

## Factors Influencing Material Weaknesses in Internal Control Over Financial Reporting in Malaysian Property Companies

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### Abstract

This study examines the factors influencing material weaknesses in internal control over financial reporting among the companies in the property industry in Malaysia. Specifically, this study examines six factors namely firm age, firm size, financial health, financial reporting complexity, rapid growth and corporate governance. Using content analysis on the annual reports of 80 property companies, this study shows that only firm size has a significant influence on the material weaknesses in internal control over financial reporting. Other factors however, show no significant influence on the material weaknesses in internal control over financial reporting. The result in this study indicates that small companies tend to have material weaknesses in internal control due to them having limited resources in building effective internal control. These companies generally could not afford to spend on expertise such as internal auditor or consultant to assist in improving and strengthening internal control. The findings of this study shed some lights to the regulators and practitioners on the factors influencing material weaknesses in the internal control over financial reporting. Of consequence, this would reduce information asymmetry between the insiders and outsiders of a company and thus, increasing the quality of financial reporting.

**Keywords:** Material weaknesses; Internal control; Firm size; Property industry; Malaysia.



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### 1. Introduction

Financial scandals such as Enron and WorldCom have led the regulators and the public to be concerned on the transparency and quality of financial reporting (Tuan *et al.*, 2017). Although before the enactment of Sarbanes Oxley Act in 2002, the companies were required to maintain an adequate system of internal control, they were only required to disclose deficiencies if there is a change in an auditor's appointment (SEC, 1988;2002;2004). Disclosure of material weaknesses in the internal control over financial reporting at that time was only voluntary. Following this, the Sarbanes Oxley Act (SOX) was enacted to provide a significant revision to the requirement of the provision of material weaknesses in internal control over financial reporting (Tackett *et al.*, 2006). Malaysia is also not an exception to this scenario. The financial scandals in Malaysia such as Bumiputra Malaysia Finance (BMF) and Perwaja Steel have also attracted the attention and demand of the public to the regulators to call to minimise information asymmetry by imposing internal control disclosure. Following this, the Malaysian government has adopted a corporate reform known as the Malaysian Code of Corporate Governance (MCCG) with the aim to improve the quality of good corporate management practices.

Over the years, the topic of material weaknesses in the internal control over financial reporting has received great attention in the accounting literature (such as (Brown and Caylor, 2006; Doyle *et al.*, 2007; Shumway, 2001)). Often, the presence of material weaknesses in internal control prevents the management of a company to conclude that its internal control is effective. However, the existence of material weaknesses in internal control must also be discussed in the management's report (Aldridge and Colbert, 1994). This has led researchers to examine the factors influencing material weaknesses in internal control over financial reporting. For example: Doyle *et al.* (2007) found that material weaknesses in the internal control over financial reporting are more likely to appear in companies that are smaller, younger, financially weaker, more complex, growing rapidly and/or undergoing restructuring. Haron *et al.* (2010), also found companies that are performing in terms of return on equity (ROE) and return on asset (ROA) disclose their internal control report voluntarily and demonstrate a perfect relationship between their internal control opinions with high internal audit quality assurance. However, these studies were often conducted on companies in general and not industry specific such as the property industry.

The property industry in Malaysia has been facing an economic downturn over the past few years. The economic downturn began in 2010 and has up roared since 2017 due to a property price spike up that led to the imbalance of the supply and demand in the local property market, especially within the residential and commercial segments (Ghani *et al.*, 2018). To stay resilient and competitive, the management of the property companies needs to improve their internal control system in order to mitigate risk. However, the companies also need to identify the

factors that can influence the effectiveness of their internal control (Ge and McVay, 2005). Identification of these could reduce information asymmetry between the insiders and outsiders and thus, increasing the quality of financial reporting.

This study examines the factors influencing material weaknesses in internal control over financial reporting. Specifically, this study examines the effect of firm age, firm size, financial health, financial reporting complexity, rapid growth as well as corporate governance on material weaknesses in internal control. The findings of this study shed some lights to the practitioners on the factors influencing material weaknesses in the internal control over financial reporting. The remainder of this paper is structured as follows. The next section, Section 2 presents the literature review relevant to this study. This is followed by Section 3 that provides the research framework. Section 4 outlines the research design whilst Section 5 presents the results and discussion. The last section, Section 6 concludes this study.

## 2. Literature Review

### 2.1. Internal Control

Public Company Accounting Oversight Board (2010), defined internal control as a process that is affected by an organisation's management designed to provide reasonable assurance in relation to the achievement of objectives in the reliability of financial reporting, increasing effectiveness and efficiency of operations and comply to the laws and regulations. Internal control plays a vital role in ensuring that all business activities are aligned with the policies and procedures of a company. It facilitates the effectiveness and efficiency of operations, ensuring reliability of internal and external reporting as well as a tool in assisting the company in complying with the laws and regulations (Raja *et al.*, 2016).

### 2.2. Components of Internal Control

There are five components of internal control. The first component is control environment that represents a set of standards, processes and structures that provide the basis for carrying out internal control across an organisation (COSO, 2013). It consists of control owners and other responsible individuals for executing process and environment that they are operating. It includes communication and enforcement of integrity and ethical value; commitment to competence; participation by those charged with governance; management's philosophy and operating style; organisational culture; assignment of authority and responsibilities as well as human resource policies and practices. In addition, control environment sets the tone of an organisation. It is the foundation for all other components of an internal control providing discipline and structure. Control environment provides a pervasive impact on the overall system of internal control.

The second component is control risk. Control risk engages with every human situations and it is unavoidable. It refers to the uncertainty that surrounds future events and its outcome. According to Vaughan and Vaughan (2008), risk is a condition in which there is a possibility of an adverse deviation from the desired outcome. Control risk assessment involves a dynamic and iterative process for identifying and assessing risk to the achievement of objectives. It forms the basis for determining how risks can be mitigated (COSO, 2013). Thus, the management may introduce plans, programs or actions to address specific risks or it may accept risk on a cost-benefit basis (Ghani *et al.*, 2016).

The third component of internal control is information and communication. Information is a vital element for an organisation to enable internal control responsibilities to support the achievement of its objectives. An organisation's information system includes accounting system that comprises of methods and records established to initiate, record, process and report exchange transactions and relevant events and conditions in a form and time frame that enable people to carry out responsibilities (Ghani *et al.*, 2016). On the other hand, communication is a continual and constant process of providing, sharing and obtaining necessary information. Internal communication is where information is circulated throughout and across an organisation whilst external communication enables inbound communication of relevant external information. It also gives information to the external parties in return to the requirements and expectations (COSO, 2013).

The fourth component is control activities representing the actions established through policies and procedures to ensure that management's directives to mitigate risks to the achievement of objectives are carried out (COSO, 2013). Control activities are performed at all levels of an organisation and at various stages within the processes over the technology environment. It may be preventive or detective in nature and may encompass a range of manual and automated activities (COSO, 2013). Control activities may be categorised as policies and procedures that associate with performance reviews, information processing, physical controls and segregation of duties.

The fifth component of internal control is monitoring. Monitoring control is a process used to assess the effectiveness of the internal control (Doyle *et al.*, 2007). It consists of the processes that assess the quality of internal control performance over time. In order to monitor control, on-going evaluation, separate evaluation or combination of the two evaluations is used to ascertain whether each of the five components of internal control is present and functioning (COSO, 2013). On-going evaluation arises from regular management and supervisory activities that provide timely information whilst separate evaluation is conducted periodically.

### 2.3. Information Disclosure of Internal Control

The need for disclosure has been an issue since the global economic crisis had put the spotlight on internal control failures (Zakaria *et al.*, 2016). These scandals have led to the demand for more transparency and reliable

information in assessing the effectiveness of internal control over financial reporting by the companies to their shareholders. Furthermore, an effective internal control system represents an important factor in achieving good quality of financial reporting (Krishnan, 2005). The management has the responsibility to design, implement and maintain effective internal controls, while the audit committee has the responsibility for the internal controls (COSO, 2013).

An internal auditor has the responsibility to provide independent assurance as well as advising on the effectiveness of internal control to the top management of the organisation. On the other hand, the management of a company has the responsibility to publicly disclose the effectiveness of the internal control over financial reporting (Gramling and Schneider, 2018). The management of a company must be transparent and diligently report if there are material weaknesses in the internal control over financial reporting.

Ashbauh-Skaife *et al.* (2007), suggested that if a company has a weak internal control, this indicates that the managers are unable to make reliable accrual estimates necessary to produce high quality earning as well as other financial information. Ashbauh-Skaife *et al.* (2007), stated that internal control disclosure has raise shareholders' uncertainty on the reliability of the reported earnings and appears to evoke a significant negative market reaction due to the negative reaction to the internal control weaknesses. One of the reasons why the shareholders need to know the adequacy of a company's internal control is to assist them in evaluating the continued safety and soundness of their investments in the company (Haron *et al.*, 2010). In addition, the effort to attract foreign direct investment would improve if the companies can show transparency through the disclosure of internal control information (Agyei-Mensah, 2016). This evidenced the need for the disclosure of internal control in reducing the impact of agency cost and information asymmetry (Agyei-Mensah, 2016).

The disclosure of material weaknesses in internal quality over financial reporting in Malaysia however, is still voluntary. The regulators only provide guidelines such as *The Statement on Internal Control – Guidance for Directors of Public Listed Firms* as well as *Malaysian Code on Corporate Governance* in order to guide directors specifically the directors of listed issuers in making disclosure regarding risk management and internal control in their firms' annual reports pursuant to paragraph 15.26(b) of the Listing Requirements (Raja *et al.*, 2016). It was not until 2001 that Bursa Malaysia requires the public listed companies to report the state of their internal control to their shareholders (Haron *et al.*, 2010). It requires the board to disclose establish and disclose the features of its risk management and internal control framework and the adequacy as well as effectiveness of the framework (Raja *et al.*, 2016).

## 2.4. Material Weaknesses and Internal Control Disclosure

Over the years, studies on internal control have grown rapidly and received great attention in the accounting literature. These studies often linked material weaknesses as part of the internal control disclosure. Material weaknesses can be defined as a deficiency or a combination of deficiencies in internal control over financial reporting that remote a reasonable possibility that a material misstatement of the company's financial statements would not be prevented or detected (Public Company Accounting Oversight Board, 2004). There are two categories of material weaknesses (Ge and McVay, 2005). The first type of material weaknesses is account-specific material weaknesses which relates to controls over specific account balances or transaction level processes. The second type of material weaknesses is the deficiency in the design or operation of internal control.

A group of studies have examined the factors influencing material weaknesses in internal control over financial reporting (Zakaria *et al.*, 2016). For example: Doyle *et al.* (2007) found that material weaknesses in internal control over financial reporting are more likely to appear in companies that are smaller, younger, financially weaker, more complex, growing rapidly and/or undergoing restructuring. Similarly, Haron *et al.* (2010) found companies that are performing well in terms of return on equity (ROE) and return on asset (ROA) disclose their internal control report voluntarily and demonstrate a perfect relationship between their internal control opinions with high internal audit quality assurance. Another study by Abd Aziz *et al.* (2015) found companies that conscientiously comply with the legal framework and reinforce good corporate governance, internal control as well as risk management would gain unlimited benefits that flow from the efficient process which enhances their ability to create value and ultimately, maximise shareholders' wealth. Therefore, it can be concluded that companies with material weaknesses are typically more complicated, smaller, younger, growing fast or undergoing restructuring as well as less profitable than companies that do not disclose any material weaknesses (Zakaria, 2014).

## 2.5. Factors influencing Internal Control Disclosure

Prior literature has provided a review on the factors influencing material weaknesses in internal control over financial reporting. Many studies have examined the relationship between firm size, firm age, financial health, financial reporting complexity, rapid growth, restructuring changes as well as corporate governance as factors that associated with material weaknesses in internal control. However, these studies are mostly conducted in developed countries leaving examination in the developing countries such as Malaysia largely unexplored.

### 2.5.1. Firm Age

Prior studies have suggested that firm age may be able to influence material weaknesses in internal control over financial reporting. According to Agboola and Salawu (2012), older companies may be more motivated to disclose such information as the disclosure is less likely to hurt their competitive position. This is because older firms are more likely to strengthen their internal control procedure and thus, expecting fewer control weaknesses in older firms (Doyle *et al.*, 2007). However, Lin *et al.* (2013) found younger firms often disclosed more internal control

deficiencies compared to older companies. On the other hand, Soodanian *et al.* (2013) argued that firm age does not have any significant effect on internal control weaknesses. This study anticipates that firm age may influence material weaknesses in internal control over financial reporting. Therefore, this study develops the first hypothesis.

**H1:** *There is a significant effect of firm age on material weaknesses in internal control over financial reporting among the property companies in Malaysia.*

### 2.5.2. Firm Size

Several studies have suggested that firm size may influence the material weaknesses in internal control disclosure over financial reporting. Intuitively, large companies are more perceptible and as a result, would be more likely to disclose more information (Agboola and Salawu, 2012). This is because larger companies are more exposed to public scrutiny compared to smaller companies (Alsaed, 2006). Furthermore, large companies would have more financial reporting process and procedures in place and thus, would have an adequate number of employees to ensure proper segregation of duties (Doyle *et al.*, 2007). This is consistent with Bryan *et al.* (2005) that indicated large companies on average have resources to dedicate to effective internal control compared to smaller companies. In addition, (Umoren and Asogwa, 2013) noted that large companies are assumed to have well-built information systems that enable them to trace both financial and non-financial information for operational, tactical and strategic purposes. This is because they can have more resources and thus, enable them to spend on internal auditors or consultants which may aid in strengthening the internal control (Doyle *et al.*, 2007). For this reason, this study aims to examine the effect of firm size on material weaknesses in internal control over financial reporting. Thus, the second research hypothesis of this study is developed.

**H2:** *There is a significant effect of firm size on material weaknesses in internal control over financial reporting among the property companies in Malaysia.*

### 2.5.3. Financial Health

A group of studies have also suggested that financial health may influence the material weaknesses in internal control disclosure over financial reporting. There is a general belief that a company's willingness to disclose information is related to its profitability (Agyei-Mensah, 2016). Agyei-Mensah (2016) found that the higher a company's profitability, the stronger the motivation to disclose internal control information. Singhvi and Desai (1971), also found companies that have profitability above industry average tend to disclose more information in order to signal to the owners about their strong position to survive. This is supported by the signalling theory that suggested companies tend to be more inclined to signal their quality to investors when their performance is good (Watson *et al.*, 2002). Furthermore, Mitra *et al.* (2012) noted that companies that have large cash flow position would have greater possibility of immediate remediation of control problems. Due to this reason, this study aims to examine the effect of financial health on material weaknesses in internal control over financial reporting. Thus, this study posits the third research hypothesis.

**H3:** *There is a significant effect of financial health on material weaknesses in internal control over financial reporting among the property companies in Malaysia.*

### 2.5.4. Financial Reporting Complexity

Often, a company is expected to have effective internal control when it engages in more complex transactions. It is anticipated that the complexity of the company to be a driver of internal control weaknesses. Complexity is defined through the existence of a foreign currency translation (Klamm *et al.*, 2012). According to Klamm *et al.* (2012), companies that reported material weaknesses tend to have higher level of operational complexity which is defined by merger and acquisition, foreign operations, geographic segments, restructuring and operating segments. Ge and McVay (2005), found that companies reporting material weaknesses in internal control over financial reporting are more complex and have less access to resources. However, Doyle *et al.* (2007) found companies reporting material weaknesses appeared to be less complex. Therefore, this study examines the effect of financial reporting complexity on material weaknesses in internal control over financial reporting. Thus, this study develops the fourth research hypothesis.

**H4:** *There is a significant effect of financial reporting complexity on material weaknesses in internal control over financial reporting among the property companies in Malaysia.*

### 2.5.5. Rapid Growth

Another body of the literature has examined the effect of rapid growth on material weaknesses on internal control over financial reporting. Rapid growth in this study is often measured by the extreme sales growth of a company (Li *et al.*, 2015). Li *et al.* (2015), stated that higher sales growth indicates the rapid increase on sales that gives a hint that the companies are in the abnormal times. This situation could negatively impact the effectiveness of the internal control as rapidly growing companies need to match internal control with the growth (Mitra *et al.*, 2012). Soodanian *et al.* (2013), noted that there is a direct and significant relationship between internal control and rapid growth. However, Petrovits *et al.* (2011) found a positive but insignificant relationship between growth and internal control material weaknesses. Due to this reason, this study aims to examine the effect of rapid growth on material weaknesses in internal control over financial reporting. Thus, this study posits the fifth hypothesis.

**H5:** *There is a significant effect of firm's rapid growth and material weaknesses in internal control over financial reporting among the property companies in Malaysia.*

### 2.5.6. Corporate Governance

The last factor that this study expects to be a factor in influencing material weaknesses in internal control over financial reporting is corporate governance. This study expects corporate governance plays a role in influencing material weaknesses in internal control since an effective internal control that is imposed by an active governance mechanism can help companies to mitigate risks (Agyei-Mensah, 2016). Dechow *et al.* (1996), stated that companies committing fraud tend to have weaker corporate governance, an indication that corporate governance plays a significant role in a company's internal control quality. However, Nalukenge *et al.* (2017) noted that board independence and separation of chief executive officer (CEO) and chairman roles are not significantly related to material weaknesses in internal control over financial reporting. Zhang *et al.* (2007), have also stated that independence of audit committee is not significantly related with the disclosure of material weaknesses over financial reporting. This study examines the effect of corporate governance towards on material weaknesses in internal control over financial reporting. Thus, this study develops the sixth hypothesis.

**H6:** *There is a significant effect of corporate governance on material weaknesses in internal control over financial reporting among the property companies in Malaysia.*

## 3. Research Design

### 3.1. Sample Selection and Data Collection

This study chooses the public listed property companies as the sample study. Based on malaysiastock.biz (2018), there are 97 listed companies under the properties sector. Since the population is 97, this study would need to have at least 76 companies as its sample (Sekaran and Boogie, 2016). This study relied on secondary data by using quantitative method. Specifically, this study analyses the annual reports of the listed properties companies in Malaysia. This study collected data from 80 properties companies based on simple random technique. The data was collected through annual reports of the companies of a two year period from year 2015 and 2016. The financial data was collected and gathered by using Microsoft Excel and analysed by using Statistical Package for Social Sciences (SPSS).

### 3.2. Variable Measurements

Table 1 presents the variable measurements for the independent variables and dependent variable. This study has six independent variables and one dependent variable. The independent variables of this study consist of firm age, firm size, financial health, financial reporting complexity, rapid growth as well as corporate governance. Meanwhile, the dependent variable is the material weaknesses in internal control. The measurement of this study is adapted from a study by Doyle *et al.* (2007).

**Table-1.** Variables definition and expected relation with the probability of disclosing material

Variable	Predicted Direction	Measurement
<i>FIRM AGE</i>	-	The log of the number of years firm has price information on Bursa Malaysia.
<i>MARKETCAP</i>	-	The log of share price x Number of shares outstanding.
<i>AGGREGATE LOSS</i>	+	Indicator variable equal to one if earnings before extraordinary items in years t and t – 1 sum to less than zero, and zero otherwise.
<i>FOREIGN TRANSACTIONS</i>	+	Indicator variable equal to one if the firm has a non-zero foreign currency translation in year t, and zero otherwise.
<i>EXTREME SALES GROWTH</i>	+	Indicator is equal to one if the sales growth falls in top quintiles, and zero otherwise.
<i>CORPORATE GOVERNANCE</i>	-	Indicator variable equal to one if the firm does represent minimally acceptable governance, and zero otherwise.

## 4. Results and Discussion

### 4.1. Descriptive Statistics

Table 2 presents the descriptive statistics on the characteristics of material weakness in internal control. Based on table 2, with a mean score of 2.45 for firm age, the result indicates that companies that are younger appear to have material weaknesses in internal control over financial reporting compared to older companies. One possible reason could be attributed to the younger companies are still in the process of building their internal control system. Another possible reason is that younger companies are expected to have less resources and experience rather as compared to older companies and thus, it is normal for younger companies to have more material weaknesses in internal control over financial reporting. This finding is consistent with Doyle *et al.* (2007).

**Table-2.** Descriptive Statistics of Material Weakness in Internal Control

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Firm_Size	160	1	5	3.14	1.466	2.149
Firm_Age	160	1	5	2.45	1.253	1.570
Financial_Health	160	0	1	.91	.292	.085
Complexity	160	0	1	.62	.487	.237
Rapid_Growth	160	0	1	.16	.364	.133
Governance	160	0	1	.54	.500	.250
Material_Weakness	160	0	1	.09	.283	.080
Valid N (listwise)	160					

With a mean score of 3.14 for firm size, the result shows that smaller companies have more material weaknesses compared to large companies. This is because larger companies on average have more resources to dedicate to effective internal control compared to smaller companies (Bryan *et al.*, 2005). This is consistent with prior studies that suggested larger companies to have well-built information systems that enable them to trace both financial and non-financial information for operational, tactical and strategic purposes (Umoren and Asogwa, 2013).

Table 2 then shows the mean score of financial health which is 0.91. The descriptive statistics in this study indicates that companies that are having poor financial health or financially weaker tend to have material weakness in internal control over financial reporting. This could be explained by companies having less access to resources to spend on internal control (Umoren and Asogwa, 2013). Table 2 also shows the results of complexity factors with a mean score of 0.62. Such result indicates that accounting complexity affects quality of internal control. This finding is supported by Doyle *et al.* (2007) that found companies with complexity report material weaknesses compared to companies with less complexity. The mean score of rapid growth in this study is 0.16. This result indicates that rapid growth is not a factor that can influence material weaknesses in internal control over financial reporting. This finding is in line with (Petrovits *et al.*, 2011) that found insignificant relationship between growth and internal control material weaknesses.

Lastly, the mean score for corporate governance is 0.54. This result shows that corporate governance does not plays a significant role in determining material weaknesses in internal control. This could due to certain composite measure of the corporate governance do not really gives impacts towards material weakness in internal control. For example: board independence and separation of chief executive officer (CEO) and chairman roles are not significantly related with the predictor of internal control over financial reporting (Nalukenge *et al.*, 2017).

## 4.2. Factors influencing Material Weaknesses in Internal Control

Based on Table 3, only firm size significantly affects material weaknesses in internal control. The table shows that one unit of change in firm size increases the odd of material weaknesses in internal control over financial reporting by 567.9% and thus, accepting Hypotheses 2 (*H2*). This finding indicates that smaller companies play a significant role in determining the material weaknesses in internal control over financial reporting. This is consistent with the finding in the descriptive statistics of this study where it shows that small companies appear to have material weaknesses in internal control over financial reporting.

**Table-3.** Logistic Regression of Material Weaknesses in Internal Control

	B	S.E.	Wald	df	Sig.	Exp(B)
Financial_Health(1)	-1.457	1.297	1.262	1	.261	.233
Complexity(1)	-.860	.858	1.004	1	.316	.423
Rapid_Growth(1)	.642	.981	.428	1	.513	1.900
Governance(1)	-.615	.708	.754	1	.385	.541
Firm_Size			5.388	4	.250	
Firm_Size (1)	1.899	.955	3.956	1	.047	6.679
Firm_Size(2)	-.378	1.188	.101	1	.750	.685
Firm_Size(3)	-18.667	6029.397	.000	1	.998	.000
Firm_Size(4)	1.103	.833	1.754	1	.185	3.013
Firm_Age			.379	4	.984	
Firm_Age(1)	-18.951	7565.200	.000	1	.998	.000
Firm_Age(2)	.552	.896	.379	1	.538	1.736
Firm_Age(3)	-19.160	10666.069	.000	1	.999	.000
Firm_Age(4)	-19.420	17606.922	.000	1	.999	.000
Constant	-2.654	1.213	4.792	1	.029	.070

\*\*Material weakness is an indicator variable that is equal to one if the firm has material weakness in internal control and zero if the firm is a control firm

This study then models the probability of material weaknesses in internal control over financial reporting as a function of the firm characteristics using a logistic regression with the following constructs:

$$Prob (MW) = -2.654 - 1.457 \text{ FINANCIAL HEALTH} - 0.860 \text{ COMPLEXITY} + 0.642 \text{ RAPID GROWTH} - 0.615 \text{ GOVERNANCE} + 1.899 \text{ FIRM SIZE1} - 0.378 \text{ FIRM SIZE2} - 18.667 \text{ FIRM SIZE3} - 1.103 \text{ FIRM SIZE4} - 18.951 \text{ FIRM AGE1} + 0.552 \text{ FIRM AGE2} - 19.160 \text{ FIRM AGE3} - 19.420 \text{ FIRM AGE4}$$

Table 4 of the classification table shows the cross tabulation of the predicted response categories with the observed (actual) response categories and predicted. All observations were classified into group 1 (material weaknesses). The sensitivity (actual positive which are correctly identified) is 7.14% while specificity (actual negative which are correctly identified) is 100%. Other than that, the error of classification is 8.13%. The overall predictive efficiency is 91.88%. It can be concluded that the logistic regression model of material weaknesses result can be used to predict the factors influencing material weaknesses in internal control over financial reporting.

Table-4. Classification Table

Observed		Material Weaknesses		Percentage Correct (%)
		No Material Weaknesses	Material Weaknesses	
Material Weaknesses	No Material Weaknesses	146	0	100.0
	Material Weaknesses	13	1	0
Overall Percentage				91.3

\*(0 = No Material Weaknesses, 1 = Material Weaknesses)

The decision rule to reject null hypothesis ( $H_0$ ) is if p-value is less than  $\alpha$  (0.05). Table 5 shows that the p-value is greater than  $\alpha$  (0.05), an indication that there is no significant difference between the observed probability and expected probability and thus, accepting the null hypothesis ( $H_0$ ). It can be concluded that the model fits the data.

Table-5. Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	3.264	8	.917

The decision rule to reject null hypothesis ( $H_0$ ) is if p-value is less than  $\alpha$  (0.05). Table 6 shows that the p-value is less than  $\alpha$  (0.05). This indicates that this study rejects the null hypothesis ( $H_0$ ). Thus, the model is significant.

Table-6. Omnibus Tests of Model Coefficients

	Chi-square	df	Sig.
Step	26.775	12	.008
Block	26.775	12	.008
Model	26.775	12	.008

Based on Table 7, there is only 15.4% (0.154) for Cox & Snell R-Square and 34.4% (0.344) for Nagelkerke R-Square of total variation in material weaknesses in internal control are explained by firm age, firm size, financial health, financial reporting complexity, rapid growth as well as corporate governance.

Table-7. Cox & Snell and Nagelkerke R-Square

Cox & Snell R Square	Nagelkerke R Square
.154	.344

As the decision rule for Binary Logistic Regression is rejecting null hypothesis ( $H_0$ ) if p-value is less than  $\alpha$  (0.05). This indicates that this study rejects the null hypothesis. This indicates that the variable is significant. Table 8 presents the summary of Binary Logistic Regression Test of Hypotheses.

Table-8. Summary of Binary Logistic Regression Test of Hypothesis

Hypotheses	Significant Value (P-Value)		Results
H1: There is significant impact between firm age and material weaknesses in internal control	Firm Age (1)	0.998	Fail to reject $H_0$
	Firm Age (2)	0.538	Fail to reject $H_0$
	Firm Age (3)	0.999	Fail to reject $H_0$
	Firm Age (4)	0.99	Fail to reject $H_0$
H2: There is significant impact between firm size and material weaknesses in internal control	Firm Size (1)	0.047	Reject $H_0$
	Firm Size (2)	0.750	Fail to reject $H_0$
	Firm Size (3)	0.998	Fail to reject $H_0$
	Firm Size (4)	0.185	Fail to reject $H_0$
H3: There is significant impact between firm's financial health and material weaknesses in internal control		0.261	Fail to reject $H_0$
H4: There is significant impact		0.316	Fail to reject $H_0$

between financial reporting complexity and material weaknesses in internal control			
H5: There is significant impact between rapid growth and material weaknesses in internal control		0.513	Fail to reject $H_0$
H6: There is significant impact between corporate governance and material weaknesses in internal control		0.385	Fail to reject $H_0$

## 5. Conclusion

This study examines the factors influencing material weaknesses in internal control over financial reporting among the companies in the property industry in Malaysia. Six factors were chosen namely, firm age, firm size, financial health, financial reporting complexity, rapid growth and corporate governance. Out of the six factors chosen, only firm size has a significant influence on the material weaknesses in internal control over financial reporting. This finding indicates that smaller firm size influence material weaknesses in internal control over financial reporting. This is consistent with the finding in descriptive statistics where it shows that small companies appear with material weaknesses. This is because smaller companies tend to have less access to resources to build an effective internal control. Smaller companies in general also could not afford to spend on expertise such as internal auditor or consultant in order to improve and strengthen the internal control.

This study is not without limitations. First, this study chose six factors to be examined as the factors influencing material weaknesses in internal control over financial reporting. There are other variables that are excluded in this study. The finding in this study shows only firm size is a significant factor to material weaknesses of internal control disclosure. Hence, future study can include other factors such as the role of management and audit committee in influencing material weaknesses in internal control over financial reporting. Secondly, this study relied only on a two year data. Future study perhaps can conduct a longitudinal study to provide further evidence on the factors influencing material weaknesses of internal control over financial reporting. Finally, this study focuses on public listed property companies. Future study could extend this study to other industries.

This study generally wants to contribute to the existing literature on the disclosure of internal control over financial reporting. The study of these factors could assist in identifying the gap and subsequently, shed some lights on the factors of material weaknesses in the internal control over financial reporting specifically from the properties industry in Malaysia. In addition, the findings of this study are expected to be beneficial to practitioners as well as the policy makers. By determining the factors of material weaknesses in internal control, this study can help in improving the exercising of disclosure on internal control. Of consequence, reduces the information asymmetry between the insider and outsider and thus, increasing the quality of financial reporting. Lastly, the findings of this study can assists regulators to improve the regulation of internal control and disclosure of internal control. Consequently, increasing the financial reporting quality will provide more confidence to the financial statement users.

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