GOVERNANCE AND THE VALUE RELEVANCE OF TAX AVOIDANCE

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ABSTRACT

This paper provides evidence on the link amongst governance, tax avoidance and firm value. We examine whether tax avoidance is associated with firm value and whether the strength of such relation is dependent on the quality of governance. We employ Effective Tax Rates (ETR) to measure tax avoidance and the Malaysia Corporate Governance (MCG) Index to rate firm-level governance. The findings rely on analysis of 203 firms that are listed in the MCG Index between 2009 and 2011. We find that tax avoidance is viewed by investors as a value-enhancing activity, and that the value relevance of tax avoidance is greater for firms with higher-quality governance.

Keywords: *tax avoidance, MCG Index, Malaysia*

87

Introduction

This paper examines the link amongst governance, tax avoidance and firm value. Similar to the other investment opportunities that are being faced by firms, tax avoidance decisions also involve managerial discretion. Although the wealth of shareholders may be enhanced by reducing the corporate taxes that are paid to the government, managers may have personal incentives to over- or under-invest in tax avoidance. We perceive that the strength of governance mechanisms has a role in mitigating the agency problems that are associated with tax avoidance. We examine whether tax avoidance is associated with firm value, and whether the strength of such relation depends on governance quality.

Given that taxes pose a significant cost to firms, managers may engage in different tax avoidance activities to reduce their tax burden. Such actions include tax deduction activities and relocation of operations in countries with low tax rates. Given that the allowable range of tax avoidance activities may differ across firms, two conflicting views have been proposed on how tax avoidance affects firm value. On the one hand, shareholders must positively value tax avoidance because a reduction in taxes may enhance their wealth. On the other hand, when the agency cost is considered, the complex nature of tax avoidance may protect managers from expropriation, but may negatively affect the shareholders. These views have been supported in empirical research (e.g., Abdul Wahab and Holland 2012; Desai and Dharmapala 2009). Nevertheless, the governance mechanisms of firms have an important role in shaping and monitoring managerial behaviours. In the context of tax avoidance, the implementation of favourable governance mechanisms may reduce the risk of misappropriation by managers. If this strong governance view holds, managers are more likely to engage in tax avoidance activities to enhance the wealth of their shareholders. Therefore, the links amongst governance, tax avoidance and firm value must be investigated further.

This paper provides evidence on the value relevance of tax avoidance and determines whether the implications of such value may vary with corporate governance. Tax avoidance is measured using Effective Tax Rates (ETR), whereas firm-level governance is rated using the Malaysia Corporate Governance (MCG) Index. The sample consists of 203 firms that are publicly listed in the Minority Shareholder Watchdog Group (MSWG) MCG Index

between 2009 and 2011. We find that tax avoidance is viewed by investors as a value-enhancing activity, and that the value relevance of tax avoidance is greater for firms with a higher quality of governance.

Our findings contribute to the literature in the below ways. First, we contribute evidence on the value of tax avoidance from the perspective of the capital market (e.g., Hanlon and Slemrod 2009) and of a developing country (i.e., Malaysia). The severe agency conflicts and weak investor protection policies in developing countries increase the likelihood of managerial rent diversion to occur in these countries in the form of direct theft of earnings (Wang 2011). Therefore, further evidence on the value relevance of tax avoidance in the context of developing countries must be obtained. Second, we consider the fact that investors may perceive the value of tax avoidance differently for firms with different governance structures. Although existing studies (e.g., Abdul Wahab and Holland 2012) employ a few governance indicators to explain the relationship amongst tax, governance and firm value, we use a comprehensive measure of governance to test our hypothesis. We utilise the MSWG MCG Index, which encompasses a broad set of governance actions and attributes as well as provides a better picture of the firm-level governance structure in the Malaysian context.

The rest of the paper is structured as follows: Section 2.0 presents the related literature and hypothesis development, Section 3.0 discusses the research methodology, Section 4.0 reports the results, and Section 5.0 concludes the paper.

Related Literature and Hypothesis Development

Tax avoidance refers to the investments of managers in a wide range of tax reduction activities to reduce the amount of corporate taxes that they pay to the government. Although the term 'tax avoidance' has been broadly defined in the literature[1], we define such a term as the reduction of explicit taxes per dollar of pre-tax accounting earnings (Hanlon and Heitzman 2010). Tax avoidance represents a wide range of tax planning strategies, including legal activities and aggressive transactions that fall into the grey area. Firms generally engage in tax avoidance activities to reduce the

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[1] For example: Tax evasion, tax non-compliance and tax shelters.

amount of taxes that they must pay. Firms benefit from greater tax savings because such savings have a positive implication on both the cash and profit of the firms. However, the involvement of firms in tax avoidance activities exposes them to tax avoidance costs, which arise in the form of fines and legal penalties. Non-tax costs may also arise from the hidden actions of managers. Tax management activities also involve 'political cost' whereby firms may be reluctant to manage their taxes and consequentially be perceived as unpatriotic or poor corporate citizens. Therefore, two views have been proposed on the implications of tax avoidance. On the one hand, firms perceive the potential benefits of tax avoidance because of the savings that they can enjoy. On the other hand, firms are placed at risk of paying additional costs for engaging in activities that can reduce their taxes. Given these conflicting implications of tax avoidance, decision makers trade off the benefits and costs in determining the extent of tax avoidance.

Corporate tax avoidance has also become a concern in the Malaysian context as these taxes are considered the main and biggest contributor to the revenues of the Malaysian government. In 2010, around 50.64% of the direct taxes in Malaysia were collected from corporations, and 763 civil tax cases were filed with penalties amounting to MYR 1,168.55 million (Inland Revenue Board 2011). The Inland Revenue Board of Malaysia has enforced continuous measures to eliminate corporate tax evasion and avoidance. Malaysia also has moderate levels of tax evasion as compared to its neighbouring countries. Tsakumis et al. (2007) find that the tax evasion level[2] in Malaysia (31.63) is greater than that in Indonesia (21.37) and Singapore (13.40), but is lesser than the level in the Philippines (44.50) and Thailand (53.34).

Tax avoidance has become an area of concern because such activity may initiate or facilitate other fraudulent activities within a firm. Desai and Dharmapala (2006) argue that complex tax avoidance transactions can provide management with the tools, masks and justifications for engaging in opportunistic managerial behaviours, including earnings manipulation, related party transactions and other resource-diverting activities. Despite the importance of the intersection between financial and tax reporting, such area has been relatively unexplored in research (Frank et al. 2009).

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[2] Measured by the mean estimates of the shadow economy of a country as a percentage of GDP. A higher score represents a higher tax evasion level.

Although managers are being pressured to report a high financial income, they have the fiduciary duty to reduce their expenditures by reporting a low taxable income (Heltzer et al. 2012). These two conflicting obligations may result in aggressive reporting. While tax avoidance is legally permissible, aggressive financial reporting may lead to aggressive and illegal taxable reporting activities. Frank et al. (2009) suggest that those firms that are aggressive in their financial reporting are also aggressive in their taxation reporting. They find a positive relation between aggressive book reporting and aggressive tax reporting as well as suggest that insufficient costs offset the conflict between these two incentives. Given that shareholders suspect that those managers who are aggressive with the IRS may also be aggressive in their financial reporting, the market may begin to doubt the accuracy of the financial statements of such companies (Hanlon and Slemrod 2009).

While tax avoidance has long been a subject of extensive academic research in most developed countries, evidence from developing countries is sparse, which presents a dilemma because of the cross-national differences in tax evasion that are caused by institutional, demographic and attitudinal factors (Richardson 2006). Riahi–Belkaoui (2004) finds that competition laws, economic freedom, importance of equity market and incidence of violent crimes explain tax compliance behaviour across 30 countries. Using institutional anomie theory, Bame–Aldred et al. (2013) find that cultural values predict tax evasion behaviour in different countries. Tsakumis et al. (2007) find evidence on the effect of culture on tax evasion levels. Besides, the risk of managerial rent diversion is more prominent in developing countries that are characterised by severe agency conflicts and weak investor protection. Given these findings, the issue of tax evasion in Malaysia must be investigated further to provide evidence from developing countries.

The role of governance in tax management activities must be examined for several reasons. Firstly, tax issues have made their way into the boardroom. Given that boards are responsible for allocating resources, improving performance and increasing shareholder wealth, they have a central role in choosing tax management strategy. Tax planning can be seen as a value-maximizing activity that will lower taxes and improve the bottom line performance of firms. Therefore, companies with different governance structures may pursue different types of tax management. In line with this view, Minnick and Noga (2010) find that corporate governance structure

affects how a company manages its taxes. They also find that incentive compensation drives managers to decide on investments with longer-horizon pay outs, such as tax management, which further benefits shareholders.

Secondly, the need to consider the role of governance in taxation issues is substantiated by views involving agency theory. Tax decisions in publicly listed firms are not directly made by shareholders (principal), but by their agents. In this principal–agent relationship, agents possess private information regarding the extent of legally permissible reductions in taxable income and may also use tax evasion to inflate the tax shields of a firm (Crocker and Slemrod 2005). Information asymmetry between managers and shareholders may facilitate managers to act in their own interest, while tax activities may provide opportunity for managerial opportunism (Desai and Dharmapala 2006). Consistent with the agency cost view of tax aggressiveness, several studies indicate that firms with different governance structures exhibit different tax avoidance behaviours. Desai and Dharmapala (2006) find that the levels of incentive compensation and tax sheltering are negatively associated, especially for firms with poor governance. Chen et al. (2010) find less tax aggressive behaviours in family-owned firms, which indicates that family owners are more concerned about potential price discounts than potential tax savings. Taken together, these studies provide insights into the role of incentives on tax avoidance and highlight the role of governance in taxation issues.

Hypothesis Development

The hypothesis development in this paper relies on two streams of research, namely, the value of tax avoidance to investors and the effect of corporate governance on firm value. When taken together, these two lines of research suggest a link amongst governance, tax avoidance and firm value.

Tax avoidance has potential effects on the shareholders of the firm. Hanlon and Heitzman (2010) suggest the following notions. First, if risk-neutral shareholders demand that managers maximise their after-tax cash flows, tax avoidance must be seen as a natural by-product of managerial decision making. Second, if managers optimally avoid taxes and if investors form unbiased beliefs about the extent and payoff from tax avoidance, no association must emerge between tax avoidance and firm value. These

two assumptions only apply when the right incentives are provided, the incentives work perfectly, and the managers and shareholders understand the risk and rewards of avoiding taxes. However, these ideal situations do not hold in the agent–principal relationship because of information asymmetry between managers and shareholders.

Using various tax measures, several studies suggest that investors consider tax information in their investment decisions (e.g., Amir and Sougiannis 1999; Bauman and Shaw 2008; Kumar and Visvanathan 2003). Those studies that investigate the effect of tax avoidance on firm value are more relevant to our study. In theory, tax avoidance is deemed by investors as a value-enhancing activity. Managers perform tax avoidance activities for the sole purpose of reducing corporate tax obligations. Under the synergy-motivated tax planning, tax planning activities are conducted by managers who act in the interest of their shareholders. Therefore, reducing the transfers from shareholders to the government through tax planning activities generally enhance the wealth of shareholders.

However, tax planning activities may not be desirable to the shareholders when agency cost is considered because such activities can be subject to the discretion of opportunistic managers. Desai and Dharmapala (2006) argue that tax planning, which are typically complex and opaque, provides opportunities for managerial opportunism. From this perspective, tax planning promotes lack of transparency, which later provides a 'shield' for managers to extract rent at the expense of shareholders by understating their accounting profits. Moreover, tax avoidance activities may allow managers to pursue activities that are designed to hide unfavourable news and mislead investors. Similar to the underlying incentives in concealing adverse operating outcome, tax avoidance activities facilitate the hoarding of unfavourable news for an extended period (Kim et al. 2011). The ability to hide and accumulate such news through tax avoidance activities may consequently lead to extreme outcomes. In short, the agency costs in tax avoidance activities may outweigh the potential tax savings that are accrued by shareholders.

Empirical evidence suggests that tax avoidance activities can affect firm value and that investors perceive tax avoidance as related to the value of firms. Given that information asymmetry between managers and

shareholders may facilitate managers to act in their own interest, evidence suggests a negative relationship between the level of tax planning and firm value (Abdul Wahab and Holland 2012). Consistent with the agency perspective of tax avoidance, Kim et al. (2011) find that tax avoidance is positively associated with stock price crash risk. However, Desai and Dharmapala (2009) find no relation between tax avoidance and firm value. Therefore, findings on the value of corporate tax avoidance activities are mixed. Given the dual perspective on the consequences of tax avoidance to firms, tax avoidance and firm value can be related in two ways. On the one hand, if the synergy-motivated view holds, tax avoidance must be positively associated with firm value. On the other hand, if the agency view holds, tax avoidance must be negatively associated with firm value. Therefore, we set our first hypothesis as follows:

H_1: *An association exists between tax avoidance and market value.*

The employed perspective in the first hypothesis refers to the single effect of tax avoidance and does not incorporate the fact that agency costs in firms can be offset by high-quality governance mechanisms. A stream of research supports the relevance of high-quality corporate governance in determining firm value (Klapper and Love 2004; Durnev and Kim 2005). Firstly, firms with better governance are more valued than those with poor governance because of two reasons. First, investors are willing to pay more because they recognise that, with better investor protection, more profits will be returned to them as interests or dividends instead of being expropriated by the entrepreneurs who control the firm (La Porta et al. 1999). Secondly, favourable governance may reduce the expected returns on equity by reducing the monitoring and auditing costs for shareholders, which will lead to a higher firm valuation. Studies that rely on corporate governance as a measure of governance quality are also relevant to this study. Conducted in the Korean context, Black et al. (2006) find a strong positive correlation between the overall corporate governance index and firm value. Gompers et al. (2003) show that the companies with a higher level of corporate governance are valued 56 percentage points higher than those with a lower level of corporate governance. Collectively, these studies show that the quality of governance mechanisms affects the wealth of shareholders in a way that better governance can enhance firm value.

In the tax avoidance context, governance mechanisms may constrain opportunistic behaviours and provide protection from managerial rent extraction. Therefore, favourable governance mechanisms may help alleviate the concerns of investors about the potential agency problems that are associated with tax avoidance. Corporate governance mechanisms may reduce the risks that are associated with the potential expropriation of shareholder wealth by opportunistic managers. To address this issue, we examine whether the relation between tax avoidance and firm value varies with the quality of governance mechanisms.

Using various measures of tax avoidance and governance, studies on the effects of tax avoidance activities on investor welfare find that such effect depends on the strength of the monitoring mechanisms that are adopted by firms. Hanlon and Slemrod (2009) find that the news on the involvement of firms in tax shelters may produce a negative market reaction, but such a reaction is less pronounced for well-governed firms. Kim et al. (2011) find that the positive relation between tax avoidance and stock price crash risk is attenuated in the events where firms have strong external monitoring mechanisms. In a similar vein, Wilson (2009) finds that the stock return performance of tax sheltering firms with low anti-takeover protection is greater than that of non-sheltering firms during the pre-, active- and post-sheltering periods. The evidence that tax-sheltering firms outperform non-sheltering firms is consistent with the view that tax sheltering can enhance the value of well-governed firms.

Empirical evidence on the relation between tax avoidance and firm value is also relevant to our study. Desai and Dharmapala (2009) find that their proxy for tax avoidance is only related to the value of firms with higher levels of institutional holding or lower levels of antitakeover protection. These findings indicate that tax sheltering signals a higher possibility of managerial wealth diversion in poorly governed firms, and are thus perceived by investors to add no value to the firm. However, Abdul Wahab and Holland (2012) find that governance mechanisms do not mitigate the negative relationship between tax planning and firm value even in the case of 'high governance firms.' Given their use of the proportion of non-executive directors on the board and the percentage of shares by institutional investors as measures of governance, Abdul Wahab and Holland attribute their findings to the possibility for the implementation of ineffective corporate

governance mechanisms or to the limited tax-related information that is made available to shareholders.

Taken together, these findings show that governance differences explain the cross-sectional variations in the consequences of tax avoidance. Most of these findings indicate that tax avoidance has net benefits in an environment where monitoring and control mechanisms can effectively constrain managerial opportunism. In line with this finding, we test whether the quality of governance mechanisms can explain the variation in the relation between tax avoidance and firm value. Therefore, our second hypothesis is as follows:

H_2: The strength of governance mitigates the association between tax avoidance and market value.

Research Methodology

Our sample consists of the top 100 publicly listed firms from the MCG Index report for 2009, 2010 and 2011. The MCG Index report is used as a basis for data selection because this report offers a comprehensive measure of corporate governance. The MCG index is developed by assessing the conformance, performance and corporate governance practices of publicly listed firms in Malaysia. Therefore, this index covers broad areas of governance that are relevant in the Malaysian context. The list from the index is matched with the financial and market data of the firms that are obtained from the Compustat database. We exclude those firms with negative earnings. These data requirements lead to a final sample of 203 firms.

A firm-value model is applied for the analysis. This model, which is originally derived from Ohlson (1995), has been widely used in value relevance studies including those that are related to tax (e.g., Abdul Wahab and Holland 2012). To cater for scale effects, we follow the approach of Easton and Sommers (2003), where all variables are deflated by the dependent variable (i.e., market value three months after the end of the financial year). The models for testing the hypotheses are specified as follows:

For H_1, a_6 tests the value relevance of TA_j as follows:

$$MV_j = 1 + a_1 BV_j + a_2 EARN_j + a_3 LEV_j + a_4 INT_j + a_5 SIZE_j + a_6 TA_j + a_7 GOV_j + \text{year} + \text{ind} + \varepsilon_j \text{ (1)}.$$

For H_2, a_8 tests whether the value relevance of TA_j is affected by GOV_j as follows:

$$MV_j = 1 + a_1 BV_j + a_2 EARN_j + a_3 LEV_j + a_4 INT_j + a_5 SIZE_j + a_6 TA_j + a_7 GOV_j + a_8 [TA_j \text{x} GOV_j] + \text{year} + \text{ind} + \varepsilon_j \text{ (2)}.$$

In the above models, the (unscaled) dependent variable is market value (*MV)*, which is represented by the market value three months after the end of the fiscal year. This period is chosen to reflect the lags in the disclosure of annual financial statements to shareholders. The independent variables include tax avoidance (*TA*), quality of governance (*GOV*) and the interaction between these two variables. *TA* is derived from ETR, which reflects the effectiveness of tax planning. ETR is calculated by dividing the total tax expenses by the pre-tax income. This measure is selected because ETR has been consistently used in tax avoidance studies (e.g., Chen et al. 2010). Given that low effective tax rates reflect tax avoidance behaviours (Md Noor et al. 2010), *TA* is measured as statutory tax rate minus ETR. *GOV,* which represents the quality of the governance monitoring mechanism, is derived from the ranking of corporate governance in the MSWG MCG Index. *GOV* has a dichotomous value of one if a firm resides in the 'Top 50 percent' of the Index and has a value of zero if a firm resides in the bottom 50 percent of the Index.

We also include several financial measures as control variables. *BV* denotes the book value of the equity of firm *j* at the end of the fiscal year, whereas *EARN* denotes the earnings before the extraordinary items of firm *j* for the fiscal year. Both variables, which are the fundamental variables in Ohlson (1995), include the set of financial information that jointly determines market value. We also include total asset, debt to equity and intangible assets to control for Size (*SIZE*), leverage (*LEV*) and growth (*INT*). Previous studies find that size, leverage and growth determine firm value. We also include control variables for year (*year*) and industry (*ind*).

Results

Table 1: Descriptive Statistics

		MV	TA	BV	EARN	SIZE	LEV	INT
GOV^{Top50} (n = 108)								
Mean		5,670.88	0.09	3,529.19	421.95	8,071.80	2,220.88	805.30
Median		2,058.49	0.10	1,219.88	194.54	2,243.27	515.01	71.14
Std. Deviation		9,291.28	0.58	5,446.53	548.06	12,986.82	4,332.70	2,220.68
Percentiles	25	555.04	(0.02)	472.57	72.49	931.24	45.60	0.78
	50	2,058.49	0.10	1,219.88	194.54	2,243.27	515.01	71.14
	75	6,158.87	0.23	4,202.83	558.75	9,262.57	1,988.00	470.54
GOV^{Bottom50} (n = 95)								
Mean		2,899.55	(0.12)	1,806.80	236.82	3,815.67	1,135.87	269.60
Median		912.73	0.06	747.52	86.02	1,372.01	179.46	18.63
Std. Deviation		6,527.45	1.85	3,435.04	491.46	7,453.96	3,223.93	1,094.40
Percentiles	25	366.63	(0.03)	425.44	46.63	761.60	15.43	-
	50	912.73	0.06	747.52	86.02	1,372.01	179.46	18.63
	75	1,983.98	0.22	1,520.78	184.94	2,755.37	769.00	111.02

Variable Description:
MV denotes the market value three months after the end of the fiscal year.
BV denotes the book value of the equity of firm j at the end of the fiscal year.
EARN denotes the earnings before the extraordinary items of firm *j* for the fiscal year.
SIZE denotes the total asset of firm *j* for the fiscal year.
LEV denotes the debt to equity of firm *j* for the fiscal year.
INT denotes the intangible assets of firm *j* for the fiscal year.

Table 1 presents the descriptive statistics for the financial and market variables of the firms at the top 50 percent (GOV^{Top50}) and bottom 50 percent (GOV^{Bottom50}) of the MCG Index. The GOV^{Top50} firms generally have greater values than GOV^{Bottom50} firms. On average, the GOV^{Top50} firms have a market value (*MV*) of MYR 5,670.88 million, whereas the GOV^{Bottom50} firms have a market value (*MV*) of MYR 2,899.55 million. The GOV^{Top50} firms has a mean book value (*BV*) of MYR 3,529.19 million and mean earnings (*EARN*) of MYR 421.95 million. The mean *BV* and *EARN* of the GOV^{Bottom50} firms are MYR 1,806.80 and MYR 236.82, respectively. The GOV^{Top50}firms have an average total assets (*SIZE*) of MYR 8,071.80 million, debt to equity

(*LEV*) of MYR 2,220.88 and intangible assets of MYR 805.30 million. The GOV[Bottom50] firms have an average total assets (*SIZE*) of MYR 3,815.67 million, debt to equity (*LEV*) of MYR 1,135.87 and intangible assets of MYR 269.60 million. These groups have different tax avoidance measures (*TA*), with GOV[Top50] firms having a mean *TA* of 0.09 and GOV[Bottom50] firms having a mean *TA* of 0.12.

Table 2: Correlation Matrix

	MV	TA	GOV	BV	EARN	SIZE	LEV	INT
MV		−0.246**	0.210**	0.657**	0.735**	0.630**	0.431**	0.343**
		(0.000)	(0.003)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
TA	0.049		0.052	−0.068	−0.174*	−0.028	0.058	−0.103
	(0.490)		(0.464)	(0.000)	(0.013)	(0.697)	(0.411)	(0.144)
GOV	0.169*	0.078		0.180*	0.257**	0.206**	0.205**	.195**
	(0.016)	(0.271)		(0.010)	(0.000)	(0.003)	(0.003)	(0.005)
BV	0.707**	0.021	0.184**		0.814**	0.955**	0.692**	0.491**
	(0.000)	(0.767)	(0.009)		(0.000)	(0.000)	(0.000)	(0.000)
EARN	0.638**	0.012	0.175*	0.808**		0.830**	0.635**	0.522**
	(0.000)	(0.866)	(0.013)	(0.000)		(0.000)	(0.000)	(0.000)
SIZE	0.647**	0.016	0.195**	0.929**	0.735**		0.828**	0.587**
	(0.000)	(0.817)	(0.005)	(0.000)	(0.000)		(0.000)	(0.000)
LEV	0.544**	0.014	0.140*	0.750**	0.599**	0.896**		0.633**
	(0.000)	(0.845)	(0.047)	(0.000)	(0.000)	(0.000)		(0.000)
INT	0.583**	0.024	0.149*	0.382**	0.438**	0.430**	0.509**	
	(0.000)	(0.733)	(0.034)	(0.000)	(0.000)	(0.000)	(0.000)	

Spearman correlations are in the upper diagonal, while Pearson correlations are in the lower diagonal. Two-tailed p-values are enclosed in parentheses.
* and ** denote significance levels at 5% and 1%, respectively.

Table 2 presents the Pearson and Spearman correlation coefficients between the dependent and independent variables. A negative association is found between *MV* and *TA* in the Spearman model, but the same association is not found in the Pearson model. The correlations between *MV* and *GOV* in both the Spearman and Pearson models are positive. *MV* is strongly, positively associated with *BV* and *EARN* in both models. *MV* is also significantly

positively correlated with all the other independent variables (*SIZE, LEV* and *INT*) in both models, which indicates that firms with a higher market value also have a higher book value, earnings, total assets, leverage and intangibles. Table 2 also reports the correlation coefficients amongst the independent variables. Aside for the correlations involving *BV, EARN, SIZE* and *LEV*, the correlations amongst the independent variables are considerably small. Therefore, multicollinearity is not expected to be a problem.

Table 3: Main Regression Results

	Prediction	Test for H_1		Test for H_2	
		Coefficient	t-statistic	Coefficient	t-statistic
Intercept		2,510.066	0.843	−505.507	−0.188
BV	+	2.214	7.909***	2.212	8.887***
EARN	+	−2.651	−2.510**	−1.455	−1.524
SIZE	+	−0.193	−1.039	−0.221	−1.337
LEV	−	−0.874	−2.887***	−0.831	−3.086***
INT	+	2.113	9.919***	2.070	10.921***
TA	+/−	1,976.217	4.162***	183.618	0.371
GOV	+	−3,128.458	−2.589**	−4,606.719	−4.206***
(TAxGOV)	+/−			6,545.886	6.953***
year		Included		Included	
ind		Included		Included	
Adjusted R^2		0.930		0.945	
F-Statistic		139.966***		170.550***	

*, ** and *** denote significance levels at 10%, 5% and 1%, respectively. All variables are deflated by the dependent variable using the weighted least squares regression technique.

We employ the specifications in equations (1) and (2) to test our hypotheses. The models are estimated to find (i) whether tax avoidance is associated with firm value (H_1), and (ii) whether the quality of governance affects the association between tax avoidance and firm value (H_2). For H_1, we

expect α_6 to be significant to support our expectation regarding the effect of tax avoidance on firm value. For H_2, α_8 is expected to be significantly more positive/less negative to indicate that the strength of governance mitigates the effect of tax avoidance on firm value. The regression results are presented in Table 3.

The model for testing H_1 shows that R^2 is 93 percent with an F-statistic of 139.97. The coefficient for *TA* is significant and positive at the 1 percent level. The coefficient of 1,976.217 indicates that a one point increase in the tax avoidance measure is associated with an MYR 1,976 million increase in market value. Statistical evidence shows that tax avoidance information is considered by investors in their decisions. Consistent with the traditional view towards tax avoidance activities, investors view tax avoidance as a value-enhancing activity, particularly in the Malaysian context.

The model for testing H_2 shows that R^2 is 95 percent with an F-statistic of 170.550. *TA* remains positive, but the coefficient is no longer significant in the model with the interaction variable. The variable of interest, which is the interaction between tax avoidance and quality of governance (T*AxGOV)*, is significant and positive at the 1 percent level with a coefficient of 6,545.886, which indicates that tax avoidance is valued by investors. However, the effect of tax avoidance on firm value differs between firms with high and low governance. For firms with high governance (GOV^{TOP50}), a one point increase in the tax avoidance measure is associated with an MYR 6,780 million increase in market value. However, for firms with low governance (GOV^{Bottom50}), the same increase in tax avoidance is only associated with an MYR 183 million increase in market value, which is in line with our hypothesis. The empirical results are also consistent with the findings in prior studies (e.g., Desai and Dharmapala 2009) and support the view that a favourable monitoring and control mechanism can effectively constrain the managerial opportunism that surrounds tax avoidance. The value relevance of tax avoidance is greater for firms with better governance.

The coefficients of *BV, LEV* and *INT* are significant in both sets of results. *BV* and *INT* are positively associated with *MV*, whereas *LEV* is negatively related with *MV. EARN* is significant and negative in the model that tests for H_1, but is not significant in the model that tests for H_2. *SIZE* is not significant in both models. The results for *GOV* are surprising as the directions

contradict our earlier expectation. The coefficients for *GOV* are significant in both models, but a negative association is found between *GOV* and *MV*.

Table 4: Regression Results for the GOV^{TOP50} and GOV^{BOTTOM50} Sample

	Prediction	GOV^{TOP50}		GOV^{BOTTOM50}	
		Coefficient	t-statistic	Coefficient	t-statistic
Intercept		−4,272.207	−1.517	−21,921.810	−3.254***
BV	+	1.864	7.009***	4.476	4.407***
EARN	+	1.613	1.190	−9.015	−4.566***
SIZE	+	−0.310	−1.566	−1.331	−1.713*
LEV	−	−0.509	−1.250	3.092	3.024***
INT	+	1.521	6.976***	−2.239	−1.572
TA	+/−	7,137.098	8.618***	−224.581	−0.645
year		Included		Included	
ind		Included		Included	
Adjusted R^2		0.920		0.881	
F-Statistic		67.129		46.294	

*, ** and *** denote significance levels at 10%, 5% and 1%, respectively. All variables are deflated by the dependent variable using the weighted least squares regression technique.

We perform several alternative analyses to test the robustness of the main results that are reported in Table 3. Specifically, we i) test the samples separately and ii) employ alternative measures of ETR. Following the alternative testing methodology in Abdul Wahab and Holland (2012), we split the samples based on their GOV variables (i.e., the GOV^{Top50} sample and the GOV^{Bottom50} sample) and then test both samples separately. Our findings are reported in Table 4. The coefficient of *TA* is significant and positive in the estimation of the GOV^{Top50} sample. However, no significant association is seen between *TA* and *MV* in the estimation of the GOV^{Bottom50} sample. These results suggest that tax avoidance activity is value relevant only for 'highly governed firms.' Table 4 provides additional support for our main result and emphasises the importance of governance in the value relevance of tax avoidance.

The alternative tests that employ various specifications of ETR have generated mixed results (untabulated). We use the following formula to calculate ETR: i) (tax expenses – deferred tax expenses)/profit before interest and tax, ii) tax expenses/profit before interest and tax, iii) tax expenses/ [pre-tax profit – (deferred tax expenses/statutory tax rate)] and iv) (tax expenses – deferred tax expenses)/[pre-tax profit – (changes in deferred tax/ statutory tax rate)]. All the specifications are derived from prior literature on tax avoidance (Hanlon and Heitzman 2010). The first two specifications of ETR do not produce any significant finding to support H_1, but *TA* is significantly negative in the model that tests for H_2. The third specification of ETR has generated a significantly negative result for H_1, but does not produce significant findings for H_2. Using the fourth specification of ETR, the coefficient of *TA* is significant and positive in the model that tests for H_1, but is significant and negative in the model that tests for H_2. Our main results in Table 3 are sensitive to the way ETR is measured. Therefore, the finding that governance affects the value relevance of tax avoidance must be interpreted with caution.

Conclusions

We examine the role of governance mechanisms in the relation between tax avoidance and firm value. Tax avoidance can affect firm value in two conflicting ways. On the one hand, managers engage in tax avoidance activities to increase the wealth of their shareholders. On the other hand, managers may have personal incentives to be involved in tax avoidance activities. Given the agency problem that is associated with the complex nature of tax avoidance, we posit that the strength of governance mechanisms has a role in mitigating such agency costs.

We hypothesise that tax avoidance is value relevant and that the valuation implications vary with firm-level governance. We rely on ETR to measure tax avoidance and use the lists from the MCG Index 2009–2011 to score firm-level governance. By using a sample of 203 publicly listed firms in Malaysia, we find that investors view tax avoidance as value relevant. We also find that those firms with a higher governance mechanisms and engage in tax avoidance show a higher firm value than those firms with a lower governance. Nevertheless, our results must be interpreted with caution.

The results from the alternative analysis using various measures of ETR show that our findings are not robust to the different ways an ETR can be measured.

We contribute to the literature by providing evidence on the economic consequences of tax avoidance from the perspective of a developing country. We also employ a comprehensive measure of governance in our analysis of the value relevance of tax avoidance. Future research can extend these findings by using alternative measures of tax avoidance. However, these studies must also acknowledge that not all measures are equally appropriate for every research question (Hanlon and Heitzman 2010). Future research may also utilise the unique features of firms in Malaysia, such as their corporate ownership characteristics, as well as utilise data from government-linked corporations in the country. These studies can also utilise cross-country data to explore tax avoidance and governance. Data from several countries can also be used to investigate the governance mechanisms that are sourced from the institutional environments of these countries.

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