



# Tax Avoidance, Corporate Governance and Firm Value in The Digital Era

Chen Siew Yee, Noor Sharoja Sapiei\*, Mazni Abdullah



<sup>1</sup>Department of Accountancy,  
University of Malaya, Jalan  
Universiti, 50603 Kuala Lumpur,  
Wilayah Persekutuan  
Kuala Lumpur, Malaysia

\*Correspondence:

[noorsharoja@um.edu.my](mailto:noorsharoja@um.edu.my)

This article is available in:

<http://journal.umy.ac.id/index.php/ai>

DOI: [10.18196/jai.190299](https://doi.org/10.18196/jai.190299)

## Citation:

Yee, C.S., Sapiei, N.S., & Abdullah, M. (2018). Tax Avoidance, Corporate Governance and Firm Value in The Digital Era. *Journal of Accounting and Investment*, 19(2), 160-175.

## Received:

23 March 2018

## Reviewed:

22 April 2018

## Revised:

13 June 2018

## Accepted:

20 June 2018

**Copyright:** © 2018 Yee, Sapiei & Abdullah. This is an open access article distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

**ABSTRACT:** In this study, we examine the link between tax avoidance and firm value and identify the moderating effect of corporate governance in this digital era. Corporate tax avoidance activities have been considered as value-enhancement activities to the companies and better quality of corporate governance would positively related to firm value. This study uses a sample of Malaysian Public Listed Companies (PLCs) which ranked the top 100 companies of good disclosure in the Malaysia-ASEAN corporate governance report 2014. It was conducted using cross-sectional data by observing a final sample of 82 PLCs at one point in time. We provide evidence from Malaysia that corporate tax avoidance behaviour would actually reduce firm value and corporate governance has moderator effect on the relationship of tax avoidance and firm value. This study offers practical insights to the government and policymakers in understanding the tax avoidance behaviour of company and it helps in forming adequate and effective taxation system in Malaysia. We also give constructive apprehension to Malaysian companies to understand the negative consequences of corporate tax avoidance when engaging in tax planning activities aggressively. Most importantly, this study added more evidence to the stream of literature that investigates the role of tax avoidance strategies, as moderated by the level of corporate governance, in determining the firm value in this era of technology.

**KEYWORDS:** tax avoidance; firm value; corporate governance; digital era

## Introduction

Tax avoidance activities by big corporations have become quite rampant in this era of digital technology. The Digital Era is characterized by technology which boost the speed and breadth of information turnover within the economy and society (Shepherd, 2004). The growing numbers of tax avoidance and evasion activities may partly be attributed to technology as corporations with their exquisite tax planning teams started to deploy technology. The recent real-life example is the case of Starbucks Company faces millions of Euros in tax repayments when the European Commission's issued a decision in 2016 on tax avoidance by multinational companies through transfer pricing activities. Taxes has been considered a factor that affects the financial decision-making of a company such as with regards to forming and restructuring of organization, financing decisions, compensation policy, payout policy and even the risk management of a firm (Graham, 2003; Desai & Dharmapala, 2006).

Corporate tax avoidance activity is an arrangement of one's financial and economic affairs to minimize the tax payable by utilizing allowable deductions, exemptions, and allowances within the provision of the law (Pasternak & Rico, 2008). In general, Malaysian Judiciary embraces the world-wide principle stating that it is perfectly legitimate to make arrangement to reduce tax liability as long as what they do is not prohibited

by law. Thus, the corporate tax avoidance pursued by companies have been considered as value-enhancement activities by reducing the income to be paid out as corporate tax to government. However, the tax avoidance activities do not come without cost as the separation of ownership and control between managers and shareholders posts the agency cost to company (Jensen & Meckling, 1976). In principal-agents relationship, the agents to whom the shareholders delegate the managerial role have great chances to divert partial of the potential incomes of company to themselves. The tax saving from tax avoidance may be outweighed by the direct cost such as implementation cost, potential punishment and indirect cost including agency cost related to the tax saving activities (Desai & Dharmapala, 2009; Chen, Hu, Wang, & Tang, 2014). In addition, Kim, Li and Zhang (2010) suggests that complicated and opaque tax avoidance arrangements allow managers in manipulating earnings of company and hiding negative firm-specific information.

While tax saving strategy is one of the crucial managerial decisions determined by the managers, the complex tax avoidance arrangement always provides a shield for the managers to extract own benefits in the absence of governance control. Corporate governance has been the processes and structures adopted by the company to manage its business activities and by doing so, it enhances the shareholders' value (Mustapha & Ayoib, 2010). The corporate governance is of paramount importance especially to the developing countries lack of investor protection and with severe agency problems (Wang, 2011).

In Malaysia, the Malaysian code on corporate governance (MCCG) was introduced in 2000 to respond to changing stakeholder expectation and to protect the minority shareholders. Corporate governance has been closely associated with corporate transparency and may have a compelling force on the extent of disclosure and timeliness of reporting (Haat, Rahman & Mahenthiran, 2008). Thus, corporate governance has been viewed as one of the measures in governing shareholders' benefit extracted from tax avoidance. Given the fact that the governance mechanism has an interactive effect to moderate the relationship between tax avoidance and firm value, this study will investigate further on the tax avoidance activities engaged by Malaysian companies with different level of governance control.

The objective of this study is therefore to analyse whether tax avoidance activities affect firm value and to identify whether the relationship is moderated by the strength of corporate governance. This paper examines the effect of tax avoidance on firm value in the business environment in Malaysia and if the governance mechanism plays a role in moderating the relationship. This investigation would be able to answer the fundamental question of value transferred to shareholders and whether the relationship between tax avoidance and firm value varies with different level of corporate governance. While a stream of emerging literature of corporate governance finds that better quality of corporate governance is positively related to firm value, this study examines whether the MCCG which integrated as part of the business of Malaysian companies will improve the firm value when companies engaged in the tax avoidance activities. We further extend the previous studies by analysing the relationship between tax avoidance and firm value in the developing country in the digital era.

Even though a great extent of academic researchers has examined tax avoidance in developed countries over a long period of time, evidence for this subject gathered from developing countries is limited (Ariff & Hashim, 2013).

In the study of Noor, Fadzillah and Mastuki (2010) which attempts to examine corporate effective tax rate of Malaysia Public Listed Companies (PLCs) revealed that the corporate tax system in Malaysia indeed provided tax incentives to companies to pursue aggressive tax planning extensively. Besides, agency conflicts, risk of managerial rent diversion and weak investor protection is eminent in developing countries (Arif & Hashim, 2013). Given that, it is interesting to extend the literatures of tax avoidance by examining the relationship of tax avoidance and firm value in agency framework in developing countries.

In Section 2, a comprehensive literature review has been conducted on two emerging streams of research: tax avoidance and corporate governance and hypotheses have been developed. In Section 3, the research methodology includes sample selection, the operationalization, source of information and measurement of variables and the regression models. Section 4 discusses the findings of this study. Lastly, Section 5 provide linking between problems, questions and the findings conclusions, and discusses the limitations and contributions of the study, providing the directions for future study and indicates the implications in the context of Malaysia and the developing country in general.

## **Literature Review and Hypothesis Development**

### **Tax Avoidance**

Tax avoidance has been viewed as tax saving activities that enhance the value of company. It has been used as a tax saving tool to transfer the wealth from government to company's shareholders. Hanlon and Heitzman (2010) have broadly defined tax avoidance as reduction of explicit taxes with perfectly legal tax saving activities at one end whereas tax sheltering activities would be closer to the other end. Tax shelters were defined by U.S. General Accounting Office (2003) as complicated tax reporting that used to explore tax loopholes and provide unintended, substantial benefits to corporations. Although some researchers argue that tax avoidance strategies could be a legal or illegal mean of activities (see for example Lee, Dobiyski & Minton, 2015), in this study, we defined tax avoidance as legitimate tax planning activities in accordance with Malaysian Judiciary who adopts the Westminster principle. The principle proclaimed that corporation have every right to make financial planning to avoid or reduce their tax liability as long as what they do is not forbidden by authorities or law. In this study we adopt the financial economics perspective to investigate on how agency theory affects the relationship between tax avoidance and firm value.

Corporate tax avoidance is one of the corporate strategies that received considerable attention in the boardroom and involving managerial decision and discretion (Arif & Hashim, 2013). In recent years, the corporate tax becomes a topic of research that received widespread of interest (Hanlon &

Heitzman, 2010) and induces more studies on tax avoidance. Initially when the body of research on corporate tax is rather scarce, the deterrence model of tax evasion by Allingham and Sandmo (1972) which studied the individual taxpayers has been utilised. In the model, the taxpayers would favour in reducing the tax if the expected utility from tax evasion is greater than the risk of being caught and being penalized by the authorities. However, scholars in the area argue that the model may not appropriate to be used for the studies on corporate taxpayer.

The PLCs are operated by managers and thus the tax planning strategies involve multiple parties and they have the absolute discretionary power of deciding on tax planning activities on behalf of shareholders. Given that the separation of ownership and control, the agency framework provides a better insight and theoretical foundation in understanding the corporate tax reporting behaviour of the managers (Slemrod, 2004; Crocker & Slemrod, 2005; Chen & Chu, 2005). Several analytical researchers have conducted the study on corporate tax avoidance activities using agency framework (Chen & Chu, 2005; Desai & Dharmapala, 2009). From the perspective of agency theory, the managers involve in the tax planning are able to ride on the nature of tax avoidance transactions that full of complexity in pursuing self-serving benefits. The complex tax planning technologies provide a shield from the investigation of internal audit committee, outside auditors and other parties.

### **Corporate Tax Avoidance and Firm Value**

Many prior studies have investigated the consequences of corporate tax avoidance in the capital market. Empirical studies about the effect of tax avoidance on corporate value have mixed results. Early studies relate effective tax rate (ETR) as the measurements of tax avoidance to various firm characteristics. Zimmerman (1983) found that companies which are relatively large in term of firm size to other companies would subject to a higher ETR. His finding is in line with the notion that more successful business subject to more stringent scrutiny and transferred more wealth to the government. In addition, Gupta and Newberry (1997) found that capital structure, asset mix and profitability are associated with ETR. These firm characteristics examined in the early studies are proxies for incentive, opportunities and sources induce company involving in tax planning and they provide some explanation of why some companies avoid more tax in relative to other companies. These firm characteristics will be used as control variables in this study to form the regression equation to test our hypotheses.

In later study, Desai and Dharmapala (2009) view corporate tax avoidance activities as a negative influence on firm value due to agency problem. In the agent-principal relationship, the information asymmetry would favour the managers who possess more information and the muddled tax avoidance process is even a shield for managers to engage to self-serving activities (Desai & Dharmapala, 2009). Thus, the tax avoidance might not necessary enhance the wealth of shareholders in the existence of agency problem in the companies. The classic example is manager of Enron who involved in tax shield by structuring financing transactions and manipulating earnings of company eventually led to the failure of company. Hanlon and Slemrod

(2009) also found that the market reacts negatively to the companies that involve in the tax shelter aggressively. Similarly, Chen, Hu, Wang, and Tang (2014) and Rezaei and Ghanaeenejad (2014) found a negative meaningful relation between tax avoidance and firm value. Thus, later studies conducted in the developed countries argued that tax avoidance does not necessarily enhance the valuation of companies. These studies provided very interesting insights of the determinants and consequences of tax avoidance which employed by companies to reduce tax. However, Arif and Hashim (2013) and Moradi, Mohammadi and Saeedi (2015) provided a preliminary evidence in Malaysia that corporate tax avoidance enhances the value of companies as tax avoidance activities are positively related to firm value. Therefore, due to the contradictory effect of tax avoidance activities found in the developed and developing countries, this study attempts to investigate the tax avoidance and firm value in the agency framework. The first hypothesis is stated as follows:

*H<sub>1</sub>: Tax avoidance is significantly associated with firm value of companies in Malaysia*

### **Corporate Governance**

The first hypothesis examines the single consequence of corporate tax avoidance from the agency perspective and it does not consider that the agency cost can be moderated by corporate governance. Shleifer and Vishny (1997) describe corporate governance as “the system of control mechanisms, through which the suppliers of finance to corporations assure themselves of getting a return on their investment”. The definition signified the importance of corporate governance mechanism in safeguarding the interest of shareholders, and stakeholders. Agency theorists have viewed the tax avoidance issues intertwined with corporate governance issues (Chen, Hu, Wang, & Tang, 2014).

The empirical literature indicated that the corporate governance has counteracting effect on the agency problem and suggested that the corporate value is the result of this counteracting mechanism of control on this matter. Desai and Dharmapala (2006) suggested that the impact of high-power incentive on tax sheltering may vary and it depends on the governance structure of the companies. Desai and Dharmapala (2009) found that tax avoidance will increase the firm value for the company of well-governed companies and it is otherwise for poorly-governed companies. Similarly, Chen, Hu, Wang, and Tang (2014) found that the tax avoidance behaviour tends to decrease the value of the firm resulted from increased agency costs, but the negative influence of tax avoidance on firm value is mitigated in well-governed companies.

Likewise, in Malaysia, Arif and Hashim (2013) provided a preliminary evidence that corporate tax avoidance enhances the value of companies and the value relevance is higher for companies in better governance compared to their counterparts. The MCCG 2000 was issued to respond to the regional financial crisis in 1997/1998 as it was believed to be attributed to lack of good corporate governance. The regulatory bodies in Malaysia shed the light

on implementing a good set of corporate governance practices and we are one of the first countries in East Asia with its own Code of Corporate Governance. The landscape of the country's corporate governance was continually reformed as the MCCG 2012 recognizes the role and fiduciary obligation of the directors not just in setting competitive strategies and steering the business in the right direction, but also playing an important role in establishing a sound governance structure and ensuring that the daily business is conducted in compliance with laws and ethical values.

Overall, the literatures indicated that the shareholders/investors are protected with the corporate governance in place and studies mostly find a link between corporate governance, which works as a firm monitoring mechanism. In consideration of the fact that the agency problem intertwined with the complex tax avoidance activities, this study postulates that corporate governance mechanisms would able to mitigate the agency problem and enhance the relationship between tax avoidance and the firm value. Thus, it is hypothesized that the level of corporate governance of a company will moderate the causal effect of tax avoidance on firm value. The second hypothesis is stated as follows:

*H<sub>2</sub>: The relationship between tax avoidance and firm value will be moderated by the level of corporate governance of companies in Malaysia.*

In the Malaysia institutional setting, this study tries to figure out the effect of corporate tax avoidance on firm value and examining the moderation effect of corporate governance between the relation of tax avoidance and firm value. Figure 1 shows the research framework of this study.

## Research Method

The aim of this study is to examine whether tax avoidance activities affect firm value and to identify whether the strength of corporate governance moderates the relationship. We utilized a quantitative research method and secondary data is collected in our study, focusing on company as a unit analysis.

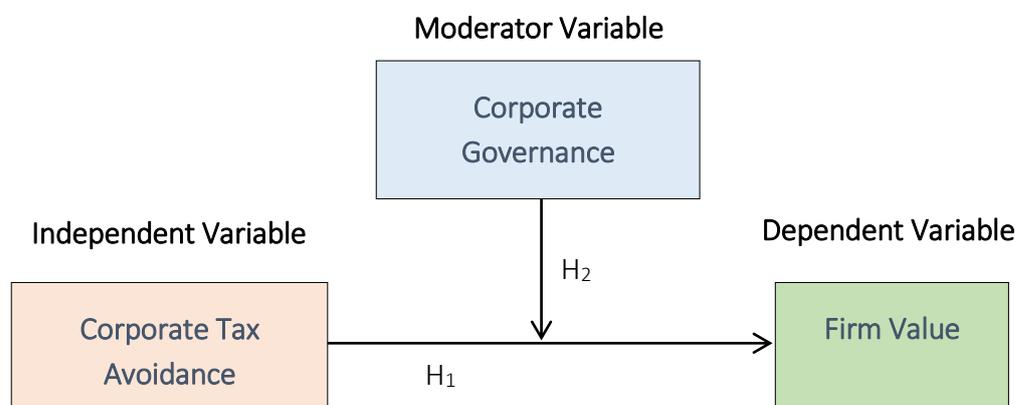


Figure 1 Research Framework

**Table 1** Summary of Sample Selection

Sample Selection	Number of companies
Number of Public Listed Companies in MACGR 2014	100
Less: Financial and Insurance Companies	(10)
Less: Companies with incomplete financial data	(1)
Less: Companies with operating loss	(1)
Less: Companies with negative operating cash flow	(6)
Final Sample	82

### Sample Selection

In this study, the sample of companies is selected based on the listing of top 100 companies in the Malaysia-Asean Corporate Governance Report (MACGR) 2014 prepared by Minority Shareholder Watchdog Group (MSWG). The report provides a snapshot of the PLCs in Malaysia of their compliance with principles and practices in corporate governance. The assessment of the companies mainly based on the rights of shareholders, equitable treatments of shareholders, roles of stakeholders, disclosure and transparency and responsibilities of the board. The financial and market data for each of the selected companies are extracted from the audited annual report of fiscal year end of 2013. The initial sample of companies have been filtered based on the characteristics in Table 1. The companies in the financial and insurances sector were excluded from the sample selection as the corporations such as banks are highly regulated by governmental authorities and they have different financial characteristics. The companies without complete financial and market data that needs to be used in the analysis were rejected. The companies with operating loss negative operating cash flow were also filtered out as the companies with taxable loss are not subject to statutory corporate tax. The final sample consists of 82 companies were used in this study.

**Table 2** Operationalization and Source of Information

Variables	Acronym	Operationalization	Source of Information
<b>Dependent:</b>			
Tobin's Q	Q	$(MV \text{ of Ordinary Shares} + \text{total borrowing}) / \text{total assets}$	Annual report for financial year ending 2013 (AR 2013)
<b>Independent:</b>			
Tax Avoidance	TA	$1 - [\text{current-year tax expense} / \text{the accounting income before tax}]$	AR 2013
Governance	GOV	ACGS	MACGR 2014
<i>Control:</i>			
Return of Assets	ROA	Net income / total assets	AR 2013
Return of Equity	ROE	Net income / shareholders' equity	AR 2013
Size	SIZE	Total Assets	AR 2013
Leverage	LEV	Total debts / total assets	AR 2013
Growth	GROWTH	$(\text{Revenues Y2} - \text{Revenues Y1}) / \text{Revenues Y2}$	AR 2013

### Operationalization, Source of Information and Measurement of Variables

The operationalization and source of information of the independent, dependent and control variables are provided in Table 2. The research design in terms of measurement of variables and regression models is then discussed.

#### Measurement of Firm Value

Tobin's Q is used in this study as a proxy for firm value of a company. This follows the practice in the stream of research that studied tax avoidance and firm value particularly, Moradi, Mohammadi and Saeedi (2015) and Lim (2011). The calculation will be employed in this study as a proxy of valuation of company as follow:

$$\text{Tobin's } Q = \frac{\text{book value of total debt} + \text{market value of common equity}}{\text{book value of total assets}}$$

#### Measurement of Corporate Tax Avoidance

As the tax returns of the company are highly confidential and unlikely to be accessible to public, we can only use various empirical proxies to estimate the tax returns of company based on publicly available information as suggested by Stewart (1981). In this study, we measure the activities of tax avoidance by examining the proportion of tax liability to accounting earnings of company using ETR. It is widely used as a measurement of tax avoidance activities of companies in Malaysia (see for examples, Noor, Fadzillah & Mastuki, 2010; Ariffin, 2013; Arif & Hashim, 2013; Salihu, Obid & Annuar, 2014). There are several variants of ETR include accounting, current and long-run cash and each of these variants has its merits and limitations. We utilise current ETR by dividing current-year tax expense by the accounting income before tax. Current ETR has its merit because current-year tax expense is used instead of aggregate tax expenses and it is able to reflect the tax deferral strategies of a company. The tax avoidance transaction of the sample companies in this study was measured by one minus current ETR.

#### Measurement of Corporate Governance

The ASEAN Corporate Governance Scorecard (ACGS) is utilize to assess the compliance of Malaysian PLCs with practices and principles in corporate governance. The scorecard was formed according to the OECD Principles of Corporate Governance and other international best practices. The mechanics in arriving the final score for each of the companies are as follows: Level 1 composed of 179 items which have been divided into 5 parts corresponding with the OECD Principles (Table 3) and Level 2 comprised of 32 bonus and penalty items. The bonus items were to reward companies which went extra miles by adopting other good governance practices and the penalty items were to penalize companies with poor governance practices. The total bonus and penalty points are added to or subtracted from the total score in Level 1 to give the final score for the company. The Top 100 companies with good disclosure are those with highest scores based on disclosures as per ACGS parameter among 873 companies. The PLCs ranked from Top 1 to 50 is defined as "well-governed companies" and

**Table 3** The ACGR (Composition and Structure of Level 1)

Components	Number of Items	Weightage (%)
Part A: Rights of Shareholders	25	10%
Part B: Equitable Treatment of Shareholders	17	15%
Part C: Roles of Stakeholders	21	10%
Part D: Disclosure and Transparency	41	25%
Part E: Responsibilities of the Board	75	40%
Total	179	100%

Source: MACGR 2014

given a dichotomous value of “1” while the PLCs ranked from Top 51 to 100 is defined as “less-governed companies” and given a dichotomous value of “0”.

### Measurement of Control Variables

The specific firm characteristics of return of assets (ROA), return of common equity (ROE), firm size (SIZE), leverage (LEV) and year-on-year growth (GROWTH) have been added as control variables in this study. Prior studies have indicated that these firm characteristics as determinants of firm value. ROA measure the efficiency of management in using its assets to generate earnings and it is obtained by dividing net income with total assets of companies. ROE reveals the profit generated by company using the money invested by shareholders and it is calculated by dividing net income by the value of the first course common stock of company. SIZE is measured in term of total assets of the company; LEV ratio defines the total debts relative to total assets; and GROWTH measures the percentage change of total revenues in current year as compared to previous year.

### Regression Models

The regression models of this study are based on a standard valuation model used in the accounting literature. In the first model, we attempt to answer the question on whether corporate tax avoidance behaviour increase or decrease firm value in the agency framework. In the second model, we investigate if corporate governance interacts with tax avoidance and has moderator effect on the valuation of companies. A new term of TA\*GOV has been added to examine the role of corporate governance in moderating the relationship of tax avoidance and firm value. The following specification models have been developed to test out the hypotheses.

$$Q_i = \beta_0 + \beta_1TA_i + \beta_2ROE_i + \beta_3ROA_i + \beta_4SIZE_i + \beta_5LEV_i + \beta_6GROWTH_i + \epsilon_i \tag{1}$$

$$Q_i = \beta_0 + \beta_1TA_i + \beta_2ROE_i + \beta_3ROA_i + \beta_4SIZE_i + \beta_5LEV_i + \beta_6GROWTH_i + \beta_7(TA*GOV)_i + \epsilon_i \tag{2}$$

Where:  $\beta_0$  represents constant interception,  $\beta_1- \beta_7$  are coefficients,  $i$  is the index the firm and  $\epsilon$  refers to residual error.

In order to reinforce the intuition that the negative impact of tax avoidance activities on firm value will be lessen for a well governed company and more severe for a less-governed company, Model 1 has been used to re-run on the subsamples of well-governed and less-governed companies. The

subsample is used to investigate whether the firm value derived from tax avoidance activities will vary according to the level of governance of companies.

## Result and Discussion

### Descriptive Statistics

Table 4 contains descriptive statistics relating to the independent and dependent variables for the Top 100 companies with good disclosures. It displays the analysis made up of 36 PLCs listed from Top 1 to 50 (hereinafter referred to as "Top-Half") and 46 PLCs listed from Top 51 to 100 (hereinafter referred to as "Bottom-Half"). Outlying observations were excluded to provide a more representative analysis: 14 PLCs ranked in the Top-Half and 4 PLCs ranked in the Bottom-Half have been excluded as these companies did not fulfil the sample selection's criteria.

Overall, tax avoidance activities of the Top-Half are almost the same as the Bottom-Half of 100 PLCs. The Top-Half carries the mean of tax avoidance of 77.69% whereas the Bottom-Half carries the mean of 77.94%. Companies ranked in the Top-Half marked a mean of Tobin's Q of 2.66, while the Bottom-Half have a lower average Tobin's Q of 1.99. It shows that, the companies with better corporate governance settings in place recorded a higher firm value as compared to the companies listed in the Bottom-Half.

The mean ROE of the Top-Half companies is 32.27 with a maximum value of 369.91 and the Bottom-Half recorded a mean ROE of 18.02 with a maximum value of 64.22. Typically, the well-governed companies have higher ROE than the less well-governed companies. Nevertheless, the average ROA of the Top-Half and the Bottom-Half is quite similar with a value of 10.01 and 10.41, respectively. The mean size (in term of total assets) of the Top-Half companies is RM 17,110.28 million whereas the mean size of the Bottom-Half is RM 3,763.69 million. A high standard deviation of size of these two

**Table 4** Descriptive Analysis for PLCs

	Q	TA (%)	ROE	ROA	SIZE (RM' mil)	LEV	GROWTH (%)
<i>Top Half (n=36)</i>							
Minimum	0.66	37.51	0.00	0.00	738.98	0.00	-19.87
Maximum	13.92	99.89	369.91	58.32	99,999.30	56.81	214.48
Mean	2.66	77.69	32.27	10.01	17,110.28	22.22	19.30
Median	1.64	76.35	13.45	6.51	8,619.79	21.05	3.86
Standard Deviation	2.98	11.26	65.26	11.74	22,029.37	14.20	50.18
<i>Bottom Half (n=46)</i>							
Minimum	0.58	21.09	0.00	0.00	78.54	0.00	-15.86
Maximum	6.76	99.74	64.22	38.19	27,261.28	47.76	134.19
Mean	1.99	77.94	18.02	10.41	3,763.69	16.68	8.25
Median	1.37	78.77	15.19	7.91	1,681.34	16.01	4.35
Standard Deviation	1.54	11.38	14.10	8.50	5,264.26	13.94	22.23

groups of companies indicates that the data is widely spread. The companies from the Top-Half have a mean leverage of 22.22 while the Bottom-Half have a lower mean leverage of 16.68. On average, the Top-Half companies have higher debt relatives to assets as compared to companies ranked in the Bottom-Half. The companies from both of the groups have recorded a negative growth rate but Top-Half in the better corporate governance ranking have higher growth rate in the sampled year.

### Correlation Analysis

Table 5 displayed the results of the Pearson Correlation analysis. ROE and ROA have a strong positive effect on Q ( $r = 0.748, p < 0.01$ ) and ( $r = 0.882, p < 0.01$ ), respectively. The companies with higher ROE/ROA resulted in a higher firm value. On the contrary, the result shows that size of a company has a weak negative effect on firm value ( $r = -0.189, p < 0.05$ ). It means that a company possesses larger total assets which determine the size of the company is negatively associated with firm value. The results however indicate that tax avoidance, governance, leverage and growth has no association with firm value. The result further shown that governance has a medium positive correlation with size and a weak positive correlation with leverage. ROA and ROE are positively associated and both of them reflecting the financial health of a company.

### Multiple Linear Regression Analysis on Full Sample

The results of regression analysis of these two models is presented in Table 6. In model 1, the value of adjusted  $R^2$  is 0.8160 indicates that 81.6% of the firm value can be explained by the 6 independent and control variables. The value of adjusted  $R^2$  in Model 1 is considered large indicating a good model. In model 2, a higher value of adjusted  $R^2$  of 0.8303 shows that it is a slightly better model. It means that 83.03% of the variability of the firm value can be explained by the 7 variables tested including the interaction variable of TA\*GOV.

T-test analysis has been employed to test out the two hypotheses developed in this study. By referring to Model, it shows that TA has a significant negative relationship with Q ( $\beta = -0.0253, p < 0.05$ ). This implies

**Table 5** Correlations Analysis for PLCs

	Q	TA	GOV	ROE	ROA	SIZE	LEV	GROWTH
Q	1							
TA	.036	1						
GOV	.146	-.011	1					
ROE	<b>.748**</b>	.054	.159	1				
ROA	<b>.882**</b>	.170	-.020	<b>.720**</b>	1			
SIZE	<b>-.189*</b>	.116	<b>.406**</b>	-.101	<b>-.208*</b>	1		
LEV	-.043	.086	<b>.194*</b>	.063	-.154	.147	1	
GROWTH	-.136	-.143	.148	-.062	-.140	.143	.109	1

\*\*Significant at the 0.01 level (1-tailed) \*Significant at the 0.05 level (1-tailed).

**Table 6** Empirical Result of Regression Analysis on Full Sample

DV: Q	Model 1 (Test for H <sub>1</sub> )				Model 2 (Test for H <sub>2</sub> )			
	Coefficient	Std. Error	t-statistic	Prob.	Coefficient	Std. Error	t-statistic	Prob.
C	1.8655	0.7872	2.3697	0.0204	1.8804	0.7560	2.4873	0.0152
TA	-0.0253	0.0103	-2.4466	<b>0.0168</b>	-0.0270	0.0099	-2.7164	<b>0.0082</b>
ROE	0.0093	0.0037	2.5122	<b>0.0142</b>	0.0075	0.0036	2.0503	<b>0.0439</b>
ROA	0.1821	0.0176	10.354	<b>0.0000</b>	0.1846	0.0169	10.914	<b>0.0000</b>
SIZE	7.5707	7.0606	0.1072	0.9149	-7.5906	7.4606	-1.0178	0.3121
LEV	0.0153	0.0084	1.8332	<b>0.0708</b>	0.0124	0.0081	1.5371	0.1286
GROWTH	-0.0024	0.0030	-0.7867	0.4340	-0.0029	0.0029	-0.9859	0.3275
TA*GOV					0.0084	0.0031	2.6913	<b>0.0088</b>
R-squared	0.8298				0.8451			
Adjusted R-squared	0.8160				0.8303			
F-statistic	60.1224				56.916			
Prob. (F-Statistic)	0.0000				0.0000			
Durbin-Watson	2.0356				2.1143			

that the tax avoidance activities will decrease the firm value as agency costs come along with tax avoidance activities. The beta coefficient of TA is -0.0253 and can be interpreted as 1 unit increase in tax avoidance will reduce the firm value by 0.0253 unit. The control variables of ROE, ROA and LEV exhibit a significant positive relationship with Q. The companies with higher net income and engaged in debt financing would have a higher firm value. However, SIZE and GROWTH do not have any significant effect on firm value.

In Model 2, the interaction variable of TA\*GOV has been added to the equation to test out if governance moderates the relationship between tax avoidance and firm value. Similar with Model 1, we found that TA has a significant negative relationship with Q ( $\beta = -0.0270$ ,  $p < 0.05$ ). Tax avoidance activities will decrease the firm value even though corporate governance has been employed in safeguarding the shareholders interest resulted from tax avoidance.

### Multiple Linear Regression Analysis on Subset Samples

To distinguish the effect of corporate avoidance on firm value for two subset samples: the group of well-governed PLCs (Top-Half) and the less-governed PLCs (Bottom-Half), we conducts regression analysis using regression Model 1 on these two subset samples separately. Table 7 displayed the results of the regression specified in regression Model 1 for the well-governed PLCs represented by Subset Sample 1 and less governed PLCs represented by Subset Sample 2. Subset Sample 1 of well-governed companies is a better model with the adjusted R<sup>2</sup> of 0.9351 if compared to Sample 2 of less-governed companies with an adjusted R<sup>2</sup> = of 0.6121. The effect of tax

**Table 7** Empirical Result of Regression Analysis on Subset Sample

DV: Q	Subset Sample 1 Well-governed PLCs (N = 36)				Subset Sample 2 Less-governed PLCs (N = 46)			
	Coefficient	Std. Error	t-statistic	Prob.	Coefficient	Std. Error	t-statistic	Prob.
C	1.6100	0.9696	2.6605	0.1080	1.3918	1.0207	1.3636	0.1805
TA	-0.0190	0.0121	-1.5662	0.1285	-0.0156	0.0143	-1.0873	0.2836
ROE	0.0026	0.0033	0.7731	0.4459	-0.0437	0.0259	-1.6852	0.0999
ROA	0.2318	0.0190	12.2086	<b>0.0000</b>	0.2249	0.0457	4.9212	<b>0.0000</b>
SIZE	-7.2606	6.2606	-1.1611	0.2554	1.6505	3.0205	0.5439	0.5896
LEV	0.0105	0.0096	1.0916	0.2843	0.0124	0.0127	0.9770	0.3346
GROWTH	-0.0020	0.0027	-0.724407	0.4748	-0.0016	0.0067	-0.2338	0.8164
R-squared	0.9465				0.6638			
Adjusted R-squared	0.9351				0.6121			
F-statistic	82.6239				12.8326			
Prob. (F-Statistic)	0.0000				0.0000			
Durbin-Watson	2.202288				2.2349			

avoidance on firm value is negative although we do not find any significant relationship in both samples ( $\beta = -0.018975$ ,  $p > 0.05$ ;  $\beta = -0.026990$ ,  $p > 0.05$ ). Nevertheless, ROA has significant positive relationship with firm value ( $\beta = 0.231772$ ,  $p < 0.00$ ;  $\beta = 0.2249$ ,  $p < 0.00$ ), that can be interpreted as ROA will make greater the firm value for well-governed companies.

## Conclusion

We examine the relationship between tax avoidance and after-tax value of Malaysian companies in an agency framework and found that tax avoidance is negatively associated with the valuation of the companies. We conclude that tax avoidance is not valued by shareholders and is in fact resulted in value reducing. Generally, the results are consistent with an agency cost theory of tax avoidance which perceived that the complex nature of tax avoidance would provide a shield for the self-serving managers to mask their action and exploit the wealth from tax saving activities. As a result, tax avoidance does not enhance the firm value. In other words, the direct effect of tax avoidance of increasing the firm value is potentially offset by the increased possibilities of rent diversion in the agency framework. This result is consistent with the result of prior studies. The study of Wang (2011) found that the benefits resulted from tax avoidance are potentially offset by agency costs and it reduces firm value in the Chinese Institutional Context. The result proves further the finding of Desai and Dharmapala (2009) that tax avoidance is not merely a transfer of wealth from government to the shareholders of company because tax avoidance would increase possibility of managerial opportunism and allow the tax savings to be piped into the opportunistic managers.

We then investigate if the corporate governance plays a role in mitigating the overall negative effect of tax avoidance on firm value in the agency framework. We predict that the agency problem will be lessened with governance control in place and tax avoidance activities should represent a transfer of value from government to shareholders and it increases firm value. However, we found that the strength of governance mechanism does not have any moderator effect on the relationship of tax avoidance and firm value. We further investigate whether the overall effect of tax avoidance on firm value will be different for well-governed companies and less-governed companies. Interestingly, we still found that tax avoidance has a negative impact on firm value, although the relationship becoming insignificant. Generally, our finding is inconsistent with the study of Desai and Dharmapala (2009) and Wang (2011). Nevertheless, our findings have some similarity with Wang (2011) that the overall effect of tax avoidance which affects the firm value negatively is diminishing in well-governed companies.

The traditional assumption that views corporate tax avoidance activities as value enhancement activities and the moderator effect of governance mechanism does not hold in this study. There are two possible explanations: (1) In this digital era with several atrocious news of global companies such as Starbucks, Google and Amazon have come under fire for avoiding paying tax on their sales, tax avoidance might lead to scepticism among investors of the traditional view of value-enhancement. The shareholders might place a lower value premium on companies who engaged in tax avoidance activities aggressively as it may affect the corporate reputation; (2) the corporate governance mechanisms in Malaysia are not effective, and/or there is inadequate relevant information provided to the shareholders for a possibility of control mechanism to function.

The findings contribute to the literature by adding evidence on the economic consequences of tax avoidance as well as the corporate governance's effect on tax avoidance in developing country. The empirical evidences from this study contributed to a growing line of research on tax avoidance and corporate governance in developing country. Most importantly, the study of Arif and Hashim (2013) on corporate governance and the value relevance of tax avoidance in Malaysia provides only preliminary evidence and this study added more evidence to the stream of literature that investigates the role of tax avoidance strategies, as moderated by the level of corporate governance, in determining the firm value in Malaysia. This study also attempts to understand the tax avoidance behaviour of company that would able to help the policymakers in formulating and implementing effective taxation systems in line with the dynamic economic environment in Malaysia. The findings in this study which revealed the negative relationship between corporate tax avoidance and firm value in Malaysia institutional setting suggested that companies to understand the negative consequences of corporate tax avoidance when engaging in tax planning aggressively.

The limitation of our study is in using cross-sectional data by observing a sample at only one point in time due to time and financial constraints. Future study should consider using time-series data or panel data by analysing multiple companies at various points in time. Furthermore, it would be interesting for future researchers to explore tax avoidance and corporate transparency. Although corporate governance is closely related to

corporate transparency there are measured using different measurements. Corporate governance is determined by the accounting standards, law protection of shareholders whereas corporate transparency is predicted by using the level of information disclosure and timeliness of reporting. While collection of secondary data has been the method of data collection in most of the literatures studied the topic of tax avoidance and firm value in developed and developing countries, future researchers are recommended to engage a different method of data collection, for example in depth interview with the tax agents hired by big corporation for tax planning purposes.

## References

- Arif, A. K., & Hashim, H. A. (2013). *Governance and the value of tax avoidance: Preliminary evidence*. Paper was Presented The 5<sup>th</sup> International Conference on Financial Criminology (ICFC).
- 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. doi: 10.7763/IJTEF.2013.V4.287
- Bursa Malaysia Top 100 Listed Companies (5 years) (n.d.). Retrieved from <http://www.harimaucapital.com/2013/03/2012-2009-bursa-malaysia-top-100-listed.html?>
- Chen, K. P., & Chu, C. C. (2005). Internal control versus external manipulation: A model of corporate income tax evasion. *RAND Journal of Economics*, 151-164.
- Chen, X., Hu, N., Wang, X., & Tang, X. (2014). Tax avoidance and firm value: Evidence from china. *Nankai Business Review International*, 5(1), 25-42. doi: 10.12691/jfa-6-1-2
- Crocker, K. J., & Slemrod, J. (2005). Corporate tax evasion with agency costs. *Journal of Public Economics*, 89(9-10), 1593-1610. doi: 10.1016/j.jpubeco.2004.08.003
- Desai, M. A., & Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics*, 79(1), 145-179. doi: 10.1016/j.jfineco.2005.02.002
- Desai, M. A., & Dharmapala, D. (2009). Corporate tax avoidance and firm value. *Review of economics and statistics*, 9(3), 537-546. doi: 10.1162/rest.91.3.537
- Graham, J. R. (2003). Taxes and corporate finance: A review. *The Review of Financial Studies*, 16(4), 1075-1129. doi: 10.1093/rfs/hhg033
- 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. doi: 10.1016/S0278-4254(96)00055-5
- Haat, M. H., Rahman, R. A., & Mahenthiran, S. (2008). Corporate Governance, Transparency and Performance of Malaysian Companies. *Managerial Auditing Journal*, 9(1), 744-748.
- Hanlon, M. & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, 50, 127-178. doi: 10.1016/j.jacceco.2010.09.002
- 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, 126-141. doi: 10.1016/j.jpubeco.2008.09.004
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360. doi: 10.1016/0304-405X(76)90026-X

- Kim, J., Li, Y., & Zhang, L. (2011). Corporate tax avoidance and stock price crash risk: Firm-level analysis. *Journal of Financial Economics*, 100(3), 639. doi: 10.1016/j.jfineco.2010.07.007
- Lee, B. B., Dobiyanski, A., & Minton, S. (2015). Theories and empirical proxies for corporate tax avoidance. *The Journal of Applied Business and Economics*, 17(3), 21-34.
- Malaysia-ASEAN corporate governance report 2014. (2014). Retrieved from [http://www.mswg.org.my/files/editor\\_files/file/publication/Malaysia-ASEAN\\_Corporate\\_Governance\\_Report\\_2014\\_upload.pdf](http://www.mswg.org.my/files/editor_files/file/publication/Malaysia-ASEAN_Corporate_Governance_Report_2014_upload.pdf)
- Malaysia's new corporate governance code (2012). *International Financial Law Review*, Retrieved from <http://ezproxy.um.edu.my:2048/login?>
- Moradi, M., Mohammadi, M. & Saeedi, P. (2015). Relationship between tax avoidance and firm value in iran. *GMP review*, 16, 493-498.
- Mustapha, M., & Ayoib, C. A. (2011). Agency theory and managerial ownership: Evidence from malaysia. *Managerial Auditing Journal*, 26(5), 419-436. doi: 10.1108/02686901111129571
- Noor, R. M., Fadzillah, N. S. M., & Mastuki, N. (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.
- Pasternak, M., & Rico, C. (2008). Tax Interpretation, Planning, and Avoidance: Some Linguistic Analysis. *Akron Tax Journal*, 23(1), 2.
- Rezaei, F., & Ghanaeenejad, M. (2014). A review on transparency in financial reporting and its effects on tax avoidance and firm value. *Journal of Commerce and Accounting Research*, 3(2), 8-21.
- Salihu, I. A., Obid, S. N. S., & Annuar, H. A. (2014). Government ownership and corporate tax avoidance: Empirical evidence from Malaysia. *Handbook on the emerging trends in scientific research*, 673-688.
- Slemrod, J. (2004). Are corporate tax rates, or countries, converging?. *Journal of Public Economics*, 88(6), 1169-1186. doi: 10.1016/S0047-2727(03)00061-6
- Shepherd, J. (2004). *What is the Digital Era?* University of Strathclyde, UK. Retrieved from [www.igi-global.com/chapter/digital-era/29024](http://www.igi-global.com/chapter/digital-era/29024)
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance*, 52(2), 737-783. doi: 10.1111/j.1540-6261.1997.tb04820.x
- The Components of the FTSE Bursa Malaysia KLCI Index for 2015. (2015). Retrieved from <http://topforeignstocks.com/indices/the-components-of-the-ftse-bursa-malaysia-khci-index/>
- Top 30 companies from Malaysia's KLCI. (n.d.). Retrieved from <http://aseanup.com/top-30-companies-from-malaysia-khci/>
- Wang, X. (2011). Tax avoidance, corporate transparency, and firm value. *American Accounting Association Annual Meeting - Tax Concurrent Sessions*. doi: 10.2139/ssrn.1904046
- Zimmerman, J. L. (1983). Taxes and firm size. *Journal of accounting and economics*, 5, 119-149. doi: 10.1016/0165-4101(83)90008-3