

EXCHANGE RATE AND FINANCIAL PERFORMANCE OF NON FINANCIAL FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE, KENYA

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Abstract: The study sought to establish the effect of exchange rate on financial performance of Non Financial Firms listed on the NSE, Kenya. In carrying out the study, Modern Portfolio Theory and Deflation Theory were adopted. The research was based causal research design and the population comprises of the non-financial companies listed at the NSE in Kenya as from January 2013 to December 2017 which are 41 in number. Therefore, the study was based on a census. This research utilized panel data which was be extracted with the use of a secondary data collection schedule. Data was analyzed using stata software version 14 where the analysis was based on descriptive analysis and regression analysis. The findings of the reveal that exchange rate had a negative and significant effect on financial performance of non financial firms listed on the NSE, Kenya. The study recommends that firms should engage in cross border operations, that is, firms should have branches in foreign countries as these will aid in cushioning the effect of currency depreciation on financial performance of firms. Further studies can utilize other measures of financial performance such as return on equity and net interest margin. Other studies can also consider internal factors such as firm size and how they affect the relationship between systematic risk factors and non financial firms listed at the Nairobi Security Exchange, Kenya.

Keywords: Exchange Rate, Financial Performance, Modern Portfolio Theory, Stakeholders Theory, Non Financial Firms, Nairobi Securities Exchange.

1. INTRODUCTION

1.1 Background of the study

Globally, the corporate sector of a country performs key roles in influencing its economic outlook (Butt, Hunjira & Rehman, 2010). Therefore, it is important to enhance the financial performance of the sector at both the macro and micro levels. Similarly, firm performance stands as an issue of concern to several stakeholders which range from creditors, owners, debtors, investors, managers of firms and the government (Macharia, 2013). The performance of firms gives shareholders directions in making decisions regarding investments. Podder, (2012) put forward that firm performance provides direction to investors and debtors in their decision making on whether to invest or not invest in certain firms or invest somewhere else. Mahmoudi (2014) performance of firms listed in Tehran Stock exchange indicated poor performance of these firms. Zulaika (2016) did a study on financial performance of firms in Angola, indicated that high performance of firms is key for their continuous existence.

In Africa, the financial performance of firms has been at different levels. The performance of a firm is influenced by various external factors generally referred to as systematic risk factors (Ongore, 2013). In Ghana, Barnor (2014) put forward that the firms are affected by macroeconomic factors. Systematic risk factors refer to factors which affect the

entire economy as a whole rather than a single unit. Furthermore, unlike firm specific factors that are within the framework and control of management of a firm, systematic risk factors are beyond the control of a firm's management (Osamwonyi& Chijuka, 2014). Exchange rate is the quantity of home or local currency needed to exchange a unit of currency of another country. The interest rate is often ascertained by the level of supply and demand of the foreign currencies (BOP) and balance of trade (Mwangi, 2013). High exchange rate indicates depreciation in the value of the local currency. Fluctuations in the level of exchange of currencies of countries are opined to impact of firms' performance (Ongeri, 2014). The study adopted USD/Ksh as an indicator for exchange rate.

The Nairobi Securities Exchange comprises of sixty four listed companies clustered in Automobiles and Accessories, Construction and Allied, Manufacturing and Allied, Investment, Agricultural, Investment Services Banking, Energy and Petroleum, Commercial and Services Telecommunications and Technology, and Insurance (NSE, 2017). However, financial firms listed in the NSE were excluded. Therefore, this study only focused on non financial firms listed in the NSE.

1.2 Statement of the Problem

Firm performance is of vital importance to all stakeholders which span from the shareholders (owners), debtors, investors, firm managers, creditors, government and regulators (Podder, 2012). The performance of listed firms at the NSE has been on a decline (Mwangi, 2014). Non-financial firms including Eveready, Kenya Airways Limited and Uchumi Limited have experienced poor performances (NSE, 2015). Kenya Airways recorded the largest decline in profits in the history of Kenya's corporate sector with a net loss of Sh25.7 billion for the year ended March, 2017. Kenya airways, Mumias, Uchumi Supermarket Ltd, ARM Cement and TranCentury recorded a loss after tax of between 836m to 10.2b for two years that is March 31 2017 & March 31 2016 (NSE, 2017). This has been a great source of concern to all stakeholders.

From the various review of past studies, there exist empirical gaps on the effects of systematic risk factors on performance of listed non financial firms in Kenya. The researches done were largely centered on other nations which makes them not applicable for Kenya due to the different economic environment as exhibited in the economic growth, size of markets among other factors in each country. Furthermore, as opined by Olweny and Omondi (2011), the impact of inflation, exchange rates and interest rates fluctuations are peculiar to each industry. As systematic risk affect all industries in the economy, the extent and nature of these effects is different to each industry to another. In line with this assertion, research results obtained in a study focusing on the banking industry which falls under the financial sector cannot be generalized for non financial sector. Also, the study by Olweny and Omondi was based on stock market performance. Previous were also largely based on multiple regression analysis. This research focused on the financial performance of listed non financial firms, Kenya where panel regression analysis was used.

Due to the various research gaps documented in the preceding paragraph, the current study seeks to address these research gaps in literature which range from contextual to conceptual gaps; this research therefore sought to establish the effects of systematic risk factors on financial performance of Non Financial Firms listed on the NSE. Thereby, providing unique policy recommendations specific to the non financial sector.

1.3 Objectives of the Study

i. To establish the effect exchange rate on financial performance of Non-financial Firms listed on the Nairobi Securities Exchange, Kenya.

1.4 Research Hypothesis

H₀: Exchange rate has no significant effect on financial performance of Non-financial Firms listed on the Nairobi Securities Exchange, Kenya.

1.5 Significance of the study

This research is of significance in the following ways. First, to the management of non financial firms listed on the NSE, it exposes them to the effect of exchange rate on financial performance of firms. The choice of non financial institutions is attributed to the fact that most empirical studies on systematic risk factors and financial performance were centered on financial institutions which is evident in the literature review. Secondly, the study is of importance to the government as policy makers will benefit from the policy recommendations that is provided by this study. Furthermore, the academicians will find this research useful as it serves a foundation for those seeking to embark on further investigation in similar study area.

2. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Modern Portfolio Theory

Modern Portfolio Theory (MPT) is attributed to Markowitz (1952). The theory came to prominence in his paper "Portfolio Selection," in the 1952. The theory is regarded as a finance theory which seeks to maximize the expected return of portfolio given amount of portfolio risk, or on the other hand equivalently minimize risk given a rate of expected return through the careful selection of the right proportions of different financial assets. This is guided by four basic steps which are utilized in the construction of portfolio of assets: first step is the valuation of security, followed by the allocation of assets, thirdly, the portfolio optimization, followed by performance measurement.

Portfolio Theory relates to the current study as it provides a context for the understanding and interpretations of the interactions between exchange rate (macroeconomic environment) and reward. The reward for shareholder which is indicated in their wealth maximization is a function of the macroeconomic environment. Therefore, the MPT has shaped the management of institutional portfolios and also has motivated the utilization of passive investment concepts and techniques. The concept of MPT is key in the financial management of risk and also a theoretical pillar of value-at-risk measures in the world today.

2.1.2 Stakeholders Theory

The theory was formulated by Freeman (1984) who views and institution to be characterized by various stakeholders. These different stakeholder groups evolve from the institution and they are the major components of concern for an organization, therefore, they are to be updated on progress and emerging challenges emanating therein. As put forward by Freeman (1999), organizations will succeed if they can consider those links that affect the organization and also those that the organization can affect.

In business operations, the important groups to be considered are beyond just the management and shareholders. According to Miles (2012), Stakeholders theory advocated for wider groups which can impact on the organization to be considered. Stakeholder theory classifies stakeholders into two groups, internal stakeholders and external stakeholders. The managers, employees and owners are classified as internal stakeholders while the government, suppliers, creditors, community, customers and business environment are regarded as external stakeholders.

Stakeholders Theory provides the link between stakeholders' expectation which ultimately determines the performance of firms. Meeting of the varying stakeholder needs and expectations impact on the performance of organizations. The importance of Stakeholder Theory lies on the fact it presents the enabling framework for ascertaining the structure and operation of an institution that is in line with the complex and varying expectations of the various stakeholders who are guided by different school of thoughts (Sundaram & Inkpen, 2004). Stakeholder Theory supports the dependent variable financial performance.

2.2 Empirical Review

Olweny and Omondi (2011) did an empirical research on the effect of systematic risk factors on stock market performance. The variables considered in the study were exchange rate, inflation and interest rate. Results of the analysis indicate a significant effect of exchange rate, on stock return volatility. Similarly, the study was focused on stock return, this study focused on financial performance of listed non financial firms in Kenya, this, addressing the contextual research gap in literature.

Mwangi (2013) undertook a research in non-financial sector where the study was on the relationship that exists between external factors and firm financial performance of aviation industry in Kenya. The study concluded that the macroeconomic variables are key in predicting the performance of firms in Kenya aviation industry. Specifically, the research findings study reveal that there exist is a negative and insignificant relationship between rate of exchange and ROA. However, the study focused on the aviation industry, the ongoing research focused on all the non financial firms listed on the NSE.

Macharia (2013) also carried out an empirical research on exchange rate effect on the financial performance of Kenyan commercial banks. Using multiple regression analysis to analyze research data, the results indicate a negative and significant effect of exchange rate on the financial performance of commercial banks in Kenya. The investigation by

Macharia was focused on financial institution, that is commercial banks. As such, the findings from such study cannot be applied to that of non financial institutions. In line with this, the current investigation centered on all listed non financial firms listed on the NSE, Kenya.

Njuguna (2013) did an empirical analysis to ascertain the relationship between macroeconomic factors and MFIs financial performance of MFIs. The variables of included in the study were inflation, interest rate and exchange rate. In measuring the financial performance of MFIs, the study utilized ROA. Research findings as per the empirical analysis indicate a negative and significant effect of exchange rate on the financial performance of MFIs. However, the study was centered on MFIs which are financial firms. This study centered on listed non financial firms as it seeks to fill the research gap.

Oroso and Ogeto (2014) did an enquiry on macroeconomic factors and their influence on performance of manufacturing companies listed in Kenya. The research used regression analysis and the results of the study show exchange rate has a significant inverse influence on financial performance. However, this study focused on only manufacturing firms list on the NSE, Kenya. The present study was on all listed non financial firms which filled the contextual gap.

3. RESEARCH METHODOLOGY

3.1 Research Design

Research design refers to the map plan in a study for data collection, measurement and analysis (Kothari, 2011). The study adopted causal research design which is ideal when evaluating the effect and cause relationship between research variables. In line with this, causal research design is ideal for the research as it seeks to establish the effect of systematic risk factors on financial performance of Non Financial Firms listed on the NSE, Kenya.

3.2 Target Population

A study population refers to a set of objects, people or organizations of interest to a researcher for purposes of carrying out investigations (Mugenda & Mugenda, 2003). The target population for this research comprises of the non-financial companies listed at the NSE in Kenya as from January 2013 to December 2017 which are 41 in number. The study was based on a census.

3.3 Data Collection Instruments

This study utilized secondary data which was sourced from the audited financial statements of the sample non financial firms listed on the NSE which are 41 in number, and the Kenya National Bureau of Statistics. Research data was based on the study time period 2013 to 2017 that is 5 years. Notably, the study only considered forty (40) listed non financial firms as the data for one (1) of the firms was not available.

4. DATA ANALYSIS AND PRESENTATION

4.1 Data Analysis and Presentation

Data analysis entails the transformation of raw research data into usable form so as to enable for making of interpretation and conclusions. After the collection of data, it was subjected to both descriptive and inferential analysis. Descriptive analysis was used to provide the mean and standard deviations of th4e research data. This indicated or revealed how the basic feature of the study data. Furthermore, the inferential analysis was based on panel regression model. The panel regression output will be used to make inferences so as to make conclusions and also recommendations. The stata software version 14 was used for the analysis of the study. The inferential statistics provided outcome for answering research questions.

4.2 Descriptive Analysis

Descriptive analysis refers to the use of measures of central tendencies and measures of dispersion to provide the basic characteristics of data in a research. The descriptive analysis is based on mean, standard deviation, maximum and minimum number of values and total number of observation.

Table 1 of the study provides statistics on the descriptive analysis of the study. Descriptive statistics were undertaken which were largely based on measures of central tendencies and measures of dispersion.

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std.Dev.	Min	Max
ROA	200	0.06	0.18	-0.56	0.59
ExchangeRates	200	95.42	7.11	86.10	103.40

Source: Research Data, 2019

Table 1 provides the summary of the descriptive statistics of the study. The statistics show that each of the variables has a total number of observation of 200. ROA had a mean of 0.06 and a standard deviation of 0.18. The maximum and minimum values of ROA were 0.59 and -0.56 respectively. The descriptive statistics on exchange rate indicates a mean of 95.42 and a standard deviation of 7.11 which is an indication that exchange rates over the study period with highly volatile, that is, exchange rates had a fluctuating trend between the period 2013 to 2017. 86.10 and 103.40 were the minimum and maximum respectively values for exchange rates.

4.3 Hausman Test

The researcher did the hausman test to find out on which model to use in carrying out a panel regression. The null hypothesis is that the preferred model is random effect while the alternative hypothesis is that the preferred model is the fixed effect model. A p value of less than 0.05 rejects the null hypothesis therefore the fixed effect model is used, while a p value of 0.05 fails to reject the null hypothesis therefore a random effect model is used. A p-value of 0.9937 was obtained, which is more than 0.05. From this finding the null hypothesis was not rejected hence the study relied on the random effect model to carry out a panel regression.

4.4 Regression Analysis

The researcher did a panel regression analysis. The results were as indicated in Table 2 below.

Table 2: Panel Regression Analysis

Variable	Coefficient	Standard Error	Z	P> z
Exchange rate	-0.1218753	0.0075062	-16.24	0.000
Constant	28.58427	0.7941129	36.00	0.000
R-sq = 0.9210, Wald chi2(3) = 2284.17, Prob> chi2 = 0.0000				
<i>*significant at 5 percent</i>				

Source: Research Data, 2019

Results from Table 2 shows the overall R^2 is 0.9210 which implies that collectively the systematic risk factors explain 92.10% of the movements in the financial performance (ROA) of non financial firms listed at the Nairobi Securities Exchange, Kenya. Furthermore, a unit increase in exchange rate brings about a 0.122 decrease in the financial performance of non financial firms listed at the Nairobi Security Exchange, Kenya.

4.5 Hypothesis Testing

The objective of the study was to determine the effect of exchange rate on financial performance non financial firms listed at the Nairobi Security Exchange, Kenya. The findings of the study indicated that an increase in interest rate leads to a decrease in the return on assets of firms by 0.122 which is significant at 0.05 significance level based on the findings in Table 2. Therefore, exchange rate had a significant negative effect on financial performance non financial firms listed at the Nairobi Security Exchange, Kenya. The negative effect of exchange rate on financial performance of firms can be attributed to the notion that firms also engage in international trade, the increases in exchange rates imply depreciation of the home/local currency, as such firms will need more of local currency to acquire raw materials and other goods from the international market. This however has a resultant effect on their profitability and in turn financial performance. The financial performance of firms is therefore depleted as a result of increasing rate of currency exchange between the home currency and other of other countries in the international market.

The findings of the study on the effect of exchange rate on financial performance are in line with that the study by Olweny and Omondi (2011) did an empirical research on the effect of systematic risk factors on stock market performance. The variables considered in the study were exchange rate, inflation and interest rate. Results of the analysis indicate a significant effect of exchange rate, on stock return volatility. Thus, similar findings with the current study. The study

however, focused on stock return, this research was focused on financial performance of listed non financial firms in Kenya, this, addressing the contextual research gap in literature.

Similar results were also found by Osoro and Ogeto (2014), Njuguna (2013) and Macharia (2013). Macharia (2013) did an analysis on exchange rate effect on the financial performance of Kenyan commercial banks. Using multiple regression analysis to analyze research data, the results indicate a negative and significant effect of exchange rate on the financial performance of commercial banks in Kenya. The investigation by Macharia was focused on financial institution, that is commercial banks. As such, the findings from such study cannot be applied to that of non financial institutions. In line with this, the current investigation centered on all listed non financial firms listed on the NSE, Kenya.

Njuguna (2013) did an empirical analysis to ascertain the relationship between macroeconomic factors and MFIs financial performance of MFIs. The variables of included in the study were inflation, interest rate and exchange rate. In measuring the financial performance of MFIs, the study utilized ROA. Research findings as per the empirical analysis indicate a negative and significant effect of exchange rate on the financial performance of MFIs.

Osoro and Ogeto (2014) did an enquiry on macroeconomic factors and their influence on performance of manufacturing companies listed in Kenya. The research used regression analysis and the results of the study show exchange rate has a significant inverse influence on financial performance. However, varying results are that of Mwangi (2013) who did a study on the relationship that exists between external factors and firm financial performance of aviation industry in Kenya. The study concluded that the macroeconomic variables are key in predicting the performance of firms in Kenya aviation industry. Specifically, the research findings of the study reveal that there exist is a negative and insignificant relationship between rate of exchange and ROA. This varying result can be attributed to the fact that the study was on the Aviation industry while this study focused on all listed non financial firms at the NSE, Kenya.

5. SUMMARY CONCLUSION AND RECOMMENDATIONS

5.1 Summary of the Study

The study was guided by three (3) objectives, which were to determine the effect of exchange rate on financial performance of non financial firms listed at the Nairobi Securities Exchange, Kenya. The output from the panel regression analysis indicated that exchange rate had a negative and significant effect on financial performance of non financial firms listed at the Nairobi Securities Exchange, Kenya.

5.2 Conclusion and Policy Recommendation

The study found out that exchange rate had a negative and significant effect on financial performance of non financial firms listed at the Nairobi Securities Exchange, Kenya. The study therefore concludes that the prevailing exchange rate in the economy is significant in predicting the financial performance of non financial firms listed at the Nairobi Securities Exchange, Kenya. Therefore, as exchange rates rise, firms are made to acquire loans at higher rates and these in turn is reflected in the depleted profitability of firms, hence detrimental to their financial performance.

The recommendation of the study is that firms should engage in cross border operations, that is firms should have branches in foreign countries as these will aid in cushioning the effect of currency depreciation on financial performance of firms.

5.3 Suggestions for Further Studies

Financial performance of firms was assessed using return on assets (ROA). As such further studies can utilize other measures of financial performance such as return on equity (ROE) and net interest margin (NIM). Other studies can also consider internal factors such as firm size and how they affect the relationship between exchange rate and financial performance of non financial firms listed at the Nairobi Security Exchange, Kenya.

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