The Effect of Inflation on Stock returns and Affirmation of the Fisherian hypotheses

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DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the Research Project contains no material previously published or written by another person except where due reference is made in the Research Project itself.

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This Research Project has been submitted for examination with my approval as the Supervisor.

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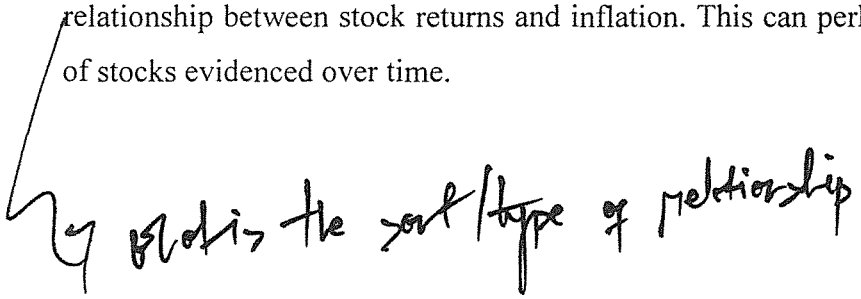
ABSTRACT

This study basically studies the long-run relationships as well as the dynamic interactions between inflation and stock returns in Kenya. Monthly data from the Nairobi Stock Exchange index and the Consumer Price Index is made use of while our sample period ranges from January 2005 to March 2014. The empirical technique of Autoregressive Distributed Lag (ARDL) bound test proposed by Perasan et al (2001) was used. The results show that there exists a long-run relationship between stock returns and inflation. The short run dynamic model on the other hand exhibits a moderate speed of convergence to equilibrium implying that there exists a short-run relationship between stock returns and inflation. This can perhaps be attributed to the instability of stocks evidenced over time.



CHAPTER 1: INTRODUCTION

Background

Over the last decade that is from the year 2005, inflation in Kenya was averaged at 10.91%. As at March 2015, it was recorded at 6.31%. It is still remembered that inflation reached an all-time high of 31.50% in May of 2008, while a low of 3.18% was witnessed in October of 2010, (Kenya Inflation Rate, 2015).

The paper seeks to look at the relationship that exists between stock returns in the Nairobi Stock Exchange and inflation. The paper will involve going through existing literature and using the empirical findings to explain the resultant relationship between inflation and the stock returns in the country's stock exchange.

The Nairobi Stock Exchange started as an informal sector for Europeans. It was started by the British but it was later formalized through incorporation in 1954. This formalization happened in 1954.

Stock markets are very important and crucially help in driving a country's economy. Stock markets provide investment opportunities as well as a platform for portfolio diversification. Stock markets therefore provide an avenue for firms to raise capital as well as allow for investors with surplus funds to invest them in financial instruments. Thus an investor can invest in such a way as to satisfy his risk attitude/preference and his liquidity preference. Stock markets all over the world drive economic growth through diversification, pooling of savings from various investors and availing them to deficit units such as firms.

Firms mainly turn to equity markets when wanting to raise funds. Firms tend to issue shares to help them acquire investment funds. Stock markets are therefore an important cog in the wheels of an economy as it increases and allows for both capital allocation and formation efficiency.

An economy's growth can be determined by the efficiency of the equity markets. This means that a stock market should strive to be as efficient as possible by allocating capital efficiently to productive units. Stock markets will therefore pool savings and allocate a larger portion to firms

with relatively high prospects of growth as indicated by their risk-return levels. This will help enhance an economy's growth and expansion, (Kimani & Danson, 2011)

Well-developed stock markets usually have a larger array of financial securities that investors can invest in. This increases savings as well as enable an investor to further diversify his portfolio leading to a reduction in risk. One will also find that in well-developed markets, there is efficient allocation of capital to productive units thus leading to faster growth of the economy.

Financial theorists believe that there are both direct and indirect results of inflation in all the economy's sectors. These researchers concluded that stock markets and inflation are closely related and that inflation rate has an effect on stock market risk and volatility, (Geetha, Mohidin, Chandran, & and Chong, 2011). Some of the key concepts that will aid this paper are the GDP and CPI. The Gross Domestic Product mainly captures the growth rate in an economy while the latter, Consumer Price Index (CPI), will capture the inflation rate via the general price increases.

Economists define inflation as an incessant rise in the price of goods as well as services over time. Inflation usually has a dual effect in that it can either be positive or negative. The common negative effect is whereby inflation leads to a reduction in the real value of money over time. The sudden surge in price increases i.e inflation since 1973 has revived interest in the notion of financial assets being used as hedges against inflation. Understanding the impact of inflation, which is a macroeconomic variable, on the general movement on the share price in the NSE is important This is because investment decisions, with regards to stocks in the equity market is to a large extent influenced by the returns guaranteed.

As an economy experiences general price level increases purchasing power of a unit of currency reduces. As a result of this, erosion in purchasing power occurs. Inflation is therefore one of the biggest fear for investors as it lead to a decrease in the real return of their investments, (Schotman & Mark, 2000). Since inflation cannot be predicted with certainty, the uncertainty may discourage investors from investing as much as they would have liked. Thus investment and savings rate reduces.

The empirical relationship between stock returns and inflation has been well documented but puzzling still. It has been seen that expected inflation, unexpected inflation as well as changes in expected inflation are all negatively related to stock returns. Some assets such as stocks have also

displayed multiple relationships whereby in the short-run, they act as bad hedges against inflation. In the long-run however stocks have shown to be good hedges against inflation. Thus the negative relationship between stock returns and inflation may be less significant for longer time horizons.

Problem Statement

Stock markets have for long played an important role in an economy. This is more so by mobilizing resources both within and outside an economy thus help in boosting an economy's potential. A research done by (Olweny & Kimani, 2011) showed that there was a one way causality running between stock market performance and economic growth. They stated that since a stock's price/value can be can be calculated via finding the present value of future cash flows emanating from the stock e.g. dividends, then economic activity can be forecasted. Thus inflation plays a big part in this via its effect on stock returns that enable one to predict future economic activity.

The research will therefore fill an important gap with regards to the need of understanding the critical role inflation plays in the movement of a stock's return and its general impact on an economy's growth prospects.

Research Objectives

- This study seeks to identify the effect inflation has on stock's return in the Nairobi Stock Exchange.
- The study will also seek to reveal whether the relationship between the aforementioned variables supports the Fisherian hypotheses.

Research Questions

The questions used to guide this study are:

1. Does a significant relationship exist between Inflation and Stock Return on the Nairobi Securities Exchange?
2. What is the direction of this relationship?

Significance of the Research

This study will mostly tend to benefit investors in the NSE_20 index as they will better understand the impact of inflation on stock returns thus helping them make sound investment decisions.

CHAPTER 2: LITERATURE REVIEW

Many studies have been done on the sensitivity of stock prices to various macroeconomic variables. The results of these studies have shown that the relationship between the share price index and macroeconomic variables such as inflation and exchange rates is negative. Establishment of the reform policies in the financial sector has led to a vastly improved financial sector in many African economies. This had led to growth of the capital markets. Due to the growth of capital markets and the demand for financial instruments that suit an investor's needs, the period has overseen an increase in modified tailor suited financial instruments, (M & Misati, 2010).

The relationship that exists between stock returns and inflation has been evaluated using four major hypothesis or theories. The theories mainly expounding on the aforementioned relationship are the fisherian, proxy, tax effect and the inflation hypothesis. Tests of these hypothesis using empirical studies have revealed mixed results and thus a consensus has not been reached, (Ibrahim & Agbaje, 2013).

The Fisher hypotheses is whereby the nominal interest rates rise point for point with expected inflation thus the real rate remains unaffected. Thus the Fisher hypotheses supports that a positive relationship exists between stock returns and expected inflation. As per this hypothesis, the relationship is also positive when taking into account changes in expected inflation. The proxy hypothesis on the other hand, is first introduced by Fama in 1981 to explain the negative relationship between stock returns and inflation. The proxy hypotheses contradicted the findings of the Fisher hypotheses.

In many economic literatures, an asset is judged as a good hedge against inflation if the Fisher hypotheses holds true. This means that the marginal effect of a unit change of inflation on nominal stock returns (the Fisher coefficient) is equal to unity.

Various explanations have been given to explain both the short and long-run inflation hedging properties of stocks. (Tomek & Laura, 2010), in their study argue that inflation rates lead to a future decrease in real economic activity. As a result there is a negative relationship between inflation and stock returns in the short run. In the long run however, a positive relationship exists between the two aforementioned variables

Extensive researches on the various variables that impact the stock exchange as well as investor behavior to changes in the stock price have been done. Past literature on the subject has revealed that macroeconomic variables greatly impact the stock market indices. Literature supporting this find that the phenomena described is more prevalent in industrialized countries, (George & Evangelia, 2001). The relationship between stock prices and inflation has been found to be negative in many developing countries. The same applies to the relationship between stock prices and interest rates.

Equity stocks represent claims against the real assets of business. The generalized Fisher hypothesis predicts that equity stocks may serve as hedges against inflation. Empirical research has therefore focused on determining whether stocks also provide a hedge against inflation, (AKMAL, 2007). Evidence of positive relation between inflation and stock market returns was found in Greece between the periods 1985-2003, (Ioannidis, 2004). Literature has gone on to show that there exists a negative relationship between stock nominal returns and inflation in the long run. This is due to the relationship that exists between inflation and future output. Some literature in Greece pointed out contrasting evidence to that found by Ioannidis. The research in Greece showed that there existed a negative relationship between stock market returns and the level of inflation for the periods 1990-1995, (Spyrou, 2001). Spyrou used monthly data from January 1990 to June 2000 to analyze the existing relationship between Greek stock returns and the inflation rate. He found that the results for the period 1990-1995, exhibited a negative relationship. The relationship was found to be significant during that period. For the period 1995-2000, his results also pointed out a negative relationship but nevertheless the relationship was found to be insignificant

Literature done on the Egyptian Stock Market shows that inflation rate has an impact on the stock market. The research made use of cointegration analysis and ECM in their analysis of inflation's impact on the Egyptian Stock market, (Omran & Pointon, 2001).

Literature done in the US strongly supported the hypothesis laid down by Fama in 1981. Multivariate innovation was employed to determine the relationship that existed between stock return and inflation in the USA, (Taylor & Gallagher, 2002). Fama hypothesized that stock returns were negatively related to inflation rate. His argument for this claim was that stock returns were positively related to real activity but real activity was negatively related to changes or movement in the level of prices.

Most empirical studies support the evidence that a negative relationship exists between stock prices and inflation, both realized and expected. The consensus though, of what drives this relationship is fewer, (Kimani & Mutuku, 2013). The negative relationship could however be as a result of using nominal interest rates to discount real cashflows by rational investors, (Sharpe, 2002).

Literature by (Geyser & Lowies, 2001), was concerned with studying the impact of inflation on stock prices in two SADC countries. The objective of their study was to determine whether the best performing firms listed on the Johannesburg Securities Exchange and the Namibian Stock exchange provided a perfect hedge against inflation. Their study bore mixed results and therefore could not come up with a generalization concerning the relationship between the aforementioned variables. As per their study, the only stocks that provided a hedge against inflation were the stocks for mining companies.

A study on the effect of inflation on stock returns in Turkey for the periods 1986-2000 showed that there was no correlation between expected return and inflation. The results suggested that the relationship between stock returns and inflation was negative. This negative relationship may have been caused by the impact of unexpected inflation on stock's returns. The impact was negative. The non-correlation of inflation and real returns therefore meant that the Fisherian hypothesis was not contradicted. The results from the study though, supported the proxy hypothesis because of the significance of the negative relationship that prevailed between the two variables, (Sari & Ugur, 2005).

The demand for stocks is usually closely related to its hedging properties during inflationary periods. Past literature shows that important determinants for the demand for stocks in a multi-period context is, the sensitivity of a stock's return to both expected and unexpected inflation as well as persistence of inflation, (Schotman & Schweitzer, 2000). Their study concludes that stocks act as good inflation hedges, for longer term investment horizons (specifically investment horizons exceeding fifteen years); in the presence of high inflation persistence plus whenever there is some partial feedback between expected nominal returns and expected inflation.

Schotman and Schweizer employed the mean variance framework in real terms. By using this framework they were able to study and come up with observations regarding an asset's demand from its hedging properties or characteristics. They concluded that inflation persistence was the main determinant of the hedging capacities of stocks in the long run. Their empirical findings showed that stocks act as a good hedge against inflation in the long run but the short run term results in them being a bad hedge.

Recent literature by, (Roy, Molenaar, Schotman, & Steenkamp, 2008), has gone further in analyzing an investor's asset allocation probabilities taking into account their liabilities which are subject to real interest rate and inflation risk at various time horizons. The sample assets they used in their analysis included, Bonds, T-Bills, stocks, credits, commodities, hedge funds and real estate. To measure the hedging capacity of each of the assets in the sample, they seeded to determine the correlation between an asset's nominal return and the rate of inflation at various investment horizons.

Their empirical findings revealed T-Bills as the best hedge. Commodities were found to be a good hedge both in the short-run and long-run but were not the best hedge. Hedge funds exhibited partial hedging characteristics in the short-run but were good hedges in the long-run. The rest of the assets in the sample acted as good hedges in the long-run but were poor in the short-run.

CHAPTER 3: METHODOLOGY

Research Design

The proposed research will seek to study the impact of inflation on the stock returns using performance of the Nairobi Stock Exchange as an instrument in our measurement. The study will also seek to see whether stocks act as good hedges against inflation, that will greatly determine an investor's decision with regards as to whether to purchase it or not.

This design is justified by the need to review the inconsistent findings on the relationship between stock returns and the inflation rate, by exploring whether stocks serve as good hedges against inflation, thereby encouraging investment.

Population and Sampling

The research seeks to use inflation data obtained from the Central Bank of Kenya. The inflation rate is estimated from the Consumer Price Index. The stock returns will be accessed from the Nairobi Stock Exchange (NSE 20) index.

The sampling period for the data obtained from the Central Bank of Kenya and the Nairobi Stock Exchange ranges from January 2005 to March 2014. The period covers for the introduction of the CDS system that enhanced efficiency of the NSE market.

Data Collection

The research will make use of quantitative secondary data. The data will include the monthly inflation figures from the Central Bank of Kenya website. Also included in the final data set, will be the monthly stock returns obtained from the NSE 20 Index.

The ease of access of secondary data maintains its status as the leading source of convenience when it comes to data collection.

Review of theoretical framework

There are four major hypotheses that try to explain the relationship between inflation and stock returns. Our study will concentrate on the fisherian hypothesis due to the degree of instability of prices for the sample period we are to use. The fisherian hypothesis suggests that stocks hedge against inflation.

The fisherian hypothesis representation is as follows;

$$\delta_t^R = \alpha_0 + \alpha_2 \pi_t + e_t \qquad (1)$$

Whereby; δ_t^R represents the real returns, π represents the actual inflation (inclusive of both expected and unexpected inflation) and e represents the error term in the equation. The error term exhibits a zero mean and a constant variance.

To determine whether the fisherian hypothesis is supported, we look at the sign or direction,α_2 takes. If it is a positive sign and is significant, then the fisherian hypotheses hold. Thus a positive sign indicates that stocks hedge against inflation.

A negative sign on the other hand suggests otherwise, that is, that stocks do not hedge against inflation.

Data Analysis

The study will first start by specifying a model for estimation. The variables in the estimation model will basically be the stock returns and the inflation rate. The stock returns will be

represented by the NSE 20 index and will be the dependent variable. Inflation will then be represented by the Consumer Price Index and will be the independent/explanatory variable.

The functional form of the estimation model is represented as follows;

$$NSE_t = f(CPI_t) \qquad (2)$$

For empirical analysis of the above functional form, the Autoregressive Distributed Lag (ARDL) analytical technique is employed. The ARDL cointegration/bound test is used to determine the long run relationship between stock returns and inflation. This will help us in determining the long-term hedging properties of stocks.

The ARDL model is specifically selected for this study due to the following reasons;

- Simplicity- Compared to other cointegration methods, the bounds test allows the cointegration relationship to be estimated by OLS once the model's lag order has been specified
- The ARDL/bounds test approach does not require pretests such as unit root tests, thus less cumbersome to use. This therefore means that the regressors can either be, I (1), I (0) or be mutually cointergrated.
- Simultaneous estimation of both the long-run and short-run parameters of the model can be carried out.

The functional relationship between stock returns (NSE 20 index) and inflation (CPI) will be represented in the form of the ARDL model as follows;

$$\Delta \ln NSE = \alpha_0 + \beta_1 \ln NSE_{t-1} + \beta_2 \ln CPI_{t-1} + \sum_{i=1}^{k} \delta_{1i} \Delta \ln NSE_{t-i} + \sum_{i=1}^{k} \delta_{2i} \Delta \ln CPI_{t-i} + \varepsilon_t$$

The above equation is our **third** equation in our data analysis. The components in the equation are specified as follows;

- NSE = Nairobi Stock Exchange 20
- CPI = Consumer Price Index
- K = The Unrestricted Error Correction Model lag length

- Δ = The first difference operator
- ε = White noise disturbance error term

To start off the ARDL approach, we use the Ordinary Least Squares (OLS) to first estimate the above third equation in our data analysis.

The second step in our approach constitutes restricting the coefficients of lagged level variables estimated in equation **2,** so as to be equal to zero. This is done so as to enable the detection of the presence of cointegration. The hypotheses used in these step are as follows

Null hypothesis

The null hypothesis (H_0) is that there is no cointegration;H_0: $\beta_1 = \beta_2 = 0$

Alternative hypothesis

The alternative hypothesis is that there is presence of cointegration;H_1: $\beta_1 \neq \beta_2 \neq 0$

The computed F-Statistic from the Wald test is then compared to the non-standard critical bound values reported by (PESARAN, SHIN, & SMITH, 2001). If the computed F-statistic exceeds the upper critical bounds value, then the null hypothesis is rejected. This means that cointegration exists between the variables. However if the computed F-statistic falls below the critical lower bounds value, then cointegration is present.

The study might yield a situation whereby the computed F-Statistic falls between the critical upper and lower bound values. In such a scenario, the order of integration of the variables under analysis will have to be considered.

After the above estimation of the cointegration relationship, the next step would be to use the ARDL approach to estimate the long-run coefficients. Estimation of the short-run dynamic parameters is also done by using the Error Correction Model while the selection of the orders of the model makes use of the Akaike Information Criteria (AIC).

The error correction model is used to capture the adjustment speed among those variables that affect return on stock (NSE 20 index) and inflation (CPI).

Estimation of the cointegrating long-run relationship is then done using the following specification;

$$\ln NSE = \alpha_0 + \beta_1 \ln NSE_{t-1} + \beta_2 lnCPI_{t-1} + \varepsilon_t \qquad (4)$$

The short-run dynamic model is represented as shown below;

$$\Delta \ln NSE = \alpha_0 + \sum_{i=1}^{k} \delta_{1i} \Delta \ln NSE_{t-i} + \sum_{i=1}^{k} \delta_{2i} \Delta ln\ CPI_{t-i} + \delta_3 \varepsilon ct_{t-1} + \varepsilon_t \qquad (5)$$

In the above equation, εct_{t-1} represents the error correction term that has been lagged one period; The coefficient, δ, is used for measuring the speed of adjustment.

CHAPTER 4: RESULTS AND ANALYSIS

Our analysis made use of the ARDL model lagged for two periods as shown in Table 1 below

Table 1

Dependent Variable: DLOG(NSE_20)

Method: Least Squares

Date: 11/05/15 Time: 09:33

Sample (adjusted): 2005M04 2014M03

Included observations: 108 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.817225	0.460173	1.775909	0.0788
DLOG(NSE_20(-1))	0.074707	0.095250	0.784321	0.4347
DLOG(NSE_20(-2))	0.079616	0.095061	0.837520	0.4043
DLOG(INF(-1))	0.489366	0.215293	2.273023	0.0251
DLOG(INF(-2))	-0.646044	0.224123	-2.882538	0.0048
LOG(NSE_20(-1))	-0.096692	0.050819	-1.902664	0.0599
LOG(INF(-1))	-0.004485	0.021774	-0.205983	0.8372

R-squared	0.176645	Mean dependent var	0.004298
Adjusted R-squared	0.127733	S.D. dependent var	0.061259
S.E. of regression	0.057213	Akaike info criterion	-2.821446
Sum squared resid	0.330608	Schwarz criterion	-2.647604
Log likelihood	159.3581	Hannan-Quinn criter.	-2.750959
F-statistic	3.611473	Durbin-Watson stat	2.023184
Prob(F-statistic)	0.002757		

The results of the bound test in equation in the ARDL model (equation 3) is illustrated in Table 2 below. The Wald test has been applied and a significance level of 5% has been considered.

Table 2

Wald Test:

Equation: Untitled

Test Statistic	Value	df	Probability
F-statistic	8.419608	(2, 101)	0.0004
Chi-square	16.83922	2	0.0002

Null Hypothesis: C(5)=C(6)=0

Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(5)	-0.646044	0.224123
C(6)	-0.096692	0.050819

Restrictions are linear in coefficients.

From the above Table 2 it can be seen that the computed F-statistic is 8.41. This value is compared with the Pesaran critical value at 5%. Our model so far has an unrestricted intercept and trend. The

lower and upper critical bound values as derived from Perasan is 4.94 and 5.73 respectively. Our F-statistic of 8.41 exceeds the upper critical bound of 5.73 at 5% significance level and thus implies that stock returns (NSE_20 index) and inflation (CPI) are co-integrated.

When the F statistic is larger than the upper bound value, we can reject the null hypotheses. Since our F-statistic is greater than the upper bound value, that is 8.41>4.85, then we reject the null hypotheses of no co-integration between the two variables, that is NSE_20 index and inflation. Rather we take the alternative hypothesis that states there is a co-integrating relationship between those two variables. This therefore shows that there exists a long-run relationship between the two aforementioned variables.

Estimation of Equation (4) was now done so as to establish the long run relationship between stock return and inflation. The results of the long-run relationship are as illustrated below in Table 3 in the following page.

Table 3

Dependent Variable: LOG(NSE_20)

Method: Least Squares

Date: 11/05/15 Time: 11:27

Sample (adjusted): 2005M02 2014M03

Included observations: 110 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.130996	0.420391	2.690341	0.0083
LOG(NSE_20(-1))	0.873596	0.046820	18.65844	0.0000
LOG(INF(-1))	-0.035544	0.018567	-1.914366	0.0582

R-squared	0.902455	Mean dependent var	8.327214
Adjusted R-squared	0.900631	S.D. dependent var	0.188477
S.E. of regression	0.059413	Akaike info criterion	-2.781703
Sum squared resid	0.377704	Schwarz criterion	-2.708054
Log likelihood	155.9937	Hannan-Quinn criter.	-2.751830
F-statistic	494.9628	Durbin-Watson stat	1.761891
Prob(F-statistic)	0.000000		

Analyzing Table 3 above, it can be seen that the estimated coefficient on inflation has a positive and significant impact on stock return (NSE_20) as represented by its coefficient of approximately 0.87. Thus a 1% increase in inflation leads to approximately 0.87% increase in stock return (NSE_20).

Table 4 below now illustrates the results of the Error Correction Models.

Table 4

Dependent Variable: DLOG(NSE_20)

Method: Least Squares

Date: 11/05/15 Time: 11:58

Sample (adjusted): 2005M04 2014M03

Included observations: 108 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.001511	0.005811	0.260005	0.7954
DLOG(NSE_20(-1))	0.360459	0.292613	1.231863	0.2208
DLOG(NSE_20(-2))	0.046725	0.096367	0.484869	0.6288
DLOG(INF(-1))	0.331227	0.198417	1.669353	0.0981
DLOG(INF(-2))	-0.493293	0.198058	-2.490653	0.0144
ECT(-1)	-9.25E-05	7.72E-05	-1.197799	0.2338

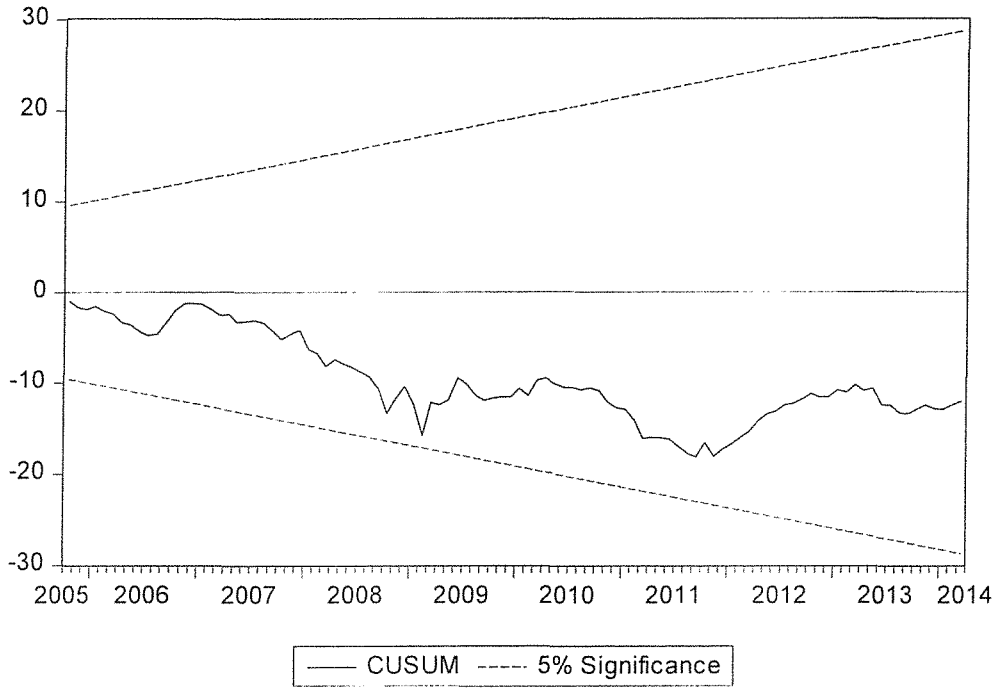
R-squared	0.122152	Mean dependent var	0.004298
Adjusted R-squared	0.079121	S.D. dependent var	0.061259
S.E. of regression	0.058786	Akaike info criterion	-2.775879
Sum squared resid	0.352489	Schwarz criterion	-2.626872
Log likelihood	155.8975	Hannan-Quinn criter.	-2.715462
F-statistic	2.838654	Durbin-Watson stat	1.993471
Prob(F-statistic)	0.019265		

The result above shows that the error correction coefficient estimated at, -9.25E-05 (0.2338) is both statistically significant, has the correct sign and also implies a moderate speed of convergence to equilibrium. The implication of this is that there also exists a short-run causal relationship between inflation and stock returns.

It is important to check for the stability of the stock return function. This is important as it enables an investor know when to invest as well as identify the major factors affecting their portfolio investment. It is also important since our period covered for the Global Financial Crisis. This is done by testing whether the estimated ARDL equation has shifted over time.

The tests involved in checking the stability of our model is the CUSUM test and the CUSUM of squares test. The results are presented in the two diagrams below

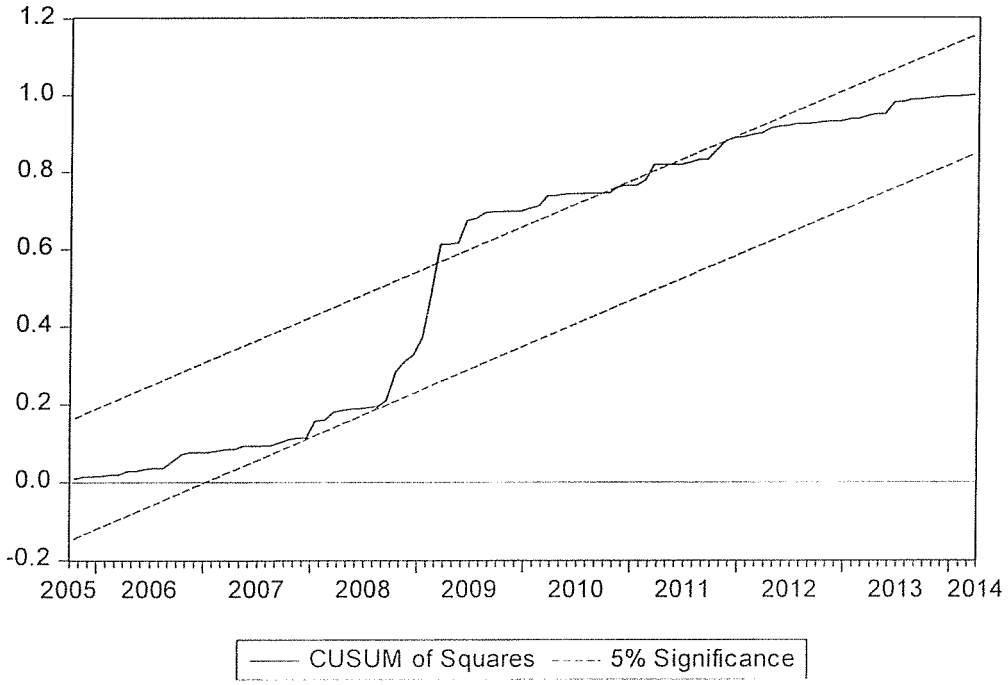
Figure 1



From the above CUSUM only test, we can see that our model is stable since as the blue line is reinforced in between the boundaries that are represented by the red line.

The stability is also evident when one conducts the CUSUM of squares test where it can be seen that the blue line is for the most part residing between the two red lines or boundaries, as shown below. It can however be seen that for the better part of the year 2008 and part 2009 some instability was evident in our model. This can be most likely be as a result of the Global financial crisis

Figure 2



CONCLUSION

This study aimed at testing the relationship between stock returns and inflation in Kenya, more specifically the NSE_20. The approach employed by this study is the ARDL bounds testing co-integration approach to investigate both the long-run and short-run dynamics between stock returns and inflation. The results evidence that a co-integrating relationship between stock returns and inflation exists.

The results also show that inflation has a positive effect on stock returns and it is significant. This therefore importantly implies that inflation is a crucial macro-economic variable that influences the flow of investment as well as determine the direction of changes in the return of stocks in Kenya.

This study therefore affirms the proposition of the Fisherian hypotheses that supports the notion that inflation has a positive effect on stock returns and thus disregarding the proxy hypotheses that states otherwise.

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