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INVESTIGATING RISK MANAGEMENT IN MUNICIPALITIES IN UNITED ARAB EMIRATES (UAE): AN EMPIRICAL RESEARCH

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Abstract

In the last decade, the lack of professionalism on government institution has given the serious concern among the practitioners and scholars in dealing with the creative approach on management in handing the risk and its common type of methods. Such attainment could be transmitted into the Risk Management Success Factor (RMSF) on the government performance in United Arab Emirates (UAE). The need to examine properly on the way of implementing the risk management together with the procedure of success factors should be considered in particular. With the number of respondent on 163, the survey was conducted through three Municipalities in three different cities in UAE. The method was using Partial Least Squares Structural Equation Modelling (PLS-SEM) for hypotheses purpose. This study reveals that RMFI, and RMSF have positive and significant effects on the performance of government institutes. The contribution here refers to support the value in offering the strategic management of comprehending the feedback and impact on firm performance. This study is also expected in promoting the strategic approach culture in enhancing the risk consciousness in institution. Through establishing the commitment to manage the information system on risk management, knowledge sharing could be developed in further to deploy in expanding comprehensive analysis together with pointing out the strategies in enhancing capabilities and competence to properly and wisely manage the risk control in the operational activities.

Keywords: Risk management, Management Strategies, Risk Management Success Factors, and Government Institute Firm Performance, and United Arab Emirates (UAE)

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INTRODUCTION

In 1997, the beginning of financial crisis amongst the Asian countries has reemerged in 2008 and thus needs to have further emphasized the importance of risk management strategies for firms' survival. The global economic meltdown is an indicator that regulatory agencies need to increase their monitoring and surveillance capabilities to ensure a sound global financial system (Nicolas, 2012). Government institutions are among the most significant economic drivers that improve the welfare of individuals by supporting the ability of households and business entities to hold and transfer financial assets (CBN, 2010). Despite, the role of this important sector, government institutions around the world have witnessed monumental challenges in carrying out effective and efficient intermediation (Oladapo & Richard, 2012). For example, the market capitalization of the global equity markets dropped from US51 trillion dollars to US21 trillion dollars, a decrease of 56 percent in 2009 (Onour, 2009). These developments have negatively affected the performance of firms globally.

As a response to global failure, various government agencies had developed both rules and regulations that were meant to guide firms' operational activities. The United State of America introduced Sarbanes-Oxley Act (SOX 2002) to control and protect further corporate fraud in the country (Lai & Azizan, 2012). The number of initiative on the top-down risk approach through identification, prioritizing and assessment has been deployed within the Sarbanes-Oxley Act of material risks for better business performance (Daud, Yazid, & Hussin, 2010). These regulations have prompted business firms to be relentless in identifying efficient strategies that will improve their performance and survival.

In Abu Dhabi, the government institutes are surrounded by poor risk management practices, economic distress, solvency crises and operational infractions among others (Ramady, 2013). Some of the government institutions with the involvement in enabling the innovative practice has been growing up with their recent trends and approaches (AlNuaimi, Shaalan, Alnuaimi, & Alnuaimi, 2011; Reiche, 2010). Also, the introduction of various economic reforms in the country has led to the explosion of several corporate governance codes. These corporate governance conventions set the regulatory capital base that could control the risks facing the government sector and stipulate how effective monitoring will improve firm performance.

Risk management strategy considers the interrelations between different types of risks. In contrast, it could be viewed into the regular point through risk management including buying, physical vindication, and also accountability decline. The strategic management of handling the risk strategy concurrently considers all forms of risks and develops mechanisms to ensure holistic management of risks and uncertainties. Risk management strategy refers to the process in enabling the business organizations in assessing the control in exploiting the financial basis together with monitoring the exposure as an attempt to enhance firm performance to run well (Casualty Actuarial Society [CAS], 2003).

In addition, the emerging issues regarding the organizational stability to have a mutual understanding have described risk management strategy as an initiative designed to promote the understanding of diverse sources of risks (COSO, 2004). It also enables organizations to improve their strategic and operational decision-making capabilities. Strategically, Risk management strategy is expected to increase firm performance, reduce the likelihood of potentially costly surprises and contribute to the development of positive organizational risk culture (Queensland, 2011). It is the accumulative effect of these decisions that will increase firm performance (Beasley, Pagach, & Warr, 2008).

However, the empirical research on risk management has been

widely deployed with the variety of strategic approach to assess the firm's performance (Abdullah *et al.*, 2012; Ballantyne, 2013; Mikes & Kaplan, 2014). To resolve some of the inconsistencies in the literature, some studies have suggested the introduction of certain organisational variables (Hafizuddin-Syah, Abdul-Hamid, Janor, & Yatim, 2014). The CBN (2006) corporate governance report identified managerial ownership as a possible incentive that may lead to interest alignment between the management of a firm and its owners or shareholders. It is sure to point out that the risk management strategy should be incorporated in dealing with the board decision. In particular, the arrangement of awareness amongst board members together with owners could have supportive empowerment to enhance the strategic management to have a mutual decision as an effort to the development process of firm enactment.

In further, the incorporation of having such development process of firm performance aims to enhance the effectivity and efficiency to monitor the strategic approach of risk management (Bhagat & Bolton, 2008; Carol Liu, Tiras, & Zhuang, 2014; Hillman & Dalziel, 2003; Lim & Mccann, 2013), board equity ownership may lead to the alignment of interest between board members and shareholders. Hence, this alignment of interest may improve the board monitoring capacity with a view to improving firm performance (Ren, Chandrasekar, & Li, 2012). Thus, the success of risk management strategies is expected to be supported by board equity ownership. Hence, board equity ownership may improve the monitoring ability of the board, which will lead to effective risk management strategies (Bouwens & Verriest, 2014). Thus, this study attempts to investigate the strategic way of incorporating the risk management performance deployed by the firms in the government institutes of Abu Dhabi, in UAE.

LITERATURE REVIEW

Several sources in the literature have traced the concept of risk management to the year 1955 (Harrington & Niehaus, 2003; Williams & Heins, 1995). Dionne (2013) stressed that the new aspect of managing risk emerged during the mid-1950s as a substitute for insurance buying due to the high cost of insurance policy. He further asserted that organisations developed contingency planning activities and a series of risk prevention techniques within the period. During that period, risk management was not considered as an aspect of the business management process. It is simply a mechanism for taking precautionary measures to ensure the success of business operations (Kalita, 2004). There was neither quantitative practice to assess risk nor the technology available to manage and distribute it. Hence, business activities became defenseless and prone to various types of risks.

Furthermore, the traditional role of insurance as a mechanism for managing risk became less popular due to the liability insurance crisis of the 1980s in the USA (Dionne, 2013). The insurance crisis occurred due to exorbitant premium and partial risk coverage. Consequently, the global risk management organizations such as Risk Management Society (RIMS) began to push for risk management legislations. It was around the 1980s that International regulation of risk began to emerge (Dionne, 2013). As such, risk management became an essential instrument that organizations used to achieve business objectives. In another trend, Doherty (2000) opined that risk management emerged from the concept of modern finance theory, which considers it as financial decisions placed within the purview of shareholders' value. It is a set of steps design to take full advantage about the assessment of firm through reducing the total alliance transmitted with paying serious attention on explosiveness (Dionne, 2013). It is a deliberate effort intended to minimize the cost of financial distress, protect the interest of the stakeholders and increase the efficiency of investment. Risk management is expected to increase the confidence of business organisations; reduce business threats to an acceptable level and serve as a mechanism for taking useful decisions about business opportunities (HM Treasury, 2004).

Also, risk management has been considered as one of the most strategic avenues for improving firm performance (Doherty, 2000). It makes sense to state that one of the primary strategic objectives of any business firm is to preserve its operating efficiency. Similarly, Archer (2002) pointed out that the successful operations of corporate organisations depend on the ability of the company to manage uncertainties. Archer argued that management of risk and uncertainty can be seen from two perspectives (i.e. traditional and integrative approaches).

Traditionally, risk management is comprehended to have a rise of strategic management in taking the benefit towards an attempt to perceive, measure, and report the feedback about the insecurity on the possibility in the organization sustainability (Williams & Heins, 1995). Moreover, strategic approach of risk management has been widely assigned into the arrangement, forming, and primary monitoring of the number of accomplishments in the certain organization in protecting the productivity of firm performance (Stulz, 1996). Consistent with the above definitions, Rejda (2005) defined risk management as a process of identifying exposures and the selection of the most appropriate techniques to deal with it. The available methods include avoidance, reduction, retention and risk transfer (Bharathy & Mcshane, 2014). Several organisations adopt this traditional approach usually referred to "silo" based approach. This approach often limits the focus of risk management to uncertainties around physical and financial assets, and it focuses mostly on loss prevention, rather than value addition activities (ACI Worldwide, 2014). The traditional way with its insufficiency of risk management skills could become a point of unfocused basis in achieving the opportunities and also threats (Fadun, 2013b).

In a similar trend, studies have asserted that traditional risk management (TRM) approach increases the cost of managing risks, and it does not allow senior managers and boards of directors to have a clear view of the effect of risk (Lam, 2000; Manab et al., 2010). Though TRM approach to some extent reduces earnings volatility, it does not take care of the interdependencies of risk events (Hoyt et al., 2008). Under this approach, risks are managed independently through different departments by independent risk management specialist. Conversely, risk management strategies provide an opportunity for organizations to combine all the classes of risks affecting an organization into a single structure (Hoyt et al., 2008). Through integrating the risk management skills, the innovative concern could be transmitted into the mechanism to run the business well together with attempting to reduce the waste in the economy (The World Bank, 2013). It is clear from the existing literature that for the management of an organization to manage risk effectively, the process must cut across the entire organizational structure so that all stakeholders could have an involvement to proceed in ensuring the effective point of risk management performance.

Risk Management Framework Implementation (RMFI)

Hoyt et al. (2008) reported that risk management framework implementation has a significant relationship with firm value. Similarly, Lai and Samad (2011) addressed the risk management performance could have the impact on enhancing to reduce the financial issues and instability. It is true that the risk management-strategic approach needs to be incorporated with disclosing the framework on financial stability. With outlining the external financing cost, the improvement of the service should do with performing the firm's recognition rating, where the informational asymmetries refer to incorporate the activity fee. Hoyt and Liebenberg (2011) point out in addressing the risk management performance should bring along with designing the framework determined by the institutional stockholders together with the firm capacity. As such, it is positively associated with the firm performance value. In this view, Lin et al. (2012a) reported that the inability of the recent studies refers to deal with the number of practitioners in supporting the value related to the enhancement process of risk management basis.

In addition, the positive feedback in aligning with risk management on returning the asset could be achieved as an attempt to maintain the firm stability (Tahir & Razali, 2011). Moreover, the sufficient capability of firm in running their production has to do positively with influencing the institutional ownership (Gatzert and Martin, 2013). In similar, the sufficient adoption of firm performance should bring along with dealing into the enhancement of having the managerial construction as an effort to lead to the risk management handle (Gates, Nicolas and Walker, 2012). The maintenance should be prioritized with risk management performance in resulting the running to drive into the better decision in enabling to make the accountability engagement. In further, the indication might be seen through the significant engagement of having the positive empowerment of risk management together with firm value (Bertinetti, Cavezzali and Gardenal (2013).

In line with dealing clearly into the positive benefit of risk management, the necessary point to deploy amongst the firms refers to enhance the plan management together with building the strategic principles of guideline to run the firm within the track and path (Mikes and Kaplan, 2014). It is necessary to note that the stage of having mutual understanding in accepting the value of firm performance should do with bringing the business management. In this view, the simultaneous connection between risk management plan and having the strategic framework of implementation may give an insight into running the firm performance (Mikes and Kaplan, 2014). The clear deal is supposed to give an effective point in enabling the commitment of firm performance to sustain the production together with committing into the consistency on managing the implementation stage within the guideline (Huda et al., 2018a). In the attempt to have such attainment, it is clear to take a point of view that implementation stage of risk management refers to capture the financial stability to urge the production process. At this point of view, the balance of transmitting such attainment should bring along with corporate responsibility to contribute into the social basis, through corporate social responsibility performance (Huda et al., 2018b). In addition, the consciousness of having such stability in dealing with the frameworks of risk management refers to enhance the simultaneous link between financial sustenance in line with expecting the attainment of achieving firm construction. As such, it is clear to note that the sufficient running for the production process points out the suitability in capturing the risk management performance in aligning with developing the positive feedback on firm running process (Kembauw et al., 2019; Kencana et al., 2019). In this view, the hypothesis here could be achieved into giving insight to have an outstanding point of implementing the risk management within the comprehensive basis in enabling the running process in the guideline procedure context. At this point of view, the following hypothesis could be seen into the following.

Ha₁: Risk management framework implementation has positively related to firm performance of government institutions in Abu Dhabi.

Risk Management Success Factors (RMSF)

As one of the successful factors on the firm performance, the strategic enhancement of risk management success factors (RMSF) should bring along with comprehending the framework basis of the concept of success factors where this began in the 1970s (Yaraghi & Langhe, 2011). In this view, the way of manufacturing the product within the production process refers to have the committed awareness on bringing the strategic plan together with management strength deployed for the purpose of taking care in achieving the firm performance more valuable within the guideline principle (Ram & Corkindale, 2014). Introducing the productive environment amongst the workers with the authorities might become the outstanding factor in enabling to run the process in a well performed basis (Rockart, 1978). The satisfactory point of building the competitive attainment refers to enhance the organization stability in the firm directory at any level position in ensuring the performance smoothly within the strategic management plan (Rockart, 1978). In particular, the specific basis on the firm performance needs to have a sufficient understanding through identifying the few key areas where things need to go right for the business to flourish. As viewed into success factors with an essential ingredient fitted to each unit of business organizations (Huda et al., 2019a), the risk management with getting clear of success factor in building the firm's practices needs to support more comprehensive of transmitting the capacity in enabling the firms to fulfill the objective as the ultimate attainment (Mcleod and Scheel, 2004).

Since RMSF is a holistic process, this study focuses on the acquainted compliance of building risk management with the cultural approach through information management. In this view, the sufficient information of knowledge understanding needs to have a mutual sharing of competence with an innovative empowerment (Huda et al., 2019b), which refers to enable the leadership skills to drive into the guideline procedure. These factors have received little attention in the RMSF literature stream. Moreover, Strauss and Corbin (1998) argued that success factors ought to reflect the study practical issues. As such, these success factors emerged from the practical issues raised in this study.

In the effort to enhance the stability of organizational practice, the need to perform in disseminating information quality refers to sustain the mutual commitment on running the business within the right path of principle procedure. In assisting the organization sustenance of RMSF, it is clear to note that having such understanding and management ethics should begin with organizing the RMSF and also firm commitment (Altaany, 2013). Based on these theoretical arguments between RMIS and firm performance of government institutions in Abu Dhabi, the study has come up with the following hypotheses:

Hb₁: Risk culture has positively related to the firm performance **Hb**₂: Risk management information system has positively related to the firm performance.

Hb₃: Risk knowledge sharing has positively related to the firm performance.

Agency theory

The complexity of modern business, stock market development and the need for organisations to allocate risk efficiently (Fama, 1980; Fama & Jensen, 1983) have created the need for principalagent relationships. Agency theorists have argued that in the modern corporation, conflicts of interest surfaces because of the division that exist between managers and owners (Pratt & Zeckhauser, 1985). Fundamentally, agency theory has provided the background for understanding the contractual relationship between principals (owners) and agents (managers) in the modern business environment (Jensen & Meckling, 1976).

In an agency relationship, pursuing the mediator in performing the actions could be fitted into the wealth management mainly for self-purpose (Demsetz & Lehn, 1985; Jensen & Meckling, 1976). The contract has obliged the agent to ensure efficient management of risks on behalf of the principal, who is the residual claimant and the risk bearer (Fama & Jensen, 1983). Having such mechanism in addressing the commitment of monitoring the control of RMSF should bring along with tying the fundamental principle in binding the mechanisms from the recent practice and theoretical basis in addressing the current issues on risk management (Hoskisson, Castleton, & Withers, 2009). In this view, the raise of expanding the link between principal and agent might have a serious concern to monitor the positive point of risk management (Jensen & Meckling, 1976).

As such, an active board control is assumed to maintain superior firm performance because of its acquainted skills to determine the running process of production procedure together with its mindful awareness and commitment on handling the challenging tasks (Anshari wt al., 2017; Lim & Mccann, 2013). As a result of comprehending the way of management skills on monitoring the principles through guideline, it is clear that the effective essence of board's control function may be more efficient where directors receive incentives to ensure alignment of interests between BODs and shareholders (Hillman & Dalziel, 2003; Lim & Mccann, 2013). The critical point of managing the supply management together with chain direction should refer to the sufficient distribution number as an urgent option enable the ownership competence that will motivate them to fulfil fiduciary responsibilities and pursue shareholders' interest.

Therefore, the agency literature sees the board of directors (BOD) as the primary instrument for controlling executive behavior on behalf of shareholders (Fama & Jensen, 1983; Hillman & Dalziel, 2003). In addition to monitoring, attempts to enhance committed awareness amongst the board are in line with the way to achieve the ensuring basis together with pointing out the strategic enactment of risk management, in which it could be applied in preparing the management skills (National Association of Corporate Directors (NACD), 2009). In the attempt to support the point of view in addressing the initiative of risk management on the BOD (Levy et al., 2010), it is clear to point out expanding the risk management should have the sufficient commitment on directing the guideline principle of building innovative skills. The creative point of enhancing the risk management should bring along with stressing the way of practical stage to ensure the moral value strength (DeLoach & Thomson, 2014).

Similarly, the idea of complying with regulatory provisions and codes can be traced to the theoretical assumptions of Agency theory (Jensen & Meckling, 1976). The theory postulated that the conflict that arises between the management and the owners can be subdued by adherence to internal and external control mechanisms (Huda et al., 2020). One of the controls mechanisms is the firm adherence to applicable regulations and provisions. This mechanism is expected to reduce the conflict and allow the management to focus on issues that will improve firm performance. Hence, this theory covers the two variables, namely independent and independent.

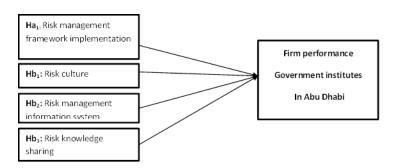


Figure 1: Framework of strategy of risk management and company practice of government institution in UAE.

METHODOLOGY

The quantitative approach refers to a situation where numerical data is applied in representing the phenomena in the certain case of study (Hair Jr et al., 2010). As the approach to test the theoretical basis, the investigation should be associated into variables, in which the adoption might bring along with the correlational prediction of conducting survey (Creswell, 2014). In this view, employing such approach needs to go through associating with both independent and dependent variable basis (Kumar, 2011; Sekaran, 2003). As such, it is necessary to have a sufficient adoption in collecting data and analyze using both descriptive and inferential statistics. A survey method is used where a researcher is interested in assessing empirically the thoughts and opinions about a given social phenomenon via the collection of primary data from the respondents (Fisher, 2010). A survey research provides a speedy way of making an accurate assessment of a given population (Zikmund, Babin, Carr, & Griffin, 2013). Thus, a survey method was considered appropriate for this study.

Population and Sample

Referring to the overall set of population, including also certain event, it would enable the research practice in expanding the investigation in following the guideline principle together with procedure (Sekaran and Bougie, 2013). As such, the number of participant involved in this study, applying for these three municipalities in UAE has been determined referring to the objective in making a total of 256 employees at manager level. These government institutes are confronted with diverse and

highly sophisticated risks that require a comprehensive risk management strategy. Inability to manage risk in this critical sector may have a devastating effect on the economy as a hub for efficient allocation of resources. Therefore, this study will examine the influence of risk management strategies on the performance of government institutes in Abu Dhabi. Since the larger the sample sizes the better the possibility of achieving higher statistical significance, the researcher considers another method of determining higher sample size to further compliment the prior power analysis. Firstly, it is necessary to use the sample size table in determining the research conduct with the participant number between 250 and 259, in which the sample has side of 152. Moreover, the overall participant is about 163 questionnaires (Krejcie and Morgan, 1970).

Measurement

In the attempts to measure Likert scale, it is necessary to point out determining the instrument procedure, where the number of questionnaire consisted of five points. The Likert scale was determined to be the appropriate point in measuring the instrument with the latest information provided appropriately fitting into the nature of information participant (Alreck & Settle, 1995). In this view, five points- Likert scale might be enhanced in supporting the reliability of instrument to achieve no midpoint of whether higher or lower basis in avoiding the error (Krosnick and Fabrigar (1997). In addition, referring to five point scales here, it should be transmitted to create better outcome as the construction and measurement items (Dawes, 2008).

Table 1 Construct, Sources and number of Items						
S/n	Construct	Source	No of Items			
1.	RMFI	Lai (2012)	6			
2.	Risk Culture	KPMG, 2011	9			
3.	Risk management Inf. Sys	Rodriguez & Edwards (2009)	5			
4.	Risk Knowledge Sharing	Rodriguez & Edwards (2009)	5			
5.	Firm performance	Rettab, Brik, and Mellahi (2009); Gates, et al. (2012)	5			

ANALYSIS AND FINDINGS

The Measurement Model

In the measurement approach, data validity refers to the way of reliable point on looking into the outcome, where all such have a similar link to the construct measures process. In this, it is true that depending on the relationship between the assessment of measurement model, the reliability of linking into the consistency from both the reliability extent of individual item together with validity of data and also validity convergence and

discriminant. The analysis deals with the components that determine how to fit the items load theoretically and link with the respective constructs. According to Hair Jr, Sarstedt, Hopkins, and Kuppelwieser (2014), items with loadings between .40 and .70 should be considered for deletion if their removal will increase the composite reliability or AVE beyond the suggested threshold. Therefore, 30 items had loadings between .508 and .900 (see Figure 2).

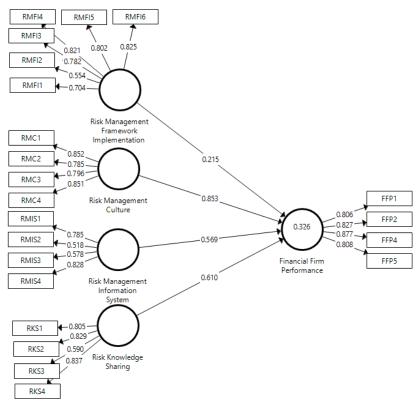


Figure 2: The Measurement Model

Determined simply as the magnitude where attempts to enhance the construct has its own featured basis (Duarte & Raposo, 2010), discriminant validity refers to have a link into comparing such basis with variables through square source (Fornell and Larcker (1981). In this research, the effort to address the validity of assessing the discriminant needs to compare the connection between such variables in following the average variance extracted (AVE). Through approaching the discriminant validity, proposing this model might have following concern into attaining the square root of exceeding the link for overall constructs. In this view, each of construct's AVE should have the formulation as viewed into the table 3, in comparing the square basis of AVE. Moreover, the particular values in correlating into the boldface places the latent constructs in achieving the validity of discriminant amongst the entire theory (Hair, Ringle, & Sarstedt, 2011; Henseler *et al.*, 2009).

Tal	ole 2: Factor	loading, AVE, CR	1
			Composite Reliability (ρc)
Constructs	Loadings		
RMFI		.588	.895
RMF1	.704		
RMF2	.544		
RMF3	.782		
RMF4	.821		
RMF5	.802		
RMF6	.825		
Risk Management		.525	.813
Culture RMC1	.852		
RMC2	.785		
RMC3	.796		
RMC4	.851		
Risk Management Information System RMIS1	.785	.553	.830
RMIS2	.518		

RMIS3	.578		
RMIS4	.828		
Risk Knowledge		.516	.761
Sharing RKS1	.805		
RKS2	.829		
RKS4	.590		
RKS5	.837		
Financial Firm Performance FFP1	.806	.515	.809
FFP2	.827		
FFP4	.877		
FFP5	.808		

Table 3 Latent variable correlation and S	quare root of AVE
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Constructs	FP	RMFI	RC	RMIS	RKS
FP	.847				
RMFI	059	.717			
RMC	043	.028	.718		
RMIS	.189	.127	.033	.744	
RKS	.329	.148	.056	.253	.841

The Structural Model

With referring to the requirement of having such structure model in evaluating the outer basis, getting the result from empirical finding should be fitted into the objective point as indicated in the structural model effects. With involvement of external basis of model's prediction, the abilities of assessing the link amongst the constructs are in line with applying the procedure standard of bootstrapping basis in enabling the mutual associations between the constructs. Through conducting the current research, it is necessary to have the multiple applications of 500 bootstrap samples as determined to be the number of sample data (Hair *et al.*, 2014; Sarstedt *et al.*, 2014). In this view, applying the featured characteristic of procedure towards standard bootstrapping in bringing along with 500 samples should determine the cumulative point of the original number of assessing the sample data to ensure their significance into the path coefficients (Sharma and Kim, 2013). With the simulation study of PLS-SEM, it is necessary to enhance the convergence of data resulted from the low basis to the high one with the ordinary data starting until 500 iterations as indicated in the following figure 3.

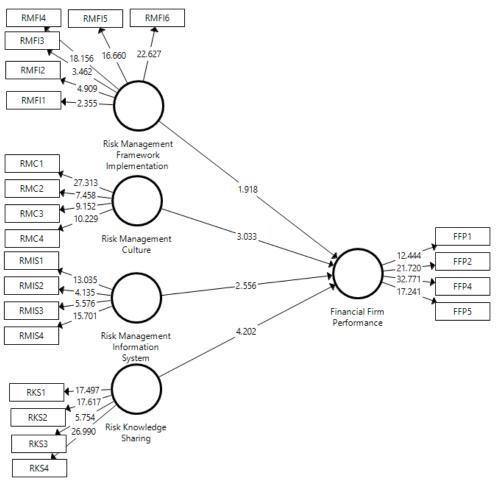


Figure 3: The Structure Model

The bootstrapping process had aided the determination of the strength of structural path relation for the test of hypotheses. The model structural assessment starts with the examination of the direct relationships between the study variables. The researcher determined the path coefficients by running PLS-SEM Algorithm while the significance of the path coefficient was assessed through PLS-SEM bootstrapping process. The study estimated the structural model in two stages. First, the study focused on the direct relationship between the exogenous variables and the dependent variables (Ha1-Hb3) Table 4 presents the path coefficients, t-statistics, P-values, and decision.

Starting with the first Hypothesis (Ha1), the results of the analysis revealed that risk management framework

implementation has a positive impact on firm performance (β =.186; t=1.918; p<.01). Thus, the study supported the first hypothesis. The results of the second hypothesis (Hb1) indicated that risk management culture positively relates to firm's performance (β =.084; t=3.033; p<0.1). Hence, Hb1 is supported. Again, the result in Table 4 revealed a significant positive relationship between risk management information systems and firm's performance (β =.215; t=2.556; p<.01) providing evidence to support the hypothesis (Hb2). Likewise, the study provides evidence to support the fourth hypothesized relationship (Hb3) that risk knowledge sharing positively influence firm performance (β =.123; t=4.202; p<.05), hence the hypothesis is supported.

		Beta Value	STD			
Hypothesis	Relation		Error	T Value	P Value	Decision
Ha1	RMFI -> PERF	.186	.053	1.918***	.000	Supported
Hb1	RMC -> PERF	.084	.059	3.033*	.079	Supported
Hb2	RMI -> PERF	.215	.054	2.556***	.000	Supported
Hb3	RKS -> PERF	.123	.058	4.202**	.018	Supported

Table 4 Results of Hypotheses Testing

Note: ***Significant at 0.01 (1-tailed), **significant at 0.05 (1-tailed), *significant at 0.1 (1-tailed)

In order to produce the R-square value, the need to have the mutual assessment in bringing along with the featured criteria on

the essential model. As the common use in examining the model of endogenous basis, it is necessary to have a critical role in

determining construct performance (Hair *et al.*, 2014; Henseler *et al.*, 2009). Moreover, the value of determination coefficient (R^2) refers to the number of dependent variable supposed to be the predictor. The value of R^2 might have the range between 0 and 1, where the more R-square to 1 is the more variant might be achieved. In this view, the acceptance rate of R^2 here refers to the appointment of the research discipline in mining the point of contenting the value into2 and considered as high in this study (Hair et al., 2012). Categorized as value of 02, 13, and 26 as weak,

the R^2 value means to have the small score with substantial respectively (Cohen, 1988). In addition, the value of R-square starting from 01, 10, 25 would become the beginning of enhancing the score considered to be the as small, medium and large (Murphy, Myors and Wolach, 2014). In the table 5, the value of R^2 refers to point out expanding the result in showing the company performance (.321), as the substantial basis. The value here refers to indicate there were nine variables provided for the analysis purpose with joining as 32.70%.

Table 5 Variance Explained in the Endogenous Latent Variables					
	Endogenous Variable	Variance Explained R ²			
	Firm Performance	0.327			

DISCUSSION AND CONCLUSION

Relationship between Risk Management Framework and Implementation Firm Performance

This study attempts to examine the positive feedback of risk management from both performance and implementation on firm. The first objective of this study is to examine the influence of risk management framework implementation on firm performance. In this present study, risk management framework implementation is conceptualized as a structure that provides the context and the methods to deliver risk management objective of an organization. It explains the processes and the procedures for strengthening risk management strategies in an organization with a view to increasing firm performance. The strategic basis of performing the risk management should build the incorporation of having crucial issue as the sign for implementing such approach in the organization (Dafikpaku, 2011).

To achieve this objective, Ha1 hypothesized that risk management framework implementation is having such positive correlation with the firm performance. The empirical result would have such approaches on recent studies on risk management to positively have feedback into the previous one. It is clear that the validity of formulating the hypothesis refers to give insight in providing the response from the question. In line with indicating the risk management, the framework should implement the effective approach in enhancing the performance of government office in UAE, in the sense that refers to point out the capacity and demand. In this view, this study might need to play a key point to investigating efficiency together with effectivity of running the commercial engagement and also government institution.

Relationship between Risk Management Success Factors and the Firm Performance

The second objective here refers to investigate the mutual link between the performance to do in the risk management and government institution in UAE. As such, there were three hypotheses to achieve this attainment through formulating success factors including culture, system and knowledge sharing procedure. In this view, examining the link between RMSF and firm performance should have a mutual turn into the government institution.

Firstly, the second hypothesis (Hb1) pointed out the culture of risk management is positively linked into the practical stage of government institutions in UAE. The study conceptualizes risk management culture as a system that collects, stores and disseminates risk information to various business unit to support business operations. As expected, the PLS regression created to have a significant sign on revealing the risk culture of firm performance and also government institutions. In this view, the positive feedback of having risk management culture with its effective improvement would have the effect on the attempts to expand the company performance (Ernst and Young, 2014; McShane *et al.*, 2011; Ngo & Loi, 2008; Uzkurt *et al.*, 2013). Nursing a solid risk culture within a business firm is fundamental to a corporate sector that is continually faced with vulnerabilities (Abd Razak *et al.*, 2016). The study concluded that there is the need for firms in the government organisation to pay special attention to the development of positive risk culture within their domain.

Secondly, the present study also hypothesized that risk management information system is having such positive feedback to the company performance (Hb2). As expected, it is clear to reveal that the significant point of risk management culture needs to bring along with the competence skills on the way to go through implementation stage. The findings suggest that firms that have effective risk information management and possess the capacity to process information are likely to improve the enhancement of performance. It is true to take note that the current research is in agreement with previous studies (Gaines et al., 2007; Gibson, 1997; Laudon & Laudon, 2012; Rodriguez & Edwards, 2010) who reported that information management is having such positive sign into the firm performance. Drawing from the agency theory, Ravichandran et al. (2005), risk management information capability is an important strategic resource that gives a firm competitive edge. The ability of a firm to manage fortuity depends to a large extent on available information at its disposal. Hence, the finding supports the theory. Again, the firms need to put in place specific data management infrastructure that will ease risk management strategies.

Thirdly, with respect to the fourth hypothesis (Hb3), as presumed, the PLS path modeling results revealed that risk knowledge sharing significantly influences firm performance. The study operationalized risk knowledge sharing as an organizational strategy that facilitates the management of fortuities in the organization through the exchange of risk knowledge among different business units. This particular result is consistent with existing research on knowledge sharing (Hartono & Sheng, 2015; Hora & Klassen, 2013; Liao et al., 2011; Rehman et al., 2015; Rodriguez & Edwards, 2009b), who reported in addressing about the understanding stage to share the positive feedback towards the company performance. More specifically, some of these studies suggested the need for firms to put in place organizational systems that encourage and enhance knowledge sharing and acquisition. In this regard, risk knowledge dissemination typically enhances risk management capabilities and improve operating efficiency. Therefore, knowledge sharing as a strategic resource, if fully utilized may lead to better firm performance.

On the overall, the R^2 value (32.70%) for this study falls on the substantial category (Murphy, Myors and Wolach, 2014). The

value of R² for this study is relatively within the range of some related risk management strategies studies that reported low R² value (Li, Wu, Ojiako, Marshall, & Chipulu, 2014; Manab & Ghazali, 2013; Sekerci, 2013). Similarly, the effect size (0.046) determined as the variable with independent basis towards the variable with dependent basis was categorized as small based on Cohen (1988) criteria. This indicates that other factors apart from risk management strategies may also exert some influence on the performance of government institutions in UAE. Getting risk management framework implementation though necessary may not be a sufficient condition of management for the risk control strategy to have an effective way to positively influence the performance. Further, the finding reveal that the descriptive point indicated only 37.40 percent with having the full implementation of risk management strategies, 36.80 percent and 25.80 percent are at the partial and initial implementation stages respectively. This might inform some of the reasons of low effect size as almost half of the study sample are at the initial stage of risk management framework implementation.

RECOMMENDATION

The aftermath feedback of the failure of global economic concern continued to pose a serious challenge to effective operations of government institutions. Risk management strategy has become a central strategy that is viewed to counter the effect of business risk through a single framework that holistically put risks in proper check. In particular, the risk concern is huge in the financial sector given the quantum of risks that surround the industry. Considering the findings of this research effort this study might have such important point of view in understanding of the practice, theory and methodology implication.

The findings suggest that risk culture is a critical success factor that drives firm performance. While risk management framework implementation is critical to effective risk management it is not sufficient condition for effective practice about the way of risk management competence. To complement the framework of risk management culture has been recognized as an important element that leads to an effective and efficient risk management strategies that improve firm performance. A firm with positive risk culture is more likely to take a point in placing the sufficient empowerment of risk management strategy. Hence, it is recommended that a successful risk culture model needs to be put in place by government institutions to complement risk management framework for better firm performance. Regulatory agencies need to formulate policies that will instill positive risk culture in the Abu Dhabi.

Further, the study has established that strategic enhancement of managing risk handle together with sharing of knowledge understanding of risk are important success factors that influence firm performance. It means for the government institutions to efficiently manage risk; government institutions require a well-functioning database. Hence, an effective management information system is required to enable them analyze the frequency and severity of risk exposures. Again, government institutions must recognize the importance of risk management information to effectively analyze risk and shield the firm against uncertainties. To achieve better firm performance, government institutions should be encouraged to have a sufficient incorporation in placing the vigorous pathway of managing the useful information for a comprehensive risk analysis and reporting. In addition, it is recommended that the government institutions need to put in place an internal risk knowledge sharing as a strategy that will improve staff capabilities to handle complex firms' operations.

In conclusion, the study identifies risk management framework and risk management including its culture basis, knowledge sharing as critical to improving firm performance. Hence, considering these variables together may lead to an efficient risk management strategy capable of improving firm performance.

LIMITATION AND SUGGESTION

The limitation of this research has been incorporated to drive into handling the critical issue of pointing out expanding the necessary conduct in measuring the common basis of method of variance problems (Podsakoff et al., 2003). It is clear to take note in managing the primary concern on what to do wisely fitting into the result of Harman's single factor technique revealed that does not exist, future studies may collect data from both regulatory agencies in addition to the government institutions to mitigate the problems of self-reported measures. Another possible weakness of this current study could be traced to the fact that the study examines only the relationship between risk management framework implementation, risk management success factors, and its strategic performance. Moreover, examining the maturity level and experience basis should do with the management practices of risk management in UAE. The future studies should begin with looking at the possible implication on the way to use the capable basis in engaging into the risk management implementation in UAE.

REFERENCES

- Abd Razak, N., Ab Rahman, Z., & Borhan, H. (2016). Modeling firm resources – enterprise risk management relationships: An empirical finding using PLS- SEM. World Journal of Entrepreneurship, Management and Sustainable Development, 12(1), 35-49.
- Abdullah, M. A. N., Zakuan, N., Khayon, M., Ariff, M. S. M., Bazin, N. E. N., & Saman, M. Z. M. (2012). Adoption of enterprise risk management practices in organization: A Review. *International Journal of Business and Information Technology*, 2(1), 1–9.
- AlNuaimi, M., Shaalan, K., Alnuaimi, M., & Alnuaimi, K. (2011, December). Barriers to electronic government citizens' adoption: A case of municipal sector in the emirate of abu dhabi. In 2011 Developments in E-systems Engineering (pp. 398-403). IEEE.
- Alreck, P. L., & Settle, R. B. (1995). The survey research handbook: Guidelines and strategies for conducting a survey (2nd ed.). New York, NY: McGraw Hill.
- 5. Altaany, F. H. (2013). Impact of management information systems to improve performance in municipalities in north of Jordan. *Interdisciplinary Journal of Contemporary Research in Business*, 5(6), 429–446.
- Anshari, M., Almunawar, M. N., Shahrill, M., Wicaksono, D. K., & Huda, M. (2017). Smartphones usage in the classrooms: Learning aid or interference?. *Education and Information Technologies*, 22(6), 3063-3079.
- 7. Archer, D. (2002). Creating a risk management framework. *CMA Management*, *76*(1), 16–19.
- 8. Ballantyne, R. (2013). An empirical investigation into the association between enterprise risk management and firm financial performance. Lawrence Technological University.
- Beasley, M., Pagach, D., & Warr, R. (2008). Information conveyed in hiring announcements of senior executives overseeing enterprise-wide risk management processes. *Journal of Accounting, Auditing & Finance, 23*(3), 311–332.
- 10. Bertinetti, G. S., Cavezzali, E., & Gardenal, G. (2013). *The effect of the enterprise risk management implementation on the firm value of European companies* (No. 10/2013).
- 11. Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance.
- 12. Bharathy, G. K., & Mcshane, M. K. (2014). Applying a systems model to enterprise risk management. *Engineering Management Journal*, *26*(4), 38–46.
- 13. Bouwens, J., & Verriest, A. (2014). Putting skin in the game : managerial ownership and bank risk-taking (No. 14–070). Harvard Business Review.

- 14. Carol Liu, M. H., Tiras, S. L., & Zhuang, Z. (2014). Audit committee accounting expertise, expectations management, and non-negative earning surprises. *Journal of Accountancy and Public Policy*, *33*(2), 145–166.
- 15. Casualty Acturial Society. (2003). Overview of enterprise risk management. Ontario Canada.
- 16. Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.).
- 17. Creswell, J. W. (2014). *Research Design*. New Delhi: Sage Publications Inc.
- Dafikpaku, E. (2011). The strategic implications of enterprise risk management: A framework. In *Enterprise Risk Management Symposium* (pp. 1–49). Society of Actuaries. Retrieved from www.ermsymposium.org/2011/pdf/Dafikpaku.pdf
- Daud, N. W., Yazid, A. S., & Hussin, M. H. R. (2010). The effect of chief risk officer (CRO) on enterprise risk management (ERM) practices: Evidence from Malaysia. *International Business & Economics*, 9(11), 55–64.
- Dawes, J. (2008). Do data characteristics change according to the number of scale points used? An experiment using 5 point, 7 point and 10 point scales. *International Journal of Market Research*, 50(1), 61–18.
- 21. DeLoach, J., & Thomson, J. (2014). *Improving organisational performance and governance: How the COSO frameworks can help*? COSO.
- Demsetz, H., & Lehn, K. (1985). The Structure of corporate ownership: Causes and consequences. *Journal of Political Economy*, 93(6), 1155–1177.
- Dionne, G. (2013). Risk management: history, definition, and critique. Risk Management & Insurance Review, 16(2), 147-166.
- Duarte, P., & Raposo, M. (2010). A PLS model to study brand preference: An application to the mobile phone market. In V. Esposito Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of Partial Least Squares* (pp. 449– 485). Springer Berlin Heidelberg.
- 25. Ernst and Young. (2014). Shifting focus: Risk culture at the fore front of banking.
- Fadun, O. S. (2013b). Risk management and risk management failure: Lessons for business enterprises. International Journal of Academic Research in Business & Social Sciences, 3(2), 225–239.
- 27. Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, *88*(2), 288–307.
- Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *The Journal of Law and Economics*, 26(2), 327.
- 29. Fisher, C. (2010). *Researching and writing a dissertation: A guidebook for business students* (3rd ed.). England: Pearson Education Limited.
- Fornell, C., & Larcker, D. F. (1981). Evaluating dysfunctional employee behaviors: A test of structural equation models with unobservable traditional and contingency theory postulates: The variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Gaines, C., Hoover, D., Foxx, W., Matuszek, T., & Morrison, R. (2007). Information systems as a strategic partner in organizational performance. *Jounnal of Management and Marketing Research*, 1–17.
- Gates, S., Nicolas, J., & Walker, P. L. (2012). Enterprise risk management: A process for enhanced management and improved performance. *Management Accounting Quarterly*, 13(3), 28–38.
- Gatzert, N., & Martin, M. (2013). Determinants and value of enterprise risk management: Empirical evidence from the literature (No. November 23, 2013). Department for Insurance Economics and Risk Management. Friedrich-Alexander-University (FAU) of Erlangen-Nürnberg.

- 34. Gibson, M. (1997). Information systems for risk management board of governors of the federal reserve system. (No. 585).
- 35. Hafizuddin-Syah, B. A. M., Abdul-Hamid, M., Janor, H., & Yatim, P. (2014). The implementation of enterprise risk management (ERM) and firm performance : Evidence from Malaysian technology firms. In *The 16th Malaysian Finance* Association Conference (MFA2014): Financial Systems Re-Generation: MAPS, GAPS and TRAPS.
- Hair Jr, J. F., Black, J. W., Babin, B. J., & Anderson, E. R. (2010). *Multivariate data analysis: A global perspectives* (Seventh Ed.). New Jersey: Pearson Education Limited.
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121.
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). A primer on partial least squares structural equation modeling (*PLS-SEM*). London: SAGE Publications, Incorporated.
- 39. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *The Journal of Marketing Theory and Practice*, 19(2), 139–152.
- 40. Harrington, S., & Niehaus, G. R. (2003). *Risk Management and Insurance*. USA.: Irwin/McGraw-Hill.
- Hartono, R., & Sheng, M. L. (2015). Knowledge sharing and firm performance: the role of social networking site and innovation capability. *Technology Analysis & Strategic Management*, 7325(December), 1–13.
- 42. Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *New Challenges to International Marketing Advances in International Marketing*, *20*, 277–319.
- Hillman, A. J. A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383–396.
- 44. HM Treasury. (2004). *The orange book: Management of risk principles and concepts. London: HM Treasury.* London. Retrieved from www.hm- treasury.gov.uk
- Hora, M., & Klassen, R. D. (2013). Learning from others' misfortune: Factors influencing knowledge acquisition to reduce operational risk. *Journal of Operations Management*, 31(1-2), 52-61.
- Hoskisson, R. E., Castleton, M. W., & Withers, M. C. (2009). Complementarity in monitoring and bonding: More compensation. *Academy of Management Perspectives*, (May), 57–74.
- Hoyt, R. E., & Liebenberg, A. P. (2011). The value of enterprise risk management. *Journal of Risk & Insurance*, 78(4), 795–822.
- 48. Hoyt, R. E., Moore, D. L., & Liebenberg, A. P. (2008). The value of enterprise risk management: Evidence from the US insurance industry.
- Huda, M., Teh, K.S.M., Nor, N.H.M., and Nor, M.B.M. (2018a). Transmitting Leadership Based Civic Responsibility: Insights from Service Learning. *International Journal of Ethics and Systems*, 34(1), 20-31. DOI: 10.1108/IJOES-05-2017-0079
- Huda, M., Mulyadi, D., Hananto, A. L., Nor Muhamad, N. H., Mat Teh, K. S., & Don, A. G. (2018b). Empowering corporate social responsibility (CSR): insights from service learning. *Social Responsibility Journal*, 14(4), 875-894.
- Huda, M., Qodriah, S.L., Rismayadi, B., Hananto, A., Kardiyati, E.N., Ruskam, A., and Nasir, B.M. (2019a). Towards Cooperative with Competitive Alliance: Insights into Performance Value in Social Entrepreneurship. In *Creating Business Value and Competitive Advantage with Social Entrepreneurship.* (pp.294). Hershey, PA: IGI Global. DOI: 10.4018/978-1-5225-5687-9.ch014
- 52. Huda, M., Hehsan, A., Basuki, S., Rismayadi, B., Jasmi, K. A., Basiron, B., & Mustari, M. I. (2019b). Empowering

Technology Use to Promote Virtual Violence Prevention in Higher Education Context. In *Intimacy and Developing Personal Relationships in the Virtual World* (pp. 272-291). Hershey, PA: IGI Global. DOI: 10.4018/978-1-5225-4047-2.ch015

- Huda, M. Muhamad, N.H.N., Isyanto, P., Kawangit, R.M., Marni, N., Mohamed, A.K., and Safar, A.J. (2020). Building Harmony in Diverse Society: Insights from Practical Wisdom. *International Journal of Ethics and Systems*. DOI: 10.1108/IJOES-11-2017-0208.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305– 360. *Journal of Corporate Finance*, 14(3), 257–273.
- 55. Kalita, M. (2004). Enterprise-Wide Risk Management: Myth or Reality? *Business Credit*, *106*(3), 22–23.
- Kembauw, E., Soekiman, J. F. X. S. E., Lydia, L., Shankar, K., Huda, M. (2019). Benefits of Corporate Mentoring for Business Organization. *Journal of Critical Reviews*. 6(5), 101-106.
- Kencana, U., Huda, M., Maseleno, A. (2019). Waqf Administration in Historical Perspective: Evidence from Indonesia. *TEST Engineering and Management*. 81, Nov-Dec. 5338 -5353.
- Krejcie, R. V, & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 38, 607–610.
- Krosnick, J. A., & Fabrigar, L. R. (1997). Designing rating scales for effective measurement in surveys. In L. E. Lyberg, P. Biemer, M. Collins, E. D. De Leeuw, C. Dippo, N. Schwarz, & D. Trewin (Eds.), *Survey Measurement and Process Quality* (pp. 141–164). John Wiley & Sons.
- Kumar, R. (2011). Research methodology: A step by step guide gor beginners (3rd ed.). New Delhi: Sage Publications Inc.
- 61. Lai, F. W., & Samad, F. A. (2011). Enterprise risk management framework and the empirical determinants of Its implementation. *International Conference on Business and Economics Research*, *1*, 340–344.
- 62. Lam, J. (2000). Enterprise-wide risk management and the role of the chief risk officer. *White Paper, ERisk. Com*.
- 63. Laudon, K. C., & Laudon, J. P. (2012). *Management information system: Managing the digital firm*. Boston, USA: Prentice Hall.
- 64. Levy, C., Lamarre, E., & Twining, J. (2010). Taking control of organizational risk culture (Report from McKinsey & Company). Retrieved from https://www.mckinsey.com
- Li, Q., Wu, Y., Ojiako, U., Marshall, A., & Chipulu, M. (2014). Enterprise risk management and firm value within China's insurance industry. *Acta Commercii*, 14(1), 1–10.
- Liao, K., Ma, Z., Lee, J.-Y. J., & Ke, K. (2011). Achieving mass customization through trust-driven information sharing: a supplier's perspective. *Management Research Review*, 34(5), 541–552.
- 67. Lim, E. N. K., & Mccann, B. T. (2013). The influence of relative values of outside directors options on firm strategic risk from a multi-agent perspectives. *Strategic Management Journal*, *34*, 1568–1590.
- Lin, Y., Wen, M. M., & Yu, J. (2012). Enterprise risk management: Strategic antecedents, risk integration, and performance. *North American Actuarial Journal*, 16(1), 1–28.
- 69. Manab, N. A., & Ghazali, Z. (2013). Does Enterprise Risk Management Create Value. *Journal of Advanced Management Science Vol*, 1(4), 358–362.
- Manab, N. A., Kassim, I., & Hussin, M. R. (2010). Enterprisewide risk management (EWRM) practices: between corporate governance compliance and value. *International Review of Business Research Papers*, 6(2), 239–252.

- McShane, M. K., Nair, A., & Rustambekov, E. (2011). Does enterprise risk management increase firm value? *Journal of Accounting, Auditing & Finance, 26*(4), 641–658.
- 72. Mikes, A., & Kaplan, R. S. (2014). Towards a contingency theory of enterprise risk management. Harvard Business School Working Paper.
- 73. Murphy, K. R., Myors, B., & Wolach, A. (2014). *Statistical power analysis: A simple and general model for traditional and modern hypothesis tests* (4th ed.). New York: Routledge.
- 74. Ngo, H.-Y., & Loi, R. (2008). Human resource flexibility, organizational culture and firm performance: an investigation of multinational firms in Hong Kong. *The International Journal of Human Resource Management*, 19(9), 1654–1666.
- 75. Nicolas, V. (2012). Financial reform after the crisis : An early assessment.
- 76. Oladapo, A., & Richard, O. (2012). The implications of global financial crisis on the Nigerian capital market performance : An empirical investigation (2000-2008). *European Journal* of Humanities and Social Sciences, 16(1), 1–18.
- 77. Onour, I. a. (2009). *The global financial crisis and equity markets in middle east oil exporting countries*. Retrieved from http://www.docudesk.com
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *The Journal of Applied Psychology*, 88(5), 879–903.
- 79. Pratt, J. ., & Zeckhauser, R. J. (1985). *Principals and agents: the structure of business*. Boston.
- 80. Queensland. (2011). A Guide to Risk Management, The State of Queensland (Queensland Treasury) July .
- Ram, J., & Corkindale, D. (2014). How "critical" are the critical success factors (CSFs)? Examining the role of CSF for ERP. Business Process Management Journal, 20(1), 151–174.
- 82. Ramady, M. A. (2013). *Political, economic and financial country risk*. Springer, New York, NY.
- Ravichandran, T., Lertwongsatien, C., & Lertwongsatien, C. (2005). Effect of information systems resources and capabilities on firm performance: A resource-based perspective. *Journal of Management Information System*, 21(4), 237–276.
- Rehman, A., Baloch, Q. B., Afeef, M., & Saleem, M. (2015). Relationship between information sharing and risk management practices with financial performance: Evidence from Pakistani banking sector. *Journal of Managerial Sciences*, 9(2), 138–146.
- 85. Rejda, G. E. (2005). Risk management and insurance. Boston: Addison Wesley.
- Ren, H., Chandrasekar, K., & Li, B. (2012). Moderating effects of board and managerial incentive on the relationship between R & D investment and firm performance- Evidence from listed manufacturing firms in China. *The Journal of International Management Studies*, 7(1), 41–55.
- 87. Rockart, J. F. (1978). A new approach to defining the chief executive's information needs (No. 1008–78.).
- Rodriguez, E., & Edwards, J. (2010). People, technology, processes and risk knowledge sharing. *Electronic Journal of Knowledge Management*, 8(1), 139–150.
- Rodriguez, E., & Edwards, J. S. (2009b). Knowledge management and enterprise risk management implementation in financial services. In *Enterprise Risk Management* (pp. 1–17). Retrieved from www.ermsymposium.org/2009/pdf/
- Sekaran, U. (2003). Research methods for business: A skill building approach. PhD Proposal (4th ed., Vol. 1). New York: John Wiley & Sons Ltd.
- 91. Sekaran, U., & Bougie, R. (2013). *Research methods for business: A skill building approach* (5th ed.). India: Wiley.

- Sekerci, N. (2013). Does enterprise risk management create value for firms ?: Evidence from Nordic countries. In *7th Nordic Econometric Meeting 2013 in Bergen* (pp. 1–43).
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage Publications Inc.
- Stulz, R. M. (1996). Rethinking risk management. Journal of Applied Corporate Finance, 9(3), 8–25.
- 95. Tahir, I. M., & Razali, A. R. (2011). The relationship between enterprise risk management (ERM) and firm value: Evidence from Malaysian public listed companies. International Journal of Economics and Management Sciences, 1(2), 32–41.
- 96. The World Bank. (2013). World development report 2014: Managing risk for development.
- Uzkurt, C., Kumar, R., Kimzan, S. H., & Eminoglu, G. (2013). Role of innovation in the relationship between culture and firm performance: A study of the banking sector in Turkey. *Emerald Insight*, *16*(1), 92–117.
- 98. Williams, A., & Heins, M. H. (1995). Risk Management and Insurance. New York.: McGraw-Hill.
- Yaraghi, N., & Langhe, R. G. (2011). Critical success factors for risk management systems. *Journal of Risk Research*, 14(5), 551-581.
- 100. Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). Business research methods (8th ed.). Canada: South-Western, Cengage Learning.