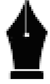
International Journal of Economics, Commerce and Management
United Kingdom ISSN 2348 0386 Vol. 11, Issue 1, Jan 2023



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INFLUENCE OF INVESTOR BEHAVIOR DRIVERS ON INVESTMENTS CHOICES AMONG EQUITY FIRMS LISTED AT NAIROBI SECURITY 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

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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: Accounting Information, 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.

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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 66million 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

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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).

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Objective of the Study

To evaluate the influence of investor behavior on investment choices among equity fund managers of listed firms at Nairobi Securities Exchange-Kenya

LITERATURE REVIEW

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

Agency theory and Investor behavior

Agency theory was advanced by two American Economists, Jensen and Meckling (1976). In their book entitled "Financial Theory and Corporate policy" Copeland &Weston (2012), the two Economists viewed corporations as "sets of contracts" between management, shareholders and creditors. Precisely, management which provided stewardship was viewed as "Agent" while the shareholders and creditors who were providers of finances were viewed as the "Principals". Corporate governance is grounded on agency theory, which is founded on the relationship between agents and the principals. In the context of the occupational pension schemes, the scheme members and the sponsoring companies are the principals while the scheme managers are the agents.

Obviously, the Agency problem arises in organizations because the corporate decisions made by the Agents (the service providers) on behalf of the Principals (the Members) bind the latter. Mwiti, (2014) argues that, in an agency scenario, tasks are well defined: Principals choose directors and auditors to guarantee efficient administrative system is realized, while agents are accountable for the daily functioning of the enterprise. Also the theory emphasize that the agent is reliable for any negligence.

Furthermore, analysis of the issues in terms of the size of the firm shows that in the case of smaller businesses, the conflicting interests of equity holders and debt holders are particularly severe. This is due to the fact that most managers of small firms are also the owners of the firms. In such situations, lenders may require additional collateral. As a result, the structure of the firm assets is examined in direct correlation with the costs entailed by possible financial distress. If a firm invests mainly in tangible assets the potential costs incurred due to financial distress is lower. Conversely, a firm focused primarily on investments in intangible assets bear higher costs induced by potential financial distress (Gomber *et al.,* 2018).

According to the agency theory, superior information available to professional managers allows them to gain advantage over owners of public institutions. The reasoning is that an institution's top managers may be more interested in their personal welfare than in the welfare

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of the institution's shareholders (Gimpel, Rau & Röglinger. (2018) argue that managers will not act to maximize returns to shareholders unless appropriate governance structures are implemented to safeguard the interests of shareholders. Therefore, the agency theory advocates that the purpose of governance is to minimize the potential for managers to act in a manner contrary to the interests of shareholders.

Adverse selection occurs when owners cannot ascertain whether an agent accurately represents his ability to do the work for which he is paid to do while moral hazard is a condition under which a principal cannot be sure if an agent has put forth maximal effort. The conflicting demands justify actions that may be criticized as immoral or unethical depending on the stakeholder group and this study focuses how such conflict affects the financial performance of the firm. Further it tries to understand how to best organize relationships between the principal (owners) and the agents (professionals) and determines the work, which the agent should undertakes and the measures the owners should put in place to maximize their returns (Eisenhardt, 1989).

Brinkmann and Kvale (2015) argue that managers will not act to maximize returns to shareholders unless appropriate governance structures are implemented to safeguard the interests of shareholders. According to Wheelen and Hunger (2002) the problems arises because agents (professional) are not willing to bear responsibility for their decisions since they don't own a substantial amount of stock in the firms and hence don't stand to benefit by perusing wealth maximizing objective. Mallin (2004) advocates that a firm's top management should have a significant ownership of the firm in order to secure a positive relationship between corporate governance and the amount of stock owned by the top management.

According to Mesa (2018) Agency Theory stresses the importance of mutual and excellent relationship between the shareholders and management of the organization in ensuring the organizational business success. In day-to-day encounters, the agents reproduce the structures that enable and constrain their actions. The agency theory focuses on the divergence of interests between managers and stockholder (Okiro, 2014). Though agency theory is very pragmatic and popular, it still suffers from various limitations and this has been documented by many authors like Eisenhardt (1989) and Brinkmann and Kvale, (2015).

This theory suggests that investment portfolios can be formed and investors can be given a choice to choose the portfolios that best appeal to them based on risks and returns. With time portfolio managers decided to look at other aspects that affected investment decision in addition to risk and returns. Some of the other factors looked into included psychological factors such as overreaction, sentiments and overconfidence.

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Nyamute et al (2015) defines Investor behavior as herd instincts and social influences that play a critical role in influencing investment choices, leading to discrepancies between market and fundamental value. The variables include behavioral Bias, overconfidence and illusion quotient and heuristics besides securities price volatility. Abreu and Mendes, (2018) looked at the factors that impacted the decision made by investors of the Islamabad Stock Exchange. The results indicated a favorable and significant association between advocate advice, unbiased information, self-image/firm image convergence and the investment choice made by the investors. There was no evidence found to support an association between accounting information, classical wealth maximization and personal financial needs. The study noted the need for further studies focusing on advocacy factors due to possibilities that the stock markets could easily be manipulated when investors rely on other advice in their investment decision making process.

The financial performance and behavior of individual investors when trading in the NSE listed shares. Questionnaire survey and secondary data retrieved from CMA and NSE were used in this study. Some investors were found to be irrational in decision making, and they often made losses in their investment as a result of herding and irrationality. A majority of the investors who responded were male, signifying men's confidence in their ability to outperform the market. A majority of the investors were Bachelor's degree holders hence sufficiently educated to make investment decisions. Other factors that were found to determine investment behavior included improved stock exchange, influence from friends, family and colleagues, inflation, management stability, number of available shares, stock capitalization level and family and religious background.

Empirical analysis on influence of varied factors on individual equity investors' decision making and behavior in India. The study applied factor analysis where 40 attributes were condensed into ten factors. These factors were categorized as individual eccentric, social obligations, wealth maximization, risk reduction, brand perception, financial prospects, accounting disclosures, and government together with the media, economic outlook and advocate advice. The factors were to have varying degree of influence on investment choices made by individual market participants.

Firm specific characteristics on profitability of listed Foods and Beverage companies in Nigeria. They studied 9 firms out of a population of 21 firms using OLS regression for a period of 7 years from 2007-2013. Their finding revealed that firm specific characteristics have both positive and negative significant effects on profitability measured by stock market returns. They therefore, recommended that firms should pay more attention to those factors that are peculiar to their industry environment. The impact of corporate attributes on the profitability of listed

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pharmaceutical firms in Nigeria using a panel data of five sampled firms for a period of ten years (2004-2013). The study reveals that firm size, leverage, and growth have positive and significant relationship with profitability implying that they have impact in increasing share price. However, the relationship between liquidity and profitability was found to be insignificant and negative, indicating that liquidity has no influence in enhancing share price of listed pharmaceutical firms in Nigeria. The study therefore, recommended that firm size, leverage, and firm growth should be enhanced in view of their influence in increasing profitability, while liquidity should not be given any attention in an effort to raise profit.

The effect of corporate attributes on the profitability of companies by employing the annual reports of thirty selected companies listed on the Nigerian Stock Exchange (NSE) for a period of 5 years (2007-2011). They used Ordinary Least Square (OLS) regression to test for the effects of the selected corporate attributes on profitability. They tested for the relationship between leverage, firm size, firm age and return on assets using Pearson's product moment correlation coefficient.. They therefore observed that older firms perform better than younger ones. They recommended that companies should pay adequate attention to financial leverage, because firms that are highly leveraged are at the risk of insolvency. Their finding supports the argument that, older firms are likely to perform better than younger firms because they are more experienced, have enjoyed the benefits of learning, are not prone to the liabilities of inventiveness, and can therefore enjoy superior profitability.

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

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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.

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

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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.

Table 1: Shareholders preference for employment of retained earnings

Statement	Mean	Standard deviation
a) We tend to hold to our investment because selling them would be painful to the fund since we would incur loss	3.2264	1.18713
b) We feel more sorrow about holding losing stocks too long than about selling winning stocks too soon.	3.5094	1.06740
c) We avoid selling shares that have decreased in value and readily sell shares that have increased in value.	3.5472	1.01083
d) After a prior gain, we are more risk seeking than usual	3.7547	1.20744
e) After a prior loss, we become more risk averse.	4.0377	.89791
f) We analyze the companies' customer preference before we invest in their stocks.	4.0377	.97984
g) We put the past trends of stocks under consideration for our investment.	3.7547	.95888
h) We have the over-reaction to price changes of stocks.	3.8868	1.01262
i) We consider the easily available information in the market before making investment choices.	3.8113	1.14450
j) We usually react quickly to the changes of other investors' decisions and follow their reactions to the stock market.	3.7736	.84675
k) Other investors' decisions of buying and selling stocks have impact on our investment choices.	3.5660	1.24822
l) Other investors' decisions of choosing stock types have impact on your investment choices.	3.7547	.97873

A mean response of 3.2264 indicated that majority of the respondents were in agreement with the statement that they tend to hold to their investment because selling them would be painful to the fund since they would incur loss. A mean response of 3.5094 indicated that majority of the respondents were in agreement with the statement that they feel more

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sorrow about holding losing stocks too long than about selling winning stocks too soon. A mean response of 3.5472 indicated that majority of the respondents were in agreement with the statement that they avoid selling shares that have decreased in value and readily sell shares that have increased in value. A mean response of 3.7547 indicated that majority of the respondents agreed with the statement that after a prior gain, they are more risk seeking than usual.

A mean response of 4.0377 indicated that majority of the respondents agreed with the statement that after a prior loss, they become more risk averse. A mean response of 4.0377 indicated that majority of the respondents agreed with the statement that they analyze the companies' customer preference before they invest in their stocks. A mean response of 3.7547 indicated that majority of the respondents agreed with the statement that they put the past trends of stocks under consideration for their investment. A mean response of 3.8868 indicated that majority of the respondents agreed with the statement that they have over-reaction to price changes of stocks. A mean response of 3.8113 indicated that majority of the respondents agreed with the statement that they consider the easily available information in the market before making investment choices.

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 2 and the hypothesis as stated below.

Objective: To find out how investor behavior bias influence group investment decision making

H_0: Investor behaviour bias has significant effect on group investment decision making

Table 2: Regression Results of investor behaviour bias on group investment decision making

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
	.712	.507	.498	.85580	
ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	38.459	1	38.459	52.511	.000
Residual	37.353	51	.732		
Total	75.811	52			
Coefficients					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.352	.579		-.608	.546
GB	1.079	.149	.712	7.246	.000

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The regression results in table 2 show that the influence of group behaviour bias on group investment decision making was significant ($F (1, 51) =52.511$, $p=0.000<0.05$). With $R =0.712$ and $R^2 = 0.507$, the model implies that about 71.2% of group decision making changes were accounted for by group behaviour bias, while a variation of 50.7% in group investment decision making was brought about by group behaviour bias.

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 the 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 group behaviour bias on group investment decision making was significant, and the conclusion is that group behaviour bias have significant contribution to group investment decision making. The coefficient for group behaviour bias (β) was also significant ($\beta = 1.079$, $t =7.246$, $p = 0.000<0.05$) indicating that group behavior bias positively influenced group investment decision making by about 1.079 units. Since p-value =0.000< 0.05, the null hypothesis was rejected and concluded that there was a statistically significant relationship between group behaviour bias and group investment decision making.

CONCLUSION AND RECOMMENDATIONS

Investment choices among fund managers in a great way inform the financial return in either short-term or long-term run. Conversely, lacking of knowledge in the field would impact huge financial losses. Thus, extensive knowledge is essential by taking into consideration of the significant factors and the moderating role played by board characteristics when making investment decision.

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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