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## EFFECT OF FINANCIAL RISK ON PERFORMANCE OF NON-FINANCIAL FIRMS LISTED AT NAIROBI SECURITIES EXCHANGE

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### ABSTRACT

*This study sought to determine the effect of financial risk on performance of non-financial firms listed at Nairobi Securities Exchange. The study used descriptive cross-sectional approach and longitudinal design. The population of the study included all listed firms at the Nairobi Securities Exchange as at 31<sup>st</sup> December 2019. The study employed secondary data. The source considered was Nairobi Securities Exchange database during 2015 to 2019. The determination of the significance of each variable under study was done using the t-test, p-values and F-test. Pearson correlation coefficient and multiple regressions were used. The study established a moderate relationship to the extent that the predictors identified in the study might not be greatly affecting financial performance of non-financial firms listed in Kenya. This meant a strong possible existence of certain issues affecting financial performance other than the financial risks considered in this study. Ensuing from the research objectives, it is concluded that financial risk affects financial performance of non-financial firms listed in Kenya. The p-value also leads to a conclusion that there is a significant association between financial risk and financial performance. Further, the study concluded that the extent to which financial risks affected financial performance was moderate to the extent that there is a strong possibility of existence of other certain issues affecting financial performance other than the financial risks considered in this study. The study recommends that the managements of listed non-financial firms should constantly work on effective management of financial risks to maximize financial performance. The financial risks may come from sources such as inefficiencies related to operational issues. The management could reduce financial risks by ensuring efficient working capital and debt*

*management. The management of the firms would also invest in latest technologies to facilitate working capital management to maximize financial performance.*

**Key words:** Financial risk; Financial Performance; Non-Financial Firms

## 1.0 INTRODUCTION

Financial risk means uncertainty of returns regarding financial activities of a company. This may be due to unstable financial markets leading to losses as caused by stock price movements, changing value of the currency, interest rate movements and the general incapacity of a company to fulfill financial obligations (Wanjohi, Wanjohi & Ndambiri, 2017). This class of risks is related to financing and investment decisions made by a company. Kassi, Rathnayake, Louembe and Ding (2019) posit that financial risks face a number of companies since their valuation especially the listed companies rely on market-related factors that makes up financial risks.

The financial risks indicators include asset-backed risks, credit risk, foreign-exchange risks, currency risks, liquidity risks, stock market risks, leverage risks and equity-price risks. The current study focuses on liquidity, leverage and equity price risks. Liquidity risk implies likelihood of the company being incapable of settling obligations when expected to do so (Drehmann & Nikolaou, 2013). Leverage risk is a measure of variations in returns of a company based on the extent to which firms use equity and debt to finance its assets. The rate of interest on debt is predetermined regardless of the organization's pace of return on assets (Al-Slehat, 2020).

Financial performance indicators of a firm are grouped under capital adequacy, liquidity, leverage, solvency, and profitability ratios (Fatihudin, Jusni & Mochklas, 2018). This is because it is the capability of an organization to take charge of its resources. The importance of financial performance is that it enables companies to sustain their operations since high performing companies are considered to be financially healthy (Matar & Eneizan, 2018). Wamiori, Sakwa & Namusonge (2016) assert that financial performance can be evaluated using many financial indicators such as liquidity ratios, profitability ratios, gross income, profit before interest and tax and the asset valuation. Masindet, Ndambiri and Oluoch (2018) indicate that companies are deemed to be financially performing when in a position to maximize financial needs of the stakeholders.

Zhongming, Frimpong and Guoping (2019) posit that financial risk occurs due to uncertain loan and other credit repayments, illiquidity, unstable interest rates and fluctuations in foreign exchange rates. Due to these uncertainties, companies face possible variations in their expected financial returns attached specifically to the risks. According to Xing, Liu, Shen and Wang (2020), financial performance indicates staking the business situation of a firm, which can directly reflect the profitability and business risk. They stated that the extent to which companies

perform financially financial can be measured in term of sales growth, profit generation, and market share in the main product market.

## 1.1 RESEARCH PROBLEM

Several studies related to the variables under considerations exist. Kimathi, Galo and Melissa (2015) focused on leverage as the only element of risk affecting how non-financial firm perform financially and ignored other elements such as interest rates and foreign exchange risks. Maniagi, Mukanzi and Mukanzi (2016) used stock return to measure financial performance while financial leverage was used as the financial risk element hence ignoring elements such as liquidity and equity risks. Kassi, Rathnayake, Louembe and Ding (2019) relevantly studied the similar concepts but was contextualized on Moroccan Stock Exchange.

From the aforementioned studies, the reality is that financial risks affect how firms achieve financial as well as non-financial objectives. The gap as stated exists on the basis of context and concept. Contextually, the current study deals with companies that are not in the financial sector as listed in Kenya while from a concept point of view, the study considers a combined effect of liquidity, leverage, foreign exchange and equity price risk which none of the studies have focused on. The study therefore sought to address the question “What is the effect of financial risk on financial performance of non-financial firms listed at Nairobi securities exchange?”

### 1.2 Research Objectives

The general objective of the study was to determine the effect of financial risk on performance of non-financial firms listed at NSE.

#### 1.2.1 Specific Objectives

- i. To establish the effect of liquidity risk on financial performance of non- financial firms.
- ii. To determine the effect of leverage risks on financial performance of non- financial firms.
- iii. To establish the effect of equity price risks on financial performance of non-financial firms.

## 2.0 METHODS

The study used descriptive cross-sectional approach and longitudinal design. The population of the study included all listed firms at the Nairobi Securities Exchange as at 31<sup>st</sup> December 2019. They were sixty-four (64) in number. The study however targeted all non-financial firms listed at the NSE market as at 31<sup>st</sup> December 2019. They were forty-five (45). The study employed secondary data. The source considered was Nairobi securities exchange database during 2015 to 2019.

The multiple regression model utilized was as follows:

$$FP = \alpha + \beta_1 LR_1 + \beta_2 LE_2 + \beta_3 EP_3 + \beta_4 FS_4 + \varepsilon$$

**Where:**

Y = Financial Performance (Dependent variable).

a = Constant

$\beta$  = Beta Coefficient

### 3.0 RESULTS

Pearson correlation was computed to ascertain how liquidity risk, leverage risks, equity price risks, firm size and financial performance correlate. The outcomes are given in Table 1:

**Table 1: Correlation Matrix**

		<b>Liquidity Risk</b>	<b>Leverage Risk</b>	<b>Firm Size</b>	<b>Equity Price Risk</b>	<b>Return on Assets</b>
<b>Liquidity Risk</b>	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	44				
<b>Leverage Risk</b>	Pearson Correlation	.447**	1			
	Sig. (2-tailed)	.002				
	N	44	44			
<b>Firm Size</b>	Pearson Correlation	.399**	.226	1		
	Sig. (2-tailed)	.007	.140			
	N	44	44	44		
<b>Equity Price Risk</b>	Pearson Correlation	-.114	.083	.079	1	
	Sig. (2-tailed)	.460	.594	.611		
	N	44	44	44	44	
<b>Return on Assets</b>	Pearson Correlation	.710**	.332*	.543**	.041	1
	Sig. (2-tailed)	.000	.028	.000	.793	
	N	44	44	44	44	44

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

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

Table 1 indicate that liquidity and return on assets have a strong positive and significant correlation ( $r = .710$ ;  $p < 0.05$ ) while leverage and return on assets have a weak positive but significant correlation ( $r = .332$ ;  $p < 0.05$ ). The findings also indicate that firm size and return on asset have a positively moderate and significant correlation ( $r = .543$ ;  $p < 0.05$ ). The correlation between equity price risk and return on assets is however not significant and it is very weak ( $r = .041$ ;  $p > 0.05$ ). The implication is that improved liquidity, leverage levels and firm size leads to improved financial performance while a positive change in equity price risk leads to a negative change in financial performance though not significantly.

Multiple regression analysis was used to help determine the effect of financial risk on performance of non-financial firms listed at NSE. From the model summary in Table 2,  $R = 0.770$  implying a positive relationship between financial risk and performance of non-financial firms listed at NSE. The adjusted  $R^2$  of 0.550 mean that 55% of variations in financial performance is caused by variations in liquidity risk, leverage risk, firm size and equity price risk.

**Table 2: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.770 <sup>a</sup>	.592	.550	10.44355

a. Predictors: (Constant), Equity Price Risk, Firm Size, Leverage Risk, Liquidity Risk

b. Dependent Variable: Return on Assets

This is an indication of a moderate relationship such that the predictors identified in this study might not be greatly affecting financial performance of non-financial firms listed in Kenya. The implication is that there is the presence of certain issues affecting financial performance other than the financial risks considered in this study.

Table 3 shows overall p-value indicating a significant relationship between financial risks and financial performance at 0.000 ( $p < 0.05$ ). This implies that equity price risk, firm size, leverage risk and liquidity risk reliably predict financial performance of listed non-financial firms at the Nairobi Securities Exchange.

**Table 3: Analysis of Variance**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	6178.098	4	1544.525	14.161	.000 <sup>b</sup>
Residual	4253.638	39	109.068		
Total	10431.736	43			

a. Dependent Variable: Return on Assets

b. Predictors: (Constant), Equity Price Risk, Firm Size, Leverage Risk, Liquidity Risk

Further, the results in Table 3 show that the F statistic was 14.161 and was significant at  $p = 0.000$  implying that the model was reliable in predicting the relationship between equity price risk, firm size, leverage risk and liquidity risk reliably predict financial performance of listed non-financial firms at the Nairobi Securities Exchange.

Table 4 indicates individual relationship between the various predictor variables with financial performance of listed non-financial firms in Kenya and their coefficient betas. The findings indicate that liquidity risk, total assets and equity price risk have a positive coefficients showing that a positive increase in liquidity risk, total assets and equity price risk positively affect financial performance of non-financial firms in Kenya as given by  $\beta=.608$ ,  $\beta=.297$  and  $\beta=.088$  respectively.

**Table 4.: Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	-17.396	3.482			-4.997	.000
1 Liquidity Risk	2.729	.557	.608		4.895	.000
Leverage Risk	-.055	.466	-.014		-.117	.907
Total Assets	1.570	.595	.297		2.639	.012
Equity Price Risk	.004	.005	.088		.800	.408

a. Dependent Variable: Return on Assets

Further, the findings indicate that leverage risk have a negative coefficient implying that an increase in leverage risk leads to decreased financial performance of the listed non-financial firms in Kenya given  $\beta=-.014$ . These findings are also confirmed by the positive and negative t-values. Regarding significance, the study found out that liquidity risk and total assets significantly affect financial performance indicated by  $p<0.05$  respectively. The implication is that liquidity risk and total assets significantly affect financial performance. This is also an indication that leverage risk and equity price risk having  $p=.907$  and  $p=.408$  with  $p>0.05$  do not have significant effect on financial performance of listed non-financial firms in Kenya. Based on the outcome, the regression model would be as follows:

$$FP = -17.396 + 0.608LR_1 - 0.014LE_2 + 0.088EP_3 + 0.297FS_4 + \varepsilon$$

**Where:**

Y = Financial Performance (Dependent variable).

a = Constant

$\beta$  = Beta Coefficient

LR<sub>1</sub> = Liquidity Risk

LE<sub>2</sub> = Leverage Risk

EP<sub>3</sub> = Equity Price Risk

FS<sub>4</sub> = Firm Size

$\varepsilon$  = Error term.

## 4.0 CONCLUSION AND RECOMMENDATION

Ensuing from the general research objective, it was therefore concluded that financial risk affect financial performance of non-financial firms listed in Kenya. The p-value also leads to a conclusion that there is a significant association between financial risk and financial performance. Further, the study concluded that the extent to which financial risks affected financial performance was moderate to the extent that there is a strong possibility of existence of other certain issues affecting financial performance other than the financial risks considered in this study. This conclusion was consistent with the study by Matayo and Muturi (2018) who concluded that financial risk statistically and significantly affects financial performance.

Regarding the effect of liquidity risk on financial performance of non- financial firms, the study concluded that liquidity risk had a strong positive and significant correlation to the extent that positive variations in liquidity leads to positive improvement in financial performance. It was also concluded that liquidity risk significantly affected financial performance. This meant that any variations in liquidity significantly lead to variations in financial performance. The conclusion was consistent with the conclusion by Mugetha (2019) who established that liquidity positively and significantly contributes to financial performance.

The conclusion of the study was also based on the determination of the effect of leverage risks on financial performance of non- financial firms. The conclusion was that leverage risk has a weak positive but significant correlation. The basis was that an increase in leverage risk led to decreased financial performance of the listed non-financial firms in Kenya. The study also concluded that leverage risk does not have significant effect on financial performance of listed non-financial firms in Kenya. The conclusion was consistent with the conclusion reached by Bărbuță-Mișu, Madaleno and Ilie (2019) who established that leverage positively affect firm performance.

Finally, the study concluded that there is a weak and insignificant correlation between equity price risk and return on assets. The study further concluded that positive variations in equity price positively affect financial performance of non-financial firms in Kenya. This conclusion was consistent by the conclusion reached by Mustofia, Puspitaningtyas and Sisbintari (2014). They concluded that equity price risks affect assets and liabilities of the company making its consideration key in corporate financial performance.

#### **4.1 Recommendations of the Study**

Based on the findings and conclusions, a number of recommendations can be made regarding the current study. Firstly, given the conclusion that financial risks have a significant effect on financial performance of listed non-financial firms in Kenya, the study wishes to recommend to the managements of listed non-financial firms to constantly work on effective management of financial risks to maximize financial performance. The financial risks may come from sources such as inefficiencies related to operational issues. The management could reduce financial risks

by ensuring efficient working capital and debt management. The management of the firms would also invest in latest technologies to facilitate working capital management to maximize financial performance.

Secondly, the study recommends on the need to have high consideration of utilizing the company assets efficiently. Because the assets utilization of the company is an important factor as it influences financial performance. If assets utilization increases, unit cost will decrease and lower unit costs, in turn, should allow firms to cut and sustain lower prices and gain market share without lowering profit margins. The recommendation is that listed non-financial firms increase their assets utilization as it is found to positively influence financial performance.

The third recommendation is that great attention be paid to leverage. Companies that are highly leveraged may be at risk of bankruptcy if they are unable to make payments on their debt and they may also be unable to find new lenders in the future. On the other hand, leverage can increase the shareholders' return on their investment and make good use of the tax advantages associated with borrowing. The study has established that high leverage affects financial performance. Listed firms must therefore work to reduce some debt to help improve financial performance through reduced cases of bankruptcy exposure.

Finally, the decision-makers and managers of listed companies should consider mitigating financial risk by using appropriate risk management strategies through derivatives, forwards, futures, swaps, options, and insurance as well as securitization techniques. Adopting new financial risk management techniques would enable the firms to venture into new areas of investment and maximize financial performance.

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