Micro – Economic Factors Influencing Quantity of Stock Demanded by Retail Investors in the Kenyan Stock Market: A Case of Nyeri District, Central Province: Kenya

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ABSTRACT
This research was set to establish whether time period of retail investors in the stock market, cost of the stocks, profits declared by listed companies, investor’s income, availability of stocks, investment returns and prior advice influence demand of stocks by retail investors in the stock market. It revealed that increase in investor’s income, investment returns, profits of listed companies, prior advice, time period, and availability of stocks have a positive relationship with the demand for stocks by retail investors, while cost of stocks has a negative relationship with the demand for stocks by retail investors in the stock exchange market. It recommends that there is need for further professional training on the stock exchange market as most investors rely on their friends advice before investing in the stock market. It also recommends that the government through the CMA and NSE ought to put up stringent measures to safeguard the public from scrupulous brokerage firms.

Keywords: Retail Investor, Stock Exchange, Capital, Mwananchi, Stock:

1.0 INTRODUCTION
Over the last five years, the Kenyan economy has been reinventing itself. From virtual stagnancy in 2001, the economy has expanded steadily to register a remarkable growth rate of more than 6% in 2006. One of the obvious beneficiaries of this economic renaissance is the stock market. Despite the major economic crisis that the country went through at the end of the year 1997 and beginning of the year 1998 due to post election violence, the Kenyan economy is now back on track and growth is being experienced again. A study carried out by Capital Market Authority (CMA) on investor education revealed that in the past four years, the stock market in Kenya has grown by leaps and bounds with stock prices appreciating to record levels. Naturally, this has generated unprecedented interest in the stock market by investors of all hues.

In an area traditionally considered the preserve of the sophisticated investor, it is gratifying to see virtually insatiable appetite for investment in stocks and shares from ordinary Kenyans of all social strata. One direct result of this new interest in the stock market is that all the recent six public offerings of shares have been massively oversubscribed. KenGen, despite its large size, was oversubscribed more than three times; Scangroup, a little understood concept company, was oversubscribed six times; Eveready, a provincial company, was oversubscribed eight times; and despite the relatively high minimum subscription threshold for retail investors, Access Kenya was oversubscribed four times. Kenya Re Initial Public Offer (IPO) was a resounding success with oversubscription of more than four times. The message is clear: investors are thirsty for viable investment opportunities and thousands of ordinary mwananchi who never gave shares a thought a few years ago are buying them today.

The very recent Public Infrastructure Bond Offer (PIBO) like KenGen and Safaricom received an awesome reception from the public and the companies were able to hit the targeted amount for their infrastructure. It is a clear indication that the public still wills to invest in the stock exchange market and thus, there is need for the investors’ interests to be put forward and be addressed.

A study conducted by Wambui Kibuthu (2006) revealed that the efforts by Nairobi Stock Exchange (NSE) and Capital Market Authority (CMA) to improve public awareness of the opportunities available in the capital markets in Kenya needed to be strengthened by using a variety of means of communication such as media
campaigns through the radio, television and newspapers, engaging in one-on-one meetings with eligible firms and potential investors, and distribution of literature to firms and potential investors across the country. The research aimed at establishing the factors that retail investors put into consideration once they intend to invest in the stock exchange market. This research shall go along way in assisting the stake – holders in the stock market in determining the gaps existing between the stocker and the retail investors.

1.1 PROBLEM STATEMENT
The stock market is widely described as a barometer of any nation’s economy. It is a well known fact that the investor (retail/individual or corporate body) is the supplier of funds in the market. This is achieved by purchasing of fresh securities in the primary market, making funds available to the issuer in the process or buying of existing securities (shares, bonds) from the secondary market to enable those who want to convert their investments to cash do so. In essence, investors’ participation in the market is very important, without them there is no market. The investor is in the market for the returns he or she expects to make on his investment. It follows that investors do sometimes forfeit present consumption if they perceive that their utility would be maximized in the future. Such perception may be influenced or determined by the investors’ adviser who is usually a stocker. However, in the final analysis, it is the investors whose funds are at risk and that should determine what investment option he should take. In other words, it is the integrated decisions of investors which should ultimately influence the prices of securities.

Recently, Initial Public Offerings (IPOs) and Public Infrastructure Bond Offer (PIBO) have become very popular with investors and have attracted massive oversubscription. Banks’ loan portfolio during the offers has been growing tremendously and there has been mushrooming of branches of the stock agencies all over Kenya. This is a clear indication of the rising demand of the stocks. Retail investors have been observed making long queues a number of days in order to transfer their shares to other stable brokers and settle their claims when stock brokerage firms collapse.

However the trend observed during the Co – operative Banks’ IPO’s, was of concern. Unlike the previous offers, retail investors participation rate was slow and with a lot of suspicions. Most retail investors feared investing in the stock market because of the downward trend of share prices then and the experiences they had with stock brokers. The researcher was therefore in the mission of finding out what the driving forces of investment by retail investors are in the stock market.

The research therefore, was aimed at finding out the factors which influence retail investors’ quantity demanded in the stock market in Kenya. The study restricted itself to retail investors in the Nairobi Stock Exchange (NSE) in the republic of Kenya specifically within the Central Province - Nyeri District. It was aimed at establishing the factors that determine how much retail investors put in the stock market in Kenya.

1.2 OBJECTIVES OF THE STUDY
The objectives of the study was to establish the micro – economic factors that influence quantity of stock that retail investors demand in the Nairobi Stock Exchange.

1.3 THEORITICAL FRAMEWORK

Efficient Market Theory
This is generally regarded as a situation where share prices fully reflect all available information on the company. In other words, the theory assumes that such information will be correctly interpreted by the investors in their investment demand decisions. Given this fact, it is therefore expected that in an efficient market, information will be quickly and widely disseminated cheaply to all investors. (www.dynamicportfolio.com)

The Theory of Asset Demand / The Theory of Portfolio Choice
This theory is one of the basic analytical tools for the study of money, banking and financial markets. The theory outlines criteria that are important when deciding which assets are worth buying. It also gives an idea of why it is good to diversify and not to put all the eggs in one basket. (Harper 1992)

An asset is a piece of property that is a store of value. It is something with value that an individual or institution legally owns. Money, bonds, other forms of credit, stocks, land, office buildings, houses, factories and equipment are all assets. A group of assets held together is called a portfolio. The theory answers questions such as follows: If one saves, which assets does one acquire for his/her portfolio? One may hold money, buy bonds or buy a house. If so, why? Does one buy stocks of companies listed on the stock market? Why or why not? This theory assists on how people might use their saved funds to purchase various assets and in studying factors that influence the willingness to buy assets. (Mishkin 1992)

2.0 LITERATURE REVIEW

Investors’ Perception:
It is a well known fact that the investor (individual or corporate body) is the supplier of funds in the market. This
is achieved by purchasing of fresh securities in the primary market, making funds available to the issuer in the process or buying of existing securities (shares, bonds) from the secondary market to enable those who want to convert their investments to cash do so. In essence, investors’ participation in the market is very important, without them there is no market. The investor is in the market for the returns he or she expects to make on his investment. It follows that investors do sometimes forfeit present consumption if they perceive that their utility would be maximized in the future. Such perception may be influenced or determined by the investors’ adviser who is usually a stocker. It is the integrated decisions of investors which should ultimately influence the prices of securities. (www.dynamicportfolio.com)

Investors’ perception is influenced by various micro – economic factors. Dr. Steve Sjuggerud an Advisory Panelist, in his “The Investment U E-Letter: Issue No.148 Thursday, June 20, 2002), states that there are only two things that drive the stock market. These are: Earnings and Emotions. Earnings consider the stock price in relation to the company’s earnings. This generally indicates whether a stock is cheap or expensive. What one needs to realize is that, unless stocks fall by over 50% - or unless earnings more than double - one does not even need to check in with the performance. Emotions are a huge part of investing. Human beings, with both rational and emotional urges, are the market players. And the thing is, those emotional urges can (and do) often overtake the rational side.

From the other two theories other factors that influence an investor’s demand for stocks include: Time, Price of stocks, Accessibility to stock brokers, Ease of liquidating stocks, Investment Returns, Company Profitability and Availability of funds. These factors contribute to economic indicators thus determining the level of economic growth in an economy. Economic Indicators are important signals of the state of the nation’s economy and these influence investors’ confidence in the economy and its stock market. Such indicators include:

Company Profitability: its level sees to the fluctuation in stock prices. Investment Returns: This factor is however dependent on profitability as there is no company that can pay good investment returns in terms of dividends and or bonus issues to its share holders without a solid profitability report. The profits declared by listed companies are of great importance when it comes to choosing which stocks to buy. Investors are attracted to companies which declare high profits since it gives an assurance of high returns on their stocks in terms of dividends and stock prices. Expected rates of return: The return on an asset measures how much we gain from holding that asset. It should be no surprise that the rate of return which savers expect to earn on assets influences their willingness to buy assets. Management: A company with well established and organised management team is likely to produce good financial results which would attract investors. Time: this is the most important factor in determining the amount of stocks that one can buy. It is the time factor that dictates whether floated stocks can be afforded or not. Therefore, no retail investor can ignore the role that time plays in the demand of his/her stocks.

Speculation: The volatility in the stock market creates price instability, which in turn encourages speculation on the stock price movements. Share prices in the secondary market change continuously. The changes could be as a result of government policies and or companies’ corporate actions as well their financial positions. It is however up to the investor to critically assess the many variables that are likely to impact on the fortunes of the company in whose shares he is to invest. By whatever method he chooses to do this and whatever skill he decides to apply (personal or professional), it is certain the investor through the interplay of demand and supply including other highlighted factors determine the movement of share prices on the secondary market. However, it is indeed advisable to seek professional advice before investing. (www.dynamicportfolio.com)

In conclusion, share prices in the secondary market change continuously. The changes could be as a result of government policies and or companies’ corporate actions its financial positions. The price of the asset. People generally want to buy more of an asset when its price falls and other factors like expected future prices and perceived quality remain constant, and want to buy less of an asset when the price of the asset rises and other factors remain constant. Wealth: This the total value of assets. The current value of wealth affects people's willingness to buy certain assets for their portfolio.

Liquidity: It measures the ease of converting an asset into funds that can be used to pay for goods and services or debt. Holding liquid assets is beneficial when investors might need to pay for goods and services or debt quickly. Accessibility of an asset: The proximity of an asset affects how many people shall be interested in investing in it. If stocks and securities are made available to the retail investors it is likely that more investors shall show up Information on the market: It is of paramount importance that investors be informed about the stock market. An informed investor invests out of wisdom and not out of euphoria.

Investor Education - Investing in the Stock Market
NSE should increasingly play an educational role and embark on a vigorous campaign to market itself and educate potential investors about the opportunities available in the market and how to effectively exploit them. The efforts by NSE and CMA to improve public awareness of the opportunities available in the capital markets in Kenya need to be strengthened by using a variety of means of communication such as media campaigns.
through the radio, television and newspapers, engaging in one-on-one meetings with eligible firms and potential investors, and distribution of literature to firms and potential investors across the country. (Kibuthu 2006)

Investor education is an important supervisory tool to promote investor protection. To this end the CMA identified public and investor education as a key driver of its market growth agenda. But while Authority will always endeavour, as part of its mandate, to provide as much protection to investors as the law permits it, it also believes that the best protection is, and will always be an informed and knowledgeable investor. An educated investor is a protected investor, and a protected investor is a more willing player in the market. All too often, investors chase rumours resulting in losses through poor risk management and following of the guide. Therefore, investors should continuously take interest in their investments and seek all the information they need to know about a target company to enable them to act as effective watchdogs over their investments. They should know their rights, ask the right questions of their financial advisers, and know where to check to verify and clarify their doubts. The Authority has set out elaborate rules that specify minimum disclosure requirements for issuers of securities and listed companies in order to elicit full and accurate disclosure of material information that will enable investors make informed decisions. (Capital Market Authority homepage 2009)

Many factors, some of which are perceptual and subjective in nature, combine to determine the quality of a stock. Highly important among these are: Management: Is the company a solid and reputable firm and does it have able, efficient and seasoned management? Products: Is the company producing goods and services for which there will be a continuing demand for the foreseeable future? Market share: Is the company operating in a field that is dangerously overcrowded, and is it in a strong competitive position? Earnings: Does the company have a satisfactory earnings record, and have reasonable dividends been paid regularly to shareholders? What are its future prospects? Asset base: Are the net assets per share reasonable relative to the market price of the share? Liquidity: Are the shares issued available in sufficient numbers and dispersion to enable the script to be bought and sold at any given time? Volatility: Has the price of the stock moved up and down without violently wide inexplicable fluctuations? Corporate governance: How strong is the company in terms of corporate governance scorecard?

Investors have widely divergent investment tastes and some are more risk averse than others. This is likely to reflect in the choice of securities in which they invest. Some Investors will be more concerned about capital preservation and growth while others are more attracted by liberal and generous dividend payouts. The type of investor you are will be a rough guide to the type of securities you should buy into. (Capital Market Authority 2009)

3.0 RESEARCH DESIGN AND METHODOLOGY
The study adopted a case study which used primary, secondary and tertiary sources to collect the data. Both descriptive and inferential statistics were used. Relevant models were used to determine the factors which influence investment levels of retail investors in the stock market. It used multi – stage sampling procedure as the major sampling technique while random sampling was used at every stage of sampling. A total of 370 respondents were sampled. The study was carried out in Nyeri District, Central Province in Kenya. The district was divided in 7 divisions which include: Othaya, Tetu, Mukurweini, Kieni East, Kieni West, Mathira and Nyeri Municipality. The study had 96.5% successful return rate, which was high enough to support completion of the study. According to Mugenda and Mugenda (1999), a response rate of 60% is good while a response rate of 70% is very good for social science researches.

Efficient Market Theory
This is generally regarded as a situation where share prices fully reflect all available information on the company. In other words, the theory assumes that such information will be correctly interpreted by the investors in their demand for stocks. Given this fact, it is therefore expected that in an efficient market, information will be quickly and widely disseminated cheaply to all investors. Factors which could influence investors’ perception have been discussed previously. They include price of stocks, availability of funds, accessibility of stock brokers, investment returns, company profitability and liquidity of stocks. These factors form the Economic Indicators of an economy. The factors show the relationships that exist between demand for stocks by retail investors and their perceptions.

The Theory of Asset Demand / The Theory of Portfolio Choice
The theory outlines the various factors which influence retail investors’ demand of stock which include; time, the price of the asset, rates of return, liquidity, company profitability availability of funds and accessibility of stocks and securities
Model Specification Framework

The relationship of variables from the theories and the models discussed previously can be diagrammatically presented as follows:

- Time
- Retail investor’s income
- Cost of stocks
- Investment returns
- Availability of stocks
- Company Profitability
- Prior Advice

Source: Author 2009

The above model was formulated by the researcher to encompass the three theories that the research borrowed from. These theories are: Dr. Steve’s theory which states that there are only two things that drive the stock market: Earning and Emotions, the Efficient Market Theory and the Theory of Portfolio Choice. Out of the three theories it emerged that an investor’s perceptions and emotions shall be driven by factors such as: Time, Retail investor’s income, cost of stocks, availability of stocks, investment returns, company profitability, and prior advice. These factors then contribute to the influences of demand for stocks by the investors. The task of the researcher therefore, was to prove whether the above model specification framework holds.
4.0 DATA PRESENTATION, ANALYSIS AND INTERPRETATION

Model summary

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**THE ESTIMATED MULTIVARIATE LINEAR REGRESSION MODEL**

This research study established that the estimated equation of the model used was as follows:

\[ Y = 2.051 + 0.04X_{1i} - 0.03X_{2i} + 0.06X_{3i} + 0.049X_{4i} + 0.026X_{5i} + 0.06X_{6i} + 0.712X_{7i} + \varepsilon_i \]  

Where:

- \( X_{1i} \) = Investor’s Income
- \( X_{2i} \) = Cost of stocks
- \( X_{3i} \) = Availability of Stock
- \( X_{4i} \) = Returns on stocks
- \( X_{5i} \) = Company Profitability
- \( X_{6i} \) = Prior Advice
- \( X_{7i} \) = Time
- \( \varepsilon_i \) = Stochastic Term

The above estimated model shows the existing relationship between the demand for stocks by retail investors and the prior advice received by them, their incomes, availability of stocks, profits declared by listed companies, investment returns, cost of stocks and time factor.

The research was able to explain 51.4% of the factors that determine demand for stock by retail investors in the stock market. Therefore there is need for further research to establish other factors.

5.0 DISCUSSION, CONCLUSION AND RECOMMENDATION

This research was motivated by the overwhelming participation of retail investors in the stock market recently. It was fuelled more by collapsing of various giants stock brokers and a big number of retail investors were queuing to place their claims. The researcher was therefore interested in answering some of the questions that emerged during those periods on how retail investors were reacting to loosing of funds and their stocks. The study was designed to assess those specific factors that retail investors put into consideration as they demand stocks in the stock market. The study set out to seek empirical evidence on whether retail investors are driven by perceptions and emotions which are shaped by various factors which the researcher classified as micro – economic factors since they are directly affecting the investor.

When NSE market was opened to the public, the aim was to get the public on board for the following reasons: to secure investment opportunities, to provide funds to investors to expand their companies and to increase government income to finance its expenditures. However, the CMA did not provide a firm platform for the players in the market to be informed equally. Stock brokers took advantages and they have been exploiting the public who know little about their rights in the market. Most investors were not informed on how the market operates. The results from the previous chapter revealed that out of the retail investors who seek prior advice before investing in the stock market seek it from their friends who may not offer professional advice, hence entering the market without information or out of euphoria. The research is therefore aimed at providing a needs assessment guide to the players in the market on what the retail investors need to be effective in the market.

Primary data has been used greatly though it has been supplemented by some secondary data. The data analysis has been conducted using the SPSS V. 16.0 package to estimate the empirical equations involved. The use of Multivariate Regression Model was of importance in order to capture a variety of factors which seem to influence the demand habits of retail investors. Econometric analysis was found to be necessary, since the statistical significance of various microeconomic variables and their impact on demand for stocks by retail investors could be determined jointly. Results from the model (1:4) shows very important evidence: Investor’s Income, Cost of stocks, Availability of stocks, Prior advice, Investment returns and Profits of listed companies are found to impact the investor’s demand for stocks in the stock exchange market. Availability of stocks, Increase of investor’s income and prior advice had a positive impact on demand for stocks by retail investors. Investment returns on stocks, Cost of Stocks and profitability of listed companies impacted on the demand for stocks depending on their movement; either low or high.

Most investors felt that there is need for more training to be done in order for them to be more aware of what happens in the stock market. This would be possible because: Out of all the respondents who participated in this research over 99.7% had formal education ranging from primary to university education. It therefore means
that training such groups of investors is easy since they can understand better the languages used. The research also revealed that more females participate in the stock market than their male counterparts. This was attributed more to the formation of groups that women have which have assisted them to develop their entrepreneurial skills and also because of their changing roles in society. The research established that there may be other factors such as inflation, risk, unemployment etc that may not have been taken care off in the model whereas they influence the quantity of stocks demanded but the stochastic term took care of them. The coefficients of availability of stocks and high cost of stocks were both negative because most retail investors felt that the IPOs has not been giving adequate shares to the public and that the most beneficial shares in the market are quite expensive. However increase of income, high investment returns and high profits determined positively how an investor will in the market.

5.1 Policy Recommendations
Very important insights, that can be used to offer plausible policy recommendations to Kenya’s stock market authority, can be drawn from the research findings in this study. These also will offer guidelines for further research in this field. This research has indicated that there is an urgent need to carry out civic education to enable the public come into direct contact with the CMA and help them understand thoroughly how to go about investing in the market. If proper training is conducted to create more awareness to the public on the operations of the NSE and how to make choices of portfolios in the market, then the government can reap greatly from the market.

There is an urgent need to control the operations of stock brokers and agents of NSE in order to safeguard the public investments in the stock market. This shall ensure that what has been happening lately after collapsing of various stock brokers is not repeated in the future. There is a dire need for the stock market authorities to set rules and regulations which will make the investor’s of the market safe. The results indicate that unequal distribution of shares from IPO’s discouraged the retail investors in participating in the market. There is need therefore, to ensure that all participants of the market play on a level ground. This shall create more confidence on the investors’ mind and shall be more than willing to participate more and more in the market.

The study revealed that investors would prefer dealing with transparent companies so that their investments are safe. It is therefore the work of the CMA in Kenya to ensure that listed companies disclose as much information as possible to the public. The management of these companies should also be watched closely to prevent them from collapsing and failing the public like what happened to UCHUMI supermarket. The government should implement policies that shall lead to steady economic growth to enable the retail investors’ income remain high and steady. This shall enable them to participate fully in the stock market since the research revealed that high incomes influence the demand for stocks positively.

Inflation and unemployment rates should also be minimized since they are affecting the demand for stocks negatively indirectly by reducing the investors’ income. It is therefore paramount that the government designs proper mechanisms of dealing with these two. The research revealed that great participation of retail investor’s in the stock market is based greatly on perceptions and emotions which are influenced by various factors. The bottom-line of these two factors is the trust that a retail investor shall have in the NSE and the faith one has on its operations. It is therefore important that the CMA comes up with measures to restore investors’ confidence, faith and trust.

5.2 Implications for further Research
A study of this magnitude cannot be exhaustive in covering the factors which influence demand for stocks by retail investors in the stock exchange market in the country. As mentioned earlier in this report, the study was limited to micro factors only. More research needs to be conducted in this field to analyze other macro and sectoral factors which influence retail investors’ demand for stocks in the stock market. This may be achieved by not only increasing the geographical study areas, but also including the variables that affect retail investors externally such as inflation and unemployment rates. The research shall bridge the gap of information existing regarding retail investors especially in Kenya which can be used as a model in most of the developing countries.

Another overall research could be carried out to encompass all categories of investors ranging from retail to corporate investors. This shall assist in drawing out the similarities and the differences in the demand habits of these two categories of stock consumers. This shall go along way in assisting the companies that wish to borrow funds from the public in identifying their target market accordingly. Examples of such researches include: First: The macro – economic factors that influence demand for stocks by retail investors in Kenya and Second: A comparative analysis of the factors that influence demand for stocks by retail and corporate investors in the stock market

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