



ADVANCED INTERNATIONAL JOURNAL OF
BANKING, ACCOUNTING AND FINANCE
(AIJBAF)

www.aijbaf.com



ENTERPRISE RISK MANAGEMENT AND COMPANY PERFORMANCE: EVIDENCE FROM EAST AFRICA

David Namanya^{1*}, Eric Nzibonera², Geoffrey Nuwagaba³, John Ogema⁴

¹ Department of Account and Finance, School of Business, Makerere University, Kampala Uganda
Email: namanyandb@gmail.com

² Department of Account and Finance, School of Business, Makerere University, Kampala Uganda
Email: ernzibonera@gmail.com

³ Department of Account and Finance, School of Business, Makerere University, Kampala Uganda
Email: geofreynuwagaba@yahoo.co.uk

⁴ Department of Account and Finance, School of Business, Makerere University, Kampala Uganda
Email: jogema@gmail.com

* Corresponding Author

Article Info:

Article history:

Received date: 09.07.2023

Revised date: 10.08.2023

Accepted date: 20.09.2023

Published date: 27.09.2023

To cite this document:

Namanya, D., Nzibonera, E., Nuwagaba, G., & Ogema, J. (2023). Enterprise Risk Management And Company Performance: Evidence From East Africa. *Advanced International Journal of Banking, Accounting, and Finance*, 5 (16), 01-15.

DOI: 10.35631/AIJBAF.516001.

This work is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)



Abstract:

Objectives: The main objective of this study was to examine influence of ERM on company performance, to compare the influence of ERM on company performance before and after the operationalization of the EAC-Common Market and make recommendations on how the adoption of ERM can enhance company performance. **Methodology:** We adopted a positivist paradigm in a quantitative analysis using non-probability sampling to select 42 out of 76 listed companies. We adopted secondary data from academic databases and annual reports and analysed the data using SPSS to generate results. **Findings:** ERM has no significant influence on company financial performance represented by ROA, ROE, TBQ and PER. The study also revealed that majority of the listed companies did not adopt ERM after the operationalization of the EAC- Common Market in 2010, which may have been due to the high costs associated with its implementation.

Keywords:

Enterprise Risk Management, Company Performance

Introduction

The recent global financial scandals have forced many company stakeholders to demand better risk management systems to preserve and enhance investors' return on investment (Beasley et

al., 2005). This has increased the significance of enterprise risk management (ERM) as a way of preventing any future corporate failure (Khan et al., 2016). ERM is mainly concerned with integrated risk management system while focusing on uncertainties that are likely to distress an organization's performance. It provides an organizational framework for managing any threats (downside risks) and opportunities (upside risks) in a holistic manner. Sadgrove (2016) posits that all companies face business and/or financial risks that may inhibit their going concern or the ability to generate the required return to the owners. This therefore calls for the need to change from traditional to modern risk management, known as ERM (Agarwal, R., & Ansell 2016).

Traditional risk management methods were more focused on the use of silo-based risk management approaches, where every business unit or department would manage their respective risks differently (Spira & Page 2003). For example, the finance department would handle interest rate or currency risk, while the operations department handles quality and safety risks, all using different approaches. This implied that each strategic business unit had to develop their own tools to manage their specific risks, which was very costly (Sobel & Reding 2004). Nowadays, there is a lot of economic volatility in the global economy, which has increased the importance of ERM to manage risks most systematically and coherently (Quon et al., 2012). Most organizations, practitioners, and regulatory agencies advocate for the adoption of ERM as the best means of risk management (Arena, Arnaboldi, & Azzone 2010). Moreover, there is a strong correlation between adoption of ERM and achievement of organizational strategic objectives because ERM helps the organization manage the common risks associated with all companies (COSO 2004). According to Renn and Walker (2008), ERM is the most efficient method of dealing with business risks, political risks, and compliance risks. Consequently, the adoption of ERM by listed companies has stimulated investor confidence and demand for the company shares, thus boosting their equity (Aguilo & Aguilo 2012; Frigo & Anderson 2011; Grant, P., & McGhee 2014). However, Rosen and Zenios (2006) posit that ERM adopters are not driven by better equity prices but by the stringent rules introduced by regulatory agencies, which may require listed companies to adopt and implement ERM as part of the company's risk management strategy. Nonetheless, the adoption of ERM enhances company performance, minimizes risks, and maximizes shareholder value (Beasley et al., 2008). If well implemented, ERM reduces unnecessary expenditures, business losses, and company risk exposures (Quon et al., 2012; Sobel & Reding, 2004). Therefore, ERM can be used to identify areas of high risk and target those areas with adequate risk management tools at a minimal cost (Quon et al., 2012).

The motivation to adopt ERM sometimes depends on organizational risk appetite (Beasley, Pagach, & Warr 2008; Pagach & Warr 2011). This appetite is in turn influenced by the organization's risk tolerance; hence, many organizations design their ERM strategy to protect themselves against any intolerable risk (Hoyt & Liebenberg 2011). Some organizations manage risks by taking out an insurance policy; others use several financial hedging techniques to transfer their risks (Nocco & Stulz 2006). Under ERM, risk management is centralized under the responsibility of a specific unit manager, normally the Chief Risk Officer (CRO) or Risk Management Officer (Quon et al., 2012). Nocco and Stulz (2006) posit that the presence of a CRO alone is an indication of an organization's commitment to ERM implementation. In East Africa, like many developing countries, the role of a CRO is not highly prominent except in the banking, financial services, and insurance sectors. The role of the CRO or designate was

non-existent in many organizations except for handling insurance policy issues or hedging foreign exchange or interest rate risks (Nocco & Stulz 2006; Quon, Zeghal & Maingot 2012).

Main Objective

The main objective of this study was to examine the influence of ERM on company performance, compare the influence of ERM on company performance before and after the operationalization of the EAC-Common Market in 2010, and make recommendations on how ERM can enhance company performance.

Company Performance

Company performance *was* measured using both financial and market-based performance indicators. Financial performance indicators measure company results based on their policies and processes (Margolis & Walsh, 2001). The commonly used financial performance metrics include return on equity, return on assets, profit margin, and sales growth. These financial performance metrics also measure the extent to which a company achieved its financial objectives (El-Shishini 2001). According to Lussier (2011), the achievement of financial objectives is influenced by the prevailing internal and external risk, which calls for stronger internal control systems within an organization to monitor and control the activities of the organization by both the executive and non-executive directors. It is thus the responsibility of the company management to identify, analyze, and mitigate such risk factors by designing good corporate governance policies that can enable investors to realize their expected return on investment (Shleifer & Vishny 1997). According to Jensen, Michael, and Meckling (1976), company performance is the foundation for the principal-agent relationship, which is derived from the agreement between the principal (shareholder) and agent (manager), giving the agent powers to use company assets to generate profits for the shareholder's wealth maximization. This forms part of the manager's main task: ensuring that the company achieves good performance outcomes (Feltham & Xie 1994). Measuring company financial performance therefore helps the principal evaluate the agent's contribution to the company's profitability over a specified period (Wild 1994). According to Fama and Jensen (1983), companies' performance depends on agents' decisions. If managers are more motivated to maximize their personal benefits, they are likely to make poor decisions that result in poor company performance. For instance, the management of the defunct Enron and WorldCom put their personal interests before those of their company, which resulted in its calamitous failure (Claessens & Yurtoglu 2013). Therefore, for a company to achieve maximum profitability, it must have a good corporate governance framework that ensures a degree of altruism in the executive management's decisions (Shleifer & Vishny 1997). Performance measurements can be broadly categorized into two categories: (1) accounting-based; (2) market-based performance measurements.

Accounting-based performance measurement involves the use of accounting information to assess the extent to which a company has achieved its predetermined performance objectives using present and past published financial accounting data (Agarwal, Y. 2013; Weber et al. 2012). According to Baker and Anderson (2010), profit-based measurements are the most used measure of performance. Accounting-based performance measurement came about after the introduction of net present value by Fisher (1930) and internal rate of return by Hirshleifer (1958). These two were later enhanced by the new valuation technique established by Miller and Modigliani (1958), who advanced a new capital structure model for company valuations. According to Knight (1998), most traditional accounting-based measures were developed to

help in management's decision-making, accountability, and budgetary control. Hengartner (2006) posits that accounting-based performance measures provide reliable results, especially during periods of economic crisis, and are relatively free from speculation as compared to market-based measures. Baker and Anderson (2010) suggest that accounting-based performance measurements have the advantage of being directly linked to a company's financial survival.

Market performance measurements, on the other hand, include market-based ratios such as market share, number of customers, and Tobin's q ratio (Kim 2015; Rossi, Nerino, & Capasso 2015; Zagorchev & Gao 2015). Unlike accounting-based performance measures, market-based measures use market value data to determine company financial performance (Eikelenboom, 2005). The main advantage of market-based approaches is that they are less prone to managerial manipulations or creative accounting (Mulsoy 2011). Market-based measures of performance are also risk-adjusted, especially where the capital asset pricing model is used in calculating the company's market value (Mans-Kemp 2014). Hence, it is believed that using market-based ratios like Price Earnings Ratio (PeR) and TBQ provides better measures of performance that are more reliable, long-term-oriented, and risk-adjusted (Kim 2015; Li, SL, & Tallman 2011). This study adopted a combination of accounting-based (RoA and RoE) and market-based (TBQ and PeR) methods to maximize the advantages of each. These measures have been adopted given their wide usage in business finance and company performance research (AdeBIte 2012; Ansong 2013; Bhagat, S. & Bolton 2008; Mans-Kemp 2014; Okiro 2014). To examine the relationship between ERM and company performance, we adopted the legitimacy and institutional theories commonly used in accounting and finance research (Namanya, 2017; Fulgence, 2021).

Hypothesis

An effective ERM system is likely to reduce risk exposure if it is well implemented (Sobel & Reding 2004); hence, Berle and Means (1932) underscore the significance of ERM in avoiding corporate failure. Moreover, ERM was found to be a major source of strategic strength for retail companies in the UK (Woods 2007); hence, many companies globally have adopted ERM as part of good governance and good practice via the creation of a risk committee of the board or the appointment of a Chief Risk Officer (CRO) in charge of the company's total risk management (Lundqvist 2015). The implementation of ERM also helps management improve their decision-making (Grace et al., 2015; Nocco & Stulz, 2006), especially the resource allocation decision (Baxter et al., 2013; Hoyt & Liebenberg, 2011). To test the influence of ERM on company performance, we adopted the following hypothesis:

- There is a significant relationship between ERM and financial performance. (H₁).
- There has been a significant change in the influence of ERM after the operationalization of the EAC-Common Market (H₂).

Legitimacy Theory

According to the legitimacy theory, "the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995, p. 574). According to the theory, there exists a social contract between an organization and the local community, which gives an organization a right to do business with the local community in return for accountability to the community (Deegan 2013). This social

contract requires the organization to comply with the rights and expectations of its host community and shareholders alike, failing which the community will impose sanctions in the form of restricted access to community resources like labor, materials, and the market for its services or products (Deegan 2013). The theory is used to examine the influence of stakeholders on a company's performance or survival (Hybels, 1995). The community's interest lies in the hands of government representatives, individual members of the public, financial institutions, and the media, who control and influence the company's strategy directly or indirectly. For instance, the government can control and influence the company's operations through fiscal and monetary policies, while the public can influence organizations by being a source of demand for the company's products and services as customers, as well as the source of labor and raw materials, which are crucial for an organization's success. Financial institutions provide capital, while the press influences public opinion about the company's products and services (Mendelow 1991; Tilling 2004). Hence, all companies have a legitimate responsibility to realize the expectations of society (Ashforth & Gibbs 1990), and according to Tilling (2004), the legitimacy theory influences ERM strategy by providing structures and systems to meet the interests of key stakeholders (Weir, Laing, & McKnight 2002).

Institutional Theory

According to Ritzer (2004), institutional theory defines the deepest and strongest aspects of an organization's social structure, including the processes by which structures, rules, norms, and routines become recognized as appropriate guidelines for social behavior. This concept thus provides the connection between a company's external and internal governance structures (Weir, Laing, & McKnight, 2002). The assumptions of institutional theory have been widely supported in the finance and accounting literature (Aldridge 2004; Greenwood & Hinings 1996; Kondra & Hinings 1998). Furthermore, Ritzer (2004) posits that institutional theory provides a detailed and more resilient consideration of social structures, particularly regarding how they are created, diffused, and adopted by an organization over time and how they may decline and fall into disuse. The institutional theory asserts that organizational structures and procedures are adopted because they are relevant to their external environment (Ritzer 2004). The theory also assumes that institutional networks are not simply control and coordination tools for economic benefits but are created as sets of rules and beliefs that exert social pressures for membership conformity and are a good source of legitimacy and rewards for the company (Major & Hopper 2004). Aldridge (2004) reverberated the criticisms of some accounting researchers who reject the institutional theory's assumptions that organizations are bounded, relatively autonomous, and economically rational. Dacin, Goodstein, and Scott (2002), Powell (2003), and Scott, WR (2005) attempted to resolve such criticisms by restricting institutional theory's applicability to governmental and non-profit organizations by arguing that companies face either institutional or technical demands (Powell 2003). The institutional theory is thus used in this study to define the company structures, rules, norms, and routines that influence company performance. These structures include ERM, which is one of the key good governance structures.

Methodology

The main objective of this study was to examine the influence of ERM on company performance and compare the influence of ERM on company performance before and after the operationalization of the EAC-Common Market in 2010. To achieve this objective, we adopted the positivist paradigm and the deductive approach, using quantitative techniques to identify the causes and effects of social phenomena (Collis & Hussey, 2013). This quantitative approach

is often used in company performance studies (Alagha, 2016; Heenetigala, 2011; Waduge, 2011). We adopted a deductive approach, in which hypotheses were developed from a review of existing literature, and data was collected and used to confirm or negate the proposed hypotheses. We used a secondary data source because the data required for this study was available in the annual reports of companies. We obtained financial secondary data from the DataStream database. Excel was used for managing and formatting the data prior to exporting it to SPSS for statistical application for carrying out the preliminary diagnostic tests, Wilcoxon signed-rank test, correlation, and regression analyses. According to Field (2009), SPSS can provide comprehensive outputs for analyses such as descriptive statistics, model analysis, multiple regressions, and correlation analysis.

Dependent Variables

We adopted some of the commonly used performance measurement in governance, business, finance, and accounting research, namely, return on assets (ROA), return on equity (ROE), Tobin Q ratio, and price earnings ratio (PER) as our dependent variables (Hermalin & Weisbach 2008; Alagha 2016; Heenetigala 2011; Kiel & Nicholson 2003; Klein 1998; Laing & Weir 1999; Tshipa 2015; Waduge 2011). The ROA was calculated as: $ROA (\%) = \text{Year-end Profits after Interest and Tax} \div \text{Total assets at the year-end}$, ROE (%) was calculated as $\text{Year-end Profits after Interest and Tax} \div \text{Total shareholders' equity at the year-end}$, TBQ was calculated as $\text{Year-end market capitalisation} \div \text{Total assets at the year-end}$, while PER was calculated as the company's year-end share price \div Earnings per share (EPS).

Regression Analysis

We used ordinary least squares (OLS) regression to examine the relationship between the dependent and independent variables. OLS was used to determine the estimated coefficients of independent variables to ascertain their effect on the dependent variable (Bowerman et al. 2003). A coefficient value indicates the extent to which a dependent variable is likely to decrease or increase as an independent variable decreases or increases by one unit, holding other factors constant. (Tabachnick & Fidell, 2006). Our model was derived using the following equation:

Wilcoxon-Signed Rank Test

Generally, with an ordinal or nominal data set, it is not right to assume that the population is approximately normally distributed (Rubin 2012). We thus adopted the Wilcoxon signed-rank test to test the matched samples to ascertain the differences in the population mean ranks (Zikmund et al. 2012). The Wilcoxon signed-rank test is comparable to the Mann-Whitney U test or the two-sample t-test (Zimmerman 1998). It tests the null hypothesis that two distributions are identical against the alternative hypothesis that the two distributions differ only with respect to the median. Similar statistical tests have been adopted in previous company performance studies (Alagha 2016; Heenetigala 2011; Namanya 2017). The results of the Wilcoxon signed-rank test are discussed in Table 1.0 below.

Statistical Results

Below (Table 1.0) are the study results, including the Wilcoxon signed-rank test (used to compare two study samples), descriptive statistics, and correlation and regression analysis results used to test the relationship between dependent and independent variables.

Table 1: Wilcoxon Signed-Rank Test Results.

	Variables	N	Mean Rank	Sum of Ranks	Z scores	Sig. (2-tailed)	Decision rule
ROA	2008/2009	42	42	1,541	-0.594	0.552	Retain the null hypothesis.
	2013/2014	42	39	1,620			
ROE	2008/2009	42	41	1,513	-0.324	0.746	Retain the null hypothesis.
	2013/2014	42	39	1,647			
TBQ	2008/2009	42	40	1,462	-0.182	0.856	Retain the null hypothesis.
	2013/2014	42	40	1,699			
PER	2008/2009	42	42	1,375	-1.032	0.302	Retain the null hypothesis.
	2013/2014	42	43	1,785			
ERM	2008/2009	42	41	1,535	-0.861	0.389	Retain the null hypothesis.
	2013/2014	42	39	1,626			
	2013/2014	42	40	1,677			

Where: ERM = Enterprise Risk Management, ROA = Return on Assets, ROE = Return on Equity, TBQ = Tobin Q Ratio, and PER = Price Earnings Ratio

Source: Own Source

Using the Wilcoxon signed-rank test, we examined the relationship between the independent and dependent variables before and after the operationalization of the EAC-Common Market in 2010. The Wilcoxon signed-rank test has a threshold of 0.05; hence, a p-value of less than 0.05 implies a significant difference between the two groups of data sets (Pallant 2011). The results for ROA, ROE, TBQ, PER, and ERM were not significant ($p > 0.05$), which is an indication that there were no statistically significant differences between dependent, independent, and s before and after the operationalization of the EAC-Common Market in 2010.

Regression Results

To achieve our study objectives, we adopted the SPSS macro on HCSE (Heteroscedasticity-Consistent Standard Error) estimators for linear regression, which were developed by Hayes and Cai (2007). The results of the regression analysis are presented below:

The influence of ERM on the ROA

ROA is a key tool in assessing the management's ability to use company assets and generate a better return on investment (Lesakova, 2007). Table 2 below presents a summary of the regression results between ERM and ROA for 2008/2009 and 2013/2014.

Table 2: Regression Analysis ERM, ROA

	2008/2009	2013/2014
Dependent variable: ROA	Model fit: R ² = 0.5060	Model fit: R ² = 0.5405
	P = 0.1600	P = 0.0002

Independent Variables	F = 1.6809			F = 5.8543		
	Coeff	T	P	Coeff	T	P
Constant	60.800	6.091	0.000	52.844	3.711	0.001
ERM	-0.848	-.470	0.642	-2.574	-0.503	0.608

*** Significant at the 1% level; **Significant at the 5% level; * Significant at the 10% level.
ERM = Enterprise Risk Management; ROA = Return on Assets; ROE = Return on Equity. TBQ = Tobin Q Ratio, PER = Price Earnings Ratio

Source: Own Source

The results (Table 2) demonstrate that in 2008/2009, ROA had an adjusted R-squared value of 0.50, which indicates that about 50% of the total variability in ROA is explained by ERM. However, ERM had no statistically significant influence on ROA; hence, any change in ERM would not affect ROA. On the other hand, the 2013/2014 results (Table 2) show an adjusted R-squared value of 0.54, which indicates a better model fit than in 2008/2009. This means that about 54% of the total variability in ROA is explained by ERM. The F test result for the regression model in 2013/2014 indicates that both variables have a statistically significant influence on ROA ($F = 5.85, p = 0.00 < 0.01$). This suggests that ERM is more relevant to ROA in 2013/2014 than in 2008/2009.

The Influence of ERM on the ROE

Table 3 below presents a summary of the regression results on the relationship between ROE and ERM in 2008/2009 and 2013/2014.

Table 3: Regression analysis of ERM and ROE

	2008/2009			2013/2014		
	Model fit: $R^2 = 0.4421$			Model fit: $R^2 = 0.5568$		
Dependent variable: ROE	$P = 0.0897$			$P = 0.0001$		
	$F = 1.8820$			$F = 6.2476$		
Independent Variables	Coeff	T	P	Coeff	T	P
Constant	62.223	2.924	0.007	26.876	1.411	0.167
ERM	0.324	0.106	0.914	2.316	0.412	0.690

*** Significant at the 1% level; **Significant at the 5% level; * Significant at the 10% level.
ERM = Enterprise Risk Management; ROA = Return on Assets; ROE = Return on Equity; TBQ = Tobin's Q Ratio; PER = Price Earnings Ratio.

Source: Own Source

As shown in Table 3 above, in 2008/2009, the OLS regression results showed an adjusted R-squared value of 0.44, which suggests that about 44% of the total variability in ROE is explained by ERM. The F test result indicated that all variables jointly influence ROE ($F = 1.88, p = 0.09 < 0.10$). In 2013/2014, the adjusted R-squared value was 0.56, which shows a better model fit than in 2008/2009, indicating that about 56% of the total variability in ROE could be attributed to ERM. The F test result also indicated variables jointly influenced ROE

($F = 6.24$, $p = 0.00 < 0.01$). The adjusted R-squared suggests that ERM had more weight in explaining ROE in 2013/2014 than in 2008/2009.

The Influence of ERM on the TBQ

Table 4 below presents a summary of the regression results on the relationship between TBQ as the dependent variable and ERM in 2008/2009 and 2013/2014.

Table 4: Influence of ERM on the TBQ

	2008/2009			2013/2014		
	Model fit: $R^2 = 0.4188$			Model fit: $R^2 = 0.6348$		
Dependent variable: TBQ	$P = 0.1719$			$P = 0.0000$		
	$F = 1.3261$			$F = 8.6222$		
Independent Variables	Coeff	T	P	Coeff	T	P
Constant	2.129	1.347	0.188	5.751	4.840	0.000
ERM	0.005	0.013	0.990	0.126	0.216	0.830

*** Significant at the 1% level; **Significant at the 5% level; * Significant at the 10% level.

ERM = Enterprise Risk Management; ROA = Return on Assets; ROE = Return on Equity.

TBQ = Tobin's Q Ratio; PER = Price Earnings Ratio

Source: Own Source

According to regression results in Table 4, TBQ had an adjusted R-squared value in 2008/2009 of 0.42, implying that about 42% of the total variability in TBQ can be explained by ERM. The F test result indicated that all variables in aggregate did not have a statistically significant influence on TBQ in 2008/2009 ($F = 1.33$, $p = 0.17 > 0.10$). In 2013/2014, results showed an adjusted R-squared value of 0.63, which demonstrates an improved model fit, and in 2013/2014, about 63% of the total variability in TBQ can be explained by ERM. The F test result also indicated that all variables in aggregate have a statistically significant influence on TBQ ($F = 8.62$, $p = 0.00 < 0.01$). This significant improvement in the model fit suggests that ERM had more bearing on TBQ in 2013/2014 than in 2008/2009.

The Influence of ERM on the PER

Table 5 below presents a summary of the regression results on the relationship between PER, as the dependent variable, and ERM in 2008/2009 and 2013/2014.

Table 5: Regression Analysis of ERM, s, and PER

	2009			2014		
	Model fit: $R^2 = 0.3934$			Model fit: $R^2 = 0.5039$		
Dependent variable: PER	$P = 0.1402$			$P = 0.0038$		
	$F = 1.3186$			$F = 3.4107$		
Independent Variables	Coeff	T	P	Coeff	T	P
Constant	3.921	3.312	0.002	52.824	3.713	0.000

ERM **0.169** **0.788** **0.282** **-2.474** **-0.404** **0.191**

*** Significant at the 1% level; **Significant at the 5% level; * Significant at the 10% level.

ERM = Enterprise Risk Management; ROA = Return on Assets; ROE = Return on Equity.

TBQ = Tobin's Q Ratio; PER = Price Earnings Ratio

Source: Own Source

The 2008/2009 results (Table 5) show an adjusted R-squared value of 0.39, implying that during 2008/2009, about 39% of the total variability in PER was explained by ERM. The F test result indicates that all variables in aggregate do not have a statistically significant influence on PER ($F = 1.32$, $p = 0.14 > 0.10$). In the 2013/2014 results (Table 5), the adjusted R-squared value was 0.50, which indicates a better model fit than in 2008/2009, implying that about 50% of the total variability in PER in 2013/2014 can be explained by ERM. The F test results indicate that all variables in aggregate have a statistically significant influence on PER ($F = 3.41$, $p = 0.00$).

Summary Results

Table 6 below presents the summary results of the hypotheses used in this study.

Table 6: Summary of the Hypothesis Test

Study hypothesises	Tests results		There has been a significant change in the influence of ERM after the operationalization of the EAC-Common Market (H2).
	2008/2009	2013/2014	
There is a significant relationship between ERM and financial performance. (H1).			
ERM and ROA	Not supported	Not supported	Not supported
RM and ROE	Not supported	Not supported	Not supported
RM and TBQ	Not supported	Not supported	Not supported
RM and PER	Not supported	Not supported	Not supported

Source: Own Source

As indicated in Table 6 above, we established no significant relationship between ERM and company performance in the EAC for the two periods under this study. Secondly, there is no significant change in the influence of ERM after the operationalization of the EAC-Common Market in 2010.

Conclusion

The objective of this study was to examine the influence of ERM on company performance and compare the influence of ERM on company performance before and after the operationalization of the EAC-Common Market in 2010. The regression analysis results (Tables 1.2 to 1.5) revealed no significant relationship between ERM (H1) and company performance presented by ROA, ROE, TBQ, and PER. The study also revealed that most of the listed companies did not adopt ERM, which might have been due to the high costs associated with its implementation (Kerstin, Simone, & Nicole 2014). Finally, the result of hypothesis H2 on changes in ERM before (2008/2009) and after (2013/2014) was not supported. Our study also revealed that less than 20% of the EAC-listed companies had the CRO and ARC. This is a clear indication of a lack of commitment to ERM (Aebi et al., 2012;

Knechel, 2002; Liebenberg & Hoyt, 2003). According to Kerstin et al. (2014), this lack of commitment is always attributable to the high costs of ERM implementation, which require highly skilled staff in risk management and regular on-the-job training. Moreover, adoption of ERM requires the introduction of new risk management policies and standards, which is costly (Duckert, 2010). We also observed that most listed companies traditionally used the audit and risk management committee of the board and risk transfer (buying individual insurance policies) as the common means of ERM. We thus recommend that all EAC-listed companies adopt a code of best practices with emphasis on ERM to mitigate the total risks and enhance their return on investment (Harris, M., & Raviv, 2008; Raheja, 2005). This would reduce risks, enhance company financial performance, and increase the company's earnings per share (Gordon et al., 2009; and Pagach and Warr, 2011).

Acknowledgment

We wish to acknowledge the contribution of the team that put together this article and Advanced International Journal of Banking, Accounting and Finance (AIJBAF) for corrections and accepting to publish our paper.

References

- Agarwal, R & Ansell, J 2016, 'Strategic Change in Enterprise Risk Management', Strategic Change-Briefings in Entrepreneurial Finance, vol. 25, no. 4, pp. 427-39.
- Agarwal, Y 2013, Capital structure decisions: Evaluating risk and uncertainty, John Wiley & Sons.
- Alagha, HS 2016, 'Corporate Governance Practices and Companyperformance of Listed Companies Including Islamic Financial Institutions in the United Arab Emirates', Victoria University.
- Aldridge, IE 2004, 'Why Are Financial Markets Regulated? An Empirical Investigation of Validity of Regulation Theories', An Empirical Investigation of Validity of Regulation Theories. (April 3, 2004).
- Ansong, A 2013, 'Risk Management as a Conduit of Effective Corporate Governance and Financial Performance of Small and Medium Scale Enterprises', Developing Country Studies, vol. 3, no. 8, pp. 159-63.
- Arena, M, Arnaboldi, M & Azzone, G 2010, 'The organizational dynamics of Enterprise Risk Management', Accounting Organizations and Society, vol. 35, no. 7, pp. 659-75.
- Ashforth, BE & Gibbs, BW 1990, 'The Double-Edge of Organizational Legitimation', Organization science, vol. 1, no. 2, pp. 177-94.
- Baker, HK & Anderson, R 2010, Corporate governance: A synthesis of theory, research, and practice, vol. 8, John Wiley & Sons.
- Baxter, R, Bedard, JC, Hoitash, R & Yezegel, A 2013, 'Enterprise Risk Management Program Quality: Determinants, Value Relevance, and the Financial Crisis', Contemporary accounting research, vol. 30, no. 4, pp. 1264-95.
- Beasley, M. S., Clune, R., & Hermanson, D. R. (2005). Enterprise risk management: An empirical analysis of factors associated with the extent of implementation. *Journal of accounting and public policy*, 24(6), 521-531.
- 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*, vol. 23, no. 3, pp. 311-32.
- Berle, A & Means, GC 1932, The modern corporation and private property, New York, Macmillan Co.

- Bhagat, S & Bolton, B 2008, 'Corporate governance and company performance', *Journal of corporate finance*, vol. 14, no. 3, pp. 257-73.
- Bowerman, BL, O'Connell, RT, Murphree, E, Huchendorf, SC & Porter, DC 2003, *Business statistics in practice*, McGraw-Hill/Irwin New York.
- Claessens, S & Yurtoglu, BB 2013, 'Corporate governance in emerging markets: A survey', *Emerging markets review*, vol. 15, pp. 1-33.
- Collis, J & Hussey, R 2013, *Business research: A practical guide for undergraduate and postgraduate students*, Palgrave macmillan.
- COSO 2004, *Enterprise Risk Management —Integrated Framework*, viewed 14, July 2016, <http://www.coso.org/documents/coso_erm_executivesummary.pdf>.
- Dacin, MT, Goodstein, J & Scott, WR 2002, 'Institutional theory and institutional change: Introduction to the special research forum', *Academy of management Journal*, vol. 45, no. 1, pp. 45-56.
- Deegan, C 2013, *Financial accounting theory*, McGraw-Hill Education Australia.
- Duckert, GH 2010, *Practical ERM: A business process approach*, vol. 15, John Wiley & Sons.
- Eikelenboom, B 2005, *Organizational capabilities and bottom line performance: The relationship between organizational architecture and strategic performance of business units in Dutch headquartered multinationals*, Eburon Uitgeverij BV.
- El-Shishini, HM 2001, 'Integrating Financial And Non-Financial Performance Measures: The State Of The Art And Research Opportunities', in *Management Accounting Research Group Conference*, Aston Business School.
- Fama, EF & Jensen, MC 1983, 'Agency Problems and Residual Claims', *Journal of Law & Economics*, vol. 26, no. 2, pp. 327-49.
- Field, A 2009, *Discovering statistics using SPSS*, Sage publications.
- Fisher, I 1930, 'The Theory of Interest as Determined By Impatience to Spend Income and Opportunity to Spend It'.
- Frijo, ML & Anderson, RJ 2011, 'Strategic risk management: A foundation for improving ERM and governance', *Journal of Corporate Accounting & Finance*, vol. 22, no. 3, pp. 81-8.
- Fulgence, S. (2021). *The Effects of Board and Ownership Structure on Corporate Governance Disclosure: Evidence from East African Countries*
- Gordon, LA, Loeb, MP & Tseng, CY 2009, 'Enterprise risk management and company performance: A contingency perspective', *Journal of accounting and public policy*, vol. 28, no. 4, pp. 301-27.
- Grace, MF, Leverty, JT, Phillips, RD & Shimpi, P 2015, 'The Value of Investing in Enterprise Risk Management', *Journal of risk and insurance*, vol. 82, no. 2, pp. 289-316.
- Grant, P & McGhee, P 2014, 'Corporate governance reform: character-building structures', *Business Ethics-a European Review*, vol. 23, no. 2, pp. 125-38.
- Greenwood, R & Hinings, CR 1996, 'Understanding radical organizational change: Bringing together the old and the new institutionalism', *Academy of management review*, vol. 21, no. 4, pp. 1022-54.
- Hayes, AF & Cai, L 2007, 'Using heteroskedasticity-consistent standard error estimators in OLS regression: An introduction and software implementation', *Behavior research methods*, vol. 39, no. 4, pp. 709-22.
- Heenetigala, K 2011, 'Corporate governance practices and company performance of listed companies in Sri Lanka', Victoria University Melbourne.
- Hengartner, L 2006, *Explaining Executive Pay: The roles of management power and complexity*, Wiesbaden.

- Hirshleifer, J 1958, 'On the theory of optimal investment decision', *The Journal of Political Economy*, pp. 329-52.
- Hoyt, RE & Liebenberg, AP 2011, 'The Value of Enterprise Risk Management', *Journal of risk and insurance*, vol. 78, no. 4, pp. 795-822.
- Hybels, RC 1995, 'On legitimacy, legitimation, and organizations: A critical review and integrative theoretical model', in *Academy of Management Proceedings*, vol. 1995, pp. 241-5.
- Jensen, MC & Meckling, WJ 1976, 'Theory of the firm: Managerial behavior, agency costs, and ownership structure'.
- Kerstin, D, Simone, O & Nicole, Z 2014, 'Challenges in implementing ERM', *ACRN Journal of Finance and Risk Perspectives*, vol. 3, no. 3, pp. 1-14.
- Khan, MJ, Hussain, D & Mehmood, W 2016, 'Why do firms adopt ERM (ERM)? Empirical evidence from France', *Management Decision*, vol. 54, no. 8, pp. 1886-907.
- Kiel, GC & Nicholson, GJ 2003, 'Board composition and corporate performance: how the Australian experience informs contrasting theories of corporate governance', *Corporate Governance-an International Review*, vol. 11, no. 3, pp. 189-205.
- Kim, K 2015, 'Revisiting the relationship between financial and environmental performance: Does Granger causality matter?', *Journal of Applied Business Research*, vol. 31, no. 5, pp. 1861-76.
- Klein, A 1998, 'Company performance and Board Committee Structure 1', *The Journal of Law and Economics*, vol. 41, no. 1, pp. 275-304.
- Knechel, W 2002, 'The role of the independent accountant in effective risk management', *Review of Business and Economics*, vol. 47, no. 1, pp. 65-86.
- Knight, JA 1998, *Value based management: Developing a systematic approach to creating shareholder value*, McGraw-Hill.
- Kondra, AZ & Hinings, CR 1998, 'Organizational diversity and change in institutional theory', *Organization studies*, vol. 19, no. 5, pp. 743-67.
- Laing, D & Weir, CM 1999, 'Governance structures, size and corporate performance in UK firms', *Management Decision*, vol. 37, no. 5, pp. 457-64.
- Lesakova, L 2007, 'Uses and limitations of profitability ratio analysis in managerial practice', in *International Conference on Management, Enterprise and Benchmarking*, pp. 1-2.
- Liebenberg, AP & Hoyt, RE 2003, 'The determinants of ERM: Evidence from the appointment of chief risk officers', *Risk Management and Insurance Review*, vol. 6, no. 1, pp. 37-52.
- Lundqvist, SA 2015, 'Why firms implement risk governance - Stepping beyond traditional risk management to ERM', *Journal of accounting and public policy*, vol. 34, no. 5, pp. 441-66.
- Lussier, R 2011, *Management fundamentals: Concepts, applications, skill development*, Cengage Learning.
- Major, M & Hopper, T 2004, 'Extending new institutional theory: regulation and activity-based costing in portuguese telecommunications', in *Fourth Asia Pacific Interdisciplinary Research in Accounting Conference*, Singapore, vol. 4.
- Mans-Kemp, N 2014, 'Corporate governance and the financial performance of selected johannesburg stock exchange industries', Stellenbosch University.
- Margolis, JD & Walsh, JP 2001, *People and profits?: The search for a link between a company's social and financial performance*, Psychology Press.
- Masulis, RW & Mobbs, S 2011, 'Are all inside directors the same? Evidence from the external directorship market', *The Journal of Finance*, vol. 66, no. 3, pp. 823-72.

- Mendelow, A 1991, 'Stakeholder mapping', in Proceedings of the 2nd International Conference on Information Systems.
- Miller, MH & Modigliani, F 1958, 'The cost of capital, corporation finance and the theory of investment', *The American Economic Review*, pp. 261-97.
- Mulsow, R 2011, 'The Relationship between Project-Portfolio Success and multi-dimensional Business Success'.
- Namanya, D. (2017). Corporate Governance and the Financial Performance of Listed Companies in the East African Community (Doctoral dissertation, Victoria University).
- Nocco, BW & Stulz, RM 2006, 'Enterprise risk management: theory and practice', *Journal of applied corporate finance*, vol. 18, no. 4, pp. 8-20.
- Okiro, K 2014, 'Corporate governance, capital structure, regulatory compliance and performance of firms listed at the East African community securities exchange', University of Nairobi.
- Powell, W 2003, 'Neither market nor hierarchy', *The sociology of organizations: classic, contemporary, and critical readings*, vol. 315, pp. 104-17.
- Quon, TK, Zeghal, D & Maingot, M 2012, 'Enterprise risk management and business performance during the financial and economic crises', *Problems and Perspectives in Management*, vol. 10, no. 3, pp. 95-103.
- Renn, O & Walker, K 2008, 'Lessons learned: A re-assessment of the IRGC framework on risk governance', in *Global risk governance*, Springer, pp. 331-67.
- Ritzer, G 2004, *Encyclopedia of social theory*, Sage Publications.
- Rossi, M, Nerino, M & Capasso, A 2015, 'Corporate governance and financial performance of Italian listed firms. The results of an empirical research', *Corporate Ownership and Control*, vol. 12, no. 2 CONT5, pp. 628-43.
- Sadgrove, K 2016, *The complete guide to business risk management*, Routledge.
- Shleifer, A & Vishny, RW 1997, 'A survey of corporate governance', *Journal of Finance*, vol. 52, no. 2, pp. 737-83.
- Sobel, PJ & Reding, KF 2004, 'Aligning corporate governance with ERM', *Management Accounting Quarterly*, vol. 5, no. 2, p. 29.
- Suchman, MC 1995, 'Managing Legitimacy - Strategic and Institutional Approaches', *Academy of management review*, vol. 20, no. 3, pp. 571-610.
- Tabachnick, BG & Fidell, LS 2006, *Using multivariate statistics*, 5 edn, Pearson.
- Tilling, MV 2004, 'Some thoughts on legitimacy theory in social and environmental accounting', *Social and Environmental Accountability Journal*, vol. 24, no. 2, pp. 3-7.
- Tshipa, J 2015, 'The south African code of corporate governance. The relationship between compliance and financial performance: Evidence from south African publicly listed firms', *Corporate Ownership and Control*, vol. 12, no. 2, pp. 149-69.
- Waduge, DSLCS 2011, 'Governance and performance: an empirical study of Australian universities', Victoria University.
- Weber, Y, Tarba, S, Stahl, G & Rozen Bachar, Z 2012, 'Ingenuity in international mergers and acquisitions: A test of new integration approach paradigm', *Handbook of research on mergers and acquisitions*. Cheltenham: Edward Elgar.
- Weir, C, Laing, D & McKnight, PJ 2002, 'Internal and external governance mechanisms: their impact on the performance of large UK public companies', *Journal of Business Finance & Accounting*, vol. 29, no. 5-6, pp. 579-611.
- Wild, JJ 1994, 'Managerial accountability to shareholders: Audit committees and the explanatory power of earnings for returns', *The British Accounting Review*, vol. 26, no. 4, pp. 353-74.

- Woods, M 2007, 'Linking risk management to strategic controls: a case study of Tesco plc',
International Journal of Risk Assessment and Management, vol. 7, no. 8, pp. 1074-88.
- Zagorchev, A & Gao, L 2015, 'Corporate governance and performance of financial institutions',
Journal of Economics and Business, vol. 82, pp. 17-41.
- Zikmund, W, Babin, B, Carr, J & Griffin, M 2012, Business research methods, Cengage
Learning.