The Impact of Enterprise Risk Management, Strategic Agility, and Quality of Internal Audit Function on Firm Performance

Ai Ping Teoh[1]*, Kaih Yeang Lee[2], Rajendran Muthuveloo[3]

[1]Graduate School of Business, Universiti Sains Malaysia, Penang, Malaysia, [2]Graduate School of Business, Universiti Sains Malaysia, Penang, Malaysia, [3]Graduate School of Business, Universiti Sains Malaysia, Penang, Malaysia. *Email: apteoh@usm.my

ABSTRACT

This paper examines the relationship of enterprise risk management (ERM) implementation to firm performance, the mediating role of strategic agility and moderating role of quality of internal audit function (QIAF) in this relationship among Malaysian public listed companies (PLCs). ERM implementation was conceptualized with the elements in COSO (2004) ERM integrated framework, and firm performance was measured by financial and non-financial indicators. A total of 137 responses were obtained through questionnaire from PLCs in main market of Bursa Malaysia. The empirical findings of the study suggest that ERM implementation has a significant relationship to firm performance and strategic agility significantly mediate the relationship. However, QIAF does not significantly moderate the relationship between ERM implementation and firm performance. Low response rate presents a challenge to generalize the content to all PLCs in Malaysia. Due to time and cost constraints this study did not acquire any secondary data and interviews which may provide further in-depth findings related to the research. In this study ERM framework as an integrative risk management has been recognized as the contributor to the firm performance of sample companies. PLCs, securities commission and institute of internal auditors Malaysia will benefit from the findings of this study.

Keywords: Enterprise Risk Management, Strategic Agility, Internal Audit Function, Firm Performance, Malaysia
JEL Classifications: M420, M190

1. INTRODUCTION

Public listed companies (PLCs) listed in Bursa Malaysia play a significant role in Malaysia economy. World Bank reported market capitalization of listed companies in Malaysia towards the percentage of Malaysia gross domestic product (GDP) was 156.66 in year 2012 and value at USD 476.34 billion. The contribution of the PLCs to Malaysia's economy may be deteriorated due to globalization which exposed PLCs to many challenges. Companies are struggling in maintaining the profits that enjoyed in the past due to economic turndown and market uncertainties. Asian financial crisis in 1997 caused many companies to experience deteriorated business performance and sustainability crisis. Bank Negara reported a sharp decline in GDP from 43.5% in year 1997 to only 28.1% in year 1998. In year 2007, Malaysia economy once again impacted by global financial crisis due to housing bubble in United States. The KLSE has declined by 9.38% from the period of June 2008 to June 2009. During the economy downturn, series of scandals occurred in the Malaysia

business arena such as Perwaja Steel Sdn Bhd, Technology Resources Industries Berhad, Sime Darby Group, and Bank Islam. The latest development of public listed firm's failure is Malaysia Airline System Bhd (MAS). MAS is the leading national airline in Malaysia, operated with 160 aircrafts and provides service to 60 destinations worldwide across six continents. MAS has been hampered by times of unprofitable period such as Asian financial crisis in 1997, year 2005 and year 2011 due to failure in mitigating the risk of rising fuel costs, mismanagement and unprofitable routes. In year 2014, MAS bas been impacted seriously by two aviation accidents where Flight MH370 disappeared in an unknown incident and MH 17 crashed in Ukraine. MAS reported a loss of RM 750.4M for the first 6 months of 2014.

The above examples has proven that failure in risk management is one of the main reasons for the collapse of PLCs in Malaysia and this supported by academic research. In recent year, the trend in corporate governance has evolved to the development of an integrated, enterprise-wide approach in assessing the risks

that possibly to impact a firm's ability to achieve its corporate objectives and to develop system and programs to address those risks. This trending has caused the traditional risk management to be replaced by an enterprise-wide view of risk rapidly as Board of Directors (BODs) and top management of the firm have begun to focus on the enterprise risk management (ERM) function. Many researchers have widely recognize the importance or benefits of ERM in managing the portfolio of risks that face by the firms nowadays (Liebenberg and Hoyt, 2003; Aabo and Skimkins, 2005; Nocco and Stulz, 2006).

MCCG 2012 recommended BODs to form an internal audit function that right reported to the audit committee and the compliance of this recommendation will be presented in the firm's annual report. The code stated clearly, any non-observance of a recommendation the firm hold the responsibilities to give details on it. The importance of the part played by internal audit function is increasing and weighted over the years. Internal audit function plays an expected and independent role within an ERM governance model as it providing objective assurance and consulting role in evaluating and reviewing the ERM implementation in the firm.

In fact, in today dynamic and fast-paced business environment, strategic agility plays a vital role in firm performance. Strategic agility is the ability to continuously adjust and sensitive the business environment. Companies need to be able to turning fast and transform without losing any momentum to sustain in the business world. Companies are required to taking advantage of the changes and distribution in the business environment. Strategic agility is the fast strategy game where innovation and continuous development of new capabilities as the competitive advantage (Doz, 2014). Strategic agility helps the firm to adapt accordingly from the risk that identified through ERM implementation and this directly help to improve the firm performance.

This study intends to examine the relationship between ERM implementation and firm performance of the PLCs on main market of Bursa in Malaysia. In addition, this study also investigates the mediating effect of strategic agility and moderating effect of quality of internal audit function (QIAF) between ERM implementation to firm performance.

2. LITERATURE REVIEW

2.1. Theoretical Background

Based on resource based view, competitive advantages were sustained through inimitable bundle of resources from the fundamental of the company based on the resource-based perspective (Conner and Prahalad, 1996). Resources was perceived broadly as "anything that can be understood as a strength of a weakness" of the firm. Dynamic capabilities will be discuss where it sees as the key for a firm on competitive advantage. Teece et al. (1997) defines capacity as the competence to adapt to the fluctuating of business environment. ERM can play a role in a resource-based view because of its framework, governance structure, standards and process that can be used to integrate, improve and help significant intra and inter-firm knowledge management. Agency theory is a contract relationship where one

party (the principal, e.g. the shareholders) engage with other party (the agent, e.g. the BODs) to perform the task on their behalf with the delegation of authorization decision making (Jensen and Smith, 1984). ERM is related to the agency theory. Following the guidelines from Committee of Sponsoring Organizations of the Treadway Commission (COSO, 2004), top management's commitment are required for ERM implementation because they responsible to create and enhance the shareholders' value.

2.2. ERM

COSO (2004) defined ERM as "a process, affected by an entity's BODs, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives." Besides that, Asian Risk Management Institute explain ERM as "a disciplined and cohesive approach to risk that support the configuration of strategy, process, people, and technology, and allow firms to categorize, rank, and effectively accomplish their serious risks."

ERM compromised three-dimensions with eight components (internal environment, objective setting, event identification, risk assessment, risk response, control activities, information and communication, and monitoring), four different objectives that were strategic, operations, reporting and compliance and the third-dimension with entity's units.

Hoyt and Liebenberg (2011) found implementation of the ERM had a positive value towards the firm value. Significant relationship was found between the level of ERM implementation and the firm's value (Waweru and Kisaka, 2013). Waweru and Kisaka (2013) verified ERM implementation has a significant effect towards the value of 22 companies that listed on the Nairobi stock exchange with Tobin's Q measurement. Besides that, Jalal-Karim (2013) explained leveraging on ERM will help to boost up the competitive business advantages in Bahrain. Additional to that, the ERM also proven help in supply chains from the survey on 207 organizations (Arnold et al., 2012). Therefore, this study proposes the following hypothesis:

H1: ERM Implementation has a significance relationship with firm performance.

2.3. Strategic Agility

Doz and Kosonen (2008) defined agility as the capacity to constant adjust and familiarize decisions to the changing event of the external environment and thus nurture value creation. The concept of "agility" was origin from manufacturing sector and slowly applied to others field. Zhang and Sharifi (2000) explained agile manufacturing consists of agility drives, strategic abilities, agility provider and agility capabilities. These explained the relationship of responsiveness, competency, flexibility and speed. Doz and Kosones (2008) explained a combination of three major meta-capabilities resulted strategic agility. The meta-capabilities consists of strategic sensitivity, leadership unity and resource fluidity.

Ofoegbu and Akanbi (2012) reported strategic agility have a positive impact on the performance of manufacturing companies

that measured by collect commitment, resource fluidity and strategic sensitivity. The data collected from 210 and sample of two manufacturing firms in Oyo, Nigeria. The findings from Yang and Liu (2012) also prove that firm's agility is a critical source of competitive strategy on firm performance from 250 companies in Taiwan's glass industry.

Arnold et al. (2011) suggested ERM supported organizational agility to conforming new governing control in uncertainty environment. The authors suggested by implementing ERM, it helps the firm to increased strategic foresight and systemic insight in unpredictable environment. Supported with Wieland and Wallenburg (2012) that risk management is significance for firm agility and agility directly important in improving firm performance. Dynamic capabilities, an extension of resource based view theory explained capabilities as the key to adapt to uncertainty environment. Thus, this study proposes the second hypothesis as below:

H2: Strategic agility mediates relationship between ERM implementation and firm performance.

2.4. QIAF
Internal auditing as an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes. Quality assurance and improvement program is necessary to ensure regular quality in audit function and assurance on the internal audit function is in conformance with the definition of internal auditing, international standards for the professional practice of internal auditing (standards), and the code of ethics. Academic researchers defined IAF quality as the gathering of characteristics such as internal auditors' competence, educational level and certification, their hiring, reporting and termination relationship, and the quality of their work result that measure through capability of audit programs and range of work performance (Johl et al. 2013).

Internal auditing is adding value to the firm by ensuring the effective risk, control and governance in place. This supported by Khlif and Samaha's (2014) research on Egyptian stock exchange. The authors found IAF quality represents a key determinants of timely disclosure which significantly reduce the delay of audit report. Johl et al. (2013) shows IAF quality has a negative relationship with abnormal accruals in the financial reporting. Accuracy of reporting play a vital role in firm's value because it portrait the firm's financial performance and to increase confidence of shareholder towards the firm. Contradictory finding on the effect of ERM implementation to firm performance (Pagach and Warr, 2007) and thus prompted consideration of factors that may be contingent to this relationship. This raised the following hypothesis.

H3: QIAF moderates the relationship between ERM implementation and firm performance.

2.5. Research Framework
The research framework is illustrated in Figure 1.

3. RESEARCH METHODOLOGY

This study is to understand the impact of the ERM implementation to the firm performance. Besides that, this study try to examine the mediating effect of strategy agility and moderator effect of QIAF between ERM implementation and firm performance. This study will constructed and proposed based on the resource-based view of the firm and COSO ERM Integrated framework.

3.1. Sample and Data
The target population of this study was 780 companies listed on the main board of Bursa Malaysia in August, 2014. Various types of industries listed in the main market that include consumer product, industrial product, construction, hotels, plantation, properties, technology, trading and services, infrastructure project and closed-fund. Website of Bursa Malaysia provided all the information of PLCs in Malaysia. Sample size of 30-500 will be a recommendation for acceptable and effective data collection (Sekaran and Bougie, 2010). This statement align with Hair et al. (2013) suggested that the sample size should be between 100 and 400.

3.2. Measurement Instrument
The survey instrument is based on constructs validated in prior research, standardized and revised to the context in this study. Questions were consists of ERM, QIAF, strategic agility and firm performance for accurate analyzing results. Mail questionnaire will be used to obtain data from the companies listed on main market in Bursa Malaysia except finance industry. The hard copies will sent to all targeted firms throughout Malaysia via POS Malaysia. The survey instrument is based on constructs validated in prior research, standardized and revised to the context in this study. The use of 5-point Likert scale or 7-point Likert scale or others will not show any difference in improving the reliability of the ratings as per Sekaran (2010) as quoted from Elmore and Beggs (1975).

3.3. Data Analysis
The data will be analyzed with structural equation modeling (SEM) approach and partial least square (PLS) algorithm and bootstrapping in SmartPLS software to determine the variables relationship. PLS is the second generation multivariate technique which can be used as measurement model and structural model with minimizing error variance. Besides that, data analysis will test the goodness of data in terms of validity and reliability (assessment of measurement model), and hypotheses testing (assessment of structural model). Researcher think through two broad types of measurement specification; reflective and formative measurement models. In this study, reflective measurement model will be used with all the items in ERM dimension are affected by the same construct. Each items are highly correlated and the ERM dimension will not change with a removal of one indicator due to its underlying nature.

The model will be used to investigate the relationship between variables and their corresponding indicators. Measurement model

Figure 1: Research framework
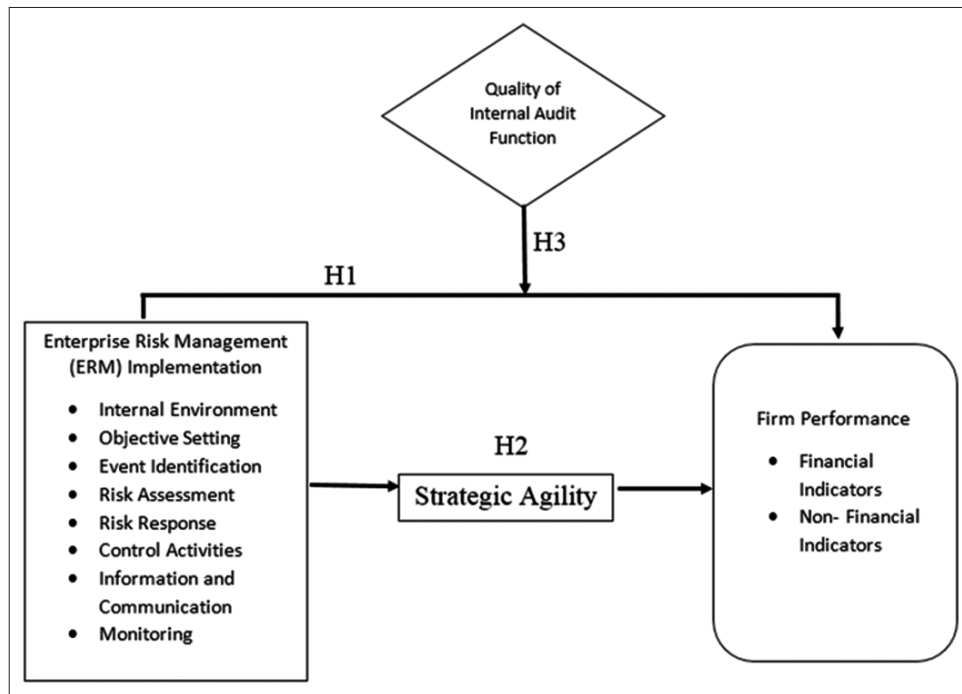
included individual item's reliability, internal consistency and discriminant validity (Barclay et al., 1995). Nunnally (1978) verified composite reliability (CR) be used to assess the reliability of reflective scales with all factor loadings are recommended to exceed 0.7. Besides that, for exploratory study, the average variance extracted (AVE) has to be above 0.5 threshold to indicate adequate convergent validity (Fornell and Larcker, 1981). To access the discriminant validity, all reflective inter-construct correlations and root square of AVE has to be compared. Lastly, all the square roots of AVE should be larger than off-diagonal elements in the same column and row.

The model to be used to measure the relationship among construct which includes estimates of the path coefficients that will demonstrate the strength of hypotheses relationship. The model examines the R^2 value that will predict the power of the model. The key target constricts' level of R^2 must be high enough for the model to achieve a minimum level of explanatory power due to the goal of the prediction-oriented PLS-SEM is to explain the endogenous latent variables' variance. In the structural model, endogenous variables can be described as substantial, moderate or weak with $R^2 = 0.75$, 0.50 and 0.25 (Hair et al., 2011). Hair et al. (2014) explained bootstrapping is a re-sampling technique that draws a large number of subsamples from the original data (with replacement) and estimate models for each subsample). There are two situations to confirm the hypothesis are significant (i) P-value below 0.01; t-value more than 2.33 or (ii) P-value below 0.05; t-value more than 1.645.

Third variables or construct intervenes between two other related constructs will caused mediating effects. In another words, the effects of a predictor constructs transmitted through mediator to a dependent constructs. Hair et al. (2014) explained on the procedure of testing mediating effects with bootstrapping

approach. Bootstrapping perfectly suited for PLS-SEM due to no assumptions on the shape of distribution and easily applied to small samples size with higher confidence level. The moderator effect defined as the moderator changes the strength or the direction of a relationship between two constructs in the model (Hair et al., 2014). Predictor and moderator will be multiplied to make a construct called as interaction construct (predictor X*moderator M) to test the moderating effect.

4. RESEARCH FINDINGS

4.1. Respondents' Profile
Majority of the respondents' are male (90.5%) and minority are female (9.5%). The respondents' ethics were only two groups where Malay (75.2%) and Chinese (24.8). Majority of the respondents are 41-year-old and above (67.2%) that imply the respondents have sufficient working experience and the capability to articulate the current business issue. In addition, more than 90% of the respondents have more than 6 years working experience with the current company that indicate huge understanding to the company's structure and planning. Lastly, majority of the respondents' have master degree qualification (68.6%) and 67.2% of respondents were BODs of the company.

4.2. Firms' Profile
Majority of the respondents are from industrial product (37.2%) and follow by consumer product, trading and services (18.2%), properties (10.2%), technology (8.0%), construction (3.6%), plantation (2.9%) and others (1.5%). The findings shows majority of the companies established more than 11 years (72.3%) none of it established <5 years. Additional to that, majority of the respondents' firm have more than 100 employees (94.9%) and more than 1 segments/subsidiaries (76.6%).

4.3. Measurement Model

In this study, two measurement model been used. The reflective measurement model to reflect the dimension of ERM implementation and formative measurement model to analyze the relationship of the ERM implementation to firm performance.

Firstly, the reflective measurement model were assess with outer loading relevance testing. As indicated by Hair et al. (2014), an indicator with loading below 0.50 deleted because the joint variance between the variable and its indicator is bigger than the measurement error variance. There are 12 items deleted from the latent variables; 12 items from exogenous (IV) constructs. Before loading, the items used in the exogenous (IV) constructs is 35 items, after loading it become 23 items. Table 1 shows the items in the latent variable after cross loadings have been accomplished.

Next, researcher evaluated the first criterion, internal consistency reliability. CR used to measure the internal consistency reliability in this model and value above 0.70 consider are acceptable (Hair et al., 2014). Table 2 show that CR's value for all the first-order latent variables and dependent variables in the measurement model are above the recommended value of 0.70. Thus, we concluded the measurement model has internal consistency and is reliable. Degree of the multiple items measuring the same concepts were measured by convergent validity. In this model, AVE is used as an evaluation criteria for convergent validity. Chin (2010) explained total variance in a latent variable that contributed from its indicators was measured by AVE. Table 2 shows the AVE for the variables ranging from 0.7091 to 0.9461 were well above the required minimum level of 0.50 (Hair et al.,2014). Thus, the measures of the instruments have high levels of convergent validity.

The discriminant validity is the degree of a construct is truly distinctive from other constructs by experiential standards. Fornell-Larcker criterion is a more conventional method in considering discriminant validity with compare the square root of the AVE values with the latent variables correlation. Table 3 shows the discriminant validity for first order constructs.

4.4. Formative Measurement Model

The eight-dimensions of the ERM in the first-order constructs used as indicator for ERM implementation. All those valid items used to measure the constructed loaded into a single factor (ERM implementation). The model evaluated for the collinearity of indicators (variance inflation factor [VIF] value) with the SPSS linear regression analysis. The rule of thumb for VIF value is below 5. Others than event identification and internal environment, VIF values for others indicators were below threshold value of 5. Internal environment and event identification have VIF value above 5 threshold, so researcher combining both indicators under one constructs. Data re-run and all VIF values below the threshold of 5 (Table 4). Next the model was assess for the outer weight and the t-value. As the t-statistic value for all the indicators were above 2.57 that indicate the significance of their outer loading (P < 0.01), we conclude the model is exhibit satisfactory levels of quality.

Table 1: Removed Indicators for the measurement model

Constructs	Before removal	Removal items	After removal
Internal environment	8	IE1, IE2, IE3, IE6, IE8	3
Objective setting	4	OS4	3
Event identification	6	EI1, EI3, EI5	3
Risk assessment	4	RA1	3
Risk response	4	RS2	3
Control activities	4	CA4	3
Information and communication	3	-	3
Monitoring	2		2
Firm performance	12	-	12
Total	47	12	35

Table 2: Results of the measurement model for first-order constructs

Constructs	Items	Factor loadings	AVE	CR
Internal environment	IE4	0.937	0.8541	0.9461
	IE5	0.911		
	IE7	0.924		
Objective setting	OS1	0.843	0.5080	0.7519
	OS2	0.683		
	OS3	0.590		
Event identification	EI2	0.851	0.7214	0.8859
	EI4	0.845		
	EI6	0.852		
Risk assessment	RA2	0.879	0.5147	0.7555
	RA3	0.610		
	RA4	0.631		
Risk response	RS1	0.774	0.5113	0.7522
	RS4	0.522		
	RS4	0.814		
Control activities	CA1	0.829	0.5206	0.7627
	CA2	0.627		
	CA3	0.694		
Information and communication	IC1	0.775	0.5168	0.7617
	IC2	0.710		
	IC3	0.668		
Monitoring	M1	0.660	0.5520	0.7091
	M2	0.818		
Firm performance	FP1	0.749	0.5093	0.9251
	FP2	0.627		
	FP3	0.673		
	FP4	0.638		
	FP5	0.700		
	FP6	0.689		
	FP7	0.685		
	FP8	0.867		
	FP9	0.714		
	FP10	0.784		
	FP11	0.743		
	FP12	0.661		

AVE: Average variance extracted, CR: Composite reliability

4.5. Structural Model

Bootstrapping been used to determine the t-values and allow us to quantify the statistical significance of the path coefficient. Eight-dimension of ERM implementation was specify as first order and ERM implementation as second order. Results indicated the beta coefficient was positively and statistically significance at P < 0.01. ERM implementation to financial performance shows the path

Table 3: Discriminant validity for first-order construct

Constructs	Control activities	Event identification	Firm performance	Information and communication	Internal environment	Monitoring	Objective setting	Risk assessment	Risk response
Control activities	0.7215								
Event identification	0.6034	0.8494							
Firm performance	0.5708	0.7092	0.7137						
Information and communication	0.4049	0.6091	0.5489	0.7189					
Internal environment	0.3750	0.5593	0.4274	0.2897	0.9242				
Monitoring	0.3859	0.4252	0.3847	0.2738	0.2749	0.7430			
Objective setting	0.6723	0.6677	0.6405	0.5105	0.3575	0.4313	0.7127		
Risk assessment	0.4244	0.5277	0.5462	0.3910	0.2180	0.3289	0.4994	0.7174	
Risk response	0.2686	0.3101	0.3820	0.2350	0.0605	0.2060	0.3499	0.3748	0.7151

Table 4: Measurement model results for second order constructs after combining constructs

Second order constructs	Weight	VIF	t-value
Control activities	0.7749	2.004	12.2641
Event identification and internal environment	0.7934	1.929	15.3658
Information and communication	0.6937	1.534	11.8809
Monitoring	0.5799	1.307	5.9345
Objective setting	0.8460	2.431	12.2541
Risk assessment	0.7018	1.522	10.1301
Risk response	0.4922	1.219	6.6554

VIF: Variance inflation factor

coefficient of 0.7730 with t-value of 12.77. The result support Hypothesis H1 of the research. Second, the model was evaluated from the coefficient determination (R^2) value and as a rough rule of thumb, $R^2 = 0.75$, 0.50, or 0.25 will be consider as substantial, moderate or weak. The R^2 values for this study is 0.598 and be consider as moderate level. Table 5 summarises the result. The structural model is shown in Figure 2.

4.6. Mediating Effects
Mediation analysis was carried out to determine the variables that mediates the relationship between independent variable and dependent variable in this study. The results showed strategic agility mediated the relationship between ERM implementation and firm performance. The t-value was 3.17 with P < 0.01 significance. The direct effect is 0.553 and indirect effect is 0.219, thus the VAF was 71.6% and consider as partial mediation.

4.7. Moderating Effects
QIAF proposed as the moderator variable that will moderate or change the strength the relationship between ERM implementation and firm performance. In order to test the moderating effects of QIAF on the relationship between ERM implementation and firm performance, an interaction construct created with multiplying ERM implementation (predictor) and QIAF to predict firm performance. Result showed the QIAF to firm performance was not significance as the t-value is 1.2087 lower than 1.96.

4.8. Summary of Hypotheses
Overall results of data analysis for this study were presented in below Table 6.

5. DISCUSSION AND CONCLUSIONS

ERM implementation affect the firm performance proposed in H1. The results after PLS-SEM analysis shows that H1 has β-value of 0.773 and P < 0.01. Thus, in this research H1 is accepted and this implied a significant relationship between ERM implementation to the firm performance. This results is reinforced by studies done by past researcher Hoyt and Lienberg (2011), Lai et al. (2011), Gordon et al. (2009), Waweru and Kisaka (2013). The benefits of ERM implementation such as increase competitive advantage, lower B2B risk, lower exposed to global risk, better supply chain are helping the companies to sustain it business operation and agile to the business uncertainty. Therefore, implementing ERM within the firm is expected to benefit the firm in long run and increase the company's performance.

Hypotheses 2 (H2) suggested that strategic agility mediates the relationship between ERM implementation and firm performance. Results of bootstrapping analysis in previous chapter conclude H2 has the t-value of 3.17 with P < 0.01 significance. The direct effect is 0.553 and indirect effect is 0.219, thus the VAF was 71.6% and consider as partial mediation in this study. Thus, H2 is accepted and strategic agility has a significant mediates effect to the relationship between ERM implementation and firm performance. As suggested by past research, strategic agility has a significant relationship on firm performance and as a critical source of competitive advantage for the firm (Ofoegbu and Akanbi, 2012; Yang and Liu, 2012). Additional to that, ERM helps firm's agility in compliance to new regulator rules (Arnold et al., 2012) and risk management has a significant relationship on firm agility (Wieland and Wallenburg, 2012). The hypotheses is further enhanced with dynamic capabilities theory, an extension from resource based view theory where ERM implementation been conceptualized as a resources and strategic agility as a capabilities to adapt to volatitly environment to the firm performance.
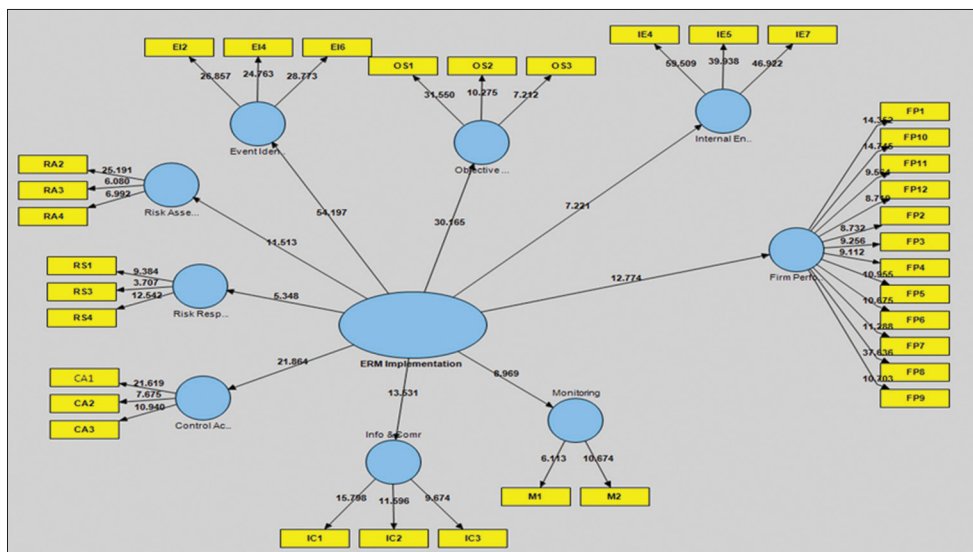
Figure 2: Structural model

Table 5: Significant results of path diagram

Path	Standard beta	Standard error	t-value	P-value	R²	Decision
ERM→firm performance	0.7730	0.0605	12.77	P<0.01	0.598	Supported

ERM: Enterprise risk management

Table 6: Summary of hypotheses

Hypotheses	Results
H1: ERM implementation has a significance relationship with firm performance	Supported
H2: Strategic agility mediates the relationship between ERM implementation and firm performance	Supported
H3: QIAF has a significance relationship between ERM implementation and firm performance	Not supported

ERM: Enterprise risk management, QIAF: Quality of internal audit function

Hypotheses 3 has proposed that there is a positive relationship between QIAF and firm performance. After the PLS-SEM analysis, the results shows β-value of −0.1568 with P > 0.05 and the t-value is 1.2087. Therefore, H3 is not supported after the moderating analysis QIAF did not moderate the relationship between ERM implementation and firm performance. The insignificant relationship is due to relative new of internal audit function in Malaysia context as part of the listing requirements - paragraph 15.26. The maturity level of internal audit function may vary compare to others country as Securities Commission Malaysia (SC) only imposed internal audit function as the recommendation in MCCG 2012. This is supported by survey from Ernst and Young that majority of internal audit function label as assurance provider and many firm expect internal audit to play a bigger role such as advisory for the company. Furthermore, there were past studies that showed internal audit function does not contributed to firm performance. Internal audit function not significantly related to the reduction of discretionary accruals (Davidson et al., 2005). Internal audit function do not contributed to profit level, return on investment and return on equity for government linked companies in Nigeria (Kiabel, 2012).

ERM is the critical intangible resources of the firm due to its value and difficult to imitate will helps the firm to obtain competitive

advantage in the long run. Strategic agility is the capabilities of the firm to adapt to changing environment quickly. In this study, strategic agility justified as the mediator from dynamic capabilities theory perspective where capabilities to adapt to uncertainty is a key to obtain competitive advantage other than those critical resources. Based on agency theory, this study found QIAF does not have any significant effect to the relationship of ERM implementation and firm performance. Lastly, this study contributed to the literature by using PLS as the analytical tool where the combination of reflective and formative measurement models. The ERM implementation been examined through its eight-dimensions with reflective second order model.

In term of practical contribution, this study showed the value of ERM in managing with the dynamic business environment within the various internal and external uncertainties translated by the significant improvement in the firm performance. This study confirm on a reasonable extent, that ERM capable to mitigate the risk and increase the opportunities in business environment while the competiveness of the firm sustain and maximize the shareholders' value. In addition, the findings on dynamic capabilities theory on strategic agility function as mediating effect serve as important points for the firm the importance of maintain agile in nowadays environment.

Low response rate presents a challenge to generalize the content to all PLCs in Malaysia. In addition, due to time and cost constraints this study did not acquire any secondary data and interviews which may provide further in-depth findings related to the research. Future studies on similar topic may adopt other ERM model such as IS0 31000 components, Australia and New Zealand risk management framework and RIMS risk maturity model for ERM to have a different perspective in conceptualizing the ERM implementation. Future studies should explore the other

two-dimensions of ERM COSO (2004) which are four objective setting and its organizational units on the metrics.

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