**FACTORS INFLUENCING STOCK PRICES FOR FIRMS LISTED IN THE NAIROBI STOCK EXCHANGE**

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## Abstract

*This paper analyzes factors influencing stock prices for firms listed in the Nairobi stock exchange covering the period the period from January 2008 to December, 2010 using inflation, exchange rates, interest rates and money supply.  The period is selected so as to use the most recent data, to make the findings more current. The study uses secondary data the main source of which is the NSE and the Central Bank of Kenya statistics. Multiple regression formula was applied to estimate effect of the selected factors on stock prices.  The regression results show that the factors of inflation, exchange rates, and interest rates were significant except money supply which although it had a positive correlation, the relationship was not significant. The result shows that exchange and interest rates had negative correlation to stock prices whereas inflation and money supply had a positive correlation.  Factor models observe the sensitivity of an asset return as a function of one or more factors.  To formulate appropriate investment strategy, investors constantly review current financial and economic conditions, based on which future trends can be forecast considering the needs of the investors. However the financial market expectation will determine the investment strategy to be chosen.  Financial markets are dynamic, and affected by various macroeconomic factors. The result of the study may offer investors and policy makers a basis upon which to make strategic decisions.*

**Key Words**: Asset Pricing Theory (APT), Capital Markets Authority (CMA), Central Depository and Settlement Co-operation (CDSC),  Deficit Spending Units (DSUs), Nairobi Stock Exchange (NSE), Surplus Spending Units (SPUs).

### *1.0 INTRODUCTION*

The key function of the stock market is to provide an exchange in which buyers and sellers interact for the purpose of trading in shares and other securities issued by publicly traded companies (Monther & Kaothar, 2010). In the course of exchange, stock market prices change according to the market activity as influenced by the forces of demand and supply. If there is a high demand for a given stock, its price will move upwards.  Conversely if there are more people who want to sell than buy, the market experiences excess supply (sellers) than demand (buyers), and the effect of this will push the prices downwards presupposing that the market forces are allowed to operate freely.

The Nairobi stock exchange (NSE, 2011) was established in 1954 as a voluntary association of stock brokers with the objective to facilitate mobilization of resources to provide long term capital for financing investments. Through stringent listing requirements the market promotes higher standards of accounting, resource management and transparency in the management of business.  The NSE is regulated by Capital Markets Authority (CMA, 2011) which provides surveillance for regulatory compliance. The exchange has continuously lobbied the government to create conducive policy framework to facilitate growth of the economy and the private sector to enhance growth of the stock market (Ngugi, 2005). The NSE is also supported by the Central Depository and Settlement Corporation (CDSC) which provides clearing, delivery and settlement services for securities traded at the Exchange. It oversees the conduct of Central Depository Agents comprised of stockbrokers and investments banks which are members of NSE and Custodians (CDSC, 2004). These regulatory frameworks are aimed to sustain a robust stock market exchange that supports a cogent and efficient allocation of capital allowing price discovery to take place freely based on the market forces.

The changes in stock prices and the trend of changes have always been of interest in the capital market given their effect on the stock market stability and strategies adopted by investors (Wang, 2010).  Understanding why prices move up and down is of critical importance to investors and from studies already undertaken there are various variables that drive stock prices.  The Factor models based on Arbitrage Pricing Model (APT) developed by (Ross, 1976) has been suggested as a tool that can be applied to estimate stock prices based on identified factors such as Inflation, level of Industrial production, exchange rates volatility, Interest rates and money supply (M3).

The Arbitrage Pricing Theory postulates that expected returns from a financial asset can be presented as a linear function of various theoretical market indices and macro-economic factors. It is assumed that the factors considered are sensitive to changes represented by a factor-specific beta coefficient. The APT is unlike the Capital Asset Pricing Model developed by William Sharpe (Sharpe, 1964) and John Lintner (Lintner, 1965) which estimates the systematic investment risk of an asset by a single factor. The major limitation with APT is that factors to be included in the model are not known in advance and have to be computed by statistical or econometric analysis (Dubravka & Petra, 2010).

(Fama & French, 1992) analyzed firm specific microeconomic variables which included market beta, firm size, earning –price ratio, leverage ratio, and book to market equities in explaining the stock returns. On the other hand following in the work of Chen, Roll and Ross (Chen et al, 1986), (Dubravka & Petra, 2010) analyzed the macroeconomic and financial variables to explain stock returns. This study proposes to look into macroeconomic factors that influence the stock prices in the Nairobi stock exchange.

## 1.1 Problem Statement

The stock exchange provides investors with an efficient mechanism to liquidate or make investments in securities (Monther & Kaothar, 2010). The fact that investors are certain of the possibility of selling what they hold, as and when they want, is a major incentive for investment as it guarantees mobility of capital between the surplus spending units (SPUs) and deficit spending units (DSUs). The stock market gives an important platform for information sharing among investors, company valuation, and prospect for company fundamentals.

A security represents an expected payment of future cash flows whose value depends on the expectations of the amount of payment and an evaluation of the risks involved (Chen et al, 2009). The expectations and evaluation reflect both the information available and the conclusions people draw from that information. The conclusions investors assume have a direct impact on the underlying values of stocks. A turbulent financial market environment creates uncertainty amongst the investors as confidence is eroded. The changes in stock prices and the trend of changes have always been of interest in the capital market given their effect on the stock market stability and strategies adopted by investors (Wang, 2010).

The NSE has seen drastic volatility in its performance such that for example in the last six months of the year 2011 the NSE 20 share index has recorded a variance from a high of 4495 points to a low of 3733 points with market capitalization declining from Sh1192.28 billion to Sh1049.56 billion (NSE, 2011). Between the years 2008 to 2010 the NSE index saw a variation of between a high of 5444 points to a low of 2800 points. The changes in stock prices and the trend of changes are always of interest in the capital market given their effect on the stock market stability and strategies adopted by investors (Wang, 2010). Rational investors will have an interest to track general and specific factors having a bearing in their investments instruments. The study therefore seeks to examine factors that drive the NSE bourse and can be used to provide a basis of decision making for both the investors and policy makers. The research effort in the NSE has concentrated on development of the exchange, investor confidence, and liquidity.

## 1.2 Research Objectives

The objective the study is to examine the macroeconomic factors that influence stock prices in the Nairobi stock exchange in view of the following specific factors;
1.2.1    To examine the influence of changes in inflation on stock prices for        listed in the NSE
1.2.2    To evaluate the effect of changes in interest rates on stock prices for listed firms
1.2.3    To examine the effect of volatility of exchanges rates on stock prices for firms listed in the NSE.
1.2.4    To evaluate the effect of money supply on stock prices for listed companies.

## 1.3 Research Questions

The following are the research questions that shall be of relevance in fulfilling the objective of the study;
1.3.1    Do changes in inflation levels affect stock prices in the NSE?
1.3.2    Is there a relationship between the changes in interest volatility and stock price changes?
1.3.3    Do the volatility of exchange rates influence changes of stock prices.
1.3.3    Does the level of money supply in the economy affect stock prices?

## 1.4 Hypothesis under investigation

The study investigates the hypothesis that there is a significant difference between selected macroeconomic factors and the price changes for the firms listed in the Nairobi Stock Exchange (H1).

**1.5 Justification of Study**

The purpose of the study is to examine the factors that influence stock prices for firms listed in the NSE.   This will be of benefit to both policy makers and investors to identify the specific factors affecting prices and can therefore be used as basis for making decision on strategies to be adopted in making investment decisions in the capital market.

**1.6 Scope of Study**

The study was based on all the listed companies in Kenya trading at NSE.

**2. *LITERATURE REVIEW***

**2.1 Introduction**

The literature review examines the studies that have been undertaken and theoretical orientation on factors influencing stock prices.  An empirical review is done discussing various studies already undertaken, identifying the research gaps and conceptualizing the current study. A summary of the variables indicating the predicted results is presented.

**2.2 Theoretical Review**

Investors are always interested to assess the investment risk which can be done through evaluation of systematic and unsystematic risk (Dubravka & Petra, 2010).  Systematic risk, which is market risk relating relates to the changes in the macroeconomic environment whereas unsystematic risk is the unique risk of a given security asset which can be reduced or eliminated through diversification.  Factor models focus on risk which cannot be avoided by diversification, in other words basically systematic risk. This is anchored on the arbitrage pricing model (APT) introduced by Ross (1976), which introduced several factors that were presumed to influence stock prices.

The logic of the APT Model is that there is no single factor that explains risk and return relationship (Mclaney, 2009). The APT theory postulates that the return expected from a financial asset can be presented as a linear function of various theoretical market indices and macro-economic factors (Ross, 1976). It is considered that the factors considered are sensitive to changes represented by a factor-specific beta coefficient ($\beta$). On the other hand Fama and French (1992) analyzed firm-specific microeconomic variables such as market beta, firm size, earnings-price ratio, leverage ratio and book-to-market equity in explaining stock returns, thus representing the fundamental factor model.  The APT requires that   investors perceive the potential risk sources to estimate factor sensitivities.Chen et al (1986) in their notable work in United States of America analyzed macroeconomic financial variables using monthly data to investigate the systematic factor influence on US firm stock prices.  The variables used in their study were industrial production, inflation, risk premium, term structure, market index, and consumption and oil prices.  The authors found that the factors had a significant influence in the stock prices with inflation showing particularly high significance particularly in periods of high volatility.
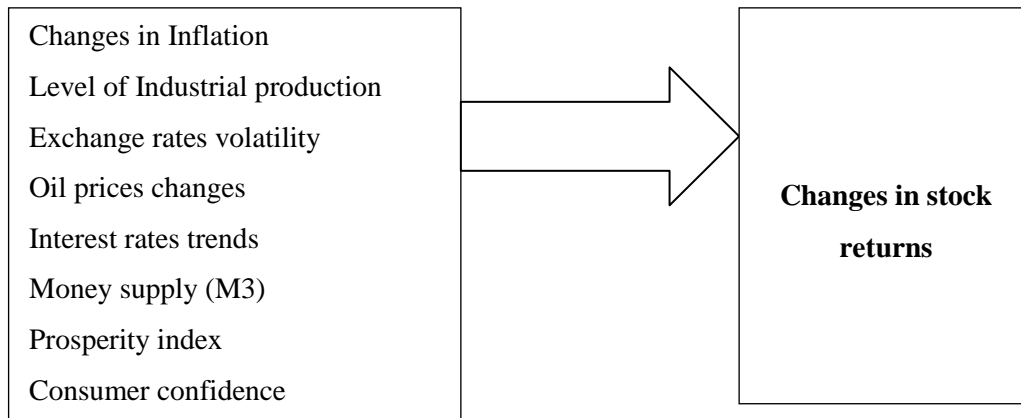
Rapach et al (2005) used several factors from 12 industrialized countries to examine the influence of the macroeconomic variables on stock returns. The study concluded that most of the selected variables had the ability to predict stock prices. Dubravka & Petra (2010) in their study undertaken in Croatia capital markets investigated the relationship between changes in macroeconomic factors and stock returns using inflation, industrial production, interest rates, and market index and oil prices variables.   The study concluded that the market index had the most significant impact whereas as inflation had a negative influence in the stock returns.  Interest rates, oil prices and industrial production were also observed to exert a positive relation to stock returns.

Cheng et el (2011) in their study covering electronic industries in Taiwan concluded that the variables of industrial production, and money supply (M2) and exchange rate were significant and had a positive impact on stock prices.  In a comparative analysis, they however observed that non microeconomic events had a stronger predictive power than the microeconomic factors.    The non microeconomic factors included in their study were sports event, presidential election, natural disaster, financial crisis and infectious disease. Wang (2010) empirical analysis of factors that affect the change in stock price shows that the change in stock price is mainly affected by the exchange rate, interest rate, macroeconomic prosperity index, consumer's confidence index and corporate goods price index. In the course of the literature review,  empirical evidence available for Kenya  concerning the effect of macroeconomic factors on stock prices for firms trading to NSE was very sparse, hence the motivation for the study.   The paper is purposed to give an insight into investment and operation strategies for players in the Kenyan financial market.

## *2.3 Theoretical Framework*

Based on the literature review above the following theoretical framework is derived;
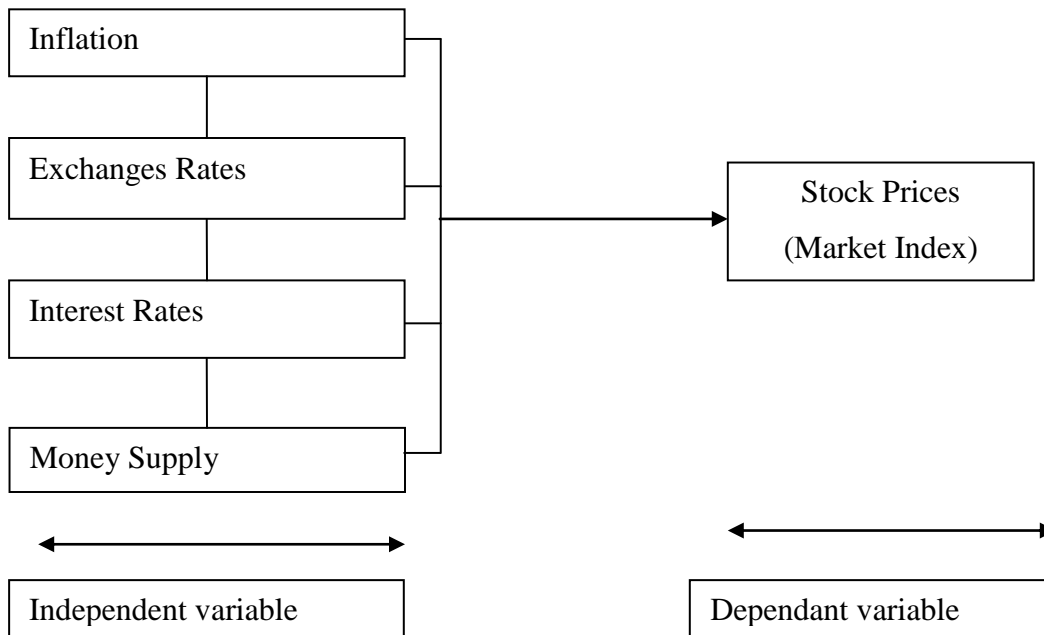
**Figure 1 – Theoretical Framework**



| Changes in Inflation |
|---|
| Level of Industrial production |
| Exchange rates volatility |
| Oil prices changes |
| Interest rates trends |
| Money supply (M3) |
| Prosperity index |
| Consumer confidence |

**Changes in stock returns**

## 2.4 Conceptualization

The researcher has chosen the following variables for the purpose of the current study. The variables are considered relevant in the Kenyan context and data can readily be collected, as will be explained under the methodology where the individual variables are also explained in details.

**Figure 2 - Conceptual Framework**



Inflation

Exchanges Rates

Interest Rates

Money Supply

Stock Prices
(Market Index)

Independent variable

Dependant variable

## *3.0 RESEARCH METHODOLOGY*

## 3.1 Introduction

The chapter presents the research design, target population, data sampling and sample size, data collection and analysis methods that were adopted to address the issue/problem delineated in chapter 1 and test the hypothesis

## 3.2 Model Specification

The econometric model under analysis is given by the following equation:

$$Ri.t = \beta oi + \beta i, F1, t + \beta i, F2, t + \ldots\ldots, \beta i, Fn, t + \varepsilon i.t$$

where: Ri = return on stock *i*

$\beta_{o}i$ = constant term
$\beta i$ = sensitivity of a stock *i* to a set of *k* macroeconomic factors
Fn = realizations of macroeconomic factors, n=1,2…,k
$\varepsilon i$ = disturbance term with an expected value of zero and constant variance

The sensitivity of stock  prices to changes in macroeconomic factors is estimated using ordinary least squares (OLS) in the framework of factor model applied by Chen et al, (1986), Wang, (2010),  Benakovic & Posedel 2010, Cheng et el (2011). The model is based on the assumption that the disturbance terms are uncorrelated across stocks, meaning that stock prices change only as a reaction to a specific factor. To carry out data analysis SPSS is used to compute multi-linear regression and Pearson correlation to answer the study questions, and ANOVA to test the hypothesis.

### 3.3 Research Design

The NSE 20 share index is selected as the proxy representing the overall stock prices.  The share index reflects the change in different types of asset securities in the stock exchange representing all the segments in the in the market (Berk et al, 2009).  The NSE 20 index is sampled to be surrogate representative of the different industries and the general change in price in line with Dubravka & Petra (2010) finding that the market index had the largest statistical signicancy in explaining stock returns.

### 3.4 Data Sampling and sample size

The sample is the related monthly market level data covering the period January, 2008 to December 2010 for the companies listed in the Nairobi stock exchange.  The period is selected so as to use the most recent data, to make the findings more current. The study uses secondary data the main source of which is the NSE and the Central Bank of Kenya statistics. The following are the conceptualized variables;

### 3.5 Definition of Variables

The market index used in this paper is NSE 20 index, the official office Nairobi Stock exchange stock index consisting of stocks from 20 companies. The series of index values for each month is calculated by averaging the daily values of NSE 20. The monthly change in NSE index is calculated by the using:

$$MI(t) = \log NSE(t) - \log NSE(t-1)$$

Where MI(t) is the monthly change in market index in month t, NSE(t) is the market index in month t and NSE(t-1) is the market index in the previous month.

Inflation is the change in prices of commodities.  Most studies reveal that inflation had a negative impact on stock prices Rapach et al (2005) and Chen et al (1986).  Based on this argument the study predicts that the variable of inflation will have a negative impact on stock prices.

$$INF(t) = \log INF(t) - \log INF(t-1)$$
$$I$$

Where INF(t) is the monthly change in inflation in month t, INF(t) is the inflation rate in month t and INF(t-1) is the inflation rate in the previous month.

The exchange rate is changing proportion of currency between countries. If a currency appreciates it will reduce competition internationally, and have adverse effect on import whereas it will be beneficial to export trade. Abugri, (2008) showed that the stock return was negatively affected by exchange rate. Cheng et al (2011) also found that exchange rate had a positive significant impact on Taiwan electronic stock return, mainly because being an export based industry investors saw an opportunity for better returns, in case of currency appreciation. Based on these findings the study predicts that exchange rate will have a negative impact on stock prices, Kenya being a net importer economy.

$$EXRATE(t) = \log EXRATEt) - \log EXRATE(t-1)$$

Where; EXRATE (t) is the monthly change in exchange rate in month t, EXRATE (t) is the exchange rate in month t and EXRATE (t-1) is the exchange rate in the previous month.

High interest rates decrease the present value of future cash flows, thus reducing the attractiveness of investment Dubravka & Petra (2010) found that an increase in interest rates should lead to a drop in stock prices in the Croatia Market. The interest rate for each month is calculated as an average of daily interest rates.

$$INT(t) = logINT(t) - logINT(t-1)$$

Where; INT(t) is the monthly change in interest rate in month t, INT(t) is the interest rate in month t and INT(t-1) is the interest rate in the previous month based on Central bank of Kenya rates.

Money supply is the total amount of money available in an economy at any particular point in time. Cheng et al (2011) found that money supply had a positive significant impact in the Taiwan electronic industry. The study estimates that the variable of money supply has a positive impact on stock prices.

$$MS(t) = logMS(t) - logMS(t-1)$$

Where; MS(t) is the monthly change in money supply in month t, MS(t) is the money supply rate in month t and MS(t-1) is the money supply in the previous month based on Central bank of Kenya rates.

### 3.6 Implementation of the Model

The factors under study have been specified in the previous section, the relevant equation for the model is given as;

$$Mi.t = \beta oi + \beta iINF, t + \beta EXRATE, t + \beta INT, t + \beta MS, t + \varepsilon i.t$$

where:
MIi = return for stock *i*
$\beta_o i$ = constant term
βINF = sensitivity of stock *i* to inflation monthly change in inflation rate
βEXRATE = sensitivity of stock *i* to monthly change in exchange rate
βINT = sensitivity of stock *i* to monthly change in interest interest rate
βMS = sensitivity of stock *i* to monthly change in money
εi,t = disturbance term

### *4.0 RESEARCH FINDINGS*

### 4.1 Introduction
The monthly market level data covering the period January, 2008 to December 2010 for the companies listed in the Nairobi stock exchange was compiled using secondary data the main source of which was the NSE and the Central Bank of Kenya statistics. The data analyzed covers a period of 36 months, and the NSE 20 share index is used as a proxy to measure the return variations for the firms listed in the Nairobi Stock Exchange.

### 4.2 Estimation of sensitivity of prices to the factors

The econometric analysis of the model is implemented by running multiple regression of the market index (MI) as a dependent variable and the four selected macroeconomic variables as independent variables. This is done to analyze the relationships between the variables and the average change of the dependant variable when the independent variable changes 1 percentage point (Kothari, 2009). The Pearson correlation coefficient is calculated to determine the degree of correlation. The results of the Pearson correlation coefficients analysis are presented in table 1.

**Table 1 - Correlation coefficients matrix of the variables**

**Correlations**

|  |  | MI | INF | EXRATE | INT | MS |
|---|---|---|---|---|---|---|
| Pearson Correlation | MI | 1.000 | .025 | -.558 | -.345 | .076 |
|  | INF | .025 | 1.000 | -.531 | .723 | -.844 |
|  | EXRATE | -.558 | -.531 | 1.000 | -.501 | .587 |
|  | INT | -.345 | .723 | -.501 | 1.000 | -.790 |
|  | MS | .076 | -.844 | .587 | -.790 | 1.000 |
| Sig. (1-tailed) | MI | . | .443 | .000 | .020 | .329 |
|  | INF | .443 | . | .000 | .000 | .000 |
|  | EXRATE | .000 | .000 | . | .001 | .000 |
|  | INT | .020 | .000 | .001 | . | .000 |
|  | MS | .329 | .000 | .000 | .000 | . |
| N | MI | 36 | 36 | 36 | 36 | 36 |
|  | INF | 36 | 36 | 36 | 36 | 36 |
|  | EXRATE | 36 | 36 | 36 | 36 | 36 |
|  | INT | 36 | 36 | 36 | 36 | 36 |
|  | MS | 36 | 36 | 36 | 36 | 36 |

Table 1 exhibits the correlation coefficient matrix of the change in prices represented, by the market index (MI), and the macroeconomic factors. Through the correlation matrix it is noticeable that EXRATE (-.558) and INT (-345) had a high negative correlation with returns among the variables, confirming the prediction assumed in the study. The study confirms the findings of Rapach et al (2005), Chen et al (1986) and Abugri, (2008). The variables of INF (.025) and MS .076 had a mild positive correlation with the changes in market index. The study had however predicted a negative correlation for inflation but result shows a mild positive correlation. The positive correlation for money supply was predicted and confirms the findings of Cheng et al (2011)

**Table 2 – Multiple Regression Results of market index on macroeconomic factors**

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df 1 | df 2 | Sig. F Change |
|---|---|---|---|---|---|---|---|---|---|
| 1 | .933[a] | .870 | .854 | 310.6320 | .870 | 52.072 | 4 | 31 | .000 |

a. Predictors: (Constant), MS, EXRATE, INT, INF

The multiple regression coefficient of determination result represented in table 2 shows overall, the variables of inflation, Exchange rate, Interest rate, and money supply explain 87% of the change in the market index (MI) which is consistent with the findings of Cheng et al (2011)

**Table 3 – Coefficients of the Regression**

**Coefficients[a]**

| Model | | Unstandardized Coefficients B | Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 1 | (Constant) | 14948.100 | 1153.696 | | 12.957 | .000 |
| | INF | 27.976 | 9.306 | .369 | 3.006 | .005 |
| | EXRATE | -138.464 | 11.686 | -.951 | -11.849 | .000 |
| | INT | -335.452 | 39.614 | -.909 | -8.468 | .000 |
| | MS | 1.061 | .665 | .227 | 1.596 | .121 |

a. Dependent Variable: MI

The regression coefficients show a negative correlation for EXRATE and INT in line with the hypotheses proposed. The variable of Inflation had mild positive correlation which varies with the prediction made whereas MS had a positive correlation supporting the proposition made in the study. Except for MS, all the other variables were significant at 95% level of significance, the sig values reached zero.

**Table 4 - Analysis of Variance.**

**ANOVA[b]**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 20098015 | 4 | 5024503.871 | 52.072 | .000[a] |
| | Residual | 2991259 | 31 | 96492.216 | | |
| | Total | 23089274 | 35 | | | |

a. Predictors: (Constant), MS, EXRATE, INT, INF

b. Dependent Variable: MI

The analysis of variance represented in Table 4 shows the F Value of the entire regression model was 52.075 df (4, 31) p< .05. The sig value generated by the model was .000 implying that the variables were significant in influencing the stock prices, and therefore we accept the hypothesis posed (H1).

## 5.0 CONCLUSION AND RECOMMENDATION

### 5.1 Introduction

In this chapter conclusions are presented and based on them suitable recommendations are made.

### 5.2 Summary

The variable of inflation had little positive correlation inconsistent with the prediction of a negative correlation as per the findings of Rapach et al (2005) and Chen et al (1986). The study shows in the case for NSE, the actual practice is contrary to the expectation on negative correlation. Ideally, the rise in the general level of prices is anticipated to reduce the expected cash inflows from investments; hence investors who own some asset are exposed to potential reduction of the real value of the stock due to inflation. The tendency would be to shy away from stock investments has inflation surges.

In general, among all the macroeconomic factors investigated, exchange rate has the most significant impact on stock prices supporting (Abugri, 2008). When the national currency appreciates, it encourages foreign currency inflows which increases liquidity resulting in more investments, and enhanced activity in the stock market. Further, stability of the national currency increases investor confidence attracting more foreign currency inflows, as opposed to erratic volatility which subjects the market to uncertainty. Prospective investors are attracted to other jurisdictions where stability can be assured.

The interest rate also had a significant negative impact on the stock prices. When the interest rate rises, saving becomes more attractive, resulting in some of the money flow being channeled away from the stock market to bank deposits. This has the effect of depleting demand for the stock and naturally reduced stock prices. High interest rates also reduce the present value of future investments, and therefore reducing attractiveness of an investment option. The study confirms Dubravka & Petra (2010) findings. The variable of money supply had a positive impact which supports the finding of Cheng et al (2011). When money supply is decreased, interest rates increase, hence investors will save their money and reduce their desire for investing, reducing demand for stocks resulting in depressed stock prices. The money supply in the Kenyan economy increased over the period covered in the study. Although the increase had a mild positive correlation, this was insignificant as evidenced by the regression coefficients result showing sign .121at P<.05.

### 5.3 Conclusion

This paper applied multiple regression analysis to estimate the influence of macroeconomic factors on stock prices. The analysis covered firms listed in the NSE, and sampled monthly market level data for 36 months covering the period 2008 to 2010. By means of multiple regression analysis of stock returns to macroeconomic factors, sensitivity of the price changes was estimated. According to the empirical analysis results, the stock prices are significantly affected by inflation (INF), exchange rate (EXRATE), and interest (INT). The effect of money supply (MI) variable was found to be insignificant. However the variable of EXRATE rate volatility was found to have the most significant negative impact followed by interest rates.

The study shows that stock prices are affected by macroeconomic factors, particularly in reaction to anticipated adverse effects on earnings. Investors react to prepare and protect themselves against risks they may be exposed to. Further research maybe undertaken, changing the combination of the variables to investigate the effect on stock prices. It will make interesting research also to investigate the factors that influence the positive correlation of inflation on stock prices in the financial markets in Kenya.

### 5.4 Recommendations

The planners in making relevant strategies should be conscious of key macroeconomic factors. The findings of the study conclude that the factors of inflation (INF), exchange rate (EXRATE), and interest rates (INT), have a significant impact on stock prices. The variable of money supply was insignificant, but with a positive correlation. In making policy decisions, the aim should be to stimulate development of the financial markets to mobilize long term capital for the economic development. In setting relevant strategies policy makers, need to consider the impact of various factors so that effective decisions can be made for long term financial market sustainability. The study therefore makes the following recommendation.

1   Inflation should be maintained at low levels.   A rise in the general level of prices reduces the expected cash inflow from an investment, as result investors who own some assets are exposed to potential reduction of the real value of the asset they hold due to inflation. To encourage investment and growth of the financial market, inflation should be kept at the minimum. Although the study showed a positive correlation, this could have resulted from market impurities.

2   There should be a deliberate policy framework aimed to create  favorable foreign exchange market to provide stability to the national currency.  This will bolster investor confidence, attracting more foreign currency inflows and with the increased liquidity activity will be enhanced at the stock market.  The forex market should have some level of control to protect the local currency.

3    Studies have shown that high interest rates reduce the present value of future investments and therefore reduce attractiveness of investment.  It is recommended that a policy to manage interest rates should be put in place. This policy framework will provide for a mechanism to regulate interest rates with a view to sustaining levels attractive to investments.

4   When money supply is decreased interest rates increase, hence investors will save their money and reduce the desire to invest.  The level of money supply should be sufficient to encourage investments.  But there should be a tradeoff because excess supply will trigger inflation which will have a counterproductive effect in the economy.

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