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# THE INFLUENCE OF MARKET FACTORS ON INVESTMENT CHOICES AMONG EQUITY FUND MANAGERS AT NAIROBI SECURITIES EXCHANGE-KENYA

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#### **Abstract**

Numerous investors are keen and conscious of getting a return for their investment at any equity market NSE included. This study sought to determine how market factors influence investment decisions in Nairobi Securities Exchange-Kenya. Primary data was collected using standard questionnaires with both closed and open-ended questions. Cronbach's Alpha Test was used to test the internal consistency reliability of measurements. Data was obtained from the unit trusts and pension funds in Nairobi County. The study was conducted during 2010-2019 period. The target population for this study was 129 fund managers hence a census of all equity fund managers at the NSE. Quantitative data was coded to facilitate analysis using Statistical Package for Social Scientists (SPSS). The study performed tests on statistical

assumptions such as test of regression assumptions and statistics used. This included tests of reliability, normality, autocorrelation, panel root test, cointegration, linearity, independence, heteroscedasticity and multicollinearity. Descriptive statistics involved use of means, standard deviations and frequency Tables. Inferential statistics involved use of regression and correlation analysis. The study concluded that more attention should be focused on firm characteristics in order to achieve the best investment choices. More attention should be paid to the predictors in the order of the magnitude of their effect to investment decision making. This study recommends that investment decision making shouldn't be based on biased decisions.

Keywords: Market Factors, firm characteristic, investment decisions

#### INTRODUCTION

Globally, Kengatharan (2014) identified market, prospect, herding and heuristics as the biases that affect individual investment choices at the Colombo Stock Exchange in Sri Lanka. The study also found out that overconfidence from the investors negatively affected the decisions made while anchoring had a favorable effect on the decisions made and herding had an unfavorable effect on investment choices made. Investors invest in safe investment in order to reduce the risk in investment. But in such case investors can expect only moderate profit. Individual's investment choices are influenced by various factors. Earlier researchers recognized the following: capital appreciation, tax benefit, expected return, liquidity, risk minimization, financial security.

According to Reilly and Brown (2016) investment is committing money in a given venture for a given duration in a bid to get a good return that will be a good compensation for the period the person chose to commit the funds and for the risk that he or she took. Therefore, investment choices usually involve compromising on current consumption and deferring the usage of financial resources for greater gains in the future. This study's focus is on investor behavior, firm characteristics, market factors and accounting information on investment decision making.

Traditional finance assumes that markets are efficient and investors are rational and consider all available information in the decision-making process, that they will favor investments that maximize their wealth (Kumar, & Goyal, 2015). Based on this approach, security prices reflect the value of the assets since the investment markets are efficient (Nofsinger, 2017). That investors act promptly to new information and update prices correctly within a normatively acceptable process.

## **Nairobi Securities Exchange**

The stock market is one of the key basis for companies to raise money. Stock market is a structure set up where the securities can be sold and purchased at a decided price (Kidwel et al., 2016). Financial regulators, such as Nairobi Security Exchange is involved in activities of the stock markets in their selected jurisdictions and offer protection to investors against fraudulent activities. The Nairobi Stock exchange is one of the largest in sub-Saharan Africa's with a number of brokers are licensed to operate (Oxford Business Group, 2015).

Nairobi Securities Exchange is the second self-listed exchange in Africa and fifth largest market in Africa with a market capitalization of USD 20 Billion p.a. (NSE website, 2017). NSE self-listed in the year 2014, where it offered 66 million shares for subscription, with a par value of KS. 4 each at an offer price of KS. 9.5 Per share. From the results of operations listed below, the company's operating incomes have been increasing at an increasing rate since 2014, except for the half year results of the year 2016 (NSE website, 2017). The two main traded products at the NSE are equities and bonds. The NSE 20 Share Index is a price weighted Kenya Shilling index, and is calculated as an average of the top 20 best performing companies. The component companies are selected based on a weighted market performance for a one year period based on market capitalization, sector, number of shares traded, number of deals and turnover basis (NSE website, 2017).

The NSE, like many other emerging markets, suffers from the lack of liquidity in the market. Foreign investment in the local subsidiaries of foreign-controlled companies is banned so as to encourage input into Kenyan companies. The Kenyan government has made several reforms aimed at attracting foreign investment via the Nairobi Securities Exchange (Njoroge, Ongeti, Kinuu, & Kasomi, 2016). The Nairobi Securities Exchange is poised to play an increasingly important role in the Kenyan economy, especially in the privatization of state-owned enterprises (Mutende, 2018).

#### Statement of the Problem

The importance of continued understanding of what drives investment choices among existing and prospective investor has been emphasized by scholars and practitioners. Despite the need to grow investment and saving culture among Kenyans, available studies have explored the reason for the low uptake of equity as an investment option. The importance of continued understanding of what drives investment choices among existing and prospective investors has been emphasized by scholars and practitioners. These is despite the fact that the saving culture among Kenyans with the majority of available studies having been conducted in

foreign context such as United States, India and China and not in Kenya where this study was focusing.

According to Reilly and Brown (2016) investment is committing money in a given venture for a given duration in a bid to get a good return that will be a good compensation for the period the person chose to commit the funds and for the risk taken. However, today even those who do not have a lot of money have decided to invest in this venture. In recent past, there has been a relative increase of enthusiasm in the securities market by individual investors. However, it is alarming that the enthusiasm is again fading away with many firms experiencing net exit of individual shareholders (Aduda, Oduor & Onwonga, 2017).

Ikeobi and Jat (2015) studied important factors that affected individual investors decisions to take up shares of Nigerian based manufacturing companies. According to the findings, there are five major factors influencing this decision namely profitability of the firm, expected future dividend, growth potential, the bonus issue expectations and past financial performance. Ngahu (2017) studied the factors influencing investment choices in equity stock among retail investors in Kenya. The study concludes that that the availability of disposable income, the prevailing market price per share and the general trend in stock price greatly affect the investment decision.

In Kenya people are more informed when it comes to the securities market compare to the past years and many are taking the venture up as an alternative form of investment from the usual real estate and other means of investment (Mbaluka & Kalunda, 2013). Theoretically investors make decision on the basis of the principles of maximisation, self-interest and consistent choice. However this is only possible in an environment where investors are able to collect all the relevant information and evaluates them objectively. However, according to Aduda (2012) in the NSE decision-making process is not a strictly rational one, where all relevant information is collected and objectively evaluated, rather, investors makes mental 'short cuts' in the decision-making process. Therefore, it is not clear as to whether evaluation of accounting information and other relevant information drive investment decision s in the NSE.

With studies on the subject matter having focused on financial restructuring and not investment drivers and decisions as argued by Muchiri, Muturi & Ngumi (2016). More so many of the studies on the theme have been conducted in developed economies. These include Hasan et al., (2014); Akeem et al., (2014); Ogobe, Orinya & Kemi (2013); Umar et al, (2012); Muchiri et al (2018) have focused on a similar theme as the current study by looking at leverage decisions versus performance but with a focus on other contexts of developed economies such as Bangladesh and Pakistan (Hasan et al., (2014).

## **Objective of the Study**

To investigate the influence of market factors on investment choices among equity fund managers at Nairobi Securities Exchange-Kenya

#### LITERATURE REVIEW

This section will be comprised of the herding theory and how it supports the study besides other studies carried out by various scholars as illustrated below:

#### Herding theory and Investor behavior

Herding theory according to Christie and Huang (1995) there is a tendency of people to commit cognitive and emotional bias when faced with different situations which magnifies how psychological biases work. It induces one to decide on the "feel" of the herd rather than on rigorous independent analysis especially in the case of decisions involving high levels of uncertainty. Investors often spend very little time to analyze individual stocks in the market but focus on buying the stocks that are currently at the center of attention by other market players. Herding can be irrational when investors in stock markets sell their stocks to avoid losses when there is a large stock market decline because other investors are doing so hence they ignore all rational analysis and react in panic leading to market distortions (DellaVigna, 2009).

According to Odean et al. (2007) herding behavior is adopted by people who think that they do not have adequate information and believe that the knowledge of other people can help them make investment choices much faster and easily. Investors imitate the actions of others believing that other people have better information than they do. Shefrin and Statman (1985) argue that herding can lead to disposition effect where individual investors sell stocks which have appreciated in value while they tend to hold on to stocks that have lost value due to loss aversion. Herding can be rational when investors with information are bombarded with information from observing the actions of other investors and deliberately choose to act against their private information by following the crowd although they do not discard their information (Bikhchandani & Sharma, 2001).

Herding behavior may occur due to the production of information asymmetry in the market as different groups of investors get diverse information with varied quality and the rate of their accessibility to information makes each group have its special investment behavior. Burke et al., (2010a) argues that herding in financial markets may stem from reputational fear where investment managers follow the actions of others so that they cannot be accused of inability to make sound judgments if their decisions turn out to be bad.

Market factors are the external factors which influence the behaviour of sentimental and rational investors in different ways. The study on behavioral factors may not be adequate, if the market factors are not included in the study. Rational decision-making of investors is based on the logical consistency across decisions instead of presentation of choices. The study held the position that the organisation statues in the industry, its financial statements and its expected corporate earning which falls under classic wealth maximization criteria were rated as having significantly high influence on individual investors' decisions. The study noted that these factors reliable criteria which can be considered in evaluating stock investments, as the respondents in this study were experienced investors who had survived the bubble burst of 1999 in the Greek stock exchange.

The association existing between past market return and the volume and value in the current market turnover and to deduce if the investors and the Egypt based stock market was characterized by overconfidence bias. The study also tested the differences in turnover value and volume from the varying market statues. The context was Egypt. The population of study was investors at the Egyptian Stock market and the data used was collected from 2002 until 2012. The sample was sub-divided into four sub periods; two tranquil upward trending (2005-2005) and (2005- 2008) and two volatile and down ward trending (financial crisis 2008-2010) and the (Egyptian Revolution Period 2010-2012).

The factors impacting the investment choices for equity funds managers. The study used data from 327 equity fund managers employed by organizations among them equity investment firms and commercial banking firms. The sample chosen was selected using random sampling technique. According to the outcome, there was a favorable and significant association among the risk aversion of investors, firm governance, use of financial tools and the investment choice. The results further showed that corporate governance issues at the firm-level played a key role and is a significant factor when evaluating investment options. Institution equity fund managers made use of financial tools and heuristics to make investment choices. These managers were also risk averse.

Management of investment portfolios established that an understanding on the past performance of the relevant assets is important to enable investors in making their investment choices. The study also noted that there is need to consider investor's tolerance to risk by looking at the personality and responsibilities of the investor before choosing investment portfolios with high risks. The study found that personal investment choices on the amount an individual investor wants to commit each month should be based on the expected amount once the investments mature. The study further posited that an investor who would want to invest on foreign stocks should consider the country's economic development rates and the liquidity of the

stock market. It is also good to look and the nation's capital gains, the tax regulations and how good the dispute resolution mechanism used are. Additionally, the investor should ensure that protection for foreign investors exists and that the central bank has enough reserves.

The past market trends, risk appetite, understanding past performance of changes in varied asset classes before planning investment finances and ability to tolerate risk differs from individual to individual. Lam also noted that ability to bear risks depends on factors such as financial obligations, personality characteristics which make understanding the capacity to bear risks an important consideration in investment decision making. The study also observed that the expected rate of returns was an important factor when it came to its effect on the investor's choices. Expected returns can see the investor putting in a lot of money or very minimal funds to a given portfolio.

The factors affecting the decision made by teacher's investors who invested in the Nairobi stock exchange in Kenya. The study that was based in Kisumu County revealed that investors were both optimistic and pessimistic which led to changes in stock prices from their norm and mean reversion. This was in agreement with the behavioral theory view that investors are often overconfident when it comes to predicting the stock prices and stock earning expected in the future. Further, the study isolated subjective factors including perceived firm ethics, feelings towards firm products and services, community participation and employee as well as unbiased information through media coverage and political statements played a role in the relative neglect of 27 the consideration of significant traditional variables in Kisumu municipality. A negative significant relationship was found to exist between the subjective factors and investment choices. The impact financial knowledge affected the decision made by retail investors in Kenya. The survey study used a sample of 311 investors that were randomly chosen from a population of 836 investors. A data analysis was done with the help of descriptive analysis and a linear regression model. According to the findings there was a significant and favorable impact of financial knowledge on the investment choices made by Kenyan investors.

#### RESEARCH METHODOLOGY

Epistemology is the field of philosophy that refers to the nature of the relationship between the researcher and the knower (the source of knowledge), acquired through three different types of inquiry: positivism, Interpretivism, and pragmatism (Denzin & Lincoln, 2005). This study employed Interpretivism and pragmatism methods of investigation. According to Chandra and Kumar (2018), interpretivism focuses on the reality that humans construct and that can only be understood subjectively. Data generated from stakeholders who know their problems, and; therefore, the truth is how they perceive, interpret, and understand issues that affect them in their contexts. The gaps addressed in this study were informed by the information collected from fund managers on the factors they consider when making decisions on investment in the NSE.

Pragmatism, on the other hand, focuses on solving the current problems through comparison of the existing solutions and the proposed solution (Denzin & Lincoln, 2005). According to Brigham and Gapenski, (2012) argue that pragmatism focuses on action, change, and the interplay between knowledge and action. In this regard, pragmatism promotes research aiming at providing solution or interventions to human problems (Van de Ven, 2007). In line with investment decision making in the NSE, pragmatism advocates for application of practices that works best, by encouraging consideration of all the drivers of investments to support decision making a decision on to buy, hold or sell stocks in the NSE. This study adopted pragmatism as a philosophical paradigm in identifying the factors to consider in investment decisions by fund managers in the NSE. The target population for this study comprised of 129 fund managers in the NSE. They were the focus of the study since drivers of investment are more of cognitive and having primary information from the investors themselves would provide accurate information. Besides the above in primary data, the researcher relied on the opinion of key stake holders in the financial sector without depending much on statistical data. Different fund managers have also been found to have different propensity to the effects of the investment drivers, since they are characterized by different investment behaviors, interest and industry. Therefore focusing on fund managers was necessary so as to have every investor represented.

This study adopted a census of all fund managers the Nairobi Securities Exchange that have been actively trading for period starting 2010-2019. This implied firms that have not been listed for 10 years or whose trading has not been consistent for 10 years were included in the study but only information that is available was used. In respect to stockbrokers and investment bankers, the researcher drafted structured questionnaire that was administered to senior managers of the stock brokerage firms. Since this study focused on all firms listed in the NSE and all market participants, it was not based on sampling but instead a census of all firms and market participants were conducted. Both primary and secondary data were collected from the employees of NMF listed by NSE. The procedure for data collection involved obtaining the authority to collect data from relevant University authorities. Descriptive statistics were used to summarize the study variables; group behavior, accounting information, firm characteristics and market factors of fund managers at NSE.

Primary data was made up of questionnaires that were were very simple but comprehensive thus the respondents did not experience any difficulties completing them. The questionnaire sought to collect background information of the respondents which included the industry, size, investment horizon and key considerations they took into account as they buy, hold and sell shares. The questionnaires had five sections. Section A solicited demographic information. The information collected data describing the sample characteristics in order to include them in the analysis because these characteristics had an effect on respondents' perception. Section B consisted of questions on market factors influencing investment choices. This section collected information on the perception of the fund managers on the aspects of market including market returns, market share and the different industry categories in the NSE. Responses were rated in a 5-point likert scale of 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, and 5-Strongly Agree. Section C solicited information on investor behavior and how they influenced investment choices in NSE. It focused on the perception of the fund managers on investment choices they made based on cognitive and emotional biases. The questions were also rated on a 5-point likert scale with 1 representing strongly disagree and 5 representing strongly agree. Section D sought to collect information on accounting information and how it influenced decision making by fund managers in the NSE. This section focused on the considerations of the Unit Trust managers on the Return on Asset ratio, Asset Liability Ratio and Cash Flow Ratio when making investment choices. Section E focused on the firm characteristics considered by the fund managers when making investment choices in the NSE.

#### **ANALYSIS AND FINDINGS**

Response rate refers to the number of questionnaires sent to the field divided by the number which was completed and returned. For this study, questionnaires were distributed out of which 129 were completed and returned 9 questionnaires were not returned.

# Descriptive Results for the influence of market factors on group investment decision making

A mean response of 3.3962 indicated that majority of the respondents were in agreement with the statement that the liquidity of an equity security plays a dominant role in our investing policy. A mean response of 3.6981 indicated that majority of the respondents were in agreement with the statement that the investing group treat immediacy critical to invest in equity securities at NSE. A mean response of 3.8113 indicated that majority of the respondents were in agreement with the statement that Market price information is important for their decision to invest in stock at NSE. A mean response of 3.4528 indicated that majority of the respondents were in agreement with the statement that they are normally able to anticipate the end of good market returns at the Nairobi Securities Exchange.

A mean response of 3.4151 indicated that majority of the respondents were in agreement with the statement that their investment preferences are based on market volatility. A mean response of 3.7547 indicated that majority of the respondents were in agreement with the statement that they prefer specific industries for their investment portfolio. A mean response of 3.8302 indicated that majority of the respondents were in agreement with the statement that investments depend on the market transaction costs.

Table 1: Descriptive statistics for the influence of Market factors on group investment decision making

Statement	Mean	Standard Deviation
a)The liquidity of an equity security plays a dominant	3.3962	.92694
role in our investing policy		
b)Our investing group treat immediacy as critical to	3.6981	.91115
invest in equity securities at NSE		
c)Market price information is important for our	3.8113	1.00109
decision to invest in stock at NSE		
d) We are normally able to anticipate the end of	3.4528	1.04819
good market returns at the Nairobi Securities		
Exchange.		
e)Our investment preferences are based on market	3.4151	1.02721
volatility		
f)We prefer specific industries for our investment	3.7547	.85273
portfolio		
g)Investment depend on the market transaction	3.8302	.91433
costs		

# Regression Analysis of investor behavior bias on group investment decision making

The study sought to determine the influence of group behaviour bias on investment decision making using objective and the hypothesis below.

Figure 1 Scatter plot for the influence of market factors on investment decision. The correlation between group behaviors and group investment decision making was found to be significant(r=0.712, p=0.000). The relationship was strong in the positive direction as was also supported by the scatter plot.

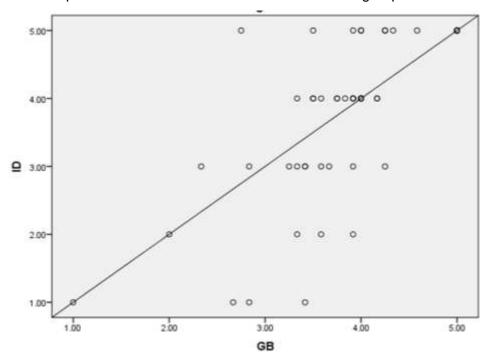


Figure 1: Scatter plot for the influence of investor behaviors on group investment decision

The correlation between accounting information and group investment decision making was found to be significant(r=0.652, p=0.000). The relationship was strong in the positive direction as was also supported by the scatter plot.

# Regression Analysis of market factors on group investment decision making

The study sought to determine the influence of market factors on investment decision making using objective 1 and the hypothesis as stated below.

**Objective:** To find out how market factors influence group investment decision making **H**<sub>0</sub>: Market factors have significant effect on group investment decision making

Table 3: Regression analysis for market factors on group investment decision making

Model Summary									
Model	R	R Square	quare Adjusted R Square		Std. Error of the Estimate				
	.542	.294		.280	1.02425				
ANOVA									
		Sum of Squares	df	Mean Square	F	Sig.			
	Regression	22.307	1	22.307	21.263	.000			
_	Residual	53.504	51	1.049					
_	Total	75.811	52						

Coefficients	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Table 3
	В	Std. Error	Beta			
(Constant)	230	.876		263	.793	
MF	1.064	.231	.542	4.611	.000	

The regression results above show that the influence of market factors on group investment decision making was significant (F (1, 51) =21.263, p=0.000<0.05). With R =0.542 and  $R^2 = 0.294$ , the model implies that about 54.2% of group decision making changes were accounted for by market factors , while a variation of 29.4% in group investment decision making was brought about by market factors. The F test was significant with a p value =0.000 which was less than the standard p value of 0.05 and this meant that the model was significant. From ANOVA table, since p value p=0.000 and was lower than the standard p=0.05 (p value 0.000<0.05), then the influence of market factors on group investment decision making was significant, and the conclusion is that market factors have significant contribution to group investment decision making. The results were in line with those of (Shefrin & Thaler, 1988); (Singh, 2016) who found out that overconfidence, herding, anchoring, cognitive dissonance, availability bias, self-attribution, mental accounting, framing, representative bias, are few biases that viewed as building blocks of behavioral finance that significantly influence the decision making of individual investor. The coefficient for market factors ( $\beta$ ) was also significant ( $\beta$  = 0.1.064, t =4.611, p = 0.000<0.05) indicating that market factors positively influenced group investment decision making by about 0.581 units. Since p-value =0.000< 0.05, the null hypothesis was rejected and concluded that there was a statistically significant relationship between market factors and group investment decision making.

#### CONCLUSION AND RECOMMENDATIONS

According to this study market factors play an important role decision making respectively while making investment decision are proved to be significant and accepted. When it came to the study objective which was to find out how market factors influence group investment decision making, the relationship between market factors and group investment decision making was significant. Fund managers, agents, marketers and financial institutions are required to define the potential investors profile to satisfy their preferences by considering the aspect of financial and psychological factors to overcome the investment challenges.

Fund managers should gauge the factors that matter most before investing in any stock. The degree of irrationality that exhibit through psychological biases; overconfidence and herding behavior should be avoidable to the extent that will not put investors into over gearing in borrowing. Instead, investors should gather in-depth property market information and to conduct risk assessment when making their choice of investment. Fund managers, agents, marketers and financial institutions are required to define the potential investors profile to satisfy their preferences by considering the aspect of financial and psychological factors to overcome the investment challenges.

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