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EFFECT OF FINANCIAL RISK ON FINANCIAL PERFORMANCE OF LARGE SCALE SUPERMARKETS IN NAIROBI COUNTY, KENYA

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Abstract

Companies worldwide are exposed to financial risks that affects their financial performance negatively. Supermarkets in Nairobi have also been facing the problem financial risks in their operations that have led closure of some major super markets in Nairobi and other parts of the country. The general objective of this study was to determine the effect of financial risk on financial performance of Supermarkets in Nairobi County. The specific objectives of the study will included; to examine the effect of operational risk on financial performance of supermarkets in Nairobi county, Kenya, to examine the effect of market risk on financial performance of supermarkets in Nairobi county, Kenya. The study adopted the finance distress theory, Firm value maximization theory and extreme value theory. The study used a descriptive research design with a quantitative approach. The target population for this study was 13 large-scale supermarkets licensed by county government of Nairobi. Study employed sampling as a census of entire large-scale supermarkets in Nairobi County. Secondary data for this study was collected using data collection sheets filled by accountants of various super markets Nairobi County. Collected data was analyzed using both descriptive and inferential statistics with the aid of SPSS Version 23. Mean, minimum, maximum and standard deviations will be used as measures of central tendencies and dispersion respectively. Multi regression analysis was used to establish the effect of financial risk on financial performance of supermarkets in Nairobi County. The findings of the study showed that of the two variables of the study, had statistically significant effect on financial performance of large-scale supermarkets in Kenya liquidity risk. The study recommendations to the management of large scale super markets to constantly work on reducing operational risk by ensuring efficient inventory management, reducing idle time on employees and investing in latest technologies that leads to innovation within the supermarkets like electronic data interchange and finally, management to partially manage markets risks to acceptable levels.

Keywords: *Operational risk, Market risk and financial performance*

1.1 Introduction

Firms face different kind of risks in its daily operations and the manner in which they deal with them greatly influences their performance. Risk in financial terms is usually defined as the probability that the actual return may differ from the expected return (Dionne, 2013). In the financial system, there are at least three broad categories of risks, financial risk, business risk and operational risk (Shah, 2014) .Risk management has therefore become an important discipline in business especially the retail trade business to mitigate against risk

in such businesses. Recently, businesses put great emphasis on risk management as this determines their survival and business performance.

According to Anderson and Terp (2006) risk management as a process that seeks to eliminate, reduce and control risks, enhance benefits, and avoid detriments from speculative exposures. The objective of risk management is to maximize the potential of success and minimize the probability of future losses because risk that becomes problematic can negatively affect cost, time, and quality and system performance. Globally, several studies have been conducted on risk management and financial performance of firms. For instance, Ennouri (2013) examined risks management from perspective of supply chain. The study notes that the complexity of the industrial activities and the important mass of flows crossing the supply chain promotes the emergence of risks that must be considered in the decision process. Ennouri (2013) sought to clarify the basics of risk management through a short new suggestion of literature review for risk management.

Another study by Romzie (2009) examined risk management practices and risk management processes of Islamic banks from the perspective of a proposed framework. The study identified the four important aspects of risk management processes including: understanding risk and risk management; risk identification; risk analysis and assessment; and risk monitoring. The framework suggested that there was a positive relationship between the aspects of risk management processes and risk management practices. Liu, Zou & Gong (2013) further examined external risk management practices of Chinese construction firms in Singapore. The study noted that managing external risks are not unlike managing project risks and the same principles that are applied to project risk management may well be used to manage external risks. The objective of the study was to examine how construction firms attempted to manage external risks during the period that they ventured into host countries.

Financial risk or the risk of losing money is real and fundamental in the modern society; unlike for individual loss of income, for corporations, financial risk can affect the value of business investments and financial assets (Shah, 2014). Financial risk refers to the danger likely to be caused by an event or a loss that could impair the value of member's savings or substantially affect assets, hence its delivery and earning capacity (Maina, 2011). It is the possibility that a business will not have adequate liquidity to meet its ongoing financial obligation like debt repayment, payroll requirements, dividend payments, government licenses and taxes (Chisholm, 2010). Financial risks can be classified into three subclasses credit risk, liquidity risk, and market risk. In order to minimize the effects of financial risks on an organization, managers have to develop appropriate measures of managing risks. Risk management is the process to manage the potential risks by identifying, analyzing and addressing them. The process can help to reduce the negative impact and emerging opportunities. The outcome may help to mitigate the likelihood of risk occurring and the negative impact when it happens. Shafiq and Nasr (2010) defines risk management as a process, effected by an 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 its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives. Anderson and Terp (2006) defines risk management as a process that seeks to eliminate, reduce and control risks, enhance benefits, and avoid detriments from speculative exposures. The objective of risk management is to maximize the potential of success and minimize the probability of future losses because risk that becomes problematic can negatively affect cost, time, quality and system performance.

Financial Performance broadly refers to the level of achievement reached by an organization, which is an essential part of financial risk management (Opiyo, 2012). It is the way towards evaluating performance of the operations in financial standings and can form the basis for comparison of firms in the same industry over time.

A Financial performance report outlines the financial outlook of an organization that reports the budgetary wellbeing of an organization which facilitates different stakeholders and speculators to take their venture decision. There are various approaches to gauge financial strength, but all measures should have same consideration

The Profitability ratios indicate the overall effectiveness of the company. The ratios used give an overview regarding the net earnings in comparison to debt, assets, shareholders equity and sales over a fixed period. Profitability ratios create a combination of evaluation of a company's control, growth and success in converting investments into profit. Lenders are intrigued by profitability ratios since they demonstrate the organization's ability in repayment of both interest and loaned funds. Shareholders have special interests towards profitability as investors. Profitability level indicates the speed and amount of return they expect to get from their investments in the firm. In this research paper the researcher focused on ROA as a measure of financial performance of Supermarkets.

1.2 Statement of the Problem

Supermarkets in Kenya just like other businesses are facing a number of financial risks in their daily operations. There are a number of large scale supermarkets in Kenya that have been scaling down there operations due to poor performance. The poor performance has been partly associated financial risks. Uchumi Supermarket, has been declining; with the business making losses, and faced with governance issues. In early 2000, Uchumi started to experience financial and operational difficulties. As a consequence, the Capital Markets Authority suspended the trading of Uchumi shares in June 2006 (NSE, 2006). It was latter re-admitted back to Nairobi securities exchange market in 2011, but even with this re-listing of shares it has never recovered from its initial profitability. Despite the fact that Nakumatt Holdings was making huge profits and enjoying the market leadership in the recent past, the Supermarket has been of late closing some of its branches as a result of consistent loss making. Once a Kenyan success story, Nakumatt supermarkets are grappling with product shortages. The dizzying fall of East Africa's largest retailer has been blamed on a combination of bad management, misguided expansion plans and increased competition. Nakumatt has become so bad at paying its bills that some suppliers demand to be paid upfront or refuse to deliver. The landlord of one supermarket recently raided the premises and seized merchandise in lieu of unpaid rent (Daily Nation, 31st July, 2017).

Studies have been carried out globally and locally on relationship between financial management practices and financial performance of firms. Gongera, Ouma, and Were (2013) examined the effects of financial risks on profitability of sugar firms in Kenya and established a significant, strong, negative correlation between firm's risk rating and profitability and a strong positive correlation between firms of risk management efficiencies and profitability. Lagat, Mugo and Otuya (2013) studied the effect of credit risk management practices on lending portfolio among savings and credit cooperatives in Kenya. Amambia, Kalio and Kwasira (2013) examined effects of financial risk management on the performance of Kenya Power with emphasis on credit risk. The study established that credit risk management greatly impacts on financial performance of the Company. Ogol (2011) studied liquidity risk management practices in micro-finance institutions in Kenya. Priya (2014) evaluated the relationship between liquidity management and profitability of listed manufacturing companies in Sri Lanka.

Even with these studies done, most of them have been done in financial firms and they have concentrated on listed firms. There exist no known studies on the effect of financial risk on financial performance of retail

industry specifically targeting supermarkets in Nairobi. The current study therefore sought to examine the effect of financial risk on financial performance of supermarkets in Nairobi County, Kenya.

1.3. Objectives of the study

The general objective of this study was to determine the effect of financial risk on financial performance of Supermarkets in Nairobi County

1.3.1 Specific objectives

The specific objectives of the study included:

i. To examine the effect of operational risk on financial performance of supermarkets in Nairobi county, Kenya

ii. To examine the effect of market risk on financial performance of supermarkets in Nairobi county, Kenya

1.4 Research Hypotheses

$H_0$1: operational risk has no significant effect on financial performance of supermarkets in Nairobi County, Kenya.

$H_0$2: market risk has no significant effect on financial performance of supermarkets in Nairobi County, Kenya.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

Finance Distress Theory

Baldwin and Scott (1983) purported that when a firm's business deteriorates to the point where it cannot meet its financial obligation, the firm is said to have entered the state of financial distress. The first signals of financial distress are violations of debt payments 16 and failure or reduction of dividends payouts. Whitaker (1999) defines entry in financial distress as the first year in which cashflows are less than current maturities' long-term debt. The firm has enough to pay its creditors as long as the cashflows exceeds the current debt obligations. The key factor in identifying firms in financial distress is their inability to meet contractual debt obligations. However, substantial financial distress effects are incurred well prior to default.

Wruck (1990) stated that firms enter into financial distress as a result of economic distress, declines in their performance and poor management especially on risks. Boritz (1991) depicts a process of a financial distress that begins with an incubation period characterized by a set of bad economic conditions and poor management which commits costly mistakes. In the case of commercial banks, in ability to provide cash to depositors and loans to borrowers as and when the demand may constitute a liquidity crisis. Other creditors also need to be taken into account when firms are putting in place risk management measures. Credit risks in banks also need to be addressed since it may lead to financial distress.

Loan portfolio management is an important determinant of the firm's liquidity. The banks should manage the credit and liquidity risk in order to avoid the financial distress. The theory of financial distress emanates from the liquidity and credit risk facing a firm. This theory provides for a non-biased perspective on the relationship between credit risk and financial performance variables employed by the study. By providing information that

the effects of financial distress occurs prior default risk, the theory offers a neutral platform to undertake an incisive empirical analysis of this relationship within the commercial banks.

Firm Value Maximization Theory

Firm value maximization theories states that firms can hedge to reduce certain costs or capital market imperfections related to volatile cash flows. There are typically three lines of explanations. First, hedging can reduce deadweight costs of financial distress (Mayers and Smith (1982), Smith and Stulz (1985)). Second, hedging may also be motivated by tax incentives. When firms face a convex tax function, hedging should help reduce expected taxes (Mayers and Smith (1982), Smith and Stulz (1985)). Hedging can also increase a firms's debt capacity, by generating greater tax advantages from greater leverage (Leland (1998). These two explanations imply that corporate hedging can add value when firms face convex costs such as progressive taxation and bankruptcy costs. Similarly MacKay and Moeller (2007) argue that hedging can add value if revenues are concave in product prices.

This theory is based on the fact that, exchange rate exposure has potentially positive or negative impact on the profitability and value of the firm. This is captured in the valuation process in terms of the firm's stock returns. Thus, the approach to modeling the exchange rate exposure has been to regress the exchange rate on firms' returns. Based on research of Smith and Stultz (1985), the tax structure would influence a company's hedging decision. As long as the cost of hedging is not too large, a firm that can reduce the variability of its pre-tax firm value trough hedging would be able to reduce its expected tax liability and increase its expected post-tax firm value. Fisher's (1907) on interest rates made it clear that the value of an investment project is equal to the discounted cash flow that this investment generates to its owner(s). The most simple and intuitive formula illustrating this principle is the investment formula calculating the present value of a single investment project under certainty. The Modigliani-Miller Theorem is a cornerstone of modern corporate finance. At its heart, the theorem is an irrelevance proposition: The Modigliani-Miller Theorem provides conditions under which a firm's financial decisions do not affect its value. Modigliani-Miller (1980) explains that with well-functioning markets (and neutral taxes) and rational investors, who can undo' the corporate financial structure by holding positive or negative amounts of debt, the market value of the firm – debt plus equity depends only on the income stream generated by its assets as shown in equation.

Extreme Value Theory

In 1709, Bernoulli discussed the mean largest distance from the origin when n points lie at random on a straight line of length (Johnson et al., 1995). A century later Fourier stated that, in the Gaussian case, the probability of a deviation being more than three times the square root of two standard deviations from the mean is about 1 in 50,000, and consequently could be omitted (Kinnison, 1985).The firms with significant amounts of trading activity proved to be very vulnerable to extreme market movements and, in time, the measurement of market risk became a primary concern for regulators and also for internal risk control. This calls for indicators showing the risk exposure of firms and the effect of risk reducing measures. Value-at-Risk (VaR) has been established as a standard tool among financial institutionsto depict the downside risk of a market portfolio. It measures the maximum loss of the portfolio value that will occur over some period at some specific confidence level due to risky market factors (Jorion, 1997). Businesses with an important trading portfolio are subject to market risk requirements. They have been required to hold capital against their defined market risk exposures, and, the necessary capital is a function of a busines risk estimates. As a result, several alternative methods have been proposed for estimating VaR, one of which being the Extreme Value Theory (EVT). EVT methods make VaR

estimations based only on the data in the tails as opposed to fitting the entire distribution and can make separate estimations for left and right tails (Diebold et al., 2000). Proper estimation of VaR is necessary in that it needs to accurately capture the level of risk exposure that the firm is exposed to, but if it overestimates the risk level, then the firm will set unnecessarily set aside excess capital to cover the risk, when that capital could have been better invested elsewhere (Hull, 2012). Extreme value theory helps in determining the minimum and the maximum capital that should be set aside to cover the market risks. To achieve this goal the banks need to manage the market risk by managing the financial leverage.

2.2 Conceptual Framework

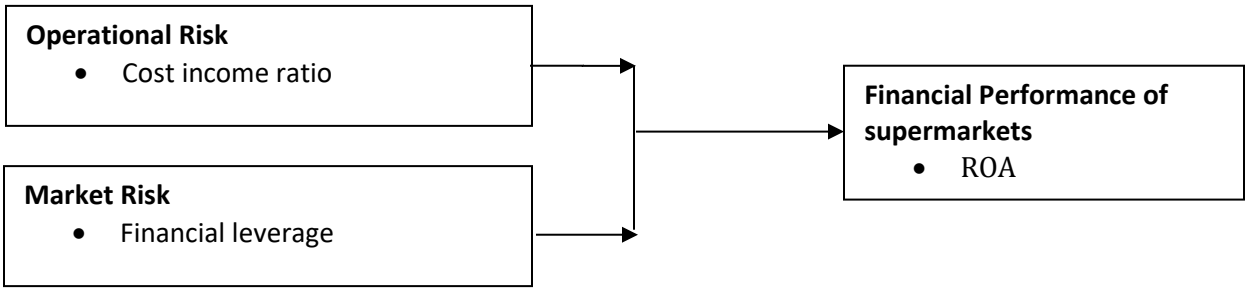

Figure 1: Conceptual Framework

2.4 Empirical Review

2.4.3 Market Risk and Financial Performance of firms

Market risk that comprises three types of risk: currency risk it is the risk that the value of a financial instrument will fluctuate because of changes in currency exchange rates; the lowering of exchange rate can lead to a loss of value of assets denominated in foreign currency thus influencing business performance (Okochi, 2008). Fair value interest rate risk - the risk that the value of a financial instrument will fluctuate due to changes in market interest rates. Price risk - the risk that the value of a financial instrument will fluctuate as a result of changing market prices, even if these changes are caused by factors specific to individual instruments or their issuer, or factors affecting all instruments traded in the market. The market risk incorporates not only the potential loss but as well the gain.

Panos *et al.* (2009) highlight in their study that commodity risks have become more evident than before. For instance rapidly developing economies like China and India have driven up the global demand and prices. As the risk exposures have increased companies are aiming to manage their exposures better and hence avoiding increased costs or earning volatility (Panos et al., 2009). However, the development of commodity exchanges and emergence of wide availability of forwards and other derivatives allows companies to meet these targets Panos *et al*., (2009). Through the developed markets companies are able to hedge the price and demand uncertainties by using financial contracts as forwards, futures, swaps, and options as discussed earlier. Many commodities like agricultural products (corn, wheat, and soybeans), energy products (crude oil, petroleum products) and metals (aluminium, gold, copper) have their own hedging instruments.

Okochi (2008) points out that commodity risk management is not always very straight forward and has often several challenges. Even defining the commodity price risk exposure which can be considered as a starting point of commodity hedging can be problematic (Okochi, 2008). After the exposures are defined and measured

companies need to start analysis whether it is possible or reasonable to hedge the exposure. However, the efficiency of hedging strategy depends highly on the existence of a strong and stable correlation between commodity's spot and futures prices. The efficiency of hedging strategy depends highly on the existence of a strong and stable correlation between commodity's spot and futures prices. If the correlation doesn't hold persistently or the level of correlation changes over time hedging loses its effectiveness. However, commodities futures contracts generally correlate very well with underlying commodity's spot prices (Gaur and Seshadri, 2005). For instance crude oil futures correlate excellently with crude oil spot prices. According to Yakup and Asli (2010) increased risk exposures and increased hedging activity are consequences of internalization in of business environments. Also Yakup and Asli (2010) point out companies that have foreign sales, foreign income, and foreign assets are exposed to exchange rate risk (due to more of foreign currencies) and interest rate risk (due to higher leverage and lower quick ratios). Oil companies are also more likely to be exposed to commodity price risk as their market prices become more volatile (Yakup and Asli, 2010).

2.4.4 Operational Risk and financial performance of firms

Operational risk summarizes the risks a company undertakes when it attempts to operate within a given field or industry. Operational risk is the risk not inherent in financial, systematic or market-wide risk. It is the risk remaining after determining financing and systematic risk, and includes risks resulting from breakdowns in internal procedures, people and systems Nyagah (2014). Study by Allayannis and Weston (2001) examined the influence of operational risk on the financial performance of deposit taking savings and credit cooperatives in Kakamega County. The specific objective was to find out the influence of financial systems on financial performance of deposit taking savings and credit societies in Kakamega. The study used a descriptive survey design. The population consisted of all the four; Invest and Grow, Weversity, Afya and Sukari deposit taking Saccos operating in Kakamega County. A semi-structured questionnaire was used to collect the data from a sample size of 56 respondents. The study revealed that there was a significant positive linear relationship between financial systems and financial performance of SACCOs in Kakamega County. The study concluded that SACCOs and other financial institutions must focus on the financial systems in minimizing their operational risks.

Study by Ndung'u (2013) sought to determine the effect of financial risk management on financial performance of Oil Companies in Kenya. The study adopted causal research design. The study population consisted of all 85 Oil Companies operating in Kenya. The sample size of the study was comprised of 40 Oil companies in Kenya. The sample was selected based on stratified random selection of the companies listed by PIEA list of the market share of various companies. Semi-structured questionnaires were used to obtain primary data about the population. A linear regression model of financial performance versus financial risk management techniques was applied to examine the relationship between the variables. The study found that most Oil companies had highly adopted financial risk management practices to manage financial risk and as a result the financial risk management practices comprising of; understanding risk, risk identification, risk analysis and assessment & risk monitoring, have a positive correlation to the financial performance of Oil Companies in Kenya. The study recommends that that risk management techniques should be emphasized and utilized more effective by Oil companies in Kenya.

Study by Nyagah (2014) sought to determine the level of implementation of enterprise risk management by pension fund management firms in Kenya and to assess the effect of enterprise risk management on the firm's financial performance. This study adopted a descriptive study design. The population for this study was the 19 registered pension fund management firms in Kenya by July 2014. Data was analysed using both descriptive

and linear regression analysis. The coefficient results showed that event identification, risk assessment, objective setting, and information communication had negative effects on the financial performance of fund management firms while risk response, internal environment, and control activities had positive effects on the financial performance of pension fund management firms in Kenya. However, the effects of even identification and risk response on financial performance were insignificant at 5% level. Thus, the study concludes that enterprise risk management practices influence the financial performance of pension fund management firms in Kenya to a very large extent.

3. 0 RESEARCH METHODOLOGY

The study employed a descriptive survey as its research design to establish the effect of financial risk on financial performance of supermarkets in Nairobi County. A Survey is useful in describing the characteristics of a large population. In addition, it has a high reliability and it is easy to obtain by presenting all subjects with a standardized stimulus which ensures that observer subjectivity is greatly eliminated (Mugenda & Mugenda, 2009).

The population of interest comprised of the 13 major retail supermarkets in Nairobi County, Kenya (Kenya Business Directory, 2017). Mugenda and Mugenda (2003) recommended that a sample of 10-30% is adequate if properly selected. Hence, the study undertook a census of the thirteen major retail supermarkets in Nairobi County, Kenya. This study targeted the entire large-scale supermarkets in Nairobi County within the CBD of Nairobi city. Since the study was a census of all the 13 large-scale supermarkets within Nairobi town CBD, no sampling technique was necessary when selecting large-scale supermarkets to be part of the study.

The study relied on entirely on secondary data hence data collection sheets was used for recording information extracted from supermarket annual financial reports for the study period 2010-2016. Data collection sheet had financial data on the columns and years on the rows for the seven years. Secondary data from large-scale super markets annual report collected on the study variable included, Financial Performance of the companies measured using return on Asset (ROA), market risk and operational risk.

The data was analysed using descriptive statistics, correlation analysis, and multiple regression analysis. Descriptive statistics was used to summarize and explain the study variables as observed in the supermarkets. Descriptive statistics included measures of central tendencies and dispersion. Inferential statistics included bivariate Pearson correlation, multiple regressions coefficients, ANOVA and coefficient of determination.

The model is shown in equation (1)

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e} \quad \text{.....(1)}$$

Where Y is dependent variable financial performance (ROA)

X_1 and X_2: are independent variables

X_1: operational risk

X_2: market risk

β_1, β_2,: are the coefficients of independent variables

β_0: intercept term

e: stochastic error term

4.0 RESEARCH FINDINGS AND DISCUSSION

4.1 Descriptive Analysis

The aim of the descriptive statistics was to describe the general distributional properties of the data, to identify any unusual observations or any unusual patterns of observations that may cause problems for later analyses to be carried out on the data. Thus initial exploration of the data using simple descriptive tools was provided to describe and summarize the data generated for the study. This section provides the descriptive statistics as per the objectives of the study. That is the effect of market risk and operational risk on financial performance of large scale supermarkets in Nairobi county as shown in table 4.1.

Table 4. 1: Descriptive Statistics

	Obs	Min	Max	Mean	Std. Deviation
Operational Risk	56	2.52	8.17	3.94	1.130
Market risk	56	0.16	1.05	.33	.198
Financial Performance	56	0.06	0.12	.09	.016

Operational Risk

The research also sought to establish the central tendency and distribution of operational risk level large-scale super markets in Nairobi County. Operational risk was measured ratio of expenses to Net profits before tax and interest. The results are presented in table 4.1. The mean expense net profit ratio was 3.94 suggesting that the operating expenses were averagely four times the operating profits of the large-scale supermarkets. The standard deviation for the expense to net profit ratio was 1.130 demonstrating that out of the Large-scale super markets in Kenya, expense to income ratio was spreads around the mean with about 1.130. Units. The minimum expense to operating income ratio was 2.52 days and the maximum was 8.17

Market Risk

The study also attempted to examine the central tendency and distribution of market among the large-scale supermarkets in Nairobi County. The results are presented in table 4.1. Market risk was proxied by financial leverage measured by debt to equity ratio. The average debt equity ratio was 0.33 suggesting that ratio of bowed funds to owners equity was roughly a third meaning most of the activities of the large scale super markets are financed owners equity. The standard deviation for debt equity ratio was 0.198 demonstrating that out of the large-scale super markets in Kenya, debt equity ratio was spreads around the mean with about 0.198. units. The minimum and maximum debt equity ratio was 0.16 and 1.05 points respectively.

Financial Performance

Finally, ROA was used as a measure of financial performance .The results are presented in table 4.1. The mean ROA was 0.09 suggesting that the average ROA for the large super markets studied was about 9 %. Nairobi County, the ROA was spreads around the mean with about 1.6 %. The minimum ROA was 6 % and the maximum ROA was 12 %.

4.2 Correlation Analysis

The researcher carried out correlations to assist explains the relationship between independent variable financial risk and dependent variable financial performance. The researcher used Pared Pearson Correlation to establish the relationship as shown in table 4.2.

Table 4. 2: bivariate Pearson correlation

		Operational Risk	Market risk	Financial Performance
Operational Risk	Pearson Correlation	1	.533**	-.782**
	Sig. (2-tailed)		.000	.000
	N	56	56	56
Market risk	Pearson Correlation	.533**	1	-.220
	Sig. (2-tailed)	.000		.103
	N	56	56	56
Financial Performance	Pearson Correlation	-.782**	-.220	1
	Sig. (2-tailed)	.000	.103	
	N	56	56	56

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The researcher wanted to establish the Bivariate correlation between variables used in the study. Pearson correlation coefficients were calculated at 0.05 and 0.01 level of significance.

There was negative statistically significant correlation between operational risk and ROA ($r = -.782^{**}$, $p = 0.00$ and $\alpha = 0.05$).

The relationship between market risk and ROA was negative and statistically insignificant ($r = -.220$, $p = .103$ and $\alpha = 0.05$).

All the coefficients were less than 0.8 implying that there was no problem of multi collinearity among the study variables. Hence, the analysis proceeded without the worry of high correlation among study variables that could distort the coefficient estimates and provide misleading results.

4.3 Regression Analysis

Regression analysis was multiple in natures as there were more than one independent variables. Multiple regression analysis involved calculation of coefficient of determination, Analysis of Variances (ANOVA) and regression coefficients.

Table 4.3: model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.831[a]	.690	.666	.00898

a. Predictors: (Constant), Market risk, Operational Risk,

Tables 4.3 indicate that the model explains only 83.1% of the variations in financial performance (ROA) of large scale super markets in Nairobi County as shown by the coefficient of determination (R2) value of 0.831 hence 26.9 % Variations in Financial performance (ROA) is explained by other factors not included in the model. It is therefore clear that Financial risk captured in the study explains only 83.1 % variations in profitability.

Table 4. 4: Analysis of variances (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.009	2	.002	28.392	.000[b]
	Residual	.004	51	.000		
	Total	.013	55			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Market risk, Operational Risk,

Additionally According to table 4.4 the overall significance of the model was 0.000 with an F value of 28.392.The level of significance was lower than 0.05 and this means that Financial Risk do show statistically significant effect on financial performance (ROA) of large-scale super markets in Nairobi County.

Table 4.5: Coefficients of Independents Variables

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.119	.010		12.026	.000
	Operational Risk	-.013	.001	-.923	-9.882	.000
	Market risk	.039	.011	.494	3.471	.001

a. Dependent Variable: Financial Performance

Table 4.5 further shows the coefficients of independent variables (Market risk ad Operational Risk and the values of p and values of t .The model was thus estimated as

ROA = 0.119 - 0.013 operational risk + .039 Market risk

The estimated model above shows the causal effect relationship between the independent variable financial risk and dependent variable financial performance of large scale super markets in Nairobi County. The estimated intercept term 0.119 showing the level of financial performance in terms of ROA when the independent variables are held constant. The coefficients estimates of the model are explained in details in the following discussion.

The researcher established that Operational risk had a statistically significant effect on financial performance measured by ROA ($\beta 3 = -.013$, $p = .000 < \alpha = 0.05$). Finally, market risk had a statistically significant effect on financial performance measured by ROA ($\beta 4 = .039$, $p = .001 < \alpha = 0.05$).

4.4 Discussion of Findings

4.4.1 Effect of operational risk on Financial Performance

Study established that the mean expense to net profit ratio was 3.94 suggesting that the operating expenses were averagely four times the operating profits of the large-scale supermarkets. The standard deviation for the expense to net profit ratio was 1.130 demonstrating that out of the Large-scale super markets in Kenya, expense to income ratio was spreads around the mean with about 1.130. The results suggest that the expenses were very high compared to the net profits of the large-scale super markets in Nairobi County; hence, the super markets are facing operational risk that must be handled well with appropriate strategies.

Additionally, there was negative and statistically significant correlation between operational risk and ROA ($r = -.782^{**}$, $p = 0.00$ and $\alpha = 0.05$). Signifying that any increase in the operational risk in terms of expenses to net profit before tax and interest is accompanied by reduction in financial performance. Further, Operational risk had a statistically significant effect on financial performance measured by ROA ($\beta 3 = -.013$, $p = .000 < \alpha = 0.05$).The hypothesis that operational risk has no significant effect on financial performance of large scale supermarkets in Nairobi county was thus rejected and conclusion made that indeed operational risk significantly affect financial performance of the said Supermarkets. The value of $\beta 3$ was negative implying that any increase in operational risk translates to reduced financial performance since the firm is inefficient in converting resources into revenues. The value ($\beta 3 = -.013$) is the responsiveness of financial performance to any change in operational risk where any change in operational risk by one unit leads to change in financial performance by 0.013 units in the opposite direction.

The concluded study found support in the empirical review. The findings are in agreement with other studies examined in the empirical review. Study by Allayannis and Weston (2001) revealed that there was a significant positive linear relationship between financial systems and financial performance of SACCOs in Kakamega County. Study by Nyagah (2014) results showed that event identification, risk assessment, objective setting, and information communication had negative effects on the financial performance of fund management firms while risk response, internal environment, and control activities had positive effects on the financial performance of pension fund management firms in Kenya.

4.4. Effect of market risk on Financial Performance

Market risk proxied by financial leverage measured by debt to equity ratio showed that average debt equity ratio was 0.33 suggesting that ratio of bowed funds to owners equity was roughly a third meaning most of the activities of the large scale super markets are financed owners equity. The standard deviation for debt equity ratio was 0.198 demonstrating that out of the large-scale super markets in Kenya, debt equity ratio was spreads around the mean with about 0.198. Its therefore clear that most of the supermarkets studied were solvent and did not rely much on borrowed funds hence were less affected by market risks such as interest rate risk.

Correlation analysis showed that the relationship between market risk and ROA was negative and statistically insignificant ($r = -.220$, $p = .103$ and $\alpha = 0.05$).This implies that increase in debt equity ratio that signifies increase in financial leverage and exposer to market risk may be associated with increased financial performance. Further, market risk had a statistically significant effect on financial performance measured by ROA ($\beta 4 = .039$, $p = .001 < \alpha = 0.05$). The null hypothesis that market risk has no significant effect on financial performance of large-scale supermarkets in Nairobi County was thus rejected and conclusion made that indeed market has a major impact on financial performance of the supermarkets studied. The value of $\beta 4$ was positive

meaning any increase in markets risk facing supermarkets may lead to improved financial performance if the supermarkets takes appropriate risk. The value of (β4=.039) measuring the coefficient of market risk implies that any increase exposure to market risk by one unit leads to increase in financial performance by .039 units.

Finally, the findings of the current study was in agreement with other studies. Panos et al. (2009) highlight in their study that commodity risks have become more evident than before. For instance, rapidly developing economies like China and India have driven up the global demand and prices. As the risk exposures have increased companies are aiming to manage their exposures better and hence avoiding increased costs or earning volatility (Panos et al., 2009). Okochi (2008) points out that commodity risk management is not always very straight forward and has often several challenges. Yakup and Asli (2010) increased risk exposures and increased hedging activity are consequences of internalization in of business environments. Also Yakup and Asli (2010) point out companies that have foreign sales, foreign income, and foreign assets are exposed to exchange rate risk and interest rate risk (due to higher leverage and lower quick ratios). Oil companies are also more likely to be exposed to commodity price risk as their market prices become more volatile.

5.0 SUMMARY, CONCLUTION AND RECOMMENDATION

5.1 Summary of Findings

5.1.1 Operational Risk and Financial Performance

The study results showed that there was negative and statistically significant correlation between operational risk and financial performance. Further, Operational risk had a statistically significant effect on financial performance. The hypothesis that operational risk has no significant effect on financial performance of large-scale supermarkets in Nairobi County was thus rejected. The value of β3 was negative and is the responsiveness of financial performance to any change in operational risk where any change in operational risk by one unit leads to change in financial performance by 0.013 units in the opposite direction.

5.1.2 Market Risk and Financial Performance

Correlation analysis showed that the relationship between market risk and financial performance was negative and statistically insignificant. Further, market risk had a statistically significant effect on financial performance measured by financial performance. The null hypothesis that market risk has no significant effect on financial performance of large-scale supermarkets in Nairobi County was thus rejected. The value of β4 was positive meaning any increase in markets risk facing supermarkets may lead to improved financial performance if the supermarkets takes appropriate risk. The value β4 measuring the coefficient of market risk and it means that any increase exposure to market risk by one unit leads to increase in financial performance by .039 units.

5.2 Conclusion

The study showed that, there was negative and statistically significant correlation between operational risk and ROA. Further, Operational risk had a statistically significant effect on financial performance measured by ROA. The hypothesis that operational risk has no significant effect on financial performance of large-scale supermarkets in Nairobi County was thus rejected and conclusion made that indeed operational risk significantly affect financial performance of the said Supermarkets. The effect of operational risk on financial performance of large-scale supermarkets was negative implying that any increase in operational risk translates to reduced financial performance since the firm is inefficient in converting resources into revenues.

The relationship between market risk and ROA was negative and statistically insignificant and market risk had a statistically significant effect on financial performance measured by ROA. The null hypothesis that market risk has no significant effect on financial performance of large-scale supermarkets in Nairobi County was thus rejected and conclusion made that indeed market has a major impact on financial performance of the supermarkets studied. The positive coefficient of market risk means that any increase in markets risk facing supermarkets may lead to improved financial performance if the supermarkets takes appropriate risk.

5.3 Recommendations

Based on the findings and conclusions, a number of recommendations can be made regarding the current study. Firstly, given the rejection of null hypothesis that operational risk has no significant effect on financial performance of large-scale supermarkets in Nairobi County and conclusion that operational risk significantly affect financial performance of the said Supermarkets. The study wishes to recommend to the managements of supermarkets to constantly work on reducing operational risk in the various supermarkets. The operational risks may come from sources such as inefficiencies related to stock management and staff management. The management could reduce operational risk by ensuring efficient inventory management and reducing idle time on employees. The management of supermarkets should also invest in latest technologies that leads to innovation within the supermarkets like just in time philosophy and electronic data interchange.

Finally, given the rejection of null hypothesis that market risk has no significant effect on financial performance of large-scale supermarkets in Nairobi County and conclusion that market risk has a major impact on financial performance of the supermarkets studied. The study recommends to management of large-scale super markets to manage markets risks well. Given the positive effect of market risk on financial performance of large-scale super markets, the supermarkets should have minimal management of markets risk but should take advantage of the markets risk to increase their financial performance. However, strategies for managing markets risks to acceptable levels should be implemented.

5.4 Areas for further research

The current study on the effect of financial risks on financial performance of large-scale super markets in Nairobi County was successfully and exhaustively done. However, it was limited to using secondary data extracted from audited financial statements of the companies. Another study should be carried out that looks at effect of financial risk on financial performance of large-scale super markets in Nairobi County using both secondary and primary methods of data collection to see if results hold. Given the many risk facing super markets in Kenya, Another study should be carried out that includes all super markets in Kenya.

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