The Effect of Interest Rate Control on the Stock Market Performance, a Case of Nairobi Securities Exchange Market

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Abstract

The objective of this study was to establish the effect that interest rate control has on the performance of stocks at the Nairobi securities exchange. Interest rate is one of the important macroeconomic variables, which is directly related to economic growth. It is considered as the cost of capital, the price paid for the use of money for a period of time. Interest rate control is a recent measure undertaken as a result of commercial banks continuing to charge high interest rate despite the measures undertaken by the Central Bank of Kenya to reduce interest rates. The regulation was seen by the public as a measure that will enable access to credit. However, development agents like World Bank and other macroeconomic experts have been warning of dire negative consequences on the economic due to constrained credit access to high risk clientele. One of the expected economic sector is the stock market which plays very crucial role in economic growth and development. Nairobi Securities Exchange has been experiencing reduced performance with commercial banks shares trading at less than par value. There is no empirical literature to establish whether the poor performance of the stock market has been due to interest rate control. The target population of this study consisted of all the 61 company stocks. This study used secondary data which was obtained from the Nairobi Securities exchange, Central Bank of Kenya and Kenya National Bureau of Statistics for a five year period from January 2012 to January 2017.The NSE All Share Index was selected as representative of the overall stock prices. Quantitatively, information was presented in tables and figures. Descriptive statistics like the mean and standard deviation were used to describe the data. Regression analysis was conducted using the statistical package for social sciences to achieve the study objectives. Event analysis technique was used in establishing how interest rate control affected stock market performance. The study found that interest rate control had a negative effect on stock market performance in Kenya. This was against the empirical finding that lending interest rates have a negative effect on stock market performance. From regression finding, interest rate control was expected to improve stock market performance due to reduced interest rate though this was not the case. The findings could be due to reduced credit availability as commercial banks advance less loans due to the perceived credit risk. The study therefore recommends for removal of interest rate cap to avoid the negative consequences it has on the stock market performance. Reduced stock market performance is an indicator of reducing economic performance due reduced credit and hence economic activity. Further repeat study was recommended in the future since interest rate control in Kenya came to effect in October 2016 with this study being carried out five months after. It could possible that the effect of interest rate control may not have existed long enough and therefore short term effect may be different from the long term effect where the negative relationship may not exist in the long term. Further study is therefore a repeat study is therefore recommended to be done in the future to evaluate the accuracy of these results. Repeat study was also recommended where other key variables affecting stock market performance that could be *used as control variables and not only the two macroeconomic factors being included. These factors could be liquidity, management styles and profitability of listed firms could affect performance of the stock market. The stock market may also be affected by social factors on the players of the stock market which could be included in the study.*

Key Words: *Interest Rate Control, Stock Market Performance*

Background

For decades, the Kenyan banks have been enjoying interest rate spreads of about 11.4% on average, way above the world average of 6.6% (CBK, 2014). Owing to this interest rates being high, the government pushed for interest rate control regulation which required financial institutions to charge interest rates within specific range. The regulation was seen by the public as a measure that will enable access to credit. However, development agents like World Bank and other macroeconomic experts have been warning of dire negative consequences on the economic due to constrained credit access to high risk clientele. One of the expected economic sector is the stock market which plays very crucial role in economic growth and development (Barasa, 2016). Nairobi Securities Exchange has been experiencing reduced performance with commercial banks shares trading at less than par value. There is no empirical literature to establish whether the poor performance of the stock market has been due to interest rate control.

The stock market is a market that deals with the exchange of shares of publicly quoted companies, government, corporate and municipal bonds among other instruments for money (Aggarwal, 2010). It comprises of a major segment of the economy as it contributes greatly to the economic segment. Not only does it promote savings and investments, but also provide an avenue geared towards portfolio diversification. Additionally, they channel savings in to investments, convert investments into cash thus supplying market liquidity and manage securities (Ayopo *et al*, 2016). The stock market performance thus acts as an indicator of the overall performance of the economy in the sense that it assists to allocate the necessary capital needed for the consistent growth of an economy (Garza-Garsia & Yu, 2010).

However, the stock market is a volatile environment with dramatic moves that can either give investors a positive or negative stock market return (Easterling, 2011). This thus necessitates the government and other regulatory bodies to closely monitor the various factors that determine how exactly the stock market performs. Particularly, changes in interest rates have been established to carry information about certain changes in future fundamental and hence affecting stock market returns (Liu and Shrestha 2008). The interest rate is essential in monitoring the inflation levels in the country. As such an increase in the interest rate will help reduce the exchange rate depreciation and thus curb the inflation pressure.

Changes in the interest rates will have impact on both the businesses and investors (Aggarwal, 2010). This is attributed to that increased interests will result in businesses will slow down the implementation of their business plans and investors will reduce their investments in the financial markets. However the exact impact will depend on, among other factors such as the absolute level of the interest rate and the perception about the interest rate hikes. This is in accordance to Arbitrage Pricing Theory, whereby the expected stock returns is assessed by taking into account various factors and their sensitivities that might affect stock price movement (Bartram 2002).

Statement of the Problem

The stock market plays an important role in financial intermediation in developed and developing economies by providing a platform by which surplus resources to be transferred to deficit areas (Vopo *et al*, 2016). Nairobi Securities Exchange has been experiencing dwindling performance lately with commercial banks shares trading at less than par value. There is no empirical literature to establish whether the poor performance of the stock market has been due to interest rate control. Interest rate control is a recent measure undertaken as a result of commercial banks continuing to charge high interest rate despite the measures undertaken by the Central Bank of Kenya to reduce interest rates. The regulation was seen by the public as a measure that will enable access to credit. However, development agents like World Bank and other macroeconomic experts have been warning of dire negative consequences on the economic due to constrained credit access to high risk clientele. Basing argument on the monetary policy rule, the interest rate control is key in the determination of the direction by which the economy activities, growth and development due to the effect of liquidity (Ayopo *et al*, 2016).

Empirical evidence available does not clearly predict the relationship between interest rate control and stock market performance. Kibet (2011) found that there was a bidirectional negative causal relationship between interest rates and share price. Muriuki, (2014) established that there were statistically significant positive relationship between interest rates and market returns. Vopo *et al*, (2016) conducted a study on the relationship between macroeconomic variable volatility and stock market return and found that stock prices responded significantly to innovations in the interest rate and the real gross domestic product. Similarly, Amata, *et al*, (2016) studied the relationship between interest rate, inflation and stock market volatility in Kenya and revealed that there was a positive and significant long run relationship between the variables. Chirchir (2012), found that there exists an insignificant negative relationship between share prices and interest rates. In relation to interest rates control, Jahur *et al*. (2014) established that pragmatic policy measures such as sound macro-economic policy were essential for monitoring interest rate and exchange rate movement.

This shows that though the available literature tries to pre-determine the exact determinants of stock returns, there is scarcity of studies conducted on the impact of interest rate control especially in the Kenyan context. It is unclear whether there exists a negative or positive relationship given the varying conclusions from the literature review. Since the Nairobi Securities Exchange has dwindled in the recent past, there is doubt whether this has been due to interest control specifically while examining the returns of commercial banks' share prices which have been less than nominal value of the shares. This study intended to find out how interest rate control effect performance of stock market and make recommendations on the importance of interest rate control. The study answered the question; what is the effect of interest rate control on stock market returns in the NSE?

Objective of the Study

To determine the effect of interest rate control on the stock market performance, a case of Nairobi Securities Exchange Market.

Research Methodology

The study adopted descriptive survey design. The target population of the study consisted of all the 61 company stocks listed on the NSE as at January 2017. This study used purely secondary data. The data for stock Performance was obtained from the Nairobi Securities exchange. Data on exchange rate and interest rates was obtained from the Central Bank of Kenya while data on inflation was obtained from the Kenya National Bureau of Statistics. All the data was collected for a ten year period from 2012 to 2017 on monthly basis. The main aim for this long duration was to achieve a more comprehensive coverage and a better chance of getting more accurate results.

Study Findings

Event analysis findings using hypothesis testing indicated that interest rate regulation had significant effect on stock market performance. The obtained t-test was negative indicating that interest rate control had a negative effect on stock market performance. This was against the empirical finding that lending interest rates have a negative effect on stock market performance. From this previous finding, interest rate control was expected to improve stock market performance due to reduced interest rate though this was not the case. The findings could be due to reduced credit availability as commercial banks advance less loans due to the perceived credit risk. The findings could be explained by argument by Vopo *et al*, (2016) who found that stock prices responded significantly to innovations in the interest rate and the real gross domestic product but did not show how interest rate controls affected stock market performance. Amata, *et al* (2016) found the relationship between interest rate and stock market volatility to be negative and weakly significant both in the short run although did not relate them to performance of stock market.

Inflation rate had a negative effect on stock market performance in Kenya. This was indicated by negative coefficient of correlation. The negative effect of inflation on stock market performance was strong since the coefficient of correlation was greater than 0.5. The relationship was statistically significant ($p<0.05$). Exchange rate had positive effect on stock market performance in Kenya. This was indicated by positive coefficient of correlation. The positive effect of exchange rate on stock market performance was strong since the coefficient of correlation was greater than 0.5. The relationship was statistically significant ($p<0.05$). Interest rate had negative effect on stock market performance in Kenya. This was indicated by a negative coefficient of correlation. The negative effect of interest rate on stock market performance was strong since the coefficient of correlation was greater than 0.5. The relationship was statistically significant ($p<0.05$).

Policy Recommendations

Interest rate control was concluded to have a negative effect on stock market performance in Kenya. This was against the empirical finding that lending interest rates have a negative effect on stock market performance. Thus interest rate control was expected to improve stock market performance due to reduced interest rate though this was not the case. The findings could be due to reduced credit availability as commercial banks advance less loans due to the perceived credit risk. The study therefore recommends for removal of interest rate cap to avoid the negative consequences it has on the stock market performance. Reduced stock market performance is an indicator of reducing economic performance due reduced credit and hence economic activity.

Exchange rate, inflation and interest rates combined were found to significant positive effect on stock market performance in Kenya. This implied that depreciating exchange rate, low inflation and low interest rates combined will have a significant positive effect on stock market performance in Kenya. However, the study recommends that the government bodies with responsibility over macroeconomic variables to determine the appropriate level for macroeconomic variables considering the trade-off between the variables. Stable exchange rate will need to be maintained since depreciation of Kenya shilling vs the USD will exert pressure on inflation and interest rates and deepen the performance of stock market.

Areas for Further Research and Limitations of the Study

Interest rate control in Kenya came to effect in October 2016 with this study being carried out five months after. It may be possible that the effect of interest rate control may not have existed long enough and therefore short term effect may be different from the long term effect where the negative relationship may not exist in the long term. Further study is therefore a repeat study is therefore recommended for longer period to evaluate the accuracy of these results.

Repeat study is also recommended where other key variables affecting stock market performance that could be used as control variables and not only the two macroeconomic factors being included. These factors could be liquidity, management styles and profitability of listed firms could affect performance of the stock market. The stock market may also be affected by social factors on the players of the stock market which could be included in the study.

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