

THE EFFECT OF FISCAL POLICY ON THE PERFORMANCE OF THE NAIROBI SECURITIES EXCHANGE IN KENYA

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Abstract

The main objective was to assess the effect of fiscal policy on the performance of the Nairobi Securities Exchange in Kenya. The specific research objectives were; To investigate the effect Government expenditure and Government domestic debt on performance of Nairobi securities market. The Broad Money supply was used as a control variable so as not to ignore the fact that fiscal and monetary policies always interact to affect stock market performance. The study employed a causal research design and used secondary time series data to investigate the problem where stock market performance as the dependent variable was measured by the NSE 20 share index and the variable of Government Expenditure, domestic Debt and Money Supply were measured as percentages of GDP. The unit roots test showed that all the variables had a single unit root at level. This prompted the application of robust methods of analysis. The results from the autoregresssive distributed lag model (ARDL) regression analyses showed that the fiscal policy variables had a significant effect on performance. Expenditure had a positive effect, domestic debt was found to have both positive and negative effect while money was found to have a negative but insignificant control power in the models.

Keywords: Performance of the Nairobi Securities Exchange, Government Expenditure, Domestic Debt, Money Supply, Gross Domestic Product (GDP)

INTRODUCTION

A stock exchange or a securities market is a regulated market where the public can trade listed securities in line with well-documented rules and regulations (Dagar, 2014). It provides an opportunity to stockbrokers to trade in stocks, bonds, among other securities. Securities markets also offer facilities for the issue and redemption of securities and other financial instruments. They also offer avenues for capital events such as paying income and dividends (Dagar, 2014).

The stock market has an important role in a country's macroeconomic development (Zakaria & Shamsuddin, 2012). Studies have shown that proper functioning financial systems result in economic growth and stock markets lie at the heart of these financial systems. The stock markets facilitate growth of companies by mergers, acquisitions or fusions, are instrumental in mobilizing savings for investment, create investment opportunities for small investors, promote corporate governance, help governments raise capital for development and are indicators of the economy (Kaur, 2014). They serve as a means of transforming savings into financing for different sectors of the economy. Efficient stock markets have been shown to make corporations compete on an equal basis for funds thus making investment more efficient (El-Wassal, 2013).

Fiscal policy is a major factor that influences the economic performance in a country. Through fiscal policy, a government can determine spending and revenue levels (Afonso & Sousa, 2011). According to John Maynard Keynes, by increasing or decreasing the levels of revenue and expenditure, representing taxes and spending, respectively, a government can influence inflation, employment, and the flow of money within an economy (Muyanga, 2014). Fiscal policy therefore involves the use of government taxation and spending to influence the economy in terms of stabilizing national output, economic growth, employment and inflation. In addition, fiscal policy can support aggregate demand, boosting the economy and potentially driving stock prices higher (Chatziantoniou, Duffy, & Filis, 2013). Fiscal policy that increases aggregate demand directly through an increase in government spending, is referred to as expansionary while fiscal policy is often considered contractionary if it reduces demand via lower spending (Horton & El-Ganainy, 2009).

Statement of the Problem

The performance of the Nairobi Securities Exchange has been on a decline. Despite posting a profit before tax of Ksh 233.1 Million in 2016, it was still a 39% decrease from Ksh. 381.5 Million in 2015. The profit before tax of Ksh 381.5 Million posted in 2015 was also a 13.6% decrease from Ksh. 441.8 million posted in 2014. The decline was because of the compounding

macroeconomic effects in the economy and a decline in equity turnover. The NSE 20 Share Index recorded a decline of 20.9% from 5113 points on close of December 2014 to close at 4041 points at the close of trading in December 2015 and a further decline of 21.15% from 4,041 points at the close of December 2015 to close at 3,186.21 points at the close of trading day in December 2016. Statistics indicate that equity turnover decreased by 3 per cent from 215 Billion Kenyan Shillings in 2014 to 209 Billion Kenya Shillings in 2015 to 147 Billion Kenyan Shillings in 2016 (NSE 2015 & 2016 Annual Reports). In 2016, the Nairobi Securities Exchange emerged as the worst performing in the world. Nigerian Stock Exchange previously held this position, in 2015. The NSE closed the second week of trading in January 13 2017 at 2971.10, a 10-year low, last witnessed in 2009. The poor performance of the NSE affects other regional stock exchanges where Kenyan companies are cross-listed like the Uganda Securities Exchange, which has eight cross-listed firms, Dar-es-Salaam Stock Exchange, which has six and the Rwanda Securities Exchange, which has four. The investors in the NSE as well as the regional stock exchanges also lose millions of dollars because of decline in market capitalization.

Pardy (1992) notes that sound, efficient securities market can contribute to economic growth in the long run while in the short run they play an important role in financial liberalization and deepening. Pardy (1992) also insists on the importance of a conducive macroeconomic and fiscal environment as prerequisites for the development of security markets among other factors like legal, regulatory and institutional infrastructure, certainty about property rights, transparent trading and other procedures, protection against unfair practices by insiders and public disclosure by companies of all information relevant to the value of their securities. Additionally, the absence of a well-developed and efficient stock market leads to an unattractive capital markets, which in turn hinders its ability to play the role of channeling funds from surplus units to deficit units (Aigheyisi & Edore, 2014). The surplus units may seek alternative investment options to channel their funds, severely crippling the capital markets, a source of long term and short-term funds for both government and non-government borrowers who use the funds for infrastructural development and business expansion

Aigheyisi and Edore(2014) pointed out the factors affecting the performance of the stock exchange as financial development, stock market liquidity, income, savings rate, consumer price index, external debt, political risk, bureaucratic quality and government expenditure; a clear indication that instruments of fiscal policy have a role to play in the performance of stock exchange. Various public expenditure and taxation components of fiscal policy have been seen to have an effect on growth. A distortionary tax regime retards investment and growth while excessive public expenditure on consumption at the expense of investment has also been seen

to deter growth (M'Amanja & Morrissey, 2005). Fiscal policy could potentially drive stock prices lower through the crowding out of private sector activity thus affecting the performance of the entire economy (Chatziantoniou, Duffy, & Filis, 2013). Reilly & Norton (1999) posit that changes in fiscal instruments like government spending, taxes and other revenue items can change market interest rates instantaneously and force investors to revalue their stock holdings. As such, the value of investors' wealth derived by the summation of the discounted value of future cash flows could be affected by an easing or tightening of fiscal policy.

Despite the fact that the relationship between fiscal policy and stock market performance has been well documented in the developing world and generally in West African Countries like Nigeria and Ghana, the number of empirical researches in Kenya, an emerging economy, is quite few. Also notably, very few studies have focused on how fiscal and monetary policies interact to affect the performance of the stock market. Existing literature only looks at how fiscal policy and monetary policy affect stock market performance in isolation. The complex interaction involving direct and indirect channels for example through the impact of inter-temporal budget constraint on monetary policy or through the effect of fiscal policy on monetary variables like interest rates, inflation and exchange rates, have not been explored (Chatziantoniou, Duffy, & Filis, 2013). This research aimed to fill that gap

Main Objective of the Study

The main objective of this study was to establish how fiscal policy affects the performance of the Nairobi Securities Exchange.

Specific objective of the study

1. To determine the effect of government expenditure on performance of the Nairobi Securities Exchange
2. To determine the effect of domestic debt on performance of the Nairobi Securities Exchange
3. To determine the effect of Money supply on the performance of the Nairobi Securities Exchange

Hypotheses

H1 Government expenditure has no effect on performance of the Nairobi Securities Exchange

H₂ Domestic debt has no effect on performance of the Nairobi Securities Exchange

H3 Money supply has no effect on the performance of the Nairobi Securities Exchange

EMPIRICAL LITERATURE

Effect of government public expenditure on performance of the Nairobi Securities Exchange

Government expenditure has been seen to affect the development of the stock exchange through its effects on activities and decisions of private sector firms and households. Firms tend to experience boosts, which indicate high profitability and dividends for shareholders whenever there is government's influence with all factors kept constant. High profitability and high dividends add to the firms' attractiveness thus driving up demand for their stocks, which results in even higher stock prices and market capitalizations of these firms and the entire stock exchange. Additionally, government expenditure can affect stock prices through its effect on income on individuals, in this case government employees. Perception of the market, expectations of returns on investment and the rate of return on alternative investment are factors, which drive government employees to invest their income which constitute part of government recurrent expenditure. A favorable market perception of high expectation leads to increased participation in the market thus increased market transactions (Aigheyisi & Edore, 2014).

Ogbulu, Torbira, & Umezinwa (2015), with an objective to investigate the nature and behavior of the relationship between fiscal policy and stock market returns in Nigeria, carried out a study for the period 1985-2012 using OLS, cointegration, error correction mechanism (ECM), Granger Causality, impulse response and variance decomposition techniques. The stock market performance was measured using the All share index while fiscal policy measures were captured using Government Total public Expenditure (PEX) in millions of Nairas obtained from the sum of Capital expenditure (CEX) and Recurrent Expenditure (REX); Non-oil Revenue (NOR) in millions of Nairas, Domestic Debt Outstanding (DBT) in millions of Nairas. The study also used broad money supply (MS) in millions of Nairas as a control variable, to account for the monetary policy transmission path as demonstrated by empirical studies that showed fiscal policy interacts with monetary policy to affect stock prices. The results indicated that there was a significant but negative relationship between Public Expenditure and Stock performance, the Domestic Debt Outstanding had a positive and significant relationship with stock prices, non-oil revenue had a significant and positive relationship with stock prices. The relationship between current broad money supply (MS) and ASI was found to be positive but insignificant while the two period and three period lagged values of MS were significant indicating Money Supply had a lagged effect on stock prices.

Namini & Nasab (2015) also investigated the interactions of monetary and fiscal policy and their effects on the stock market in Iran for the period 1991-2010. The study used GDP

target, oil revenue, the general price levels and government expenditure as variables for fiscal policy and used money supply for monetary policy while the performance of the stock exchange was measured using the stock market index. Data was analysed using Structural Vector Autoregression model (SVAR), Impulse response functions and variance decomposition were used to investigate the impact of shocks. The findings for the study were that monetary and fiscal policies had a positive but little impact on the changes in the stock market index and that both policies affect the stock market, with the interactions affecting stock market development directly while fiscal policy was shown to have no impact on stock market development. The study established that the stock markets responded negatively to an increase in government expenditure.

Muyanga, (2014) carried out a study aimed at determining the relationship between fiscal policy and performance of the Nairobi Securities exchange using the NSE 20 share index that was regressed against fiscal policy instruments such as government expenditure, government tax revenue and government debt expressed as a percentage of the GDP. The scope was 10 years between January 2004 to December 2013. The study established that government expenditure and government revenue had positive effect on stock market performance. Government debt had low positive effect on stock market performance with a negative cumulative effect due to its risk on inflation as a result on interest on debt.

Effect of domestic debt on performance of the Nairobi Securities Exchange

Kimathi & Muturi, (2016) explored the Relationship between Government Domestic Debt and Stock Market Performance in Kenya for the period January 2009 to December 2015. The study's main objective was to determine the effect of treasury bills, treasury bonds, commercial bank advances to government and central overdraft on performance of the NSE 20 share index. The author was motivated by the fact that establishing the relationship would be significant in predicting optimum government debt to gross domestic ratio where any debt changes do not have a negative impact on stock market performance. The dependent variable analysed was NSE 20 share index at time t , (NSEIDX) while the independent variable were, Treasury bonds at time t (TBD_t), Treasury Bills at time t (TBL_t), Central Bank Overdraft at time t (CBO_t) and Commercial Bank Advance at time t (CBA_t) The results of the study indicated that treasury bills and treasury bonds had negative but insignificant influence on stock market performance while the central bank overdraft to the government and commercial bank advance to the government has positive and significant influence on stock market performance.

Gerleman, (2012) also studied the impact of government debt changes on stock market movements for three different European countries of Germany, Portugal and Sweden. The

study focused on quarterly government debt changes as a percentage of GDP and quarterly stock market changes over the time period 2000:Q2-2011:Q2. Its main objective was to put the Efficient Market Hypothesis (EMH) to test to establish whether stock prices fully reflect all relevant information for example government debt changes as soon as they occur without delays. The study applied OLS and Granger Causality test for each respective country. The stock index was the dependent variable with independent variables represented by lagged values of debt as a percentage of GDP, Interest rates and unemployment. The results in the case of Sweden and Portugal proved to be inconclusive thus the inability to reject or accept the EMH with respect to government debt changes while results from Germany indicated a correlation between the two variables.

Hsing, (2013) examined the potential impacts of fiscal and monetary policy on stock market performance in Poland for the period between 1999:Q2-2012:Q4. The study examined the stock market index in Poland as a function of fiscal policy, interest rate, money supply, real output, the nominal effective exchange rate, inflation rate, the stock market in Germany and the stock market in the US. Using GARCH to estimate the regression parameters, results indicated that Fiscal policy as represented by the ratio of government deficit spending to GDP had an insignificant positive coefficient, suggesting that more government deficits as a percent of GDP would not cause Poland's stock index to decline.

Aigheyisi & Edore (2014) studied the effect of government expenditure and government debt on the value of transactions on the trading floors of the Nigerian Stock Exchange. The study used annual time series data for the year 1981-2012 sourced from the Central Bank of Nigeria Statistics Bulletin and was motivated mainly by the fact that the literature for government debt and stock market development was still quite lean. Using the methodology of cointegration and ECM justified by the need to investigate the short run and the long run effects of the variables on stock market development, the study developed the model to be estimated first in its basic functional form and developed it to a more robust and inclusive form. The values of transactions on the trading floors of the Nigerian stock exchange were used as proxy for stock market development. Muyanga (2014), while exploring government debt as a variable in fiscal policy found that it had a low positive effect on stock market performance with a negative cumulative effect as its long term use poses risk to inflation owing to interest on debt.

Monetary Policy performance of the Nairobi Securities Exchange

Nyamongo, Misati, & Ngare, (2014) emphasised the need to consider the monetary-fiscal mix bearing in mind that both policies have an impact on key macroeconomic variables despite their differences in use of policy instruments. The authors highlighted three channels in which fiscal

policy could influence the short term environment for Monetary policy in Kenya. The channels are: discretionary fiscal policy stabilizations, operations of automatic stabilizers can contribute to reducing short term volatility, specific instruments at the disposal of the government that have a quick effect on prices such as Value added Tax (VAT). In the long-term, the effect of fiscal policy on monetary policy occurs via its impact on sustainability of public finances and on potential growth.

Money volume changes play a significant role in achieving a country's economic goals, growth and development of the capital market (Namini and Nasab 2015). Increased liquidity could lead to an increase in asset demand. Information on expansionary monetary policy has positive psychological effects on formation of expectations and propensity to invest indicating a positive relationship between stock market index and money volume. Namini and Nasab (2015) found that money supply shocks had a positive impact on stock market performance. This is because money supply was looked at as an important factor as a macroeconomic variable and because it is significant as an asset in the investor's portfolio.

METHODOLOGY

Research design

Kothari (2004) defines research design as the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In other words, research is conducted within the conceptual structure. It constitutes the blueprint for the collection, measurement and analysis of data. The research design adopted for this study was causal research design. The research attempted to determine the extent to which fiscal policy affects the performance of the Nairobi Securities exchange.

Sample

The sampling design was non-probability or purposive sampling because the researcher intended to use indices as exhibited by the NSE 20 share Index and not any other Instruments, which was a deliberate decision. The NSE 20 share index, which has been in existence longer than the NSE All Share index was found to be a sufficient indicator of market performance as previously seen in empirical studies by Nyamongo (2015) and Waitthaka (2014)

Data

The researcher used secondary data which was obtained from the Kenya Central Bank database and the Nairobi Securities exchange database. As per Kothari (2004) secondary data means data that are already available.

Data processing, analysis and model specification

Data processing implies the editing, coding, classification and tabulation of collected data to ensure that it is amenable to analysis (Kothari 2004). Preliminary analysis was performed to ensure no violation of assumption of stationarity, linearity, Heteroskedasticity, autocorrelation and Multicollinearity using E-views software package. Since time series data was involved in this study, the first preliminary step was to test for stationarity among dependent and independent variables. The Augmented Dickey Fuller Test was applied for unit root testing and autoregressive distributed lag model (ARDL) technique was applied for regression analysis.

$$PNSE_{it} = a_0 + a_1 PEX_{it} + a_2 DBT_{it} + a_3 MSP_{it} + U_t$$

Where: PNSE= Performance of the Nairobi Securities Exchange. The 20 share index monthly
 PEX =Government Total public Expenditure in millions of Shillings obtained from the sum of Capital expenditure (CEX) and Recurrent Expenditure (REX); as percentage of GDP
 DBT= Domestic Debt Outstanding in millions of Kenya Shillings as percentage of GDP
 MSP = Money supply in millions of Kenya shillings as a control variable, to account for the monetary policy transmission path as demonstrated by empirical studies that showed fiscal policy interacts with monetary policy to affect stock prices.

a_0 , = constant coefficient

a_1, a_2, a_3 , = partial coefficients for independent variables

U_t = residual error term

FINDINGS AND DISCUSSION

Test of Multicollinearity

Table 1 Correlation Matrix

	Securities Market performance	Money supply	Recurrent expenditure	Domestic debt
Performance of the Nairobi Securities Exchange	1.000000			
Money supply	0.303342	1.000000		
Recurrent Expenditure	0.058556	0.191568	1.000000	
Domestic debt	-0.215213	0.241727	0.318777	1.000000

Table 1 shows the pair-wise correlation matrix. Brook (2002) noted that multicollinearity is the problem that occurs when the explanatory variables are very highly correlated with each other. If there is no relationship between the explanatory variables, they would be said to be orthogonal

to one another. If the explanatory variables were orthogonal to none another, adding or removing a variable from a regression equation would not cause the values of the coefficients on the other variables to change. All the correlations among explanatory variables were found to be low to affect any further analysis.

Test of unit root

The time series data was also subjected to stationarity test as an additional test of the stability of the time series data. When the variables of interest are to be used in a joint analysis the order of integration is necessary to avoid misspecification of the analytical technique required. Kennedy (2008), noted that most macroeconomic time series data is integrated of order (1) which is greater than order (0).

Table 2 Unit root test

Group unit root test: Summary ;Series: securities market performance, government spending, domestic debt, money supply				
Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	0.35144	0.6374	4	215
Breitung t-stat	-0.81460	0.2076	4	211
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	0.04032	0.5161	4	215
ADF - Fisher Chi-square	6.67398	0.5722	4	215
PP - Fisher Chi-square	45.9262	0.0000	4	220
Unit root test at first difference				
Group unit root test: Summary -Series: securities market performance, government spending, domestic debt, money supply				
Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-10.5054	0.0000	4	213
Breitung t-stat	-9.88037	0.0000	4	209
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-10.7202	0.0000	4	213
ADF - Fisher Chi-square	95.1408	0.0000	4	213
PP - Fisher Chi-square	105.521	0.0000	4	216

Table 2 presents test of unit root in this study was conducted first before the estimation of the regression equation. The null hypothesis of unit root could not be rejected for all the variables. This was because all the estimated test statistics were less than the critical values at levels. The result therefore showed that all the time series were integrated of an order greater than zero. However after taking the first difference all the variables were found to be stationary. The significance of the test statistic depicted by the p-value after first differencing was below 0.05.

Regression Results

Serial correlation test

Table 3 Serial Correlation test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	1.695479	Prob. F(4,43)	0.1686
Obs*R-squared	7.356558	Prob. Chi-Square(4)	0.1182

Table 3 presents the results for the test of serial correlation. The test results rejected the hypothesis of serial correlation in the model. The null was rejected on the basis that the p-value of the two test statistics that is F-statistic and chi-square were statistically insignificant. The langrage multiplier (LM) indicates that the residuals were serially uncorrelated and the equation was identified optimally. Gujarati (2008), notes that the advantage of using Breusch-Godfrey test is that it allows for non-stochastic regressors, such as the lagged values of the regressors and unlike a test such as Durbin-Watson that is only fit where there are no lagged terms.

Heteroskedasticity Test

Table 4 Heteroskedasticity test

Heteroskedasticity Test: GARCH			
F-statistic	0.913615	Prob. F(2,49)	0.4078
Obs*R-squared	1.869390	Prob. Chi-Square(2)	0.3927

Table 4 presents the result after the testing for heteroskedasticity using Breusch-Pagan-Godfrey test. Since the test statistics were statistically insignificant, the presence of heteroskedasticity was rejected. The interpretation was that the estimation of the regression model was adequately identified. The conclusion was that the mean and the variances of all the parameters were stable and not evolving over time.

Good-of-fit statistics

The value of R-squared 0.968457, Adjusted R-squared 0.964431, shows that the variables included in this study were able to explain about 96% of the variation in market performance. The value of F-statistic of 240.5082 was also found to be statistically significant. The other model selection criteria used to weight on the relevance of the lags included were; Akaike info criterion -1.992574, Schwarz criterion -1.734743, Hannan-Quinn criter.-1.893139. The more negative the value assumed by these tests the better the model. From table 5 it can be observed that a total of 100 models were estimated and the most optimal one selected.

Table 5 Coefficient Table

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Performance(-1)	1.264759	0.142866	8.852751	0.0000
Performance(-2)	-0.295858	0.164117	-1.802727	0.0778
Expenditure	0.000610	0.000271	2.250142	0.0292
Domestic debt	0.003657	0.000251	14.55609	0.0000
Domestic debt(-1)	-0.004677	0.000252	-18.58990	0.0000
Money supply	-0.000117	9.38E-05	-1.249464	0.2177
C	0.136144	0.051446	2.646331	0.0110
R-squared	0.968457	Mean dependent var		0.866874
Adjusted R-squared	0.964431	S.D. dependent var		0.446060
S.E. of regression	0.084126	Akaike info criterion		-1.992574
Sum squared resid	0.332629	Schwarz criterion		-1.734743
Log likelihood	60.79950	Hannan-Quinn criter.		-1.893139
F-statistic	240.5082	Durbin-Watson stat		1.578403
Prob(F-statistic)	0.000000			

Lagged Dependent

The inclusion of the lagged dependent in the dynamic regression did not improve the predictive power of the model since only the remote coefficient was statistically significant. The coefficient were Performance (-1) 1.264759 and Performance (-2) -0.295858. The t-statistics were

statistically significant with values 8.852751 and -1.802727. The p-values were found to be 0.0000 and 0.0778. The conclusion was that for model one the dependent variable had a statistically significant dynamic effect in the determination of the market performance. It is also interesting to note that the lag effect is very strong almost explaining all the movement of the stock market as given by the elasticity value of 1.264759 for one quarter and strongly significant.

Government Expenditure

From table 5, the regression coefficient of government expenditure was found to be 0.000610. This value shows that holding other variables in the model constant, an increase in government spending by one percent causes the Performance of the securities market to increase by 0.000610 percent. The effect is also statistically significant with an associated t-statistic value of 2.250142 and a probability value of 0.0292.

The positive effect shows that there is a linear positive relationship between government spending and performance of securities market. These findings contradict those of Ogbulu, Torbira, & Umezina (2015), who's results indicated that there was a significant but negative relationship between Public Expenditure and Stock performance. These findings support the views of Aigheyisi & Edore, (2014) who found that Government expenditure has been seen to affect the development of the stock exchange through its effects on activities and decisions of private sector firms and households. Firms tend to experience boosts, which indicate high profitability and dividends for shareholders whenever there is government's influence with all factors kept constant. High profitability and high dividends add to the firms' attractiveness thus driving up demand for their stocks, which results in even higher stock prices and market capitalizations of these firms and the entire stock exchange. Additionally, government expenditure can affect stock prices through its effect on income on individuals, in this case government employees. Perception of the market, expectations of returns on investment and the rate of return on alternative investment are factors, which drive government employees to invest their income which constitute part of government recurrent expenditure. A favorable market perception of high expectation leads to increased participation in the market thus increased market transactions. Amporfu, Sakyi, & Ofori-Abebrese, (2016) used Autoregressive Distributed Lag (ADRL) technique to investigate the impact of macroeconomic policy on the development of the Ghana stock exchange for the period 1991-2011. The study established that government expenditure had a positive though insignificant impact on stock market performance.

The interpretation for this study was that government spending caused the performance of the Nairobi securities market to increase though the contribution is very small in terms of percentage. The listed companies should therefore consider the effect of government spending on performance of securities market despite the small sensitivity because it was found to be statistically significant and cannot be ignored. This is especially true for the management of listed companies as well as the policy makers.

Domestic Debt

From table 5, the regression coefficient of domestic debt was found to be 0.003657 and logdomestic debt (-1) -0.004677. This value shows that holding other variables in the model constant, an increase in domestic debt by one percent causes the Performance of the securities market to increase by 0.003657 and -0.004677 percent. The full impact of domestic debt is felt in the market after two quarters. It can also be observed that the one lag effect is slightly significant than the current period effect. This implies that the negative effect is more persistent in the market. The effect is also statistically significant with an associated t-statistic value of 14.55609 and -18.58990 a probability value of 0.0000 and 0.0000.

The positive effect shows that there is a linear positive relationship between domestic debt and performance of securities market. On the other hand the negative effect shows that there is an inverse relationship between domestic debt and market performance. These findings support those of (Ogbulu, Torbira, & Umezina, 2015), who's results indicated that Domestic Debt had a positive and significant relationship with stock prices. Kimathi & Muturi, (2016) indicated government borrowing has positive and significant influence on stock market performance. Muyanga (2014) reported that government debt had low positive effect on stock market performance, while Aigheyisi & Edore (2014) determined that the short-run and long run effects of federal government domestic debt and external debt were statistically insignificant to the stock market performance.

The interpretation for this study was that domestic debt causes the performance of the securities market to decrease or increase though the contribution is very small in terms of percentage. The listed companies should therefore consider the effect of Domestic debt on performance of securities market no matter how small the sensitivity.

Money Supply

This variable was introduced as a control variable to control for the effect of monetary policy in an attempt to identify the effect of fiscal policy on market. To achieve this goal the money supply variable was introduced as a fixed regressor in the model. From table 4, the regression

coefficient of money supply was found to be -0.000117. This value shows that holding other variables in the model constant, a decrease in money supply by one percent causes the Performance of the equity securities market to increase by -0.000117 percent. The effect is also statistically insignificant with an associated t-statistic value of -1.249464 a probability value of 0.2177.

The negative effect shows that there is a linear negative relationship between money supply and performance of securities market. These findings contradict those of Ogbulu, Torbira, & Umezina (2015) who found the relationship between current broad money supply (MS) and ASI was found to be positive but insignificant while the two period and three period lagged values of MS were significant indicating Money Supply had a lagged effect on stock prices. The interpretation for this study was that money supply causes the performance of the securities market to decrease though the contribution is very small in terms of percentage. The listed companies should therefore consider the effect of money supply on performance of securities market.

SUMMARY OF FINDINGS

The study attempted to establish the relationship between fiscal policy and stock market performance. It was guided by three key objectives; government expenditure and performance of equity securities market Kenya, domestic debt and performance of equity securities market Kenya and money supply and performance of equity securities market Kenya. The dimension of the dynamic dependent was introduced in the regression results. The ARDL method allowed for the introduction of the lagged dependent variable to improve the predictive power by taking care of the memory effect in the model. The results showed that the securities market in Kenya had a strong memory. In fact the first coefficient had an elasticity of one which was statistically significant. The key revelation was that the market explained its own dynamics largely leaving the little explanation power to the other variables.

The study established that all variables had a significant effect on the performance of securities market in Kenya. The study employed multidimensional analysis techniques to come up with the optimal solution. The Augmented Dickey-Fuller test of unit root statistics revealed that all variables had a unit root thus they were not stationary. The order of integration was necessary in order to establish the most appropriate technique for regression analysis. The regression results revealed that there was a positive relationship between expenditure and stock market, negative relationship between domestic debt and stock market and finally a negative relationship between the money supply and securities market performance.

CONCLUSION

Government expenditure was found to have a positive and significant effect on the performance of the security market in Kenya. There were no previous effect from this variable introduced in the model by the system. The study, thus conclude that expenditure is a key determinant of the stock performance in Kenya. The implication is that when the government spends it increases disposable income for its citizens which in-turn leads to consumption of products of these companies resulting in better performance. Government expenditure was found to have a significant effect on the performance of the security market in Kenya. In the model estimated only the current quarter and one quarter lagged value for domestic debt were introduced and were both significant . The current quarter value was positive and significant while the second quarter was negative and also significant. The study, thus conclude that domestic debt is a key determinant of the stock performance in Kenya. The implication is that when the government increases borrowing firms may lend to it through bonds, which increases profitability in the short run. In the long run however this would result in reduction in the performance due to the clouding out effect of the firms. Money supply as a control variable was found to have an insignificant effect on the performance of the security market in Kenya. In the model estimated only the current quarter value was introduced in the system. There were no previous effect from this variable introduced in the model by the system. The study, thus concluded that money supply as a variable could have a passive effect in the stock performance in Kenya.

RECOMMENDATIONS

The investors and other key market players should be keen on the changes of the past activities of the market since this was found to have effect on the stock market performance. This study, has revealed that past trading history has statistically significant effects on the performance of equity securities market in Kenya. The study thus recommends that the management of the listed firms put in place mechanisms that help them monitor the fluctuations in the history of the market activities to be in a better position to forecast the future. The investors and other key market players should be keen on the changes of the government spending since this variable was found to have effect on the stock market performance. This study, has revealed that government spending has an significant positive effect on performance of equity securities market in Kenya. The study thus recommends that the management of the listed firms put in place mechanisms that help them monitor the fluctuations in the government expenditures as a government policy.

The investors and other key market players should be keen on the changes of the domestic debt levels in the economy since this variable was found to have effect on the stock

market performance. This study has revealed that domestic debt has a significant positive and negative effect on performance of equity securities market in Kenya in different horizons. The study thus recommends that the management of the listed firms put in place mechanisms that help them monitor the fluctuations of the debt levels in the economy as a government policy. The investors and other key market players should be keen on the changes of the government spending since this variable was found to have effect on the stock market performance. This study has revealed that government spending has a significant positive effect on performance of equity securities market in Kenya. The study thus recommends that the management of the listed firms put in place mechanisms that help them monitor the fluctuations in the government spending collection as a government policy.

The investors and other key market players should be keen on the changes of the money supply in the economy since this variable was found to have effect on the stock market performance. This study has revealed that money supply has an insignificant negative effect on performance of equity securities market in Kenya. The study thus recommends that the management of the listed firms put in place mechanisms that help them monitor the fluctuations in the money supply in the economy as a government policy.

AREA FOR FURTHER RESEARCH

This research was not able to identify all the possible variables with explanation power on performance of equity market in Kenya. It is therefore in this light that the future research should consider other variables which would increase the predictive power of the model. The other relevant variables would be firm specific factors such as the size of the firm, market value of the firm and the macroeconomic variables such as exchange rate, inflation, interest rates among others. This study used just multiple regression analysis were only macro variables were used. This study recommend the assessment of the market performance by use of other models such as capital assets pricing model (CAPM), Fama-French three and five factor models. All of which should look and examine the returns or performance of individual companies in details rather than an aggregate. This study was purely dedicated to the Kenya NSE market. Other studies could be done to compare the results in the global market, eastern Africa region and also in Africa in general.

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