019. Section 140C is essentially an earnings stripping rule (ESR) aimed to restrict the deductibility of interest expenses. As aforementioned, Malaysia is one of the participating countries in the OECD's BEPS 15 Actions. The introduction and implementation of Section 140C is literally based on the OECD's BEPS Action 4: Limitation on Interest Deductions which objects to curb base erosion with the use of excessive interest expenses or any payments economically equivalent to interests claimed by businesses, and part of the legislation is adopted directly from the OECD's BEPS Action 4. IRBM acknowledged that the authority is aware that many companies, especially those with foreign operations, have external borrowings or borrowing arrangements between enterprises within the group which may range up to multi-billion.

Thus, IRBM introduced Section 140C to the ITA 1967 and the corresponding Income Tax (Restriction on Deductibility of Interest) Rules 2019 to ensure that any interest expenses claimed for tax deductions commensurate with business income. To illustrate, Section 33(2) of ITA 1967 explicitly restricts the deductibility of interest expenses paid for borrowings used to finance non-business sources. With the enhanced monitoring by the authority, the risks and costs increase for companies when using interest expenses to reduce their tax liabilities. Therefore, more leveraged companies are likely to have become more careful and cautious when doing so. Thus, they end up paying more taxes. In brief, this study proposes that the explanation where companies are ineffective in utilising tax savings from interest expenses is less plausible; rather, companies are effective in balancing the costs and benefits of claiming tax deductions from interest expenses.

5.2.2.4 Profitability (PROFIT)

In line with Derashid and Zhang (2003), Noor et al. (2008), Noor et al. (2010), Rashid et al. (2015), Kasim and Saad (2019), and Muhmad et al. (2020), a significant positive relationship between profitability and corporate tax avoidance is discovered in this study ($p < 0.05$). This indicates that highly-profitable companies in Malaysia have a tendency to avoid more taxes and pay lower ETRs. This is consistent with the industrial policy hypothesis proposed for firm size, whereby efficient companies are given tax subsidies in the form of lower ETRs. While Malaysia provides the opportunities for companies to plan and execute their tax strategies through a wide range of tax incentives, highly-profitable companies are likely more efficient, and manage to take advantage of the availability of tax incentives and other tax provisions, as well as to invest in tax-exempt income activities to avoid taxes. They also possess greater resources to do so (Derashid & Zhang, 2003; Noor et al., 2008; Noor et al., 2010; Kasim & Saad, 2019). Some examples of available tax credits and deductions are double deductions for promotion of export, research and

development, and employee training programs (Kasim & Saad, 2019). Thus, a more profitable (and a more efficient) company pays less taxes in the country (Derashid & Zhang, 2003; Noor et al., 2008; Noor et al., 2010; Kasim & Saad, 2019). Moreover, the high profits in the companies could have induced the companies to engage in greater corporate tax avoidance in order to retain as much profits earned in the period as possible (Kasim & Saad, 2019; Muhmad et al., 2020).

Universiti Malaysia

CHAPTER 6: CONCLUSION

Corporate tax avoidance has become a widespread activity across the globe. As corporate tax avoidance threatens government revenue which in turn restricts funds available for the provision of public goods and services, it has become a serious concern for governments and the public (OECD, 2021b; 2021d). In step with the growing political and public interest, the academia witnessed a rise in empirical research concerning corporate tax avoidance to uncover causes for the phenomenon. In the past decade, studies have looked into corporate governance as a potential factor influencing corporate tax avoidance (Wilde & Wilson, 2018; Kovermann & Velte, 2019).

As corporate tax avoidance increases a company's after-tax income and shareholders' wealth, shareholders who are risk-neutral are likely to favour corporate tax avoidance. However, corporate tax avoidance increases risk on the part of managers; and since corporate tax avoidance is a management activity decided by managers, they may not engage in as much corporate tax avoidance as shareholders desire to protect their own interest. As agency conflict arises, corporate governance starts to come into play. If effective corporate governance is put in place, it can align the interests between shareholders and managers, so managers would act in the interest of shareholders (Hanlon & Heitzman, 2010; Kovermann & Velte, 2019).

Despite the surge in research on the relationship between corporate governance and corporate tax avoidance, studies were mostly carried out in a developed country context, particularly in the U.S. (Kovermann & Velte, 2019; Wang et al., 2020). Therefore, this study extends the literature by conducting an empirical research in a developing country context, which is in Malaysia. Specifically, this study is conducted on the 100 largest companies on FTSE Bursa Malaysia for a period of five years, from years 2016 to 2020. The corporate governance mechanisms examined are CEO compensation, CEO duality, board size, board independence, board gender diversity, and foreign ownership. It is

hypothesised that these corporate governance mechanisms, if effective, should have a significant impact on corporate tax avoidance.

Findings reported that the companies listed in Malaysia are in fact associated with some sort of tax planning activities as their ETR (21.77%) is below the STR (24%). Results from a fixed effect panel least squares regression analysis presented that CEO compensation is significantly and positively related to corporate tax avoidance in the Malaysian companies. This supports the hypothesis developed based on agency theory, where it is proposed that the alignment of incentives between shareholders and managers can resolve agency conflict (Jensen & Meckling, 1976). In simple words, a higher pay compensates managers for the additional risk assumed in conducting tax avoidance activities, and encourage otherwise risk-averse managers to engage in such risky activities (Minnick & Noga, 2010; Armstrong et al., 2012; Rego & Wilson, 2012; Armstrong et al., 2015; Xian et al., 2015; Zolotoy et al., 2021). Nevertheless, results did not find any significant relationship between other corporate governance variables (CEO duality, board size, board independence, board gender diversity, and foreign ownership) and corporate tax avoidance in Malaysia.

Above that, this study included firm characteristic variables which are proven to impact corporate tax avoidance in Malaysia as controls (Kim & Limpaphayom, 1998; Derashid & Zhang, 2003; Noor et al., 2008; Noor et al., 2010; Rashid et al., 2015; Kasim & Saad, 2019; Muhmad et al., 2020). Consistent with these studies, it is documented that firm size, capital intensity, leverage, and profitability all have significant impact on corporate tax avoidance in Malaysia. This suggests that companies which are larger, more capital-intensive, and more profitable tend to pay less taxes; while companies which are more leveraged pay more.

6.1 Contributions to Knowledge

This study contributes to extant tax research by extending the literature related to corporate governance and corporate tax avoidance. As the literature has received substantial attention in the academia, research on this area remains understudied in developing countries (Kovermann & Velte, 2019; Wang et al., 2020). Therefore, this study differs from most previous literatures by examining the literature in a developing country context. Thus, it enriches the literature, adding empirical evidence from an emerging economy perspective to a body of literature primarily based on Western observations. Findings from this study may also be generalised to other developing nations which share similar market characteristics and cultural traits as Malaysia such as those in the ASEAN region.

While the study's findings where only CEO compensation has a significant impact on corporate tax avoidance, but not other corporate governance mechanisms (CEO duality, board size, board independence, board gender diversity, and foreign ownership), may be mainly inconsistent with results documented in other studies particularly those in a developed country context, they complement those found in Mahenthiran and Kasipillai (2012), Wahab et al. (2017), and Mgammal et al. (2018). To reiterate, Mahenthiran and Kasipillai (2012), Wahab et al. (2017), and Mgammal et al. (2018) are studies in Malaysia which discovered mostly insignificant findings on the influence of corporate governance on corporate tax matters. Therefore, this study continues to provide empirical evidence and insights which prove the limited extent of effects of corporate governance on a company's tax policy in Malaysia in a recent period.

The finding that CEO compensation significantly impacts corporate tax avoidance also provides empirical evidence which substantiates the agency theory propositions. Agency theory proposes that if a manager is properly incentivised, then s/he is more likely to act in the interest of shareholders, and in this case, to engage in corporate tax avoidance

(Jensen & Meckling, 1976; Wang et al., 2020). Although findings for other corporate governance mechanisms are insignificant, they provide the possible associations of these mechanisms with corporate tax avoidance. That is, CEO duality, board gender diversity, and foreign ownership have a positive relationship with corporate tax avoidance (promotes corporate tax avoidance); while board size and board independence have a negative relationship with corporate tax avoidance (curbs corporate tax avoidance).

Additionally, this study documented significant findings on the role of firm characteristics on corporate tax avoidance in Malaysia. This corroborates with other prior studies in Malaysia, namely Kim and Limpaphayom (1998), Derashid and Zhang (2003), Noor et al. (2008), Noor et al. (2010), Rashid et al. (2015), Kasim and Saad (2019), and Muhmad et al. (2020). To be specific, this study revealed that firm size, capital intensity, leverage, and profitability significantly impact corporate tax avoidance among companies in Malaysia. This study, therefore, continues to prove the important role of firm characteristics on a company's tax avoidance level in Malaysia.

The study's findings between firm characteristics and corporate tax avoidance are also consistent with those in Mahenthiran and Kasipillai (2012), Wahab et al. (2017), and Mgammal et al. (2018). These Malaysian studies all reported mainly insignificant results from corporate governance, but mostly significant results from firm characteristics, on corporate tax matters, in Malaysia. Overall, findings from this study are important in improving one's understanding on the effects of various corporate governance mechanisms (and firm characteristics) on a company's tax avoidance activities, particularly in Malaysia.

6.2 Implications to Practice

This study also provides practical implications, whereby its findings could be of value to practitioners and policymakers who wish to understand the circumstances which affect a company's tax policy. Specifically, information gathered and insights generated in this study could assist market participants and regulators to have a better understanding on the role of corporate governance in monitoring a company's tax aggressiveness. To rehearse, findings show that except for CEO compensation, other corporate governance mechanisms which include CEO duality, board size, board independence, board gender diversity, and foreign ownership do not have any significant impact on corporate tax avoidance.

For shareholders and investors, the finding where CEO compensation is an effective tool to alter managerial behaviour, particularly in tax management, may be useful. Those attempting to anticipate and restrict an executive's behaviour which is inconsistent with social goals and which may threaten the company's social license to operate may design and refine the executive's compensation contract to create alignment between shareholders and managers in the company. In terms of the limited finding from board influence on corporate tax matters, shareholders may communicate and pressure the board that they are concerned with the company's tax compliance issues. They may also voice out their worry over having CEOs hold the position of board chairman as that would cause CEOs to have control over the board which impairs a board's effectiveness.

For policymakers and regulators, the findings may be helpful whereby the tax authority may use CEO compensation as an indicator to identify companies with the potential to avoid more taxes. This is because it is confirmed that a higher pay is not necessarily for the sole purpose of keeping the company competitive in terms of remuneration to retain and attract talents, but is used as a "risk premium" to compensate managers who assume additional risk to engage in risky activities (in this case, tax avoidance activities) to

increase the company's and shareholders' wealth. Therefore, a company which rewards its CEO a higher pay, especially an exceptionally generous one, should send out an alert to the authority. Although the finding is inconclusive, the authority may also use CEO duality to determine tax-avoidant companies as this study documented a positive impact of CEO duality on corporate tax avoidance. As the board of directors is put in place to oversee the management, the CEO who is also the board chairman literally "oversees" him-/her-self, so s/he may do what s/he desires rather easily, which includes avoiding taxes.

Apart from that, policymakers and regulators should pay attention to the board of directors. The board which is seen as one of the most effective corporate governance mechanisms failed to influence a company's tax policy. When comparing descriptive statistics on board independence with previous Malaysian studies, it is found that companies in Malaysia have constantly increased the proportion of independent directors on their boards. While this may signal an increased compliance of companies with the MCCG, this may be an act for mere compliance of the Code. As evidence, this study continues to prove the limited role of independent directors on a company's tax planning activities, after Mahenthiran and Kasipillai (2012) and Wahab et al. (2017). The formal establishment and significant reforms on corporate governance in the wake of the Asian Financial Crisis in 1997 aimed to improve the board's oversight roles such as to strengthen the board's independence by requiring all listed companies to have boards with a set percentage of independent directors seem to have not achieved the intended objectives. In other words, they should understand that increased compliance of the Code does not necessarily mean increased effectiveness of governance. In addition, Malaysian companies failed to meet the target to have 30% of female directors on board by end of year 2020. The low representation of female directors on board may also be a reason on why they did not have a significant influence on companies' tax policies. Thus, authorities

concerned should take necessary steps to emphasise the significance of the board in a company. They should ensure that the MCCG is not just a “checklist” for companies, but one which is truly effective in governing the companies. For instance, merely making sure that companies meet the set target of independent and female directors on board is inadequate. Rather, it is important to ensure that these independent and female directors understand and carry out their roles, and that they can execute their oversight responsibilities properly without obstacles with the design of appropriate tax compliance measures. One way proposed by Jensen (1993) to make the board of directors do their work is to have them own a fraction of the firm’s equity by requiring new board members to invest in the company. This way, the board of directors would recognise that their decisions affect their own wealth. Over time, the amount of their investment can be made larger by paying them in shares or options, and from discouraging them to sell this equity. Above all, enforcement to achieve an efficient market supervision is much more important than the writing of the Code.

Additionally, although this study does not find a significant influence of foreign ownership on corporate tax avoidance in Malaysia, it finds a positive relationship between the two variables. In fact, a past Malaysian study by Salihu et al. (2015) did find a significant positive impact of foreign ownership on corporate tax avoidance. The significant influence of foreign ownership “ceases”, which this study proposes is likely due to a mere difference in measurement. This study uses the percentage of foreign directors on board as a measurement of foreign ownership, whereas Salihu et al. (2015) includes the percentage of shares held by foreign owners as one of their measurements for foreign ownership which this study admits is a more direct and proper measure, but is unable to collect related data due to data constraints. Thus, this study reiterates that from Salihu et al. (2015), whereby while emerging economies actively welcome foreign investments, it is important to exercise caution diligently in the evaluation of such

investments at the presence of corporate tax avoidance, and consider whether the benefits outweigh the costs in the host countries. Similarly, the costs and benefits of providing tax incentives, such as tax allowances, grants, and reliefs, should also be considered.

Aside of corporate governance, this study also examined a set of firm characteristic variables as control variables. Firm characteristics, namely firm size, capital intensity, leverage, and profitability, are all proven to significantly impact a company's tax avoidance activities in Malaysia. In particular, larger, highly capital-intensive, and highly profitable companies in Malaysia are found to carry out more tax avoidance activities. These findings may assist investors in their economic decision-making. When deliberating over various investment choices, investors should be aware that a larger and more profitable firm, while promising, is likely to come with a higher risk of tax avoidance. For the authorities, these findings may help them pinpoint the right companies for tax audit, and to divert their resources, based on firm characteristics through the analysis of financial statement figures, which may improve their subsequent tax collection. To be particular, authorities should give a closer attention to companies with higher total assets, capital investments, and profits. Similarly, external auditors may also be on guard with companies that have huge numbers on these line items to aid the auditing process.

6.3 Limitations

This study acknowledges that it is subject to several limitations. As with every empirical study, a quantitative research model is inherently sensitive to the measures chosen. Consistent with many studies (for example, Powers et al., 2016; Wahab et al., 2017; Hoseini et al., 2019; Alkurdi & Mardini, 2020; Jarboui et al., 2020; Riguen et al., 2020; Salhi et al., 2020; Boussaidi & Hamed-Sidhom, 2021; Dakhli, 2021), this study uses ETR as a proxy of corporate tax avoidance. As corporate tax avoidance is measured based on financial statements data, instead of tax returns data, the measure would unavoidably include potential noise and measurement error, thus it may not be perfectly

accurate. However, due to the private and confidential nature of tax returns, this study is unable to access tax returns data to ascertain the actual tax paid by companies, and financial statements data (ETR) is the best immediate alternative.

Furthermore, this study is faced with a number of missing data due to data constraints, which may reduce the interpretation power of the results. To be exact, this study is forced to reject a handful of firm-year observations (55 observations) simply because of missing compensation data. This study is also unable to collect data for most sample companies on the percentage of shares held by foreign owners which is a more common and direct proxy for foreign ownership, and used the proportion of foreign directors on board as an alternative measure which yielded insignificant results. This study attempted to search for these missing data on relevant databases, such as the S&P IQ Capital database, yet was unable to locate them. Lower corporate reporting transparency in developing countries may be the cause for data constraints. Nevertheless, this study still has a reasonable number of observations sufficient for the conduct of an analysis.

Moreover, this study measured the total remuneration rewarded to CEOs, but there may be components in the CEOs' remuneration package which are responsible for motivating CEOs to engage in tax avoidance activities, such as bonuses. As it is difficult to access the CEOs' compensation contracts directly, it is hard to identify and investigate the components that drive CEOs' tax avoidance behaviour. However, since fixed salary likely constitutes a major part of the CEOs' remuneration, it is assumed to be the main driver. In addition, this study measured the compensation paid to CEOs, based on the assumption that CEOs hold the ultimate power and final say about companies' tax policies and strategies. It is important to note that this assumption may not necessarily be true, as other studies have proven that other executives such as CFOs, tax directors, and business unit managers may influence companies' tax management. Similarly, this study is not able to gather compensation data for the CFOs, tax directors, and business unit managers

due to data restriction. Though, several prior studies (for example, Phillips, 2003; Desai & Dharmapala, 2006; Rego & Wilson, 2012; Halioui et al., 2016; Powers et al., 2016; Chi et al., 2017; Jbir et al., 2021), which includes a Malaysian study (see Mahenthiran & Kasipillai, 2012), have proven that CEOs play a critical role in a company's tax management. Also, while this study documented that CEO compensation significantly and positively impacts corporate tax avoidance, the results do not tell us the optimal ratio which incentivises and restricts tax avoidance activities.

Above that, as with other quantitative studies, this study may not explain the reality on the results obtained. The authors have, however, summarised and provided rather comprehensive explanations on each documented finding. The authors hope that, for standard readers, this could aid and improve their understanding on the topic; and for fellow researchers, to stimulate their thinking and spark ideas for future studies.

Lastly, differences in results may arise simply because of variables definition, model specification, and time period under investigation. While the study has included control variables in its regression model, the model may still be incomplete. That is, the model may have omitted variables related to corporate tax avoidance. It is, however, practically impossible to identify and incorporate all related variables in the model. To reduce the problem and to improve the robustness of the research model, this study included firm fixed effects to capture other firm-related variables not captured by the control variables, and year fixed effects to control for time-varying variables. In addition, as the study covered a limited period from years 2016 to 2020, findings from the study may not be generalisable to a different time frame. Though, it examines a recent period and thus provides a more relevant set of results.

6.4 Suggestions for Future Research

In light of the study's limitations, fellow Malaysian researchers may examine the components of, not necessarily the CEO's, but other managers such as the CFO's, tax director's, and business unit manager's, compensation, which may be contingent to corporate tax avoidance, if able to draw data from management compensation contracts. These components may include equity-based payments, debt-based payments, and performance-based payments such as bonuses. Thus, researchers could contribute in terms of providing more precise evidence on the association between executive compensation and corporate tax avoidance.

Future research could examine a different time frame, probably a more recent time frame, to examine whether the results remain in the new time frame, in view of the rapid pace of change in a company's operating environment. For instance, as the global market has been significantly slammed by the unprecedented COVID-19 pandemic which led to an economic downturn, the pandemic and financial crisis could have affected a company's policy which may include tax policy. In response to the COVID-19 pandemic, the Malaysian regulators have revised its Code on Corporate Governance, namely MCCG 2021, which would be effective for companies beginning from the financial year end of 2021. While this study and previous Malaysian studies, Mahenthiran and Kasipillai (2012) and Wahab et al. (2017), provided that corporate governance has limited effects on corporate tax avoidance in Malaysia, would things change following the revision of the MCCG, the pandemic, and the financial crisis? According to risk shifting theory, companies would transfer risk responsibility to another party such as the government when they are faced with high risks. Thus, did managers and board of directors play their role when companies are faced with financial distress during the pandemic by restricting companies' cash outflows through tax pay-outs?

Above that, future research may investigate the influence of other variables on corporate tax avoidance in Malaysia. For instance, future studies may look into external governance mechanisms, and examine whether enforcement by outside parties such as tax authorities and auditors are capable of curbing tax avoidance activities among Malaysian companies. With the speedy growth in the literature, researchers have started investigating the impact of personal characteristics of managers, such as CEO overconfidence and CEO narcissism, on corporate tax avoidance. Researchers have even gone beyond shareholders, and looked into stakeholder's, such as analysts, activists/watch groups, and customers, influence on a company's tax policy. However, these newer research agendas are mainly focused in the developed country context, and remain very limited in developing countries, including Malaysia. Therefore, there is still plenty of gaps to fill in the literature for the emerging economies. Research in a developing nation could contribute through enriching the literature dominated by mainly developed evidence, offering insights from a different context and perspective. In addition, studies which examined personal characteristics of managers are often underpinned by behavioural theories, while those which investigated stakeholder's influence are mostly based on legitimacy theory and stakeholder theory. Therefore, studies looking into these variables may also provide theoretical contributions, adding new theoretical insights to the literature which has been mainly grounded on the classic principal-agent theory. By all means, future researchers are more than welcome to examine any other variables, or any other aspects of corporate tax avoidance, which they think important and interesting based on their unique understanding and experience on the governance and tax topic. For instance, one may wish to examine the implications of various tax incentives and tax legislations such as Section 140C on corporate tax avoidance in Malaysia, and contribute insights in terms of the costs and benefits of these mechanisms. Alternatively, one may identify the specific tax avoidance mechanisms

employed by companies, which may be helpful to policymakers and regulators in understanding the mechanisms used by companies to avoid taxes, and to formulate policies accordingly.

Also, future studies may simply replicate this study in other developing countries to confirm the generalisability of the study's findings. That is, is it true that corporate governance has little influence on corporate tax avoidance in developing nations as opposed to developed countries? Similar analyses would provide a more synchronised basis for comparison which enhances the comparability between studies.

Finally, future studies may take a qualitative approach, if not a mixed approach (quantitative and qualitative), such as conducting surveys, interviews, and case studies. A qualitative study can help to better comprehend the reality of tax planning within a company. For instance, are CEOs, board of directors, and foreign owners in fact involved in a company's tax decisions? If yes, how does it work? Does it work as this study documents? If no, who are the actual parties responsible in managing a company's taxes? A clear understanding of the who and how in corporate tax planning would certainly be valuable. A qualitative study may also uncover variables, not necessarily corporate governance variables, which impact a company's tax avoidance activities, thus providing new insights on the cause and effect of corporate tax avoidance.

REFERENCES

- Aggarwal, R., Erel, I., Ferreira, M., & Matos, P. (2011). Does governance travel around the world? Evidence from institutional investors. *Journal of Financial Economics*, 100(1), 154-181.
- Agyei, S. K., Marfo-Yiadom, E., Ansong, A., & Idun, A. A. A. (2020). Corporate tax avoidance incentives of banks in Ghana. *Journal of African Business*, 21(4), 544-559.
- Ahmed, A., Temouri, Y., Jones, C., & Pereira, V. (2022). How does firm ownership concentration and female directors influence tax haven foreign direct investment? Evidence from Asia-Pacific and OECD countries. *Asia Pacific Business Review*, 28(2), 235-259.
- Alkurdi, A., & Mardini, G. H. (2020). The impact of ownership structure and the board of directors' composition on tax avoidance strategies: Empirical evidence from Jordan. *Journal of Financial Reporting and Accounting*, 18(4), 795-812.
- Amri, K., Douagi, F. W. B. M., & Guedrib, M. (2022). The impact of internal and external corporate governance mechanisms on tax aggressiveness: Evidence from Tunisia. *Journal of Accounting in Emerging Economies*.
- Annuar, H. A., Salihu, I. A., & Obid, S. N. S. (2014). Corporate ownership, governance and tax avoidance: An interactive effects. *Procedia Social and Behavioural Sciences*, 164, 150-160.
- Ariffin, Z. Z. (2013). Tax planning of a company operating foreign activity in Malaysia. *International Journal of Trade, Economics and Finance*, 4(4), 209-212.
- Armstrong, C. S., Blouin, J. L., & Larcker, D. F. (2012). The incentives for tax planning. *Journal of Accounting and Economics*, 53(1-2), 391-411.
- Armstrong, C. S., Blouin, J. L., Jagolinzer, A. D., & Larcker, D. F. (2015). Corporate governance, incentives, and tax avoidance. *Journal of Accounting and Economics*, 60(1), 1-17.
- Arora, T. S., & Gill, S. (2022). Impact of executive compensation on corporate tax aggressiveness: Evidence from India. *Managerial Finance*, 48(6), 833-852.
- Association of Chartered Certified Accountants. (2017). *What the new Malaysian corporate governance code will mean for companies*. ACCA. <https://www.accaglobal.com/my/en/member/discover/cpd-articles/governance-risk-control/mycorpgov-cpd.html>

- Austin, C. R., & Wilson, R. J. (2017). An examination of reputational costs and tax avoidance: Evidence from firms with valuable consumer brands. *Journal of the American Taxation Association*, 39(1), 67-93.
- Boussaidi, A., & Hamed-Sidhom, M. (2021). Board's characteristics, ownership's nature and corporate tax aggressiveness: New evidence from the Tunisian context. *EuroMed Journal of Business*, 16(4), 487-511.
- Campbell, J. L., Guan, J. X., Li, O. Z., & Zheng, Z. (2020). CEO severance pay and corporate tax planning. *Journal of the American Taxation Association*, 42(2), 1-27.
- Campbell, K., & Helleloid, D. (2016). Starbucks: Social responsibility and tax avoidance. *Journal of Accounting Education*, 37, 38-60.
- Central Bank of Malaysia. (2017). *Strategic cooperation between Bank Negara Malaysia, the Malaysian Anti-Corruption Commission and the Inland Revenue Board of Malaysia*. BNM. <https://www.bnm.gov.my/-/strategic-cooperation-between-bank-negara-malaysia-the-malaysian-anti-corruption-commission-and-the-inland-revenue-board-of-malaysia>
- Chan, K. H., Mo, P. L., & Zhou, A. Y. (2013). Government ownership, corporate governance and tax aggressiveness: Evidence from China. *Accounting & Finance*, 53(4), 1029-1051.
- Chang, M. L., Huang, D. F., Ting, C. C., & Chang, H. S. (2019). Gender, political connection, and tax avoidance in China. *Theoretical Economics Letters*, 9(8), 2839-2863.
- Channel News Asia. (2021, July 28). Malaysia's coffers run dry as COVID-19 pandemic worsens. <https://www.channelnewsasia.com/commentary/covid-19-package-permerkasa-malaysia-government-debt-spend-2074471>
- Chi, S., Huang, S. X., & Sanchez, J. M. (2017). CEO inside debt incentives and corporate tax sheltering. *Journal of Accounting Research*, 55(4), 837-876.
- Chytis, E., Tasios, S., & Filos, I. (2020). The effect of corporate governance mechanisms on tax planning during financial crisis: An empirical study of companies listed on the Athens Stock Exchange. *International Journal of Disclosure and Governance*, 17(1), 30-38.
- Dakhli, A. (2021). Do women on corporate boardrooms have an impact on tax avoidance? The mediating role of corporate social responsibility. *Corporate Governance*, 22(4), 821-845.

- Damayanti, T. W., & Supramono, S. (2019). Women in control and tax compliance. *Gender In Management: An International Journal*, 34(6), 444-464.
- DeAngelo, H., & Masulis, R. W. (1980). Optimal capital structure under corporate and personal taxation. *Journal of Financial Economics*, 8, 3-29.
- Demirguc-Kunt, A., & Huizinga, H. (2001). The taxation of domestic and foreign banking. *Journal of Public Economics*, 79(3), 429-453.
- Derashid, C., & Zhang, H. (2003). Effective tax rates and the “industrial policy” hypothesis: Evidence from Malaysia. *Journal of International Accounting, Auditing and Taxation*, 12(1), 45-62.
- Desai, M. A., & Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics*, 79(1), 145-179.
- Dyreng, S. D., Hanlon, M., & Maydew, E. L. (2008). Long-run corporate tax avoidance. *The Accounting Review*, 83(1), 61-82.
- Dyreng, S. D., Hoopes, J. L., & Wilde, J. H. (2016). Public pressure and corporate tax behaviour. *Journal of Accounting Research*, 54(1), 147-186.
- Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88(2), 288-307.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301-325.
- Field, A. (2009). *Discovering statistics using SPSS* (4th ed.). Sage.
- Francis, B. B., Hasan, I., Wu, Q., & Yan, M. (2014). Are female CFOs less tax aggressive? Evidence from tax aggressiveness. *Journal of the American Taxation Association*, 36(2), 171-202.
- Frischmann, P. J., Shevlin, T., & Wilson, R. (2008). Economic consequences of increasing the conformity in accounting for uncertain tax benefits. *Journal of Accounting and Economics*, 46(2-3), 261-278.
- FTSE Bursa Malaysia. (2017). *Corporate governance guide. Pull-out I. Guidance on board leadership and effectiveness*. https://www.bursamalaysia.com/sites/5bb54be15f36ca0af339077a/assets/5bb54d165f36ca0c341f0065/Pull-out_I.PDF

- Gaertner, F. B. (2014). CEO after-tax compensation incentives and corporate tax avoidance. *Contemporary Accounting Research*, 31(4), 1077-1102.
- Garcia-Blandon, J., Argiles-Bosch, J. M., Ravenda, D., & Castillo-Merino, D. (2022). Board gender quotas, female directors and corporate tax aggressiveness: A causal approach. *International Review of Financial Analysis*, 79, 1-12.
- Graham, J. R., & Tucker, A. (2006). Tax shelters and corporate debt policy. *Journal of Financial Economics*, 81, 563-594.
- Gupta, S., & Newberry, K. (1997). Determinants of the variability in corporate effective tax rates: Evidence from longitudinal data. *Journal of Accounting and Public Policy*, 16(1), 1-34.
- Halioui, K., Neifar, S., & Abdelaziz, F. B. (2016). Corporate governance, CEO compensation and tax aggressiveness: Evidence from American firms listed on the NASDAQ 100. *Review of Accounting and Finance*, 15(4), 445-462.
- Hamzah, F. H. A., Hamid, N. A., Zawawi, S. N. H. M., Yusup, R., & Azali, N. M. (2020). Indicators of tax authority monitoring: Firm characteristics, tax avoidance and reinvestment allowance utilisation. *Malaysian Journal of Economic Studies*, 57(2), 325-342.
- Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, 50(2-3), 127-178.
- Hanlon, M., & Slemrod, J. (2009). What does tax aggressiveness signal? Evidence from stock price reactions to news about tax shelter involvement. *Journal of Public Economics*, 93(1-2), 126-141.
- Hasan, I., Hoi, C. K., Wu, Q., & Zhang, H. (2014). Beauty is in the eye of the beholder: The effect of corporate tax avoidance on the cost of bank loans. *Journal of Financial Economics*, 113(1), 109-130.
- Hasan, I., Hoi, C. K., Wu, Q., & Zhang, H. (2017). Does social capital matter in corporate decisions? Evidence from corporate tax avoidance. *Journal of Accounting Research*, 55(3), 629-668.
- Hasan, I., Kim, I., Teng, H., & Wu, Q. (2022). The effect of foreign institutional ownership on corporate tax avoidance: International evidence. *Journal of International Accounting, Auditing and Taxation*.
- Hope, O. K., Ma, M., & Thomas, W. B. (2013). Tax avoidance and geographic earnings disclosure. *Journal of Accounting and Economics*, 56(2-3), 170-189.

- Hoseini, M., Gerayli, M. S., & Valiyan, H. (2019). Demographic characteristics of the board of directors' structure and tax avoidance: Evidence from Tehran Stock Exchange. *International Journal of Social Economics*, 46(2), 199-212.
- Huang, W., Ying, T., & Shen, Y. (2018). Executive cash compensation and tax aggressiveness of Chinese firms. *Review of Quantitative Finance and Accounting*, 51(4), 1151-1180.
- Iazzi, A., Vacca, A., Maizza, A., & Schiavone, F. (2022). The role of corporate board and auditors in tax planning: Evidence from Italy. *Management Research Review*.
- Income Tax Act 1967 (Cth) s. 140 (Malaysia).
- Income Tax Act 1967 (Cth) s. 140C (Malaysia).
- Income Tax Act 1967 (Cth) s. 33.2 (Malaysia).
- Inland Revenue Board of Malaysia. (2018). *Annual report 2017*. https://phl.hasil.gov.my/pdf/pdfam/annual_report_2017.pdf
- Inland Revenue Board of Malaysia. (2019). *Restriction on Deductibility of Interest Guidelines [Section 140C, Income Tax Act 1967]*. IRBM. http://lampiran1.hasil.gov.my/pdf/pdfam/RDIG_05072019.pdf
- Inland Revenue Board of Malaysia. (2021). *Tax rate of company*. IRBM. <https://www.hasil.gov.my/en/company/tax-rate-of-company/>
- Jarboui, A., Saad, M. K. B., & Riguen, R. (2020). Tax avoidance: Do board gender diversity and sustainability performance make a difference? *Journal of Financial Crime*, 27(4), 1389-1408.
- Jbir, S., Neifar, S., & Fourati, Y. M. (2021). CEO compensation, CEO attributes and tax aggressiveness: Evidence from French firms listed on the CAC 40. *Journal of Financial Crime*, 28(4), 1141-1160.
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48(3), 831-880.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.

- Kasim, F. M., & Saad, N. (2019). Determinants of corporate tax avoidance strategies among multinational corporations in Malaysia. *International Journal of Public Policy and Administration Research*, 6(2), 74-81.
- Kim, J. B., Li, Y., & Zhang, L. (2011). Corporate tax avoidance and stock price crash risk: Firm-level analysis. *Journal of Financial Economics*, 100(3), 639–662.
- Kim, K. A., & Limpaphayom, P. (1998). Taxes and firm size in Pacific-Basin emerging economies. *Journal of International Accounting, Auditing and Taxation*, 7(1), 47-68.
- Kinney, M., & Lawrence, J. (2000). An analysis of the relative US tax burden of US corporations having substantial foreign ownership. *National Tax Journal*, 53(1), 9-22.
- Kolias, G., & Koumanakos, E. (2022). CEO duality and tax avoidance: Empirical evidence from Greece. *Journal of International Accounting, Auditing and Taxation*, 47, 1-15.
- Kovermann, J., & Velte, P. (2019). The impact of corporate governance on corporate tax avoidance—A literature review. *Journal of International Accounting, Auditing and Taxation*, 36, 1-29.
- Kubick, T. R., & Masli, A. N. (2016). Firm-level tournament incentives and corporate tax aggressiveness. *Journal of Accounting and Public Policy*, 35(1), 66-83.
- Kubick, T. R., Lockhart, G. B., & Robinson, J. R. (2020). Does inside debt moderate corporate tax avoidance? *National Tax Journal*, 73(1), 47-76.
- Kusbandiyah, A., Norwani, N. M., & Jusoh, M. A. (2021). Determinants of tax avoidance of public listed companies in Indonesia. *Turkish Journal of Computer and Mathematics Education*, 12(3), 592-601.
- Lanis, R., & Richardson, G. (2011). The effect of board of director composition on corporate tax aggressiveness. *Journal of Accounting and Public Policy*, 30(1), 50-70.
- Lanis, R., & Richardson, G. (2018). Outside directors, corporate social responsibility performance, and corporate tax aggressiveness: An empirical analysis. *Journal of Accounting, Auditing and Finance*, 33(2), 228-251.
- Law, K. K., & Mills, L. F. (2017). Military experience and corporate tax avoidance. *Review of Accounting Studies*, 22(1), 141-184.

- Li, J. T., & Tang, Y. (2010). CEO hubris and firm risk taking in China: The moderating role of managerial discretion. *Academy of Management Journal*, 53, 45-68.
- Lim, Y. D. (2011). Tax avoidance, cost of debt and shareholder activism: Evidence from Korea. *Journal of Banking & Finance*, 35, 456–470.
- Lisowsky, P. (2010). Seeking shelter: Empirically modelling tax shelters using financial statement information. *The Accounting Review*, 85(5), 1693–1720.
- Mahenthiran, S., & Kasipillai, J. (2012). Influence of ownership structure and corporate governance on effective tax rates and tax planning: Malaysian evidence. *Australian Tax Forum*, 27(4), 941-969.
- Malay Mail. (2021, April 12). *PM claims govt doesn't have much money left after Covid-19*. <https://www.malaymail.com/news/malaysia/2021/04/12/pm-claims-govt-doesnt-have-much-money-left-after-covid-19/1965946>
- Malaysian Code on Corporate Governance. (2002). *Malaysian Code on Corporate Governance 2002*.
- Malaysian Code on Corporate Governance. (2007). *Malaysian Code on Corporate Governance (Revised 2007)*.
- Malaysian Code on Corporate Governance. (2012). *Malaysian Code on Corporate Governance 2012*.
- Malaysian Code on Corporate Governance. (2017). *Malaysian Code on Corporate Governance*.
- Malaysian Code on Corporate Governance. (2021). *Malaysian Code on Corporate Governance (as at 28 April 2021)*.
- Malaysian Investment Development Authority. (2021a). *Incentives*. MIDA. <https://www.mida.gov.my/wp-content/uploads/2020/07/Chapter-2-Incentives-for-New-Investments.pdf>
- Malaysian Investment Development Authority. (2021b). *Malaysian Investment Performance Report 2020*. MIDA. https://www.mida.gov.my/wp-content/uploads/2021/03/MIDA-IPR-2020_FINAL_March4.pdf
- McClure, R., Lanis, R., Wells, P., & Govendir, B. (2018). The impact of dividend imputation on corporate tax avoidance: The case of shareholder value. *Journal of Corporate Finance*, 48, 492-514.

- McGee, V. E., & Stickney, C. P. (1982). Effective corporate tax rates: The effect of size, capital intensity, leverage, and other factors. *Journal of Accounting and Public Policy*, 1(2): 125 – 152.
- Mgammal, M. H., Bardai, B., & Ismail, K. N. I. K. (2018). Corporate governance and tax disclosure phenomenon in the Malaysian listed companies. *Corporate Governance*, 18(5), 779-808.
- Mills, L., Erickson, M. M., & Maydew, E. L. (1998). Investments in tax planning. *Journal of the American Taxation Association*, 20(1), 1.
- Ministry of Finance. (2018). *Federal Government Revenue*. https://www.mof.gov.my/portal/arkib/economy/2018/st4_2.pdf
- Ministry of Finance. (2021). *2021 Fiscal Outlook and Federal Government Revenue Estimates*. <http://belanjawan2021.treasury.gov.my/pdf/revenue/2021/fiscal-outlook-2021.pdf>
- Minnick, K., & Noga, T. (2010). Do corporate governance characteristics influence tax management? *Journal of Corporate Finance*, 16(5), 703-718.
- Muhmad, S. N., Haat, M. H. C., Taha, R., Rashid, N., & Muhmad, S. N. (2020). The influence of the financial indicators towards the changes of the corporate tax avoidance. *Journal of Advanced Research in Dynamical and Control Systems*, 12(1), 167-171.
- New Straits Times. (2022, March 22). AG Report: RM16.35 billion taxes, penalties that can be collected by IRB. <https://www.nst.com.my/news/nation/2022/03/782184/ag-report-rm1635-billion-taxes-penalties-can-be-collected-irb>
- Noor, R. M., Fadzillah, N. S. M., & Mastuki, N. A. (2010). Corporate tax planning: A study on corporate effective tax rates of Malaysian listed companies. *International Journal of Trade, Economics and Finance*, 1(2), 189-193.
- Noor, R. M., Mastuki, N. A., & Bardai, B. (2008). Corporate effective tax rates: A study on Malaysian public listed companies. *Malaysian Accounting Review*, 7(1), 1-20.
- O'Donovan, J., Wagner, H. F., & Zeume, S. (2019). The value of offshore secrets: Evidence from the Panama Papers. *The Review of Financial Studies*, 32(11), 4117-4155.

- Organisation for Economic Co-operation and Development. (2021a). *Action 1 tax challenges arising from digitalisation*. OECD. <https://www.oecd.org/tax/beps/beps-actions/action1/>
- Organisation for Economic Co-operation and Development. (2021b). *Base erosion and profit shifting (BEPS)*. OECD. <https://www.oecd.org/tax/beps/>
- Organisation for Economic Co-operation and Development. (2021c). *BEPS actions*. OECD. <https://www.oecd.org/tax/beps/beps-actions/>
- Organisation for Economic Co-operation and Development. (2021d). *Fighting tax evasion*. OECD. <https://www.oecd.org/ctp/fightingtaxevasion.htm>
- Organisation for Economic Co-operation and Development. (2021e). *Statutory corporate income tax rates*. OECD. https://stats.oecd.org/index.aspx?DataSetCode=Table_III
- Phillips, J. D. (2003). Corporate tax-planning effectiveness: The role of compensation-based incentives. *The Accounting Review*, 78(3), 847-874.
- Powers, K., Robinson, J. R., & Stomberg, B. (2016). How do CEO incentives affect corporate tax planning and financial reporting of income taxes? *Review of Accounting Studies*, 21(2), 672-710.
- PricewaterhouseCoopers. (2014). *PwC alert tax avoidance*. PwC. <https://www.pwc.com/my/en/assets/publications/alert116-tax-avoidance.pdf>
- PricewaterhouseCoopers. (2021). *2021/2022 Malaysian tax booklet - Corporate income tax*. PwC. <https://www.pwc.com/my/en/publications/mtb/corporate-income-tax.html>
- Rashid, N. M. N. N. M., Noor, R. M., Mastuki, N. A., & Bardai, B. (2015). Longitudinal study of corporate tax planning: Analysis on companies' tax expense and financial ratios. *Pertanika Journal of Social Science and Humanities*, 23, 109-120.
- Rego, S. O. (2003). Tax-avoidance activities of US multinational corporations. *Contemporary Accounting Research*, 20(4), 805-833.
- Rego, S. O., & Wilson, R. (2012). Equity risk incentives and corporate tax aggressiveness. *Journal of Accounting Research*, 50(3), 775-810.

- Richardson, G., Lanis, R., & Taylor, G. (2015). Financial distress, outside directors and corporate tax aggressiveness spanning the global financial crisis: An empirical analysis. *Journal of Banking and Finance*, 52, 112-129.
- Richardson, G., Taylor, G., & Lanis, R. (2016). Women on the board of directors and corporate tax aggressiveness in Australia: An empirical analysis. *Accounting Research Journal*, 29(3), 313-331.
- Riguen, R., Salhi, B., & Jarboui, A. (2020). Do women in board represent less corporate tax avoidance? A moderation analysis. *International Journal of Sociology and Social Policy*, 40(1-2), 114-132.
- Salhi, B., Jabr, J., & Jarboui, A. (2020). A comparison of corporate governance and tax avoidance of UK and Japanese firms. *Comparative Economic Research. Central and Eastern Europe*, 23(3), 111-132.
- Salihu, I. A., Annuar, H. A., & Obid, S. N. S. (2015). Foreign investors' interests and corporate tax avoidance: Evidence from an emerging economy. *Journal of Contemporary Accounting and Economics*, 11(2), 138-147.
- Securities Commission of Malaysia. (2021). *SC updates the Malaysian Code on Corporate Governance to promote board leadership and oversight of sustainability*. SC Malaysia. <https://www.sc.com.my/resources/media/media-release/sc-updates-the-malaysian-code-on-corporate-governance-to-promote-board-leadership-and-oversight-of-sustainability>
- Seidman, J. K., & Stomberg, B. (2017). Equity compensation and tax avoidance: Disentangling managerial incentives from tax benefits and re-examining the effect of shareholder rights. *Journal of the American Taxation Association*, 39(2), 21-41.
- Seno, R., Hashim, H. A., Taha, R., & Hamid, S. A. (2021). The influence of Hofstede's cultural dimension on tax compliance behaviour of tax practitioners. *Asian Review of Accounting*, 30(1), 77-96.
- Shackelford, D. A., & Shevlin, T. (2001). Empirical tax research in accounting. *Journal of Accounting and Economics*, 31(1-3), 321-387.
- Sunarto, S., Widjaja, B., & Oktaviani, R. M. (2021). The effect of corporate governance on tax avoidance: The role of profitability as a mediating variable. *Journal of Asian Finance, Economics and Business*, 8(3), 217-227.
- Tang, T. Y. (2020). A review of tax avoidance in China. *China Journal of Accounting Research*, 13, 327-338.

- Tax Foundation (2021). *Corporate tax rates around the world, 2021*. <https://taxfoundation.org/publications/corporate-tax-rates-around-the-world/>
- Taylor, G., & Richardson, G. (2014). Incentives for corporate tax planning and reporting: Empirical evidence from Australia. *Journal of Contemporary Accounting and Economics*, 10(1), 1-15.
- United Nations Conference on Trade and Development. (2021a). *Foreign direct investment: Inward and outward flows and stock, annual*. UNCTAD. <https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=96740>
- United Nations Conference on Trade and Development. (2021b). *World investment report*. UNCTAD. https://unctad.org/system/files/official-document/wir2021_en.pdf
- Wahab, E. A. A., Ariff, A. M., Marzuki, M. M., & Sanusi, Z. M. (2017). Political connections, corporate governance, and tax aggressiveness in Malaysia. *Asian Review of Accounting*, 25(3), 424-451.
- Wahab, E. A. A., How, J. C., & Verhoeven, P. (2007). The impact of the Malaysian Code on Corporate Governance: Compliance, institutional investors and stock performance. *Journal of Contemporary Accounting & Economics*, 3(2), 106-129.
- Wang, F., Xu, S., Sun, J., & Cullinan, C. P. (2020). Corporate tax avoidance: A literature review and research agenda. *Journal of Economic Surveys*, 34(4), 793-811.
- White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica*, 48(4), 817-838. <https://doi.org/10.2307/1912934>
- Wilde, J. H., & Wilson, R. J. (2018). Perspectives on corporate tax planning: Observations from the past decade. *Journal of the American Taxation Association*, 40(2), 63-81.
- Wilson, R. J. (2009). An examination of corporate tax shelter participants. *The Accounting Review*, 84(3), 969-999.
- Xian, C., Sun, F., & Zhang, Y. (2015). Book-tax differences: Are they affected by equity-based compensation? *Accounting Research Journal*, 28(3), 300-318.
- Zhou, Y. (2011). *Ownership structure, board characteristics, and tax aggressiveness* [Master's thesis]. Lingnan University, Hong Kong.

Zimmerman, J. L. (1983). Taxes and firm size. *Journal of Accounting and Economics*, 5, 119-149.

Zolotoy, L., O'Sullivan, D., Martin, G. P., & Wiseman, R. M. (2021). Stakeholder agency relationships: CEO stock options and corporate tax avoidance. *Journal of Management Studies*, 58(3), 782-814.

Universiti Malaya