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Enterprise Risk Management and Firm Performance among Financial Firms Listed at the Nairobi Securities Exchange

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Abstract

Purpose - the purpose of the paper is to establish the existence of ERM components in the integrated financial statements and further establish the relationship between ERM and firm performance.

Design/Methodology/Approach- The study adopted descriptive research design and considered the entire population of the seventeen financial firms listed at the NSE for a period of two years, 2017 and 2018. The study used secondary data. The data was analyzed using descriptive statistics and Pearson's correlation analysis.

Findings- The study findings revealed that whereas most firms adopted and disclosed the ERM practices in their annual integrated reports, there was no significant correlation between ERM and firm performance among financial firms listed at NSE. But the general understanding was that ERM consists of risk governance, which is a set of mechanisms that deals with the agency problem of risk management and risk aggregation, which is a set of mechanisms that deals with the information problem of risk management.

Research limitations/implication- The study thus recommends that the management of the financial firms listed at the NSE should allocate very minimal resources in ERM implementation to ensure that they are able to handle both agency and information problems as required by the regulators but not with a view of enhancing firm performance.

Key words: Risk management, enterprise risk management, firm performance

1. Introduction

Managing risk is becoming a significant business determinant and the shareholders have become more sensitive to risk. Risk may be a determinant of strategic decisions or simply included in the activities of the organization or it would be a leading factor of uncertainties in the organization. ERM gives a firm an opportunity to consider possibilities of all risk on all stakeholders, activities, product and services and processes, (The Public Risk Management Assosiation, 2010). Moreover, ERM gives the management of the firms' opportunity to align their strategic goals with enhancing the shareholders' value thus coming up with implementation plans and constant reviews to ensure that the results are achieved to the optimal at minimal cost. Hence, the study opted to review the status of financial firms listed at NSE as this gives the apex of the firms in Kenya which have both access to internal and external financing, given that the end results l of risk management is to maximize shareholder value (Hoyt and Liebenberg, 2011).

Enterprise risk management is "a process effected by the entity's board of directors, management, and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity and manage risk to be within the risk appetite, to provide reasonable assurance regarding the achievement of entity objectives" (Moeller, 2007). ERM can also be defined as the aspect where firms in whatever industry can make an assessment, conduct control activities including exploitation of possible financing mechanisms and monitors the risks arising from different dimensions with an intention of enhancing the strategic plans of the organization's short term and long-term values to its stakeholder. (Casualty Actuarial Society Forum, 2003). From the foregoing definitions, it is clear that ERM coagulate all the risk together, explore the extent to which those risks would affect the firm thereby crafting adequate measures to curb them and then setting strategies at reasonable cost to mitigate all the risk at a go. While doing this, the process should be run concurrently with monitoring events so that any deviations are corrected early enough. Measuring ERM entails review of the proportions of key risks being monitored, areas involved in risk assessment, risk mitigated and systematic risks identified therefrom, (Minsky, 2012). ERM vouches for a universal view of managing risk, risk management understanding options and being on the lookout so that there is an assurance that any risk information is utilized to support decision making and best management practices. The belief is that, ERM will assist the firm in focusing in the most relevant risk thus achieving both strategic and operational organization's objectives. This study took an investor's point of view thereby exclusively relied on the published financial reports to assess disclosure of risk management practices.

Aktan and Bulut (2008) define financial performance as a firm's ability to generate new resources from day-to-day operations over a given period of time. They add that the financial performance measures can be divided into two major types: traditional measures based on accounting/financial data (i.e., the effect of actions on one year's profits, ROI, ROE, etc.) which reflect a firm's past performance and market-based measures derived from stock market values (i.e., Economic Value Added (EVA) and Market Value Added (MVA) approaches) which are based on valuation principles". Aleem et al., (2011) on their part considered financial performance from the perspective on how best a firm is putting into use its available resources to generate income, profits or how an organization has successfully achieved its financial objectives. Different scholars adopted different ways in their studies to measure firm performance. The firm performance in this research was measured using return on assets which Sofyan, (2001) explains to be a proportion of net income to total assets. The greater the ratio, the better the firm's return resulting into a better performance for the firm. The firm managers should thus aim at putting in place the ERM practices that will enhance this ratio while at the same time still operating at the firm's reasonable capacity.

2. Research Problem and study objectives

The survival, sustainability and achievement of any firm depend on its capacity to effectively identify, manage and control its risk. Although shareholders' value has been emphasized as the most momentous influence on ERM execution by many scholars, (Kimotho, 2015; Cheplel, 2013; Roba, 2013), the improvement in firm performance does not necessarily mean that the organizational risk management program has been successfully implemented and has achieved the objectives. Moreover, ERM contributes to firm's performance and similarly offer opportunities for competitive advantage to companies enabling them to achieve superior ratings and adherence to solvency regulation (McShane, Nair, & Rustambekov, 2011). The contribution of ERM to firm performance has been discussed widely, hypothetically and its value additive to a firm, nonetheless there is divergence views among researchers on whether ERM adds value to an organization that implement it or not. There are those scholars that advance that ERM influences firm's performance positively (Mouni, Wanjau, Yegon, 2014; Nyagah, 2014; Kisaka and Waweru, 2013; Hoyt, Moore, and Liebenberg, 2008; Momanyi, Mugenda and Naibei, 2012). Where as the second group of scholars established an inverse relationship between ERM and firm performance (Maingota, Quon, and Zeghala, 2012; Tahir and Razali, 2011). Another group presented mixed and inconclussive results on the association between ERM and firm performance (Nickmanesh, et al., 2013; Wu, et al., 2014; Obalola, Akpan, and Olufemi, 2014).

The firms in financial sector, by virtue of being under the supervision of CMA, CBK, and IRA are required to implement robust ERM programs with the objective of guaranteeing its sustainability and improving the corporate value of the company over time (Oketch, 2019). ERM in Kenya has been reported to be ineffective or inadequate as most organizations have felt that due to evolving nature of risk, their organizational risks are increasing (Deloitte and Touche, 2012). The study was based on financial firms listed at NSE as this gave the apex of firms in Kenya which function under a regulatory framework. ERM implementation has been undertaken in Kenya due to legislation and regulatory drive like, CMA legal notice No. 3362 of 2020 on corporate governance, Treasury Circular No. 03 of 2009 standards and best practices, technology and skills. Despite this progress, there is still mixed results on whether implementation of ERM would improve firm performance. Hence, we sought to fill these gaps by addressing the following two objectives, to find out the existence of ERM practices among financial firms listed at the NSE and determine the relationship between ERM and firm performance among financial firms listed at NSE.

3. Enterprise Risk Management and Firm Performance

Enterprise risk management theory as advanced by Jankensgard, (2019), suggests that firms' operations are run independently by agents who have motivations or behaviourial prejudices leading to sub optimization of risk management decisons resulting into either over-management or under-management. Enterprise risk management theory thus tries to solve the agency problem which was illustrated by Jensen and Meckling (1976) by introducing the risk governance. In order to achieve succsessful risk governance, the motivations and behavioural prejudices of managers should not overide the long term objectives of firm's performance. ERM is proposed as the solution adopted by the firm's Board of Directors to address these problems, which revolve around agency and information asymmetries within the firm. The theory therefore complements traditional corporate risk management theory, which focuses on eliminating the effects of frictions that exist outside the firm (Jankensgard, 2019, p.20).

Enterprise risk management brings forth the theoretical concept of MTP beyond financial risk to include all other risks that a firm may face. Aziz, Manab, and Othman (2015) recognized that there is a connection between ERM and MPT and further argued by Miccolis (2003) that the discipline and practice of ERM is deeply derived from MPT and that the principle of ERM is very much the manipulation of the 'portfolio effect' described by MPT. The MPT however contradicts ERM in that investors are not concerned with firms' specific risk since these risks within a portfolio can be easily eliminated through diversifying the assets in the portfolio, and this the investors can do by themselves and do not need the firm to do for them. Additionally, ERM vouches for additional spending in setting up ERM system and process and this erodes the investors' value. However, based on corporate risk management theory, however, some managers would want to capitalize on their personal efficacy instead of making the most benefit for the entity. Firms which are not in the financial sector but want to maximize their values participate in hedging activities for risk management and get this encouragement from the corporate risk management theory (Cummins, Phillips, & Smith, 1999). ERM provides an opportunity for management to excellently deal with risk thus identifying associated opportunities, allowing a utility to realize operational efficiencies, reap financial gains and achieve lasting competitive advantages.

Several publications on risk management in general have been done. Nevertheless, most of these empirical studies on enterprise risk management practices have been in different sectors in different geographical areas over varied time period. The following is a summary of selected studies' main conclusions. The studies that have been conducted as regards enterprise risk management in various parts of the world have shown mixed and inconclusive results. When using ROE as proxy for firm value, Wu, et al., (2014) conducted a research on insurance industry in China investigating how firm values relates with ERM. On a Pearson correlation matrix, the results initially indicated statistically significant association between ERM and firm value but later fell below statistically significance on a closer analysis through regression analysis. This study's findings were similar to those of (Nickmanesh, et.al., 2013) and share contextual similarities with Hoyt, Liebenberg and Moore (2008).

Maingota Quon, Zeghala (2012) study entitled enterprise risk management and firm performance in Canada in 159 non-financial firms between 2007 and 2008. The results were not statistically significant for all the eight parameters hence one could not conclude that the assessed consequences, economic levels and market risk exposures are related to firm performance. Even though this was not in financial sector, it further showed mixed and unexpected results. Another study which was conducted in Vietnam by Jandug, Kommunuri, Narayan, Wheaton, (2016) with the objectives to find out if Vietnamese firms have adopted adequate ERM practices, and if these firms carry out these implementations and at organizational level and to ascertain if the ERM implementation has any means of improving firm's performance and value. Their findings showed that the statistical results were stronger for the benefits of effective ERM implementation in the country. The findings also noted that some firms incurred high cost in implementing ERM thus resulting to a negative impact on performance. Consequently, Alhety, Altanashat, Dubai, (2019) finding indicated that the improvement of firm performance of Jordan extraction public shareholding companies were influenced by an elaborate enterprise risk management activity put forth by these firms and further showed that ERM implementation had influenced organization performance significantly.

Hoyt, Liebenberg, and Moore (2008) conducted study entitled "the Value of Enterprise Risk Management: Evidence from the U.S. Insurance Industry" revealed that there exists a positive relationship between firm value and the use of ERM. This study results were consistent with those of Nickmanesh, et al., (2013) conducted a research on enterprise risk management influences performance in Malaysia amongst 175 companies that are listed in Bursa Malaysia. The study used descriptive statistic, Pearson correlation and regression analysis. The findings showed no significance on size of the board and board members financial background on ROA. However, there was a positive and significant relationship on the number of non – executive board members on ROA. Additionally, this study showed a significantly inverse relationship between the two parameters. Evidently, with these mixed results on different parameters, a further research is required. Gordon, Loeb, and Tseng, (2009) study findings emphasized that the relationship between ERM and firm performance majorly rely on the circumstances under which best mixes between ERM and the factors that would impact on the firm's implementation of the ERM. This however should be undertaken within the firm's contextual surrounding the firm.

Norhayate, Wan, and Yazid, (2010) research entitled "the effect of chief risk officer on enterprise risk management practices: evidence from Malaysia" was interested in finding out how much ERM has been adopted amongst the listed firms in Malaysia studying 500 firms. This study finding revealed that only less than half of the firms have completed adoption of ERM. Further results showed that quality of ERM has a strong influence on the level of ERM implementation within the firm. Another aspect of ERM was conducted by Daud, Haron, and Ibrahim, (2011); the study was to evaluate the relationship between the qualities of board of directors in comparison with the level of ERM adoption within the participating firms in Malaysian Bourse. The study returned a positive correlation between the qualities of BOD on the level of ERM adoption. The study findings affirmed that whenever there exists a strong board of directors with good insight in risk management, then that would translate to a better ERM implementation and adoption of the firms' strategies.

Tahir and Razali, (2011) investigated on "the relationship between enterprise risk management and firm value: evidence from Malaysian public listed companies". This study was based on 207 out of 528 companies. The results did corroborate the proposition that firms which implement ERM tend to show a higher Tobin's Q ratio than firms which are not. In performance measurement, this study is consistent with Kisaka and Waweru (2013) and Smithson and Simkins (2005). Another study conducted in Malasyia by Golshan and Rasid, 2017) revealed a contrary results to this of Tahir and Razali (2011) as they found out that ERM adoption does not positively influence organizational perfomance.

In Indonesia, Iswajuni and Manasikana, (2018) found out that firm value increases as firm size, ROA and ERM improves. This investigation was conducted amongst the listed firms in the Indonesian Stock Exchange between years 2010 and 2013. This study results conforms with those of (Saiful, 2017) entittled "Enterprise Risk Management, Corporate Governance and Firm Value: Empirical Evidence from Indonesian Public Listed Companies" which was conducted over the same period amongst 110 companies in Indonesia concluded that implementaion of ERM had a positive influence on the firm value. However, a study in the same country by Augustina and Baroroh, (2016) showed a contrary results that there was no major impact of ERM implementation on the firm's profitability and value. Effectively, these findings sent a signal to the managemnet of the firms that even though ERM is a good practice, they should be cautios on its implementaion so as to safeguard the shareholders' value.

Anton, (2018) did a study within the non-financial firms in Romania investigating how enterprise risk management impacts on firm value and found mixed results on ERM implementation. The study was conducted between 2001 and 2011. The results of the initial set of data 2001 – 2007 revealed that the firm value as measured by Tobin's Q was higher at a premium of roughly 46.5 %, for the firms that had implemented ERM. However, when the period was extended to 2011, the findings showed that ERM had no effect on the firm value in any significant manner. This was echoed by Alawattegama, (2018) whose study results indicated when the eight ERM parameters were analyzed, not even one of them impacted on the firm value significantly.

Florio and Leoni, (2017) conducted a study in Italy entitled "Enterprise risk management and firm performance: The Italian case" and the results showed that higher performance is present in firms that have advanced levels of ERM implementation. According to this study, there is motivation to implement ERM practice. The resources that a firm would put in would not go in vain as it is viewed that the more advance the implementation is, the better and higher the firm performance. This further portrays the mixed and inconclusive results on whether there exists a relationship between ERM and firm performance.

Akpan, Obalola, and Olufemi, (2014) in their study on the relationship between enterprise risk management and organizational performance: evidence from Nigerian insurance industry by selecting ten general insurance companies from 49 firms whose operations is in Nigeria adopting a panel data for a ten-year period of 2001 to 2010. The findings of their research showed that when the parameters were analyzed together there was relationship among ERM variables and organizational performance though; there was a difference on the individual relationship components. Since the study was entirely based on insurance companies, it adopted loss ratio as a measure of performance for the firms.

In the local arena, some studies have been conducted and these include a study by Mugenda, Momanyi and Naibei, (2012) who aimed at looking at how financial performance of firms that manufacture sugar in Kenya would be affected by the risk management practices. The results indicated a strong positive relationship between risk management practices and firm performance. These findings thus assert the necessity for implementing ERM.

Gachanja, (2017) studied enterprise risk management practice and performance of selected commercial state corporations in Kenya. The findings of this study indicated that ERM practice was popular among commercial state corporations and which was practiced most in identification of key risk indicators. This study portrays an increasing interest in ERM implementation not only amongst the private sector but also in the governmental sectors. Despite this move, the benefits of ERM implementation are still varied as the researcher sighted weak framework. This study however will major on the firms listed at the NSE.

Nyagah, (2014) conducted a study to determine the level of implementation of enterprise risk management by pension fund management firms in Kenya amongst the 19 registered pension fund management firms in Kenya by July 2014. The research findings established that enterprise risk management practices influence the financial performance of pension fund management firms in Kenya to a very large extent. In her study she measured firm performance using return on asset which is a ratio of income to total assets; this is consistent with my study, however this research concentrated on banking and insurances firms listed at the NSE.

Mouni, Yegon, and Wanjau, (2014) subsequently conducted a study on effects of firm size on enterprise risk management of 33 listed firms I n Kenya. The result indicated that there was a high correlation between firms' characteristics and enterprise risk management revealing that there was a proportionate increase in firm size to the efficiency of ERM. These results were consistent with those of Gordon, Loeb and Tseng (2009) who concluded that there was a relationship between ERM implementation and the firm size. However, they used ERM as a dependent variable while my study used it as independent variable.

Kisaka and Waweru, (2013) conducted a study which used size of the firm, industry of operation, board independence, appointment of Chief Risk Officer as its variables amongst a sample of 22 firms listed at the NSE. The study findings indicated a significant relationship between organization's level of enterprise risk management implementation and the company's value. The findings of this research further showed that companies that had a positive impact on their values had shown an increase in implementation of ERM. In their study, they adopted Tobin's Q as a proxy for firm value and used different elements for ERM. This study will adopt proxies for disclosures of ERM practices in the financial reports and ROA as a measure of the firm performance.

4. Research Methods

All the seventeen listed financial firms at the NSE as at December 2018 formed the target population for this research. The secondary data were collected by use of secondary data captured from published financial reports and other documents from the financial firms listed at the NSE for two years; 2017 and 2018. The secondary data was considered most suitable for the study since the study took an investor's point of view where such an investor would exclusively rely on the published financial statement to make decision based on whether a firm practices ERM or not.

Descriptive statistics was adopted in analyzing raw data, measurements of central tendency and measures of variations like standard deviation, mode, frequencies and mean. The study then used Pearson's Correlation Coefficient to establish the relationship between ERM and firm performance amongst financial firms listed at NSE. The researchers assigned proxies (ERM) for different variables: one (1) for disclosure and zero (0) for non-disclosure through a dichotomous key.

5. Results and Analysis

The study findings revealed a mean return on asset of 2.4 for year 2017 and 1.5 for 2018. This showed a decline in return of asset despite increased disclosure on the ERM practices. The firm performance was measured using return on assets which according to Sofyan, (2001) is a proportion of net income to total assets. The greater the ratio, the better the firm's return resulting into a better performance for the firm. From this finding, one cannot conclude that ERM practices have a relationship with firm performance which conforms with Anton (2018) results when the period was extended to 2011, the findings showed that ERM had no effect on the firm value in any significant manner. This was echoed by Alawattegama, (2018) whose study results indicated when the eight ERM parameters were analyzed, not even one of them impacted on the firm value significantly. However, this finding is contrary to the one of Nickmanesh, et al., (2013) whose study revealed that there was a significant and negative relationship between the existence of risk management committee and ROA. Study findings also contradict those of Oketch, (2019) who found a positive association between enterprise risk management and firm performance amongst firms listed at the NSE.

The researchers sought to further establish the existence of risk management practices within the financial reports of individual financial firms listed at NSE. Enterprise risk management practices in the financial services sector focus on ascertaining, quantifying and evaluating those threats to reduce material, reputation, opportunity and other costs. In ERM implementation, there are a number of practices that different firms do to mitigate the risks. This study looked at five areas which are; existence of CRO, existence of risk reporting structure, involvement of Board of Directors in ERM process, corporate wide common language on communicating risk and adherence to regulatory framework. The findings revealed that ERM practices existed among these firms as indicated by higher percentages as shown in table 1.

Table .1: Existence of ERM practices

ERM practices	Disclosure in 2017	Disclosure in 2018
Existence of CRO	64.7%	70.6%
Existence of Risk Reporting Structure	82.4%	88.2%
Involvement of BoD in ERM process	82.4%	94.1%
Corporate wide Common language on communicating Risk	76.0%	82.0%

Adherence to Regulatory Framework	82.4%	94.1%

Source: Author 2020

Finally, the researchers sought to establish between ERM and firm performance amongst financial firms listed at NSE between years 2017 and 2018. We used Pearson correlation to determine the relationship. The results of the findings are shown in table 2.

Pearson Correlation

Table .2: Pearson Correlation analysis

		RoA 2017	RoA 2018
Existence of CRO	Pearson Correlation	0.090	0.145
	Sig. (2-tailed)	0.732	0.579
Existence of Risk Reporting Structure	Pearson Correlation	0.049	-0.063
	Sig. (2-tailed)	0.853	0.809
Involvement of Board of Directors in ERM process	Pearson Correlation	0.049	0.000
	Sig. (2-tailed)	0.853	0.999
Corporate wide Common language on communicating Risk	Pearson Correlation	-0.044	-0.133
	Sig. (2-tailed)	0.868	0.610
Adherence to Regulatory Framework	Pearson Correlation	-0.020	0.000
	Sig. (2-tailed)	0.939	0.999

Source: Author 2020

At a confidence level of 95% level (α=0.05), Pearson's correlation was used to obtain the results in table 2. The results show that there were no significant correlation coefficients between ERM and firm performance following disclosure or non-disclosure of the ERM practices in the integrated annual financial statements. Existence of CRO (R=0.09, p=0.732 in year 2017 which changed to (R=0.145, p=0.579) in year 2018; Existence of risk reporting structure (R=0.049, p=0.853) in year 2017 but this changed to a negative correlation of (R=-0.063, p=0.809); involvement of board of directors in ERM process in year 2017 showed (R=0.049, p=0.853) and no significant at all in year 2018 (R=0.000, p=0.999). Corporate wide common language on communicating risk showed a negative correlation coefficient in year 2017 (R=-0.044, p=0.868) and (R=-0.133, p=0.610) in year 2018; on adherence to regulatory framework, the study finding showed a negative weak significant in year 2017 (R=-0.020, p=0.939) and no correlation in year 2018 (R=0.000, p=0.999).

This finding conforms with the Modern Portfolio Theory which contradicts ERM in that investors are not concerned with firms' specific risk since these risks within a portfolio can be easily eliminated through diversifying the assets in the portfolio, and this the investors can do by themselves and do not need the firm to do for them. In line with this, MM theory which asserts that corporate financial decision does not influence firm performance as such decisions would re-distribute the income streams amongst various shareholders. Provided that all the investors can act simultaneously on the new information provided in the capital market as the firm itself, firm performance can only then be influenced by the expected cash flow levels. The study findings are however inconsistent with the findings of (Hoyt, Moore, and Liebenberg, (2008); (Momanyi , Mugenda, & Naibei, (2012); Maingota, Quon, Zeghala, (2012) whose finding revealed a positive relationship between ERM and firm performance which was asserted by corporate risk management theory that ERM provides an opportunity for management to excellently deal with risk thus identifying associated opportunities, allowing a utility to realize operational efficiencies, reap financial gains and achieve lasting competitive advantages.

6. Summary, Conclusions and Recommendations

Majority of the firms disclosed the existence of the chief risk officer in their integrated annual report; while at the same time, most of the firms had a risk reporting structure; Majority of the firms disclosed that the board of directors actively took part in ERM processes 82.4% and 94.1% in the year 2017 and 2018 respectively; Most firms had a structured way of communicating different types of exposures. Almost all firms adhered to the regulatory framework. We noted that there was an increased disclosure on ERM practices in the year 2018 as compared to the previous year 2017. However, there was no significant correlation coefficient between ERM and firm performance as the highest correlation coefficient for all parameters for both years was 0.145.

The major concern in the study was to sought on the relationship between the disclosure of ERM and firm performance, however, from the study findings, the study concludes that financial firms listed at NSE implement ERM whose practices are equally disclosed in the firms' integrated annual reports. Conversely, there were differences in the observed percentage levels of ERM disclosure with individual firms on five areas of disclosure, they were not statistically significant, and hence no relationship between ERM and firm performance was established among financial firms listed at NSE.

Based on the findings, the study recommendations; that management of the financial firms listed at the NSE should be cautious on how allocate resources toward ERM implementation. Further, ERM implementation should not be a factor to be considered by investors as this is not key to the investors return on investment as measured by the firm performance. The government in its attempts to enhance corporate governance through the development of administration procedures and blue prints, formulation of policies that affects taxation and other legislatives and regulatory requirements of firms in the country, ERM, though a best practice, shouldn't be considered for any possible tax incentives as the cost incurred would be more of value erosion than helping firms generate more income that would translate to better income to the government through taxation. Moreover, a requirement that all the financial firms listed at NSE should disclose in their annual integrated reports which ERM practices they are implementing should be discretional. Finally, the researchers are of the view that, ERM should be regarded as a set of mechanisms, to address two general risk management problems faced by the firm such as the agency and information problems of risk management.

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