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**Influence of High Cost of Living, Oil Price, Government
Expenditure and Exchange Rate Effect on Stock Market Return
Volatility. A Critical Literature Review**



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Influence of High Cost of Living, Oil Price, Government Expenditure and Exchange Rate Effect on Stock Market Return Volatility. A Critical Literature Review

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Abstract

Purpose: The financial services sector aims at creating a vibrant and globally competitive financial sector promoting high-levels of savings and financing for investment needs. The overall objective of this study was to examine influence of high cost of living, oil price, government expenditure and exchange rate effect on stock market return volatility. A critical literature review

Methodology: The paper used a desk study review methodology where relevant empirical literature was reviewed to identify main themes and to extract knowledge gaps.

Findings: The study also concluded that among the variables under study oil price, inflation, government spending and exchange rate, only exchange rate is significant in explaining the volatility in stock returns in Nairobi securities exchange. Positive shocks are associated with higher volatility than negative shocks. Policy makers should enhance exchange rate stability as well as making sure that inflation is suppressed so as to spur growth in the economy.

Unique Contribution to Theory, Policy and Practice: The study recommends that the government should also increase production of energy locally so as to reduce over reliance on imported oil, reduce the cost of production as well as suppressing the rate of inflation in the economy. This study recommends that Policy makers, and investors, need to take the macroeconomic variables into account when formulating financial and economic policies which are necessary to encourage investment.

Keywords: *Influence, High Cost Living, Oil Price, Government Expenditure, Exchange Rate, Stock Market Return Volatility.*

INTRODUCTION

According to economic theory, the functioning of the stock market should be closely related with the behavior of the macroeconomic variables in an economy so as to necessitate forecasting for quality policy formulation. Stock exchange enables the firms to attain capital quickly due to the ease with which trading of securities in the stock market is executed. (United Nations, 2016). Therefore, the efficiency of stock market returns and the volatility of stocks require to be investigated continuously to infer proper and quality formulation of policies geared towards attraction and retaining of potential investors. Financial analysts and investors are interested in understanding the nature of volatility patterns of financial assets and what events can alter and determine persistence of volatility over time (Fama, 2020). Volatility can be considered as a measurement of the uncertainty of the risk that is associated with stock market investment decisions (Sharpe, 2018). The opinion of Umar (2014) is that the presence of and challenges emanating from volatility in various emerging stock exchanges is almost a common phenomenon. Zakaria (2022) are of the view that the volatility of the return on the market portfolio is inversely related to the ratio of expected profits to expected revenues of the economy.

Oil price is an important input in production where changes in oil prices affects real economic activity in all sectors which cause the stock returns to change. According to Basher Haug and Sadorsky (2011), changes of oil prices directly influence the rate of growth in the economy. The increase of the oil prices generates uncertainty in the financial markets which can induce a decrease in stock prices hence stock returns. (Litner, 2015). Government spending is one of the key macroeconomic variables that shape economic growth and development. Government spending has an impact on household income who may decide to invest part of their income in stock market depending on the rate of return on the alternative investment (Kipra, 2021).

Exchange rates affect the competitive position of companies and their profitability. A rise in exchange rate (depreciation) causes a decrease in stock returns. Companies which rely heavily on imports suffer from higher costs due to a weaker domestic currency hence lower earnings. On the other hand, domestic products will become cheaper to foreign traders hence a benefit to the domestic exporters. Inflation rate is a key macroeconomic variable in economies. Unexpected inflation triggers a rise in the living cost which will tend to shift the resources from the investment to consumption expenditure. As inflation goes up, discount rate used to determine intrinsic values of stocks will therefore increase which will reduce the present value of net income leading to lower stock prices (Talla, 2013)

Statement of the Problem

Studies that have been conducted in developed and developing economies on the macroeconomic variables, stock market return and volatility realize a lot of conflicting findings in terms of the causality. Olweny and Omondi (2014) and kirui (2014), investigated the effect of macroeconomic variables on stock market return in Kenya where the former found inflation to be significant while

the latter found it to be insignificant. Ouma and Muriu (2014) found inflation to be significant while Rajni et al (2017) who investigated the effect of macroeconomic variables on stock market return for four economies; Brazil, China, Russia and India where found no relationship between exchange rate, oil prices and the stock market return. If volatility of stock returns could be predicted by use of the available macroeconomic information, therefore information on rational portfolio selection and diversification geared towards increasing returns would be easily established. It is evident that there is no consensus in literature of the main factors causing volatility where factors vary from one study to another. There is need for an in-depth and an extensive evaluation to determine influence of high cost of living, oil price, government expenditure and exchange rate effect on stock market return volatility.

Objective of the Study

The overall objective of this study was to examine influence of high cost of living, oil price, government expenditure and exchange rate effect on stock market return volatility. A critical literature review.

Significance of the Study

The study will provide a platform for the government in the formulation of policies with regard to control of excessive stock return volatility and promotion of investment in the stock market. By investigating the influence of high cost of living, oil price, government expenditure and exchange rate effect on stock market return volatility, the study will be of great use to the investors since it will raise their returns predictability power and help them make quality and sound investment decisions. The study is also geared towards enriching the school education curriculum as well as forming a basis for the academicians who would like to carry out further research on determining the effects of macroeconomic variables on stock market return.

THEORETICAL REVIEW

This study will benefit from the capital asset pricing model was developed by Sharpe (1964), efficient market hypothesis model developed by Fama (1970) and arbitrage pricing theory (APT) established by Ross (1976).

Capital Asset Pricing Model (CAPM)

The capital asset pricing model was developed by Sharpe (1964), Lintner (1965) and Mosin (1966). It provides a theory that predicts an exact relation to hold for the expected returns of all securities in relation to the market portfolio expected return. CAPM operates under the concept of efficient markets where in an efficient market; the return of an asset includes a premium for risk that cannot be diversified away. CAPM comprises of only one independent variable which is the risk premium of the market. The risk premium should be fully explained by the covariance between asset returns and market return. (Takala and Pere, 1991). The expected return is given by the summation of the risk free rate of return and the premium. The main criticism of capital asset

pricing model is particularly the use of betas in predicting the return of assets. Returns on high beta stocks will tend to be overestimated while the returns on low beta stocks are underestimated. (Groenewold and Fraser, 1997). Therefore, application of the capital asset pricing model may not be accurate.

Efficient market hypothesis

This model was developed by Fama (1970). The model states that in an efficient market, all the important information concerning the changes in macroeconomic variables is fully reflected in the current stock prices. Also, stock prices fully and rationally incorporate all the relevant information and therefore this theory supports the idea that the changes in any macroeconomic variables should not affect stock much, thereby discrediting its applicability in stock returns.

Arbitrage Pricing Theory (APT)

APT was established by Ross (1976). It builds on a multifactor model to develop a theory of asset pricing. It is based on the tenet that in a well-functioning security market, no arbitrage should exist. APT is generally assumed to be an equilibrium pricing model that extends the original CAPM from a single factor to a multifactor model. It assumes that the return on an asset is a linear function of any number of macroeconomic factors such as exchange rate, industrial production inflation, government spending, foreign direct investment and changes in oil prices. These factors are denoted with factor specific coefficients that measure the sensitivity of the assets to each factor. APT states that the realized return on an asset is composed of the expected return at the beginning of a time period and the unexpected realization of K risk factors during that time period plus firm specific risk. The model requires that the returns on any stock should be linearly related to a set of indexes. The empirical evidence that APT takes more than one factor to explain the systematic risk in securities discredits CAPM. By demonstrating that the risk premium of an asset depends only on its systematic factor loading, the APT provides investors with a result of great practical value that the CAPM.

EMPRICAL REVIEW

Kinuthia (2022), conducted a study to examine whether stock market liberalization, by improving the functioning of domestic stock market accelerates economic growth in Kenya. The study also evaluated the nature of the relationship between stock market performance and economic growth in Kenya. The stock market liberalization and performance were measured using two variables namely stock market size as measured by stock market capitalization and stock market turnover respectively. The study used quarterly time series data collected through secondary sources and covered a period of 22 years from January, 1991 to December, 2012. The study utilized econometric techniques of Vector Autoregressive (VAR) and Granger Causality Tests to explore the relationships. The empirical results showed a uni-directional causal link that runs from stock market development to economic growth and there is evidence of an indirect transmission

mechanism through the effect of stock market development on investment. The study found that stock market liberalization has a significant positive impact on the economic growth in Kenya. The study presented a conceptual gap as it focused on whether stock market liberalization, by improving the functioning of domestic stock market accelerates economic growth in Kenya while our study will focus on influence of high cost of living, oil price, government expenditure and exchange rate effect on stock market return volatility.

Wainana (2022), conducted a study that sought to determine how cross border listing announcement in the Dar-es Salam Securities Exchange, Rwanda Securities Exchange, and Uganda Securities Exchange behaves in relation to the return in stocks at the Nairobi Securities Exchange. Anchoring the study were two theories, namely signalling theory and the efficient market hypothesis, to explain the relationship between cross border listing announcements and stock returns at all Nairobi Securities Exchange listed firms. The explanatory research methodology on seven cross listed firms with a forty-day event window was applied. The results indicate that that p values for Keya Airways, East Africa Breweries Limited, Jubilee, Nation Media, Uchumi and Kenya Commercial Bank cumulative abnormal returns on Dare-Salam Securities Exchange are insignificant at 95% confidence interval. The findings also indicate that that p values for Kenya Airways, East Africa Breweries Limited, Jubilee, Equity, Nation Media, Uchumi and Kenya Commercial Bank cumulative abnormal returns on Uganda Stock Exchange are all more than 0.05 ($P > 0.05$) hence, insignificant. Finally, the results indicate that p values for Kenya Airways, East Africa Breweries Limited, Jubilee, Equity, Nation Media, Uchumi and Kenya Commercial Bank cumulative abnormal returns on Rwanda Securities Exchange are insignificant at 95% confidence level. The study presented a methodological gap as it utilized explanatory research methodology while our study will be a desktop review approach. .

Mureithi (2019), carried a study on to examine the effect of stock splits at the NSE and whether the investor can make abnormal return ;To determine the effect of stock splits on Liquidity at NSE and ; To establish the effect of stock splits on Company ownership. .Results indicated that generally, there was an increase in the volumes of shares traded when stock splits were announced. This was especially so in the days around the stock splits. Trading activity was also seen to generally increase after the stock split as compared to that before the split. The results indicate that there is a positive cumulative abnormal return during the entire event window of stock split and after completion stock split. The study presented a conceptual gap as it focused on examining the effect of stock splits at the NSE and whether the investor can make abnormal return while our study will focus on influence of high cost of living, oil price, government expenditure and exchange rate effect on stock market return volatility.

Makau (2018), conducted a study to find out the influence of classroom learning environment on lower primary school pupils' performance in social studies in lower primary schools in Kibwezi zone in Makueni County, Kenya. The study employed descriptive survey design. Data was

analyzed using descriptive statistics. Results showed that a number of variables in this study were influencing classroom learning environment which contributed to poor performance in social studies in Kibwezi zone. It was recommended that parents be sensitized to participate in forums which could help primary schools get funded for teaching /learning materials and facilities by funding organizations and government agencies such as CDF and county Government. It was also recommended that TSC should employ more qualified teachers to reduce pupil-teacher ratio. More so, the Government should increase the Free Primary School funding to enable schools buy more teaching /learning materials and build more physical facilities. The study presented a methodological gap as it focused on descriptive survey while our study will focus on desktop review approach.

Kimathi (2015), conducted a study on ought to establish the effect of union wages on management staff wages. Time series data for the period 1968 to 2013 was used. The results revealed that number of management staff, gross profit before tax, previous period wage of management staff and wage of unionisable staff were statistically significant determinants of management staff wages. The other variables were found to be statistically insignificant. The study confirms the need of coming up with a way to measure labour productivity that is acceptable to all the players in the banking industry. It also revealed the need to ensure that management staff wages do not lag behind as the wages of unionisable staff rise. The study however presented a conceptual gap as it focused on the effect of union wages on management staff wages. Time series data for the period 1968 to 2013 was used while our study will focus on influence of high cost of living, oil price, government expenditure and exchange rate effect on stock market return volatility.

Kamande (2015), conducted a study on investigating the macroeconomic variables and stock market return in Nairobi securities exchange limited. Regression analysis was done using ADF test for unit root and Johansen for co integration. Toda and Yamamoto Granger causality was applied to establish the causal relationship between the set of macroeconomic variables and the NSE 20 share index while Power Garch model was employed to determine the volatility. Diagnostic test showed that all the variables are integrated of order one. The co integration test confirmed presence of long run relationship between the NSE stock market 20 share index and the selected macroeconomic variables. The analysis revealed a uni-directional relationship which runs from the NSE stock market index to the inflation rate, a uni directional relationship from foreign exchange rate to NSE index and a bilateral causality between oil price and the stock market return. Presence of arch effects was noted and that the results of the power Garch model show that the magnitude of shocks has a significant impact on volatility of stocks. The study showed that exchange rate contributes greatly and significantly to volatility of stock returns at Nairobi securities exchange. The study however presented a contextual gap as it focused on macroeconomic variables and stock market return in Nairobi securities exchange limited while our study will focus on influence of high cost of living, oil price, government expenditure and exchange rate effect on stock market return volatility.

Mbogho (2012), conducted a study to investigate the role that compensation plays in motivating employees and ensuring their job satisfaction, and thus uncovering the existing relationship between compensation and employee performance at KPA. Both descriptive and inferential statistics were adopted with a focus on both qualitative and quantitative characteristics and status of compensation and employee performance at KPA. The result revealed that other than basic pay staff are offered house allowance, mileage allowance and mobile allowance. Further study findings indicated that staff is to a large extent dissatisfied with pay offered. Promotion and pension were highlighted as not contributing to improving KPA's performance. This result reveals that there is a statistically significant, direct and positive relationship between compensation and job satisfaction and motivation. In addition, the result indicates that there is a statistically significant, direct and positive relationship between compensation and organizational performance. Therefore, this study confirms that a total compensation management programme, which includes payment or compensation, benefits and informal recognition is required to optimise the motivation and satisfaction levels of staff which would result in increased organizational performance. Thus, the Authority could benefit by focusing on the compensation factors that positively impact employee motivation and job satisfaction. The study was done in KPA presenting a contextual gap, our study will be done in stock market.

METHODOLOGY

The study adopted a desktop literature review method (desk study). This involved an in-depth review of studies related to influence of high cost of living, oil price, government expenditure and exchange rate effect on stock market return volatility. Three sorting stages were implemented on the subject under study in order to determine the viability of the subject for research. This is the first stage that comprised the initial identification of all articles that were based on influence of high cost of living, oil price, government expenditure and exchange rate effect on stock market return volatility. The search was done generally by searching the articles in the article title, abstract, keywords. A second search involved fully available publications on the subject on influence of high cost of living, oil price, government expenditure and exchange rate effect on stock market return volatility. The third step involved the selection of fully accessible publications. Reduction of the literature to only fully accessible publications yielded specificity and allowed the researcher to focus on the articles that related to influence of high cost of living, oil price, government expenditure and exchange rate effect on stock market return volatility. After an in- depth search into the top key words (influence of high cost of living, oil price, government expenditure and exchange rate effect on stock market return volatility), the researcher arrived at 7 articles that were suitable for analysis. This were findings from:

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economic growth in Kenya. The stock market liberalization and performance were measured using two variables namely stock market size as measured by stock market capitalization and stock market turnover respectively. The study used quarterly time series data collected through secondary sources and covered a period of 22 years from January, 1991 to December, 2012. The study utilized econometric techniques of Vector Autoregressive (VAR) and Granger Causality Tests to explore the relationships. The empirical results showed a uni-directional causal link that runs from stock market development to economic growth and there is evidence of an indirect transmission mechanism through the effect of stock market development on investment. The study found that stock market liberalization has a significant positive impact on the economic growth in Kenya.

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SUMMARY, CONCLUSION AND RECOMMENDATIONS

Conclusion

The study also concluded that among the variables under study oil price, inflation, government spending and exchange rate, only exchange rate is significant in explaining the volatility in stock returns in Nairobi securities exchange. Positive shocks are associated with higher volatility than negative shocks. Policy makers should enhance exchange rate stability as well as making sure that inflation is suppressed so as to spur growth in the economy.

Recommendations

The study recommends that the government should also increase production of energy locally so as to reduce over reliance on imported oil, reduce the cost of production as well as suppressing the rate of inflation in the economy. This study recommends that Policy makers, and investors, need to take the macroeconomic variables into account when formulating financial and economic policies which are necessary to encourage investment.

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