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THE MODERATING EFFECT OF RISK CULTURE ON THE RELATIONSHIP BETWEEN GOVERNANCE MECHANISM AND ENTERPRISE RISK MANAGEMENT IMPLEMENTATION IN MALAYSIA

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ABSTRACT

The present study is designed to examine the relationship between governance mechanism (audit committee, risk management committee and internal audit) and enterprise risk management (ERM) implementation amongst Malaysian public listed companies (PLC). It is also examining the moderating effect of risk culture on the relationship between governance mechanism and ERM implementation amongst Malaysian PLC. This research adopted quantitative research approach to analyse the data obtained from the questionnaire distributed to the PLC via their Risk Management Division. From the 814 listed companies, according to Bursa Malaysia main board directory, 300 were taken as a sample. The primary data collection commenced after the pilot test was completed and the data was analysed using SPSS. From the analysis it is found that audit committee, risk management committee and internal audit have a significant and positive relationship with the ERM implementation. The hierarchical multiple regressions indicated that risk culture played the moderating role in the relationship between risk management committee and ERM implementation. This study provides significant theoretical and practical contributions for the industry, practitioners, researchers and academician, besides providing a framework for ERM implementation in the listed companies in Malaysia. The results of this study could serve as a guide to develop a strategy for audit actions in the assessment of ERM practices to further improve the level of ERM implementation by the intended shareholders as a whole.

Keywords: Enterprise Risk Management, Audit Committee, Risk Management Committee, Internal Audit, Risk Culture

1. Introduction

The term 'risk' refers to uncertain and unpredictable situations that disrupt the process of achieving corporate objectives and creating shareholders' values (Deloach, 2000; Cassidy, 2005). In an unpredictable business cycle, risk is highly uncertain and could negatively affect a company's operations, including but not limited to, strategy operations, human capital, reputational exposure and the legal framework (Shimpi, 2005; Gupta, 2011). Thus, every company has to effectively manage operational risks so that profitability and business growth could be ensured. In the literature, the process of managing risk is usually coined as ERM.

Smith et al. (1997) defined ERM as a tool to manage, measure and mitigate risk exposure that give an impact to the business operations and strategy objectives. In other words, ERM is a value-added tool for business improvement by identifying and analysing potential risks or hazards inside and/or outside the company, and in turn, determining suitable actions to mitigate them. According to Anthony (2001), ERM is a comprehensive business tool to assist companies to align business strategy, processes, human capital, technology and innovation and knowledge transfer with actions that aim to maintain business sustainability and shareholder's expectation. The role of ERM in mitigating an organization's exposure to business risks is also highlighted in the Committee of Sponsoring Organizations of Tradeway Commission (COSO) (2004). The continuous monitoring and executing risk mitigation action plans in the business context will ensure that corporate objectives and maximum wealth for shareholders are always achieved (Lam, 2003; Gupta, 2011).

Essentially, ERM implementation involves the entire organization and decision-making process which in turn are associated with the quality of corporate governance mechanism (Manab et al., 2010). This study investigated three elements of governance, namely, audit committee, risk management committee and internal audit (Manab et al., 2010). In short, it could be said that the success of ERM implementation depends on the credibility, efficiency and efficacy of management in terms of identifying and evaluating business risks that cover the internal control system and business operations areas as well as the approach to address those risks (Fraser, 2007; Rosa, 2007).

Additionally, ERM implementation is also associated with risk culture. KPMG International (2010) conducted a survey amongst 500 bank executives and found that 48% of respondents stated that risk culture is a key factor in a credit crisis. This is because executives that have low risk culture are usually not serious in weighing benefits and risk exposure and ultimately leads to wrong decision making and poor internal control. Thus, without positive risk culture, it is hard to deliver quality products or services to clients and ultimately reduces their confidence on the company. Although there are a few studies that have identified factors influencing ERM implementation, the moderating factor of risk culture has not or has yet to surface. If the level of risk culture among the stakeholders within the company is ignored, it will surely challenge the implementation of ERM, and in turn, the meeting of the company's ultimate objectives. This study intends to investigate this in detail.

In short, the objective of this research is to examine governance elements that are critical to effective ERM implementation. The moderating effect of risk culture on that relationship will be investigated also. As stated above, the proposed governance elements are audit committee, risk management committee and

internal audit. All these elements are embedded in the conceptual framework. To discuss this in detail the paper is organized as follows. Next section presents a conceptual justification for every element in the conceptual framework. Section 3 offers a diagram of the proposed conceptual framework. Finally a conclusion is presented in the concluding section.

2. Theoretical Overview

For the theoretical understanding of ERM implementation in this paper we posit that ERM implementation is based on the concepts of governance and risk culture. In the following sections a discussion of governance and risk culture is offered.

2.1 Enterprise Risk Management

Deloach (2000) defined ERM as a holistic approach and systematic program which aligns with corporate strategy, business processes, human resources, technology innovation and knowledge management to mitigate business uncertainties and help in creating business value for the benefit of shareholders and stakeholders within the business circle of influence. ERM is also one of the key components of good governance practices and is linked to the corporate governance framework, which emphasizes both transparency and accountability (Priscilla & Susan, 2008). It thus enables a business enterprise to support its achievement by pro-actively identifying and controlling risks. In short, ERM is part of an organization's strategy to reduce potential losses and maximize opportunities.

To a layman's understanding, ERM refers to a process of managing a crisis within an agreed parameter, which requires further attention from the management to mitigate risks (Eick, 2003). Gupta (2011) stated that ERM is an avenue or platform for business enterprises or associates to mitigate their potential risks in terms of identifying, analysing and reporting their business gaps and addressing them in the form of risk mitigation action plans. Thus ERM is an important agenda for business enterprises, especially in the financial sector, since business operations are very much inter-twined with business conditions which are likely to be uncertain in nature.

In the wake of mismanagement that brought down some of the largest corporations, ERM has emerged as an essential discipline for any corporation. For example, the Barings collapse was primarily due to weak internal controls and poor corporate governance, which in turn increased the need for ERM in the companies (Hespenheide & Funston, 2006). During the East Asian financial crisis in 1997, poor ERM was found to be one of the factors that contributed to corporate failure (Fraser, 2007). Karen (2007) uncovered that ERM is always linked to investors' confidence on the company and market. In short it could be said that ERM is an important part of business operations because of its ability to reduce the level of severity and the impact of risk exposures.

The above discussion is applicable to Malaysia because being an open economy attracting high foreign direct investment is a must for maintaining economic growth. Sustaining economic growth is critical to Malaysia as it aims to achieve a high income developed nation status by year 2020. Thus, every organization in Malaysia must implement ERM so that good ratings for proper business conduct will be given by the international rating houses, which in turn can ensure economic growth of the country.

2.2 Enterprise Risk Management Implementation

The ERM implementation is derived from the interaction or interrelationship between key determinants that have significant impact on ERM. It can also be interpreted as a systematic integrated action in mitigating risks across an organization to achieve its objectives and at the same time, maximize shareholders' value (Lam, 2000). In addition, it is an organizational-wide approach or a structured process framework which governs the process of identifying, evaluating, analysing, treating and monitoring risks and aligning them with organizational objectives (Shimpi, 2005).

The underlying principles of ERM implementation is COSO's (2004) framework. This framework is a basic principle to alleviate the requirement of risk management efforts in a more appropriate manner. Fraser (2007) in his study revealed that ERM implementation is embedded within formalized, mature governance and management processes. This involves the alignment of all risk management processes to ensure the processes are working as intended and the impacts are significant and measurable. Cassidy (2005) argued that the implementation of ERM drives some components of basic management principles, which include leading, organizing, planning, controlling and monitoring activities in order to minimize the impact of firms' significant risks, such as strategic, operational, reputational and financial risks. Mike (2005) stated that ERM implementation is a comprehensive structure for mitigating risk in order to be aligned with the overall strategic objectives and add value to the internal stakeholders.

Ernest and Albert (2015) studied ERM implementation from the perspective of public private partnership (PPP) in the water supply project. The results of the study concluded that poor risk list and risk rank leads to poor contract design, water pricing and tariff review uncertainty, political interference, public resistance to PPP, construction time and cost overrun, non-payment of bills, lack of PPP experience, financing risk, faulty demand forecasting, high operation costs and conflict between partners. Hoyt and Liebenberg (2006) investigated the determinants of ERM of 275 United States insurance companies within a 10-year consecutive period. The result revealed that size, institutional ownership and international diversification are significant in determining ERM implementation. Yusuwan et al. (2008) conducted a study on ERM implementation, specifically in Malaysia, to examine risk awareness and to review the management policy in a construction project. The outcome of the research revealed that ERM affects performance, project budget, quality performance and productivity. Alviunessen and Jankensgard (2009) pointed out that ERM implementation centralizes company-wide information on risk scenarios to mitigate risk. The risk appetite has a significant input on the business and gives an absolute impact to the bottom line, continued existence of a company and financial cash flow.

2.3 Governance Mechanism and Enterprise Risk Management Implementation

The success of ERM implementation depends on good governance mechanism (Banham, 2000).Manab et al. (2010) stated that audit committee (AC), internal audit (IA) and risk management committee (RMC) are critical to spearhead the oversight of organizational commitment related to ERM. The success rate of ERM depends heavily on the strong function of these three committees in the business enterprises. These entities are pivotal for determining the ERM implementation in the organizations and provide a platform for senior management to discharge their responsibilities in a more transparent and accountable manner, particularly on matters correlated to the business enterprise, strategic planning and business portfolio.

The above governance mechanisms are critical for the ERM implementation because ERM could fail if the involved employees are not accountable, lack knowledge and do not understand the correlation between risk and ERM benefits (Kleefner et al., 2003). The challenges of risk management are due to unsystematic, informal practices and too many business orientations, which result in lack of indulgence in organization-wide risk exposure and reflection on business aspirations. Having good ERM policy and procedures to support the managerial practices will be useless if not supported by accountable employees in the control area.

Business enterprises should give more priority to the staff member' dedication and standard structure of ERM governance based on the degree of sophistication in risk management, business expertise, inherent risk profile, analysis of size, complexity and the nature of their activities and the capacity to absorb the additional workload within existing structures (Mikes, 2005). Large organizations, with sizeable and significantly inherent risk exposure, require distinct and diverse operations (Anthony, 2001). In addition, a sound and dedicated central risk governance resources and the establishment of a formal RMC is required. The magnitude of work to be carried out would justify the need for such a governance mechanism. Although some elements of ERM governance exist, the leadership behavior and accountability in the implementation process, communication line and reporting might change the predicted outcome (Karen & Ian, 2007). The organizations that implement ERM need to formalize leadership and all other roles and responsibilities including AC, RMC and IA.

2.3.1 Audit Committee

The role of AC in the ERM implementation is pivotal as collators of information for the board of directors (BOD) of the holding companies (Lindsell, 1992.) The Combined Code (Finance Risk Committee, 2003) stipulates that the role of AC members is to further strengthen the financial aspects of a companies' operations. Subsequently, the repercussions of an AC not being familiar or expert on financial matters will be great. In addition, the AC must undertake the role of reviewing high risk level areas and be capable of addressing issues related to non-financial risks as far as the business operations are concerned.

Triant and Ayse (2010) stated that the role of AC and BOD in ERM program are equally important. Hodge (2002) supported this by saying that the AC lack of risk ownership. The independence of AC members in providing fair view of ERM implementation is required to ensure its effectiveness. However Zaman (2001), said that it is unreasonable to expect the AC to discharge its duty above or beyond the limit of authority due to time and expertise constraints. Turely and Zaman (2000) concluded that there is a positive relationship between the independence of the AC from the senior management group and internal audit function. However, it is still uncertain as to whether a strong AC can assist in preventing and detecting control weaknesses. Spira (2003) emphasized on the importance of providing task framework by virtue of professional guidance; however, there is still inadequate support or evidence of substantial benefits accruing from this process.

Kalbers and Fogarty (2010) argued that the AC should examine, analyze and monitor internal audit function and its effectiveness. Both AC and internal audit are important to ensure the success of ERM implementation (Lindsell, 1992). The AC needs a strong internal auditor to provide high quality assurance on ERM procedures and control. Inevitably, internal audit function will act as an independent party to

provide value-added services to management besides examining the adequacy of the internal control system on a large scale. If internal audit functions have the capability to evaluate the ERM and report to the AC without amendment, then the AC should have the power to take action against irresponsible management. Although the ultimate goal of the AC is to enhance the effectiveness of ERM by protecting the internal audit and monitoring internal audit recommendations but the information irregularity between non-executive directors and executives could pose a threat. The literature indicates that the AC is becoming more important to ERM implementation however, there are doubts as to whether they can assist in ensuring continuous improvement and effectiveness of ERM implementation (Kalbers & Fogarty, 1993).

According to Lindsell (1992), both AC and IA have the obligation and trust to enhance the ERM implementation. If AC can exercise their duties within the range of control reviews, they would require strong internal audit function to provide them with adequate assurance that ERM procedures and processes are adequate and effective. Kalbers and Fogarty (2010) suggested that larger AC are legitimized by continuous organizational support from the AC. It should be acknowledged as an authoritative body, such as external auditors and internal audit functions. This is supported by the study of Turely and Zaman (2000) where they concluded that there is a relationship between the independence of the AC from executive management and ERM implementation. But survey evidence indicates doubt as to whether a strong AC can prevent and detect control weaknesses (Pricewaterhouse, 2004). Overall, AC is consistent with the Blue Ribbon Committee's (1999) recommendations and therefore can strengthen oversight functions in the organizations (Turely & Zaman, 2000). Thus, the following hypothesis is proposed:

H1: AC significantly and positively influences ERM implementation

2.3.2 Risk Management Committee

The existence of RMC as one of the governance mechanisms has not clearly been identified and is inconsistent due to the conflicting issues with other mechanism such as the AC and management committee. In a study conducted by Grant Thornton on the 17th Bank Executive Survey (2010), it is found that 35% of banks reported that the RMC is separated from the AC. The survey conducted by Australia Institute Chartered Public Accountant and North Carolina (2010) on 700 entities from various business dimensions discovered that there have been instances whereby the BODs delegates risk oversight to a board-level committee; 70% are of the opinion that the task is delegated to the AC; and another 30% of entities stated that the RMC would eventually review the enterprise's risks.

The Cadbury Committee (1992) advocates that the appointment of oversight committees by the BOD effectively would not buttress specified structures and procedures. Usually RMC is linked to the governance component and oversight board committee (Fraser, 2007). In general, the RMC has the obligation to assess, monitor and report on ERM implementation, provide sufficient view or advice or to some extent assist in making decisions on implementation strategies and assist management in identifying risk exposures with proper guidance and responses (Anthony, 2001). Usually, the RMC's responsibilities include: (1) ascertaining organizational risk strategies; (2) assessing organizational risk management operations and financial reporting, and (3) conducting continuous compliance review on applicable laws and regulations (COSO 2004; Subramaniam, 2009).

RMC consists of senior managers who are experts in risk management and thus, would be better able to support corporate governance by undertaking an in-depth review of risks and internal control. RMC members are responsible for digesting, discussing and reviewing organizational risk exposure with senior management, reviewing the adequacy and management of the risk procedures and reporting to the BOD on its findings (IIAM, 2006).

Fraser (2007) found that RMC has gained popularity as an important governance component and oversight committee. The RMC triggers or alerts BOD to constantly review and focus on corporate governance practices within an organization (Smiechewicz, 2001). In other words, RMC reviews the existing risk exposures or emerging issues that influence business operation. Harrison (1987) argued that it is very difficult to observe what work that RMC can do. The higher possibility is that RMC acts an independent role to oversee the overall risk governance and monitor the entire process in order to produce a constructive manifestation. The COSO of the Treadway Commission (1992, 2004), Hermanson (2003), and Selim and Mc Namee (1999) reviewed both actual and perceived quality of internal monitoring and stated that it is likely to be higher and significant when RMC exists compared to a situation where there is no RMC. Based on the above discussion, the following hypothesis is proposed:

H2: RMC significantly and positively influences the ERM implementation

2.3.3 Internal Audit

Hespenheide and Funston (2006) stated that internal auditors possess splendid risk assessment skill sets and understanding of risk management framework and appetite. The COSO (2004) framework outlines the key components of risk management, including various types of risk indicators and business universe including internal audit. It functions as a support to senior management, BOD and AC by evaluating risk exposures, recommending improvements and constantly reporting on the adequacy of the entity's ERM process (Beasley et al., 2006).

Eija and Peter (2014) conducted a study to examine the implementation of risk management as a tool for IA activities in one Finnish municipal. The study was conducted based on Actor-Network Theory. The publicly available internal documents such as municipal annual reports, internal audit reports, municipal council meeting minutes, national legislation, municipal regulations, guidelines and white papers were reviewed as primary sources. In addition, semi-structured group and individual interviews were also conducted with 13 keys actors of various organizational levels. The outcome of the study concluded that risk management created unexpected uncertainties which include legal aspects of risk management solution, definition and operationalisation of risk management, resources available for expanding risk management as well as professional identities and responsibilities of operational managers as defined by the frame devices. They also concluded that internal auditor play as a risk management centric role.

The internal auditors play an important role in terms of consulting and assurance services in the area of governance and ERM implementation (Donald, 2007). They also support senior management by ensuring that continuous monitoring of ERM is regularly performed by the business owner and it is performed either directly or upon request by the divisional executives (Ana, 2007). In principle, the internal auditors must maintain a good reputation by providing value-added services to senior management and the BOD in terms of examining, evaluating, recommending improvements, monitoring and reporting on the strengths and weaknesses of the ERM processes.

The IA functions in ERM are related to giving assurance to the risk management activities, risk evaluation and its core processes, evaluating new emerging risk profiles and reviewing the mitigating activities of key risk exposures (Eick, 2003). In a standard practice, the IA has an obligation to perform or discharge the six common ERM portfolios, namely, owning ERM processes, providing risk assurance, setting the risk appetite, communicating risk responses, being directly accountable for risk management and making decisions on risk responses (Gramling & Myers, 2006).

Spira (2004) discovered that although IA is varied in terms of competencies and skills in practice, they come from the financial background. It however may or may not provide an adequate foundation in risk management consultation. In the research done by the Institute of Chartered Accountants England and Wales (ICAEW) (2000), it was noted that the assurance role of IA mainly refers to prioritizing the assessment, managing expectations, mitigating possible action plans and ERM reporting on a regular basis.

Page and Spira (2004a) had a mixed view on the role of IA in the ERM implementation, whereby its fundamental role is the involvement in risk management strategy. It focuses more on identifying inherent risk which is beyond the normal internal audit parameter. Although the IA does not directly challenge board strategy, it is advisable to objectively segregate the tasks of observing risks and communicating an opinion and rationale behind actions to be taken by relevant stakeholders.

In 2005, the Institute of Internal Auditors' Research Foundation in the United States of America (USA) conducted a global online survey on the involvement of internal auditors in the ERM. The result was that internal auditors' ultimate focus is ERM, highlighted by 36% of the surveyed organizations. The IA should provide value-added services in terms of evaluating, examining, recommending improvements and reporting on the adequacy and effectiveness of ERM processes to both senior management and the BODs. The role of IA in the ERM as outlined by the IIAM (2004) are as follows: (1) the core roles of IA in ERM; (2) the role which is not played by internal auditors; and (3) the legitimate roles which are undertaken by the internal auditors with safeguards. The recently released joint statement on internal control by the IIAM and Bursa Malaysia stipulates that internal auditors must take the opportunity of the new listing to support their position in the area of corporate governance, control environment and risk assessment in the organizations. In addition, the need to consistently communicate the business development and financial performance of the company to the BOD and AC to leverage with the information related to risk management.

Stewart and Laura (2009) uncovered that internal auditors' high involvement in the ERM provides some implication on their motivation to report a breakdown of risk assessment or procedures to the AC. Based on the COSO framework, that is related to ERM guidelines, the deficiency in ERM implementation and control environment can be easily proven by leveraging the level of risk monitoring capabilities.

According to Ana (2007), internal auditors play a significant role in ensuring continuous support and monitoring of ERM and its performance. This is part of their continuous tasks or upon demand from senior management or subsidiaries or divisional executives. Internal auditors work closely with senior management by providing value-added services and assurances on the following: (1) ERM design and function; (2) effectiveness of risk responses and control activities; and (3) completeness and accuracy of ERM reporting. The Statement of the Malaysian Code on Corporate Governance (2007) under the Securities Commission stipulates that internal auditors should be independent of the activities they audit. This is in tandem with the

statement made by Knight (2006) and Protiviti (2006) that risk management is not a new thing in the business world and is part of audit function. Grambling and Myers (2006) indicated that IA has an independent party is required to observe and perform the common ERM portfolios, for instance communicating risk responses. Stewart and Laura (2009) found that internal auditors perceive that high involvement in ERM impacts on their willingness to report a breakdown in risk procedures to the audit committee. Based on the above discussion, the following hypothesis is proposed:

H3: IA significantly and positively influences ERM implementation

2.4 Risk Culture

According to Lima and Castro (2005), risk culture can be interpreted as a behavioural system that envisages the core values and behaviours adopted throughout an organization and assists in shaping the right risk decision making processes. Tansey and Riordan (1999) pointed out in their study that risk culture influences the management and employees' decisions even if they are not deliberately considering the risks and benefits as a whole. An organization directly benefits from deliberating risk exposure in response to the increase of corporate culture and ERM values, such as strategic, human capital, operational, financial, reputation and legal compliance values (Pagach & Warr, 2007). Bolton (2000) suggested that the Turnbull Guidelines provide the organizations an opportunity to initiate an adequate control culture where ERM is incorporated and a reality check on lessons learnt which are also embedded as part of daily operational activities within the risk management (Chown, 2000; Viles, 2000; Boswell, 2001; Barlow, 2000).

Zeier (2014) viewed that risk culture is a combination of key values, understanding, beliefs and norms that members of an organization share. He further reiterated that risk culture can be categorised into visible and invisible culture by way of promoting right values and constant awareness to intended parties within business enterprises, such as symbols, slogans and ceremonies and deeper values and shared understanding held by the organization. Risk culture is an integrated approach to risk assessment which allows business units to measure risk exposures and monitor residual risks by both impact and likelihood which is consistent across the enterprise.

Lima and Castro (2005) argued that risk culture is crucial for positive change in the mindset or internal system relating to business enterprise and families. It has been highlighted also that an over-emphasis on automated risk assessment will eventually reduce the tendency or likelihood of being able to identify and mitigate risk factors at an optimum level. However, this depends on the extent to which risk management has already been incorporated into strategic planning and operations. It also depends on the availability of risk identification, operational and financial information, staff awareness on the capacity to manage risks and finally the existence of systems and protocols to respond to potential threats and opportunities.

Regester and Larkin (2005) found that traditional corporate culture and risk management culture do not vary greatly. In order to make sure that the level of understanding of risk management implementation is guaranteed and constantly monitored by the assigned authority or delegates, the following activities need to be established: (1) ensure continuous awareness and importance of ERM; (2) constant communication on the entity's risk appetite and tolerance; (3) common risk language assistance; and (4) consult with personnel on their roles in supporting the components of ERM implementation. From the above discussion, it can be seem that risk culture could moderate the relationship between governance mechanism and ERM implementation. Thus, the following hypotheses are developed:

H4a: The influence of the AC on ERM implementation is moderated by risk culture
H4b: The influence of the RMC on ERM implementation is moderated by risk culture
H4c: The influence of the IA on ERM implementation is moderated by risk culture

3. Research Methodology

In this study, the researcher decided to randomly choose 300 respondents from the listed companies on Bursa Malaysia. As the total number of listed companies is 814 (as at July 2014), as recommended by Sekaran (2003), the proposed sampling size is 300. Hence, 300 questionnaires were distributed to the respondents based on random basis. The questionnaires were distributed in December 2014 until middle of February 2015. The returned questionnaires were 162. After checking all the questionnaires, the researcher found that eight questionnaires were badly completed. The researcher excluded those questionnaires due to their incompleteness. Hence, 154 questionnaires were considered usable for analysis procedure.

4. Research Findings

Out of 300 distributed questionnaires, 154 were returned and usable for analysis. This resulted in a response rate of 51.3%. As suggested by Sekaran (2003), a response rate of 30% is considered adequate for mail survey research. Based on this suggestion, the response rate of this study (51.3%) was above the recommended rate. In turn, the findings of this research can be generalized to the population.

4.1 Profile of Respondents

The frequency and percentage of each demographic profile are illustrated in Table 1. In term of assessing the existing risk management process, result shows that 142 respondents which represents 92.2% stated that the companies have a formal process to perform risk assessment. The remaining 12 respondents which represents 7.8% indicated that there was no formal process in place to perform a risk assessment in the organization. This shows that more than 92% of the total respondents are already adopting a formal risk assessment process.

Table 1
Profile of the Organizations

	Frequency	Percentage
Formal process in place to perform a risk assessment		
Yes	142	92.2
No	12	7.8
Early warning indicators to alert management		
Yes	142	92.2
No	12	7.8
Adequate risk management training		
Yes	131	85.1
No	23	14.9
Need to strengthen risk management function		
Yes	154	100
No	0	0
Standard template/standard operating procedures		
Yes	136	88.3
No	18	11.7
Risk assessment and monitoring software		
Yes	142	92.2
No	12	7.8
Modelling tools		
Yes	138	89.6
No	16	10.4
Type of Business		
Trading	10	6.5
Industrial product	35	22.7
Consumer product	19	12.3
Properties	20	13.0
Finance	20	13.0
Construction	11	7.1
Plantation	11	7.1
Technology	19	12.3
Hotels	1	.6
Mining	8	5.2
Age of the Company (years)		
1-5	4	2.6
5-10	13	8.4
11-15	73	47.4
<16	64	41.6
Ownership		
Bumiputra	72	82.8
Foreign	2	2.3
Others	13	14.9

The result also shows that 142 respondents which represents 92.2% stated that the companies have an alert indicator. The remaining 12 respondents which represent 7.8% indicated that there were no early warning indicators to alert management in the organization. This shows that more than 92.2% of the total respondents are already adopting or implementing an early warning indicator in the organization. Next, result shows that 131 respondents which represents 85.1% stated that the companies have adequate risk management training. The remaining 23 respondents which represent 14.9% indicated that there was no formal risk management training in the organization. This shows that more than 85% of the total respondents have a sufficient or an adequate risk management training program company-wide.

The background of companies related to risk management function shows that 154 respondents which represents 100% stated that the companies need to strengthen the risk management function in the organization. This shows all respondents agreed to the idea of strengthening risk management function within their organizations. The result also shows that 136 respondents which represent 88.3% stated that the companies have standard operating procedure for risk management. The remaining 18 respondents which represent 11.7% indicated that there was no specific or standard operating procedure for risk management in the organization. This shows that more than 88.3% of the total respondents are already adopting and have established the required standard operating procedure for risk management within the organization.

Table 1 also illustrates the findings on the background of companies in terms of risk assessment and monitoring software. The result shows that 142 respondents which represents 92.2% stated that the companies have basic risk assessment tools. The remaining 12 respondents which represent 7.8% indicated that they did not use risk assessment and monitoring software. This shows that more than 92.2% of the total respondents are already adopting risk assessment and monitoring software within the organization. 138 respondents which represents 89.6% stated that the companies have a standard modelling tool related to risk management program. The remaining 16 respondents which represents 10.4% indicated that there were no basic modelling tools related to risk management in the organization. This shows that more than 89% of the total respondents have already adopted or implemented a basic modelling requirement on risk management within the organization.

Several industrial sectors are given which are trading, industrial products, consumer products, properties, finance, construction, plantation, technology, hotels and mining. Table 3.1. shows that 35 respondents which represents 22.7% (the highest) come from industrial products; 20 respondents each represent properties and finance, respectively; 19 respondents each representing 12.3% are from technology and consumer products, respectively; 11 respondents, each representing 7.1% are from construction and plantation, whilst the remaining 10 (6.5%), 8 (5.25%) and 1 (0.6%) respondents represent trading, mining and hotel industries, respectively.

The descriptive analysis in Table 1 shows that 73 respondents (47.4%), represent the age of the company between the range of 11-15 years; 64 respondents (41.6%) represent the age of more than 16 years; 4 (2.6%) respondents are from companies with the age range of 1-5 years; and 13 (8.4%) respondents come from the age range of 5-10 years. The research also intends to know the ownership of the business based on three dimensions: Bumiputra, Foreign and Others. Others category is classified as Chinese and Indian. The descriptive analysis, as illustrated in Table 3.1., shows that 72 respondents which represents a high percentage (82.8%) are bumiputra companies; two respondents which represents 2.3% indicated that the business is owned by the foreigners; whilst the remaining 13 respondents which represents 14.9% indicated that the business is owned by others.

4.2 Reliability Analysis

An internal consistency confirmation of the scales was performed to ensure the reliability of the scales. This can be done by checking the Cronbach's alpha coefficient. The cut-off point for measuring the reliability for this study is coefficient alpha of above 0.65 as recommended by Nunnally and Berntein (1994) and Nunnally (1978). Table 2 exhibits the Cronbach coefficient alpha of all variables. In short, all the variables in this study have values more than 0.65.

Table 2
Reliability Coefficients for Variables

Variable	**N of Item**	**Cronbach Alpha**
Governance:		
Audit Committee	7	0.850
Internal Audit	6	0.790
Risk Management Committee	7	0.807
Risk Culture	18	0.792
Enterprise Risk Management Implementation	14	0.724

4.3 Multiple Regression Analysis

Multiple regressions were utilized to examine the influence of governance on ERM implementation. Multiple regression analysis using Enter Methods were applied with the confidence level of 90 percent ($p<0.10$). Overall, leadership elements significantly explained 84.8 percent of variance in ERM implementation ($R^2=0.848$, $F=71.85$, $p<0.01$) (refer Table 3). Table 3 also indicates the result of multiple regression analysis to examine the effect of governance mechanism on ERM implementation. All factors under governance mechanism construct significantly influence ERM. They are IA ($B=0.178$, $t=3.870$, $p<0.01$); AC ($B=0.128$, $t=2.337$, $p<0.05$); and RMC ($B=0.178$, $t=3.837$, $p<0.01$). Hence, the results support H1, H2 and H3. The three hypotheses are accepted.

Table 3
Effect of Governance Mechanism on ERM Implementation

Governance Mechanism	**B**	**t**	**Sig.**
Internal audit	.178	3.870***	.000
Audit committee	.128	2.337**	.021
Risk management committee	.178	3.837***	.000
R^2	0.848		
F	71.851		
Sig.	0.000		

*Notes: ***p<0.01, **p<0.05, *p<0.1*

4.4 Hierarchical Multiple Regression

Hierarchical multiple regressions test were utilized to examine the effect of risk culture on the relationship between governance mechanism and ERM implementation. The results are summarized in Table 4.

Table 4.
Effect of Risk Culture in the Relationship between Governance Mechanism and ERM Implementation.

	Standardised Beta					
	Model 1		**Model 2**		**Model 3**	
	B	**Sig.**	**B**	**Sig.**	**B**	**Sig.**
Model 1: Independent Variable						
Internal audit	.178**	.021	.206***	.007	.172***	.005
Audit Committee	.128***	.000	.148***	.004	.165***	.008
Risk Management Committee	.178***	.000	.140***	.000	.138***	.001
Model 2: Moderating Variable						
RC			0.106***	0.009	0.092**	0.036
Model 3: Interaction Term						
rcX-Internal Audit					.103	.899
rcX-Audit Committee					-.010	.173
rcX-Risk Management Committee					.139*	.082
R^2	*0.848*		*0.855*		*0.866*	
F	*71.851*		*69.203*		*36.479*	
Sig.	*0.000*		*0.000*		*0.000*	
R^2 *Change*	*0.848*		*0.007*		*0.001*	
F Change	*71.851*		*6.951*		*0.968*	
Sig. F Change	*0.000*		*0.009*		*0.079*	

*Notes: ***p<0.01, **p<0.05, *p<0.1*

Model 1 represents the effect of independent variables on ERM Implementation. The model contributes 84.8 percent of variance of ERM. Model 2 represents the effect of independent variables on ERM implementation with the presence of risk culture.

The results indicate that the presence of risk culture in Model 2 has significantly increased the variance to 85.5 percent (R^2=0.855, F=69.203, p<0.001). Risk culture is also found to have significant association with ERM implementation in Model 2 (B=0.106, t=2.637, p<0.01). The last model, Model 3, shows the effect of independent variables and moderator variable on ERM implementation with the presence of interaction variables between independent variable and moderator variable. Model 3 also shows the significant changes in the variance (R^2=0.866, F=36.479, p<0.01).

Table 4 also summarises the result of hierarchical regression to examine the effect of risk culture as the moderating variable in the relationship between governance mechanism and ERM implementation. Model 3 shows the effect of independent variable and moderator variable on ERM implementation with the presence of interaction variable between independent variable and moderator variable.

The results indicate that there are significant effects of the interaction between RMC and risk culture (B=0.139, p<0.1). The examination on the interaction plot showed an enhancing effect whereby when RMC and risk culture was larger, ERM implementation increase (Figure 1). The results successfully support H4b. Additionally, the results also indicate that there are no significant effects of the interaction between interaction terms with ERM implementation. Thus, this result fails to support H4a and H4c.

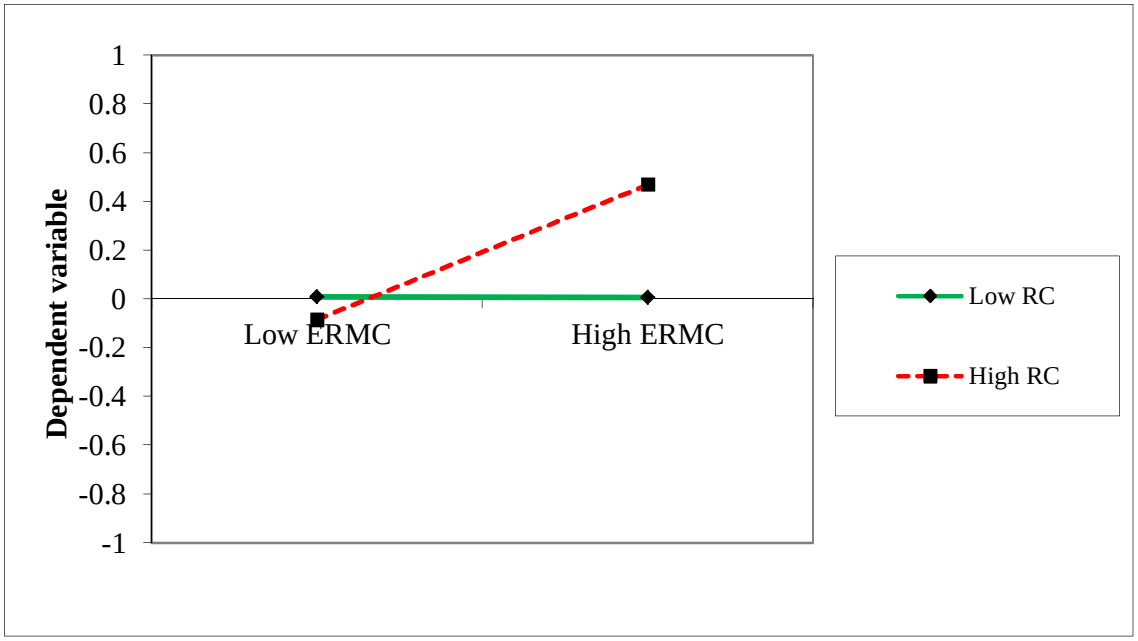

Figure 1: Moderating effect of Risk Culture on the Relationship between Governance Mechanism Elements and ERM implementation

5. Discussion

In the present research, it is hypothesized that AC significantly and positively influences ERM implementation. Verschoor et al. (2002) uncovered that the AC and BOD roles in ERM program are important and highly demanding. The AC role is to review with management the internal control system and financial reporting that are relied upon to provide reasonable assurance of compliance regarding an organization's risk management processes. In addition, AC oversee certain aspects of ERM, including review of major operational, reputational, legal and compliance issues and steps the management has to take to monitor and control risk exposure.

The regression results show that the relationship between AC and ERM implementation is significant and positive (β=.128, t=2.337, p>0.01). Thus H1 is accepted and supported. This result also supports the agency theory and corporate legitimacy theory. In short, AC is important to ensure the success of ERM implementation within business organizations. This outcome is also aligned Kalbers and Fogarty (2010) where they found that there is a potential relationship between AC and ERM implementation. According to Lindsell (1992), the AC's role in risk management is important as collators of information for the BOD in the holding company. Kalbers and Fogarty (2010) suggested larger AC to support BOD. This is supported by Turely and Zaman (2000) whereby they found that that there is a need to make AC independent from senior management group and their activities in relation to the IA function. The regression results are in line with the result of the correlation test which confirm that there is a positive linear relationship between AC and ERM implementation (p<0.01).

In the present research, it is hypothesized that RMC significantly and positively influences ERM implementation. According to Fraser (2007), the RMC is very important and linked to the governance components and BOD oversight functions. Anthony (2001) stated that RMC has the obligation to assess, monitor and provide sufficient advice in making decisions on implementation strategies and identifying risk exposures with proper guidance and response. The RMC members are responsible for reviewing the state of affairs of their organization's risk exposure and must report to the BOD on its findings.

The regression results (as displayed in Table 3) show that the relationship of RMC and ERM implementation is significant and positive (β= .178, t=3.837, p>0.01). Hence hypothesis H2 is accepted. This result supports the agency theory and corporate legitimacy theory. It implies that RMC is one of the key success factors in ERM implementation within the business organizations. This outcome is consistent with Kalbers and Fogarty (1993) where they said that there is a potential relationship between RMC and ERM implementation. The COSO of the Treadway Commission (2004), Hermanson (2003), Selim and Mc Namee (1999) stated that both actual and perceived quality of internal monitoring is likely to be higher and significant when a RMC exists compared to a situation when there is no RMC.

Based on the above discussion, it could be said that there is a positive relationship between RMC and ERM implementation. The regression results are also in line with the correlation test between variables which confirm that there is a positive linear relationship between the RMC and ERM implementation. The findings further confirm that RMC significantly influences ERM implementation. Implicit in this finding is that RMC supports agency theory and corporate legitimacy theory in the context of ERM. The significant relationship between RMC and ERM has a direct implication on ERM implementation due to the fact that the existence

of RMC significantly supports the development of ERM within companies. The involvement of RMC is vital to ensure continuous efforts in ensuring communication and reporting standards are well structured and maintained. Thus RMC must be active in ensuring the success of ERM through thorough and prudent oversight activities.

In the present study, it is hypothesized that IA significantly and positively influences ERM implementation. In principal, IA maintains a good reputation by providing value-added services in terms of examining, evaluating, recommending improvements, monitoring and reporting on the strengths and weaknesses of internal control, governance and risk management assurance. Internal auditors should play an effective role in ERM by giving assurance to the risk management activities, risk evaluation and its core processes, evaluating of new emerging risk profiles and reviewing the mitigating activities of key risks exposure. In this study, IA supports the ERM implementation by providing consulting and advisory services, including the assurance profile of organizational needs, especially on the global approach of ERM implementation. As indicated in the current study's results, the association between IA and ERM implementation (as illustrated in the Table 5.13) is found to be significant (β=.178, t=3.870. p>0.01). Hence hypothesis H3 is accepted and supported.

The current results are consistent with previous studies. For instance, Stewart and Laura (2009) found that the internal auditors perceived that high involvement in ERM impacts on their willingness to report a breakdown in risk procedures to the AC. Page and Spira (2004a) discovered a mixture of views for internal auditors on effective ERM, whereby the essence of the fundamental role is their involvement in risk management strategy. Notwithstanding, it has got to be focused more on identifying inherent risk which is beyond the normal internal auditor's parameter.

6. Conclusion

The outcome of this research reveals that there is a significant and positive relationship between ERM determinants and ERM implementation. The independent variables which represent governance mechanism (AC, RMC and IA) directly support the previous findings with the additional contributions to knowledge in the area of ERM implementation in Malaysia. The risk culture as a moderating effect was tested to determine the relationship between ERM determinants and ERM implementation.

The result of hypothesis testing reveals that a few independent variables of the governance mechanism construct (RMC) are fully supported and accepted. The other independent variables were found to be insignificant and not accepted. From this assessment, the insertion of the interaction between RMC with risk culture has significantly increased the effect on ERM implementation. The outcomes of the study also show that the risk culture is a good moderator in the relationship between ERM determinants and ERM implementation.

The result of this study also suggests that under governance mechanism (e.g., RMC) are also strongly connected and significantly increase the effect on ERM implementation. Other independent variables, require further improvement as these factors are considered highly important to determine the ERM implementation.

The current findings are also aligned with past researchers and found to be significant and concurrent with previous studies conducted by Ciocoiu and Dobrea (2010) whereby they viewed that successful ERM implementation requires support and correlation of ERM determinants and dependent variables in the area of governance mechanism. The current study is significant in the sense that it helps shed light on the relative importance of the governance mechanism constructs on ERM implementation in Malaysia. The independent factors, such as AC, RMC in relation to ERM unfolded in this study could serve as reference to academia and as a catalyst for further investigations.

Following a thorough revision and discussion of the study's objectives achieved and related prior literature, the general and individual implications of the outcomes of the study are deliberated to give further details about their importance from the academic and stakeholders' points of view. In addition, theoretically and practically, the study's findings have significant value in terms of the research model developed and can be used as an explanatory model for ERM determinants and ERM implementation. In the auditing field for instance, the adoption of the risk based methodology approach is essentially important that linked to the yearly internal audit plan development. The auditor shall use the related information on ERM perspectives to conduct the audit based on high risk areas besides audit universe. Hence this model contributes to the knowledge in the area of risk governance, compliance and control mechanism that have linked with the enterprise risk management implementation. From the ERM perspective, the results of this study could serve as a guide to develop a strategy for audit actions in the assessment of ERM practices as this has the potential to improve the level of ERM implementation by the stakeholders as a whole.

References

1. Alviunessen, A., & Jankensgard, H. (2009*).* Enterprise Risk Budgeting: Bringing Risk Management into the Financial Planning Process. *Journal of Applied Finance*, 19(1/2), pp. 178-190.
2. Anthony. M (2001), A systematic approach to risk management for construction, *Structural survey*, Vol. 19 (5) pp. 245-252.
3. Banham, A (2000). Embedding risk management; structures and approaches, *Managerial Auditing Journal*, Vol. 22, (4), pp. 392-409.
4. Barton, T.L., Shenkir, W.G., & Walker, P.L (2002)," Making enterprise risk management pay off: How leading companies implement risk management". *USA: Financial Times/ Prentice Hall PTR*, Pearson Education, Inc.
5. Beasley, M.S., Clune, R., Hermanson D.R., (2006). The impact of Enterprise Risk Management on the internal audit function. *Journal of Strategic Finance*, pp. 1-26.
6. Berge, L. & Levrau, A. (2004). Evaluating board of directors: What constitutes a good corporate board?, *Blackwell Publishing Ltd*, Vol. 12(4), pp. 461-478 .
7. Berenbeim, R. (2004). The value based enterprise: A new corporate citizenship paradigm. *Paper presented at The Asia Foundation's Hong Kong Symposium on Corporate Citizenship and the Taipei Corporate Citizenship Forum, held in Hong Kong*, October pp. 27-29, 2004.
8. Brian, N. (2006). *Enterprise Risk Management: Theory and Practice*, Journal of Applied Corporate Finance, A Morgan Stanley Publication, Vol. 18 (4), pp. 8-20.
9. Brooks, D.W. (2010),'' Creating a risk-aware culture", in Fraser, J.R.S. and Simkins, B.J. (Eds), Enterprise Risk Management, *Today's Leading Research and Best Practices for Tomorrow's Executives.* John Wily & Sons, Inc. New Jersey pp 301-34
10. Bursa Malaysia (2009*),"* Bursa Guideline for Listing Vehicle ", *Public Listed Companies in Malaysia*, Vol. 1 (1), No.1 pp 345-356
11. Campbell, M. (1987) Enterprise-wide risk management and the role of the chief risk officer: *eRisks. Com.* Vol (1) 1-5 pp. 120
12. Cassidy, D. (2005). Enterprise Risk Management (ERM): A New Reality for Businesses, *Employee Benefit Plan Review*, pp 29-31.
13. Ciocoiu, D.A. & Dobrea, A. (2010)," Determinants and value of enterprise risk management: empirical evidence from the literature", *Risk Management and Insurance Review*, Vol.18 No.1, pp 29-54
14. COSO. (2004). Enterprise Risk Management-Integrated Framework Executive Summary. retrieved from, http://www.coso.org/Publications/ERM/COSO_ExecutiveSummary.pdf
15. COSO'S (2010), COSO Report on Enterprise Risk Management (ERM). Thought Leadership in ERM, Current State of Enterprise Risk Oversight and Market Perceptions of COSO's ERM Framework.
16. Daud, W, ,Yazid, A, & Hussin, M. (2010). The Effect of Chief Risk Officer on Enterprise Risk Management Practices: Evidence from Malaysia. *International Business and Economics Research Journal*, Vol. 9 (11). Pp 34-46
17. Debowski, B. (2006), "The leadership and management conundrum, innovation or risk management," *Leadership & Organization Development Journal*, Vol. 28 (2), pp. 122-136.
18. Deloach, J.W. (2000). Enterprise Risk Management: Strategies for linking risk and opportunity, *London Financial Times, Prentice Hall*, Vol. 1 No.1 pp 35

19. Deloitte, N. (1995). The Ethics of Enterprise Risk Management as a key component of corporate governance, *International Journal of Social Economics,* Vol..37 (10), pp. 802-815.
20. Douglas, A.N., Albert, C.& Patterson, V. (2010), Effective Enterprise Risk Management, *Nagan Research Group*, pp 1-3.
21. Dounglas, M. (1978), "Cultural bias", Occasional Paper *No.35, Royal Anthropological Institute of Great Britain and Ireland.*
22. Douglas, M. (1992*).* Risk and Blame: Essays in Cultural Theory. *Routledge, London.*
23. Douglas, M. and Wildavasky, A. (1982). Risk and Culture: An Assay on the Selection of Technological and Environmental Dangers, *University of California Press,* Berkeley, CA, pp. 701-725.
24. Eick, C.L.M. (2003). *Factors that promote effective risk management at universities classified by the carniegie system.* Auburn University, Alabama.
25. Ernest, E.A & Albert P.C. (2014), Risk ranking and analysis in PPP water supply infrastructure projects, An international survey of industry experts, *Facilities*, Vol. 33 Iss 7/8 pp. 428-453
26. Finuance, M. & Holup, J. (2005*).* Psychosocial and cultural factors affecting the perceived risk of genetically modified food: an overview of the literature, *Social Science & Medicine,* Vol. 60, pp. 1603-1612.
27. Fraser, Ian (2007), Embedding risk management; structures and approaches, *Managerial Auditing Journal* , Vol 22, (4), pp. 392-409.
28. Fraser, D & Barry J. C. (2005). Risk Management: Developing a framework for a water authority, Vol 16 (3), 235-249
29. Gupta,.P..K. (2011). Risk Management in Indian companies: EWRM concerns and issues, *The Journal of Risk Finance,* Vol. 12 (2), pp. 121-139.
30. Hasanali, N. (2002) The leadership and management conundrum, innovation or risk management? *Leadership & Organization Development Journal*, Vol. 28 (2), pp. 122-136.
31. Henriksen, E. & Uhlenfeldt, A.M. (2006), "Stronger corporate governance and its implications on risk management*", Ivey Business Journal*, Vol. 67(5), p. 4.
32. Hespenheide E. and Funston, R. (2006). The risk Intelligent Internal Auditor, *Internal Auditing;* 21, 2ABI/INFORM Global.
33. Hoyt, R.E., & Liebenberg, A.P. (2006),*"* The Value of Enterprise Risk Management: Evidence from the U.S. Insurance industry, *Retrieved from http://www.aria.org/meetings/2006papers/Hoyt_Liebenberg_ERM_070606.pdf*
34. Kaiser, E (1999). Comparing varieties of Agency Theory in economics, Political Science and Sociology: An Illustration from state policy implementation. *Society Theory Journal* , Vol. 17(2) pp. 146-170.
35. Kalbers, L.P. & Fogarty, T. (1993). Audit Committee effectiveness: An empirical investigation of the contribution of power. Auditing, *A Journal of Practice & Theory,* Vol. 1 (12), pp. 201-221
36. Kanuk, M. & Berenson, G. (2001), "*The multivariate social scientist: Introductory statistics using generalized linear models.* Thousand Oaks, CA: Sage Publications
37. Karen, B & Ian. F (2007), The leadership and management conundrum, innovation or risk management? *Leadership & Organization Development Journal,* Vol. 28 (2), pp. 122-136.
38. Kevin Knight (2003), Risk Management: An integral component of corporate governance and good management, A Month of ISO Standardization*, ISO Bulletin October,* 2003, pp. 21-24.
39. Kleffner, A.E., Lee, R.B., & Mc Gannon, B.(2003a). The Effect of Corporate Governance on the use

of Enterprise Risk Management: Evidence from Canada, *Risk Management and Insurance Review*, Vol. 6 (1), pp. 53-57.

40. Kleffner, A.E., Lee, R.B., & Mc Gannon, B.(2003b). Stronger corporate governance and its implications on risk management, *Ivey Business Journal,* Vol. 67(5), p. 4.
41. Krejcie, M. and Morgan, A.P. (1970), Quantitative and qualitative data analysis: An expanded sourcebook. Sage, Thousand Oaks, pp. 245-456
42. Lam, J. C., & Kawamoto, B. M. (1997). Emergence of the chief risk officer, *Risk Management Journal,* Vol. 44(9), pp. 30-36.
43. Lam, J. C. (2000). Enterprise-Wide Risk Management and the role of the Chief Risk Officer. *Retrieved from http://erisk.com/learning / research/011_lamriskoff.pdf*
44. Lambert, J (2001), Stronger corporate governance and its implications on risk management, *Ivey Business Journal,* Vol. 67(5), p. 4.
45. Lange, S. (1998). Building the next generation RMIS, *Risk Management Journal*, Vol. 45(4), pp. 23-33.
46. Langford, I., Georgiou, S., Bateman, I., Day, R & Turner, R. (2000), Public perceptions of health risks from polluted coastal bathing waters: a mixed methodological analysis using cultural theory, Risk Analysis: *An International Journal*, Vol. 20(5), pp. 691-705.
47. Lars. E & Bengt. H (2011). Performance and risk management in strategic cooperation. A comparative study of business and military sectors, *International Journal of Productivity and Performance Management*, 6,(1), 387-403
48. Lee, C.R.(2003). *Chief Risk Officer stepping up*. Risk Management Journal, 47 (9), 22-27
49. Liu, H., & Li, Y. (2002). From Strategic Risk Measurement to Strategic Risk Management- *A Resource Based View.* USA-China Business Review, 2(2)
50. Liebenberg, A.P., & Hoyt, R.E.(2003). The Determinants of Enterprise of Risk Management: Evidence from the appointment of Chief Risk Officers. *Risk Management and Insurance Review*, 6(1), 37-52
51. Lima, M and Cstro, P. (2005)," Cultural theory meets the community: worldviews and local issues", *Journal of Environmental Psychology*, Vol.25 No.1, pp 23-35
52. Lindsell, D. (1992)."Blueprint for an Effective Audit Committee," *Accounting Journal*, Vol. 3 (3), pp. 104-118
53. Longenecher, D. & Neubert, M.A. (2003), "A framework for integrated risk management in international business", *Journal of International Business Studies*, Vol. 12. No. 2, pp.153-163
54. Miccolis, M. (2003), "The practice of risk management: silence in not absence", *Risk Management Journal*, Vol.1 11 Nos 3 /4, pp. 285-306
55. Mikes, A. (2008), "Chief Risk Officers at crunch time: compliance champions or business partner?", *Journal of Risk Management in Financial Institutions*, Vol.2 No.1, pp 7-25
56. Mikes, A. (2005). Enterprise Risk Management in Action. Discussion paper, *The Center for Analysis of Risk and Regulation at London School of Economics and Political Science* Vol 1 (3), pp. 259-358
57. Muralidhar, K (2010). Enterprise Risk Management in the Middle East Oil Industry, *International Journal Energy Sector*, Vol 4 (1), pp. 59-86.
58. Nocco, B. W. & Stulz, R. M. (2006) Enterprise Risk Management: Theory and Practice, *Journal of Applied Corporate Finance*. Vol. 18(4), pp. 1-8.
59. Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.
60. Nunnally, J. C. & Bernstein, I. H. (1994). Psychometric theory. *New York*, NY: McGraw-Hill.

61. Pagach,D., & Warr, R.(2007). An empirical Investigation of the Characteristics of Firms Adopting Enterprise Risk Management. *Retrieved from http:// papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID1010200-code5875.pdf?abstractid=1010200*
62. Priscilla.B & Susan.H (2008*),* Ten Step to Enterprise –Wide Risk Management, *Corporate Governance Journal,* Vol. 9 (5), pp. 539-550.
63. PriceWaterhouseCoopers. (2004a*).* Enterprise-wide risk management for the insurance Industry: Global Study
64. PriceWaterhouseCoopers. (2004b). Integrity-driven performance: A new strategy for success through integrated governance, risk and compliance management.
65. PriceWaterHouseCoopers (2008). Enterprise Risk Management (ERM) Benchmarking Survey 2008. Retrieved from *http://www.pwc.com/fi/fin/about/svcs/neuvnota/erm_benchmarking_survey_2008pdf*
66. Protiviti, S.A. (2006), "Corporate Governance: A stakeholder interpretation*," Journal of Behavioral Economics.* Vol. 19 No.4, pp 337-452
67. Rasid, S. A., & Rahman,A. A.(2009). Management Accounting and Risk Management Practices in Financial Institutions Retrieved from *http://www.penerbit.utm.my/onlinejournal/51/E/JT51EDIS06.pdf*
68. Register, L. & Larkin, M. (2005),"Risk allocation in the private provision of public infrastructure", *International Journal of Project Management,* Vol. 25 No.1, pp 69-79
69. Rosa, S. (2007). Moving Forward with Enterprise Risk Management (ERM), *Internal Auditor,* June 2007, pp. 50-54.
70. Sekaran, U. (2003). Research Method for Business: A Skill- Building Approach (4th Edition),
71. John Wiley & Sons, Inc., New York, USA.
72. Sekaran, U. (2005). Research Methods for Business: A skill - building approach *(4th ed.).NY:* John Wiley & Sons.
73. Sekaran, U. & Bougie, R. (2010). Research Method for Business (5 Edition*). Haddington, East Lothian,* John Wiley & Sons.
74. Shimpi.P. (2005), Enterprise Risk Management from compliance to value. *Financial Journal 2010*
75. Shenkir, W.G & Walker, P. L (2006). Enterprise Risk Management: Framework, elements and integration. Institute of Management Accountant.
76. Smith, R. (1997). Chief Risk Officers in the hot seat, Jo*urnal Risk Management.* PriceWaterHouse Cooper., Vol.1 (1) pp. 258-271
77. Tansey, J. and O'Riordan, T. (1999) Cultural theory and risk: a view," *Health Risk Society, Journal* , Vol.1 No.1.
78. Udechukwu, O. & Thanos, P. (2012), "Perception variability for categorized risk factors", *Industrial Management & Data Systems,* Vol. 112. No. 4. pp 600-618
79. Walker,P. L., Shenkir, W. G., & Barton, T. L. (2003), *ERM in Practice*. *The Internal Auditor,* Vol. 60(4), pp. 51-54, The Institute of Internal Auditors Research Foundation
80. Walker, P. L., Shenkir, W.G., & Barton, T. L (2002). Enterprise risk management: Putting it all together, *The Institute of Internal Auditors Research Foundation.*
81. Yatim P, Kent. P., Clarkson, P. (2006). Governance structures, ethnicity and audit fees of Malaysian listed firms, *Managerial Auditing Journal*, Vol. 21 (7), pp. 752-782.
82. Yazid, A.S., Hussin, M.. R., & Razali, A. R. (2008). A Cross-Sectional Study on Foreign Exchange Risk Management by Malaysian Manufacturer. International Business Management Journal, Vol. 2(1), pp. 28-32

83. Yazid, A. S., Hussin, M. R., & Razali, A. R. (2009). An Empirical Study of Risk Management Best Practices in Public Limited Companies in Malaysia, *The Journal of Risk Management and Insurance,* Vol. 13, pp. 1-22.
84. Yazid A. S., Hussin, M.R., & Wan, D (2011). An Examination of Enterprise Risk Management (ERM) Practices among the Government Linked Companies (GLCs) in Malaysia, *International Business Research Journal,* Vol. 4 (4), pp. 94-103.
85. Yusuwan, N. Adnan, H., & Omar, A. (2008). Client's Perspective of Risk Management Practice in Malaysian Construction Industry, *Journal of Politics and Law,* Vol. 1(3), pp. 121-130.
86. Yi, W. & Judith, O. (2009). Board composition and firm performance variance: Australian evidence, *Accounting Research Journal*, Vol. 22 (2), pp. 196-212.
87. Zeier, A. (2014), "Risk culture: what it is and how it affects an insurer's risk management", *Risk Management and Insurer Review,* Vol. 17 o 2, pp. 77-296