

**THE IMPACT OF ENTERPRISE RISK MANAGEMENT, STRATEGIC
AGILITY AND QUALITY OF INTERNAL AUDIT FUNCTION ON FIRM
PERFORMANCE**

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TABLE OF CONTENTS

ACKNOWLEDGEMENT	i
TABLE OF CONTENTS	ii
LIST OF TABLES	vi
LIST OF FIGURES	vii
ABSTRAK	ix
ABSTRACT	x
CHAPTER 1 INTRODUCTION	1
1.1 Introduction	1
1.2 Background of the study	1
1.3 Problem Statements.....	11
1.4 Research Objectives	12
1.5 Research Questions	13
1.6 Definition of Key Terms	13
1.7 Significance of Study	18
1.8 Organization of the Remaining Chapters	19
CHAPTER 2 LITERATURE REVIEW	20
2.1 Related Theories.....	20
2.1.1 Resource-based View.....	20
2.1.2 Agency Theory.....	22
2.2 Firm Performance.....	23
2.2.1 Financial Measures versus Non-Financial Measures in Firms' Performance Measurement	24
2.3 Enterprise Risk Management (ERM).....	25
2.3.1 Definition of Risk and Risk Classification	25
2.3.2 Risk and Risk Management	27
2.3.3 Evolution of Enterprise Risk Management (ERM)	28

2.2.4	Driving Forces of Enterprise Risk Management Implementation	30
2.2.5	Definition of Enterprise Risk Management (ERM).....	31
2.2.6	Enterprise Risk Management Framework	32
2.2.7.	Benefits of Enterprise Risk Management	41
2.2.8	Conceptualizing the Measurement for Enterprise Risk Management in this Study	42
2.3	Internal Audit Function (IAF).....	43
2.3.1	Quality of Internal Audit Function	45
2.4	Strategic Agility	45
2.5	Theoretical Framework and Hypotheses Testing.....	52
2.5.1	Theoretical Framework.....	52
2.5.2	Development of Hypotheses.....	53
2.6	Literature Gap	56
2.7	Summary	57
CHAPTER 3 RESEARCH METHODOLOGY.....		58
3.0	Introduction	58
3.1	Research Design.....	58
3.2	Unit of Analysis	59
3.2	Population and Sample Size.....	59
3.4	Pre-Testing	61
3.5	Measurement Instrument.....	61
3.6	Questionnaire Design	67
3.7	Data Analysis	69
3.7.1	Descriptive Analysis	69
3.7.2	Structural Equation Modeling.....	69
3.7.3	Partial Least Square Path Model.....	70
3.7.4	Reflective and Formative Measurement Models Justification.....	71
3.7.5	Validity and Reliability.....	72
3.7.6	Measurement Model	73
3.7.7	Structural Model	73
3.7.8	Bootstrapping Method	74
3.7.9	Mediating Effect	74

3.7.10	Moderating Effect	76
3.6	Summary	77
CHAPTER 4 RESEARCH FINDINGS		78
4.1	Introduction	78
4.2	Sample Profile	78
4.2.1	Respondents' Profile	79
4.2.2	Firm Profile	81
4.3	Descriptive Analysis of Variables	82
4.4	Measurement Model	83
4.4.1	Reflective Measurement Model	84
4.4.2	Formative Measurement Model	90
4.5	Structural Model	93
4.6	Mediating Effect	94
4.7	Moderating Effect	96
4.8	Additional Analysis	97
4.8.1	Assessment on the Relationship of Individual Components of ERM to Firm Performance	97
4.8.2	Assessment of ERM Implementation to Financial Performance and Non-Financial Performance	99
4.9	Summary of the Hypotheses	100
CHAPTER 5 DISCUSSION AND CONCLUSION		102
5.0	Introduction	102
5.1	Recapitulation of the study	102
5.2	Discussion	103
5.3	Contributions of Findings	106
5.3.1	Theoretical Contributions	106
5.3.2	Practical Contribution	106
5.4	Limitations of the Study	108
5.5	Suggestions for Future Research	108
5.6	Conclusion	109
REFERENCES		110

APPENDIX A: COVER LETTER AND QUESTIONNAIRES	123
APPENDIX B- SMARTPLS- PLS ALGORITHM REPORT	134
APPENDIX C: SMARTPLS – BOOTSTRAPPING REPORT	137
APPENDIX D: COLLINEARITY RESULTS	139

LIST OF TABLES

<i>Table 1.0: Definition of Key Terms</i>	13
<i>Table 2.1: Agility Terms</i>	47
<i>Table 3.1: Measurement Instrument</i>	62
<i>Table 4.1 Summary of Respondents' Profile</i>	79
<i>Table 4.2: Summary of Firm Profile</i>	81
<i>Table 4.3: Descriptive Analysis of Variables</i>	83
<i>Table 4.4: Removed Indicators for the measurement model</i>	85
<i>Table 4.5: Results of the measurement model for first-order constructs</i>	86
<i>Table 4.6: Discriminant Validity for first-order construct</i>	88
<i>Table 4.7: Measurement Model Results for Second Order Constructs</i>	91
<i>Table 4.8: Measurement Model Results for Second Order Constructs After Combining Constructs</i>	91
<i>Table 4.9: Significant Results of Path Diagram</i>	94
<i>Table 4.10: Results of Moderating Effects</i>	96
<i>Table 4.11: Individual Dimensions of ERM to Firm Performance</i>	98
<i>Table 4.12: Significant Results of Path Diagram (Financial versus Non-Financial)</i>	99
.....	100
<i>Table 4.13: Summary of hypotheses</i>	100

LIST OF FIGURES

<i>Figure 1.1: Malaysian Stock Market Capitalization, percentage of GDP.</i>	3
<i>Figure 1.2: Malaysian Stock Market Capitalization, in dollars.</i>	3
<i>Figure 2.1 :Enterprise Risk Management :Evolution, Trends and Emerging Practice ...</i>	29
<i>Figure 2.2: COSO Cube of Internal Control-Integrate Framework</i>	33
<i>Figure 2.3: The COSO ERM Integrated Framework Cube 2004.....</i>	35
<i>Figure 2.4: Conceptual Model of Agility.....</i>	47
<i>Figure: 2.5 Strategic agility model.....</i>	49
<i>Figure: 2.6: Where is Strategic Agility most needed?</i>	50
<i>Figure 2.7: The Research Framework.....</i>	52
<i>Figure 3.1: Reflective and Formative Measurement Model.....</i>	72
<i>Figure 3.2: Mediation model analysis</i>	75
<i>Figure 3.3: Mediator Analysis Procedure in PLS –SEM</i>	76
<i>Figure 3.4: Moderation model analysis.....</i>	77
<i>Figure 4.1 Measurement Model.....</i>	89
<i>Figure 4.3 Second Order Measurement Model with combination of constructs.....</i>	92
<i>Figure 4.2 S Second Order Measurement Model</i>	92
<i>Figure 4.4 Structural Model</i>	94
<i>Figure 4.5: Structural Model with Mediating Effect</i>	95
<i>Figure 4.6: Structural Model with Moderating Effect.....</i>	97
<i>Figure 4.7: Structural Model with Individual Components of ERM to Firm Performance</i> <i>.....</i>	98
<i>Figure 4.8 Structural Model with Financial and Non-Financial Performance</i>	100

Figure 4.9: Summary of Structural Model..... 101

ABSTRAK

Pengurusan Risiko Enterpris merupakan satu konsep pengurusan yang diintegrasikan secara keseluruhan dalam organisasi untuk membantu syarikat dalam menilai risiko yang menghalang syarikat mencapai matlamat strategik dan memusnahkan kejayaan yang dicapai sebelum ini. Oleh kerana kerumitan persekitaraan hari ini, kebanyakan syarikat telah beralih dari pengurusan tradisi kepada pengurusan risiko enterpris. Pada masa yang sama, ketangkasan strategik memainkan peranan yang penting kerana ia mampu membantu syarikat berubah dengan pantas and mengekalkan daya saing dalam persekitaraan perniagaan. Selain itu, peranan audit dalaman juga semakin meningkat terutamanya dengan cadangan daripada MCCG 2012 kepada ahli lembaga syarikat untuk menubuhkan jabatan audit dalaman di syarikat masing-masing. Kajian ini menguji hubungan antara tahap pelaksanaan ERM dengan pretasi syarikat dan fungsi pengantara oleh ketangkasan strategik serta fungsi penyederhana kualitti jabatan audit dalaman dalam hubungan ini. Tahap pelaksanaan ERM dikonseptualkan dengan komponen-komponen dalam rangkakerja COSO (2004) manakala pretasi syarikat dikaji berdasarkan petunjuk kewangan dan bukan kewangan. Analisis data dengan menggunakan 137 maklum balas menunjukkan tahap pelaksanaan pengurusan risiko entrepris mempengaruhi pretasi syarikat di Bursa Malaysia secara signifikan and ketangkasan strategik juga berfungsi secara signifikan pengantara dalam hubungan ini. Manakala, kualitti jabatan dalaman tidak mempunyai hubungan signifikan sebagai penyerdahana.

ABSTRACT

Enterprise risk management or famously known as ERM is an integrated, enterprise-wide approach in assessing events that possibly to impact a firm's ability to sustain its performance and hinder from achieving its strategic objectives. Due to the complexity of today environment, many firm has shifted from traditional risk management model to enterprise risk management model. At the same time, strategic agility play an important role as it allowed the firm to adapt to the changes quickly and maintain its competitiveness in the business environment. The role of internal audit function is increasing over the years especially with the recommendation from MCCG 2012 for the board to establish an internal audit function in the company. This study examines the relationship of ERM implementation to firm performance in public listed companies of Malaysia and mediating and moderating effects of strategic agility and quality of internal audit function in this relationship. The ERM implementation was conceptualized with the elements in COSO (2004) ERM Integrated Framework, and firm performance was measured by financial and non-financial indicators. Total of 137 responses obtained through questionnaire from PLCs in main market of Bursa Malaysia for data analysis and found ERM implementation has a significant relationship to firm performance and strategic agility significantly mediate the relationship. However, quality of internal audit function found does not significantly moderate the relationship between ERM implementation and firm performance.

CHAPTER 1

INTRODUCTION

1.1 Introduction

Managing risk is a core component for business nowadays as they are facing challenges in economic environment. Firms are struggling in maintaining profits due to mainly market uncertainties and financial crisis. In the last few years, research by Lai et al, (2011) shows a shift trend on how the organizations view and manage risks. In recent years, organizations tend to view risk management in a wider and holistic perspective which is known as Enterprise Risk Management (ERM) (Gordon et al., 2009). Therefore, this study intends to examine the relationship between ERM implementation and firm performance of the public listed companies (PLCs) on main market of Bursa Malaysia. This study also investigates the role of strategic agility as mediator the impact of quality internal audit function as moderator to the relationship between ERM implementation and firm performance.

1.2 Background of the study

Public Listed Companies or PLCs are company that are listed on a stock exchange market. In Malaysia, all the PLCs are traded on Bursa Malaysia or earlier known as Kuala Lumpur Stock Exchange (KLSE). Bursa Malaysia has Main Market and ACE market with total of 929 companies as per July 2014. Companies that are listed on Bursa Malaysia are classified under different sector such as consumer products, construction, finance, hotels, industrial

products, mining, plantation, trading/services, technology and others such as real estate, bond and funds.

Consumer products are those companies transform materials into new products for consumer use while industrial products for industrial use. On another hand, construction companies are involve in constructing any form of structure and hotels sector are providing hospitality to the consumer. Finance sector are related in obtaining and redistributing funds, while mining and plantations are those companies that actively engage with exploration extraction of minerals and planting crops. Lastly, trading/ services are related to distribution of products and provision of services and technology companies are related to information technology solutions.

Public listed companies (PLC) that are 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 GDP was 156.66 in year 2012 and value at USD 476.34 billion. Share price times the number of shares outstanding of the companies is defined as market capitalization.



Figure 1.1: Malaysian Stock Market Capitalization, percent of GDP.

(Source: Adapted from the World Bank, 2012)

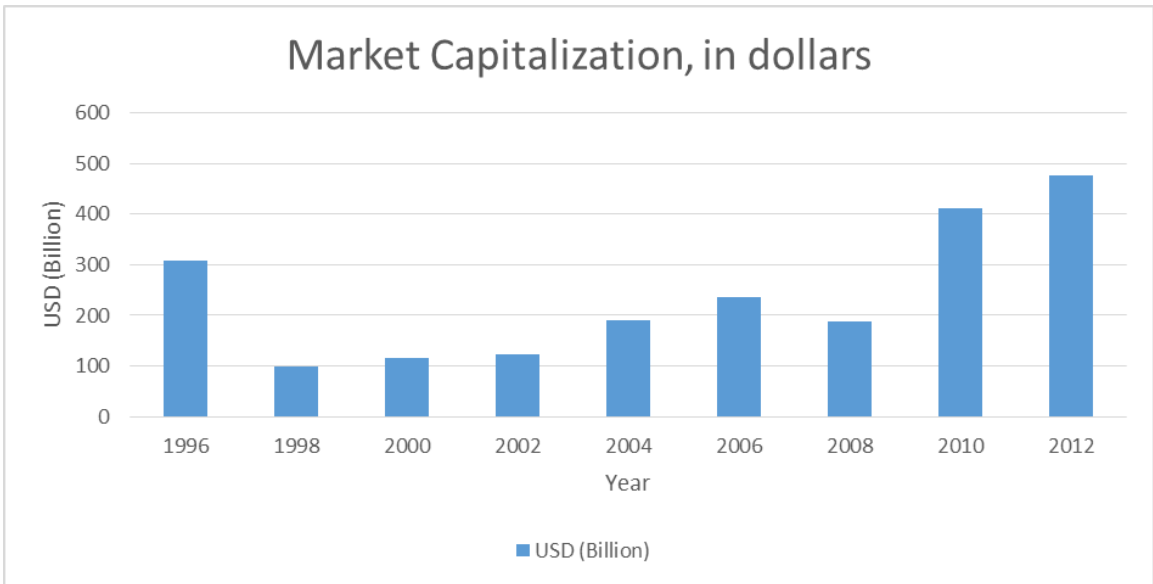


Figure 1.2: Malaysian Stock Market Capitalization, in dollars.

(Source: Adapted from the World Bank, 2012)

The contribution of the public listed companies (PLCs) to Malaysia's economy may be deteriorated due to globalization which exposed public listed companies (PLCs) to many challenges. Companies are struggling in maintaining the profits that enjoyed in the past due to economic turndown and market uncertainties. Additional to that, companies in Malaysia were impacted by the uncertainties of monetary policy from dominant economies and instability in in the international financial, currency and commodity markets. As per Figure 1.1 and Figure 1.2 shows, market capitalization of public listed companies will drop significantly when Malaysia impacted by global economy crisis.

The major drawback in Malaysia's economy can be tracked back since year 1997. During the period from June 1997 to August 1998, Kuala Lumpur Composite Index (KLCI) drop by 72% due to Asian Financial Crisis (Chin, 2009). This crisis 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. Moreover, due to the financial crisis, Malaysia government fixed the ringgit (MYR) exchange rate at RM3.80 that directly impact the Kuala Lumpur Stock Exchange (KLSE) value with depreciation of 44.8%. 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 business arena. The international scandals of Enron, WorldCom, and Xerox have brought an alarming signal to the world. In Malaysia context, there are examples of companies that failed to safeguard the shareholders' value especially in term of the fraud reporting.

Perwaja Stell Sdn. Bhd was established in 1982 by HICOM Bhd to advance the heavy industrial policy in Malaysia. However, due to failure of the company in ensuring fair and transparent reporting in place, Perwaja has an inaccurate records and unauthorized million ringgit of deal. This fraud enriched certain directors in the expense of shareholders. In addition, another Malaysian company that failed to recognize and mitigate risk accurately was Technology Resources Industries Berhad (TRI) on the forex losses and high rate of borrowing in 1997 when Asian Financial Crisis happen. In 2010, Sime Darby Group incurred losses of RM 964 million from Qatar Petroleum Project (QP), Maersk Oil Qatar (MOQ) Project and Marine Project and the Bakun hydroelectric dam project. The forensic audit into the energy and utilities division had concluded the key personnel of foul play and failure to carry out duties and obligations that caused the delay of the project completion. Board of Directors of Sime Darby took a stringent measures by asking the Group Chief Executive (GCE), Dato' Seri Ahmand Zubir Marshid on absence leave prior to the expiry of the contract and search for a new GCE.

Tan (2005), stated that Bank Islam recorded the losses of RM456 million in 2005. Bank Islam Malaysia was established in 1983 and largely owned by government. The losses of the bank was due to non-performing loan that coming from its subsidiary in Labuan's offshore financial center and the borrowers were companies from Sarajewo and South Africa. Chief executive officer at that point of time, Noorazman A Aziz told The Edge business weekly about the non-performing loans were given out without sufficient understanding of the risks involved and he hinted that the risk management had to be tightened. All those scandals have weaken the investors' confidence on the company in

safeguarding their value, reliability of the financial report and the risk management program.

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 has 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 six months of 2014. Tan Sri Azman Mokhtar, managing director of Khazanah Nasional Bhd estimate the losses will double to RM 2 Billion by end of the year. These incidents showed the failure of management in mitigating the risk of aviation accident where low likelihood but high impact. In August, 2014 Khazanah will restructuring MAS with privatization, 30% cut in workforce and review of routes and renegotiation of supply contracts.

The above examples has proven that failure in risk management is one of the main reasons for the collapse of public listed companies in Malaysia and this supported by academic research .Past researched studies explained the deteriorated impact of economy downturn to public listed companies were due to failure in risk management. Claessens, Djankov and Lang (1998) discloses many East Asian companies could not tolerate the pooled risks of increased interest rates, depreciated currencies, and huge drops in domestic demands. Furthermore, Jin (2001) estimated from sample of public-listed companies on

the Bursa Malaysia, one-tenth of it were severely impacted by poor corporate governance and risk management that contributed to the companies' failure.

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.

Compare to traditional risk management approach, ERM is a more comprehensive and integrated approach that have high-level oversight of the firm entire risks portfolio and aligned with the strategic objectives of the firm. This is different to traditional risk management where different individual managers oversee specific risks individually. ERM framework is an extension of the COSO (1992) Internal Control Framework and can be utilized to address the needs of a more complete control system and move the firms to an integrated and comprehensive risk management processes. Many researchers have widely recognize the importance or benefits of ERM in managing the portfolio of risks that face by the firms nowadays (Liebenberg & Hoyt, 2003; Aabo & Skimkins, 2005; Nocco & Stulz, 2006).

Following the benefits of ERM implementation to firm performance, this is expected to increase the adoption and implementation among public listed companies in Malaysia. However only 29.7% of 528 companies claimed to have adopted ERM process in year 2007 (Tahir et al., 2011). The complete ERM adoption rate has increased in year

2008 in which 36% of 608 public listed companies in Malaysia have fully implemented ERM (Teoh & Muthuveloo, 2012). Earnst & Young conducted a risk management survey in 2011 and showed that risk management practice increased over the years as majority of the respondents indicated a formal risk framework exists in their organization and only 15% of 140 respondents claimed no formal risk management framework exists in their organization.

Asian Financial Crisis 1997 shacked the investors' confidence level on the corporate governance of the public listed companies in Malaysia. In March 2000, Malaysia Government introduced Malaysia Code on Corporate Governance 2000 (MCCG 2000) to identify the roles and responsibilities of board of directors. The code marked a significant landmark in corporate governance improvement in Malaysia. Risk management is been clearly identified and beheld as one of the primary responsibilities of the board of directors for the first time ever in Malaysia history. The voluntary requirement on the board to understand the primary risks of all aspects of the business in order to achieve a correct balance between risks incurred and potential return to shareholders, and to confirm that there is an appropriate framework of reporting on internal financial controls and regulatory compliance are stated clearly in the code. The code revised in 2007 (MCCG 2007) where it impose a mandatory requirement instead of the previous voluntary requirement.

The code revised in 2012 (MCCG 2012) to groups out the wide principles and precise references on structures and process to ensure the companies applied good cooperate governance. The MCCG 2012 specify those principles such as established clear roles and responsibilities, strengthen composition of the board such as establishment of nominating committee, reinforce independence and etc. to ensure good corporate

governance in place. Principle 6 of MCCG stated the board should recognize and manage risks of the companies. The introduction of Malaysia Code on Corporate Governance implies the importance of the role that played by Board of Directors in ensuring good corporate governance in place to certify the sustainability and profitability of the company.

MCCG 2012 recommended board of directors 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. Internal audit function is defined as “an independent, objective assurance and consulting activity to design to add value and improve an organization's operations. It helps an organization accomplished its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance process” (IIA,1999) 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 (The Institute of Internal Auditors, 2004).Internal audit function providing objective assurance that the major business risk are managed appropriately and ensure that the risk management and internal control framework of the firm is operating effectively. In order to ensure the independence and objectivity of the internal audit function, all the relevant Standards need to be applied. Quality of internal audit function achieved through complies with the attributes and performance standards as stated in Institute Professional Practices Framework (IPPF) (Institute of Internal Auditors Malaysia, 2002). Quality of Internal Audit Function is

deemed to contribute to the effectiveness of risk management towards the performance of 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.

Hence, this study intends to examine the relationship between ERM implementation and firm performance of the public listed companies (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.

1.3 Problem Statements

The Asian Financial Crisis in 1997 marked a bad memories for Malaysia economy. The disaster caused many listed companies to experience deteriorated business results and danger of went bankruptcy. The performance of public listed companies was affected by another global financial crisis due to the US housing bubble in year 2007 where stock market capitalization dropped from USD 187.07 billion in year 2008 from previous of USD 325.66 billion. The competence level of the firm in dealing with risks or uncertainties is directly impact the sustainability of the firm. The past experiences hence indicated the importance of a holistic risk management to the management and BODs of the public listed companies. ERM is an integrated and systematic approach to manage risk holistically. Firm achieve competitive advantage, and ultimately lead to superior long-term performance through possess valuable and rare resources as per resource-based view theory (Barney, 1999). Significant resources from ERM such as structure, essence and knowledge will create and enhance the sustainable competitive advantage of firms.

Past studies also found that ERM bring benefits to the firms (Meulbroek, 2002; Hoyt & Liebenberg, 2006). However, contradict results from Norlida (2009) and Pogach and Warr (2010) indicated insignificant value creation from ERM implementation poses a roadblock or questions to the management on the effectiveness of the ERM to the firm. In addition, literature has highlighted the role of quality internal audit function to firm performance (Beasley et al, 2006; Gramling & Myers, 2006). However, there is still lack of literature that investigated the influence of the quality of internal audit function in ensuring better performance in firms with regards to the extent of its ERM implementation. Furthermore, by just addressing the risk alone will not enough in today environment, firm

need to be proactive in taking steps to response in fast facing strategies. Strategic agility is the ability to continuously adjust and sensitive the business environment helps to improve firm performance based on past research (Johl et al., 2013; Fooladi & Shukor, 2012; Ogoegbu & Akanbi, 2012; Oyedijo, 2012).

Hence, the study examines enterprise risk management (ERM) implementation as the independent variable, strategy agility (SA) as mediator, quality of internal audit function (QIAF) as moderator and firm performance (FP) as the dependent variable.

1.4 Research Objectives

- a) To examine the relationship between enterprise risk management implementation and firm performance among public listed companies (PLCs) on Main Board in Bursa Malaysia.
- b) To investigate whether strategic agility mediates the relationship between the ERM implementation and firm performance among public listed companies (PLCs) on Main Board in Bursa Malaysia.
- c) To investigate whether quality of internal audit function moderates the relationship between ERM implementation and firm performance among public listed companies (PLCs) on Main Board in Bursa Malaysia.

1.5 Research Questions

- a) Is there a significant relationship between enterprise risk management implementation and firm performance among the public listed companies (PLCs) on the main market of Bursa Malaysia?
- b) Does the strategic agility mediate the relationship between enterprise risk management implementation and firm performance among the public listed companies (PLCs) on the main market of Bursa Malaysia?
- c) Does quality of Internal Audit Function moderate the relationship between enterprise risk management implementation and firm performance among the public listed companies (PLCs) on the main market of Bursa Malaysia?

1.6 Definition of Key Terms

Table 1.0: *Definition of Key Terms*

Constructs	Definitions	Source
Quality of Internal Audit Function	a) Collection of attributes such as internal auditors' competence, education level and certification, internal auditors' hiring, reporting and termination, and quality of the work.	Johl et al. (2014)

<p>Strategic Agility</p>	<ul style="list-style-type: none"> a) The ability to continuously adjust and adapt strategic direction in core business, as a function of strategic ambitions and changing circumstances, and create not just new product and services, but also new business models and innovative ways to create value for a company. b) Ability to continuously and adequately adjust and adapt in appropriate time the strategic direction in core business in relation to changing circumstances, be known by sensitivity to the environment. c) Combination of three major meta-capabilities that is strategic sensitivity, leadership unity and resource fluidity. <p>This study defines strategic agility as strategic sensitivity, leadership unity and resource fluidity.</p>	<p>Doz (2014)</p> <p>Ofoegbu & Akanbi (2012)</p> <p>Doz & Kosones (2008)</p>
<p>Firm Performance</p>	<ul style="list-style-type: none"> a) Includes financial indicators such as growth, profitability and market value, measured by income/ revenue, return on 	<p>Merchant & Van der Stede, 2007; Samad & Hassan, 1998;</p>

	<p>assets, return on equity, dividend per share, earning per share.</p> <p>b) Non-financial indicators such as competitiveness, customer, efficiency in internal business process and improvement in learning and growth among the employees</p> <p>This study defines firm performance as the combination of financial and non-financial.</p>	Kaplan & Norton, 1992
Risk	Risk is the degree of uncertainty. It cannot be eliminate by definition and nature	Fabozzi & Peterson (2003)
Risk Management	Risk management is managing to achieve a balance between gains while minimizing losses.	Ferreira (2006)
Enterprise Risk Management (ERM)	A process affected by an entity's board of directors, management and other personnel, applied in a 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.	COSO (2004)

Risk Appetite	Defined as the readiness of investors to bear risk/ uncertainty. It will depend on the degree the investors dislike such uncertainty and the level of the uncertainty.	Gai & Nicholas (2006)
Internal Environment	The basis for how risk is viewed and addressed by an entity's people, including risk management philosophy and risk appetite, integrity and ethical values and the environment in which they are operate.	(COSO, 2004)
Objective Setting	To ensure management has in place a process to set objectives and that the chosen objectives support and align with the entity's mission and are consistent with its risk appetite	(COSO, 2004)
Event Identification	Internal and external events affecting achievement of an entity's objectives must be identified, distinguishing between risks and opportunities.	(COSO, 2004)
Risk Assessment	Risks are analyzed, considering likelihood and impact, as a basis for determining how they should be managed.	(COSO, 2004)

Risk Response	Management selects risk responses such as avoiding, accepting, reducing or sharing risk.	(COSO, 2004)
Control Activities	Policies and procedures are established and implemented to help ensure the risk responses are effectively carried out.	(COSO, 2004)
Information and Communication	Relevant information is identified, captured and communicated in a form and timeframe that enable people to carry their out responsibilities.	(COSO, 2004)
Monitoring	The entirety of enterprise risk management is monitored and modifications made as necessary.	(COSO, 2004)

1.7 Significance of Study

In recent years, firm performance and its sustainability become major concern for every organizations. This is mainly due to the uncertainties and challenges faced by firms in today business environment. The enterprise risk management framework that introduce by COSO in 2004 emphasises on the wider, extensive and more comprehensive focus in manage firm's risk. In the implementation of the ERM approach, it may depend on the outcome of benefits that will gain because the cost and resources that associated.

Previous studies conducted in the develop countries provided inconclusive and mixed results towards the effectiveness of ERM implementation to firm performance (Hoyt & Liebenberg, 2006; Gordon et al., 2009; Norlida, 2009; Pogach & Warr, 2010), limited studies were undertaken to identify the factors that influence corporate performance on the implementation of enterprise risk management in developing economics such as Malaysia (Daud, 2011).

This study has its practical significance, which allow companies to understand the importance ERM implementation to firm performance. Besides that, this study will increase the awareness of the implementing ERM among listed companies in the main market of Bursa Malaysia with the concept and components of the integrated risk management program, the benefit and impact of ERM to the company. Furthermore, this also increase awareness on how quality Internal Audit Function (QIAF) and strategic agility can enhanced and contribute to the success of ERM implementation to drive firm performance. The overall results of this study will benefit the public listed companies in Malaysia, Securities Commission and the Institute of Internal Auditors Malaysia.

In terms of theoretical contribution, this study applies the resource-based view in examining the extent of ERM implementation and firm performance. According to resource-based view, the ERM will be viewed as intangible and valued product for the firm because it able to help the firm achieve competitive advantage by addressing the uncertainties environment. Additional to that, dynamic capability as the capabilities of firm to build, reconfigure and integrate internal and external competency in the changing environment will be applied to examine the relationship of ERM implementation to firm performance. This study also discloses further suggestion on key contingent factors, i.e. quality of internal service and strategic agility, in the relationship of ERM implementation to firm performance amount public listed companies in Malaysia.

1.8 Organization of the Remaining Chapters

In Chapter 1, background of this study is introduced, the research problem and context is identified and discussed the significance of the study. In Chapter 2, the related theories are identified, related literature reviewed and models proposed for this study. The proposed research framework and the variables of this study will also be identified. Chapter 3 is mainly focus on research design of the study, methodological procedures, and the method of analysis. Next in chapter, data analysis will be conducted and results will be discussed where the research hypothesis will be tested and explained. Lastly, Chapter 5 covers research discussion, impact and limitation of the study, and concluded with suggestion for future research.

CHAPTER 2

LITERATURE REVIEW

This section presents previous literatures with regards to Enterprise Risk Management (ERM), firm performance, the role of strategic agility and quality of internal audit function. Besides that, the roles and relationships of each variable are also be examined. This chapter elaborates the underpinning theories, suggest the theoretical research framework and develops the hypotheses related to this study.

2.1 Related Theories

2.1.1 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 & Prahalad, 1996). Resources was perceived broadly as “anything that can be understood as a strength of a weakness” of the firm (Dollinger, 1999). This concept explained on how superior performance can be accomplished relative compare to other company in the same industry with securing and using unique resources of the firm. Additional to that, Peteraf (1993) mentioned firm have to possess those resources that are heterogeneous and imperfect mobile to obtain competitive advantage.

The resources for a firm will include all its assets, firm attribute and it capabilities, knowledge and information, its organizational process. (Barney, 1991). The valuable resources that will improve the firm’s efficiency and effectiveness will be the capabilities of using and engaging the resources within the firm to transfer the knowledge and

information (Barney, 1991; Makadok, 2001). Barney (1991) defined value, rareness, imitation and substitutability as the characteristics of the resources that determine the sustainability of the company competitive advantage and therefore organizational performance. Grant (1991) highlighted durability, transparency, transferability and replaceability as four important determinants of competitive advantage and under four categories of financial, physical, human and technological, and organizational resources.

In this study, 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. The term “capabilities” highlighted the main role of strategic management in adjusting, integrating and reconfiguring core and external organizational skills, resources and functional competences to match the requirements of a changing environment. Firm required to sense uncertainties, grab opportunities and detect risk with capabilities that the firm own especially in the changing environment. Existing resources can be boost or leverage as continuing long term competitive advantage through dynamic capabilities approach (Eisenhardt & Martin, 2000). Wu (2010) investigated the dynamic capabilities view to environmental volatility on 253 Taiwanese firms and found out firms that own dynamic capabilities can successfully increase their competitive advantage regardless of highly volatile 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” (Grant, 1996). Additional to that, ERM will be leverage as the internal capabilities to improve the competitive advantage of the firm.

2.1.2 Agency Theory

The meaning for the agency theory is a contract relationship where one party (the principal, eg 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 & Smith, 1984). As per agency theory explain, the agents tend to perform activities or actions that favor themselves when there both parties have a different goal (Jensen & Meckling, 1976). Different attitudes towards risk and how their perceive risk lead to the principal-agent problem and caused them to take those actions that are more comfortable and confidence. The theory explained two specific issues; agency problem where misalignment of goal between owner and contractor, and both parties reconcile different risk tolerance.

Fama & Jensen (1983) emphasis the importance of controlling agency problem because the impact to organizational survival. Additional to that, the agency problems rise due to agreements are not costless carved and enforced. The authors' emphasis primary part of board of directors is to align the goal of the owners (shareholder) and the management in the agency theory framework context. Board of directors must effectively assume an oversight function in order to safeguard the interests of shareholders (Brennan, 2006).

In this research, 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. The Malaysia Code on Corporate Governance (MCCG) 2012 focus on firming the board of directors' duty in maintain effective governance structure to confirm the proper management of risks and

close of internal controls further rationalizes the control instrument stressed in the agency theory. Firm can achieve its business objectives and maximizes the shareholders' value with implementation of ERM. (Nocco & Stulz, 2006). Internal audit function is synthesizes as reporting to the audit committee as per Standards to maintain its independence.

2.2 Firm Performance

The performance of the firm is essential to indicate whether a firm is facing a loss or profit and it can be assessed from different perspective. Main concern of strategic management is business performance (Venkatraman & Ramanujam, 1986). Maintaining good control, increase the probability of organizational success, and improve firm performance will let the management assured that no major unfriendly surprises will happen (Merchant & Van der Stede, 2007).

Everyone defined performance differently. Firm performance is the ability of the firm in utilizing the resources effectively and efficiently to achieve its corporate goal (Daft, 2000). Firm performance been explained by Doherty (2000) as the ability of the firm's to achieve its goals and objectives, financially or non-financially. Javier (2002), as quoted in M.Taleghani & M.N. Liya (2013) defined performance is equivalent to economy, efficient and effectiveness or famously known as 3E of a certain program and activity. Richardo (2001) state that firm performance is organization activity achieves goals and objectives of the organization (quoting Abu Jrard, Yusuf, Nick Bean, 2010). Richardo (2001) explained productivity was a proportion describing the volume of work finished in a given period and performance was a wider indicator that could include productivity as well as quality, consistency and other features.

In the early days, performance measurement system was solely based on those accounting formula such as sales per worker, return in investment (ROI) and profit per unit production. In measuring the market valuation of the firm, Tobin's Q will be used because it combines the market and accounting information. Additional to that, return on assets (ROA) will be used to measure the operating profit. Kaplan & Norton (1992) concluded balanced scorecard (BSC) has been used in measuring the firm performance in their study.

2.2.1 Financial Measures versus Non-Financial Measures in Firms' Performance Measurement

Firm's financial success is the determinants for firm performance (Abu Jarad et al., 2010). Profit margin, return on assets (ROA), return on equity (ROE), return on investment (ROI) and return on sales (ROS) are considered as communal indicators in financial measurement (Robinson, 1982; Galbraith & Schendel, 1983) as quoted in Abu Jarad (2010). Business Performance Index (BPCI) incorporated with return on investment (ROI), return on assets (ROA), and return on sales (ROS) are three commonly used indicators to measure profitability. Davis et al., (2000) emphasis profit as an important financial indicators which reflecting the firm's efficiency and effectiveness with increase the sales while maintain low cost variable.

Although the traditional accounting measurement are long established as standard for measuring business performance, they still been criticized as short-termism, lack strategic focus, poor data quality, local optimization, and not encouraging continuous improvements were those weakness on financial measures (Neely, 1999). Kaplan & Norton (1996) as quoted in Lau and Oger's research challenged the oldness and insignificance management accounting standards in today's environment.