Influence of Investor Behavior on Investment Choices among Equity Fund Managers of Listed Firms at Nairobi Securities Exchange-Kenya

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Abstract

Purpose: This study sought to determine how market factors influence investment decisions in Nairobi Securities Exchange-Kenya. The study would offer valuable contributions from both a theoretical and practical standpoint where it contributes to the general understanding of the drivers of investment in the Nairobi Securities Exchange in Kenya.

Methodology: The study adopted positivism philosophy because the study variables were based on facts derived from the empirical literature review and the theoretical premises discussed in chapter two. Its results are quantitative and explain the relationship between the variables quantitatively. This research used a descriptive research design that allows a researcher to get adequate data from a small population cost-effectively and easily by use of a questionnaire as the research instrument. It is the structure, or the blueprint of research that directs the process of research from the formulation of the research questions and hypotheses to reporting on the research findings Krishnan, (2015). 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 the 2010- 2019 period. This study adopted a census of all fund managers the Nairobi Securities Exchange that have been actively trading for the period starting 2010-2019. 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 23). 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. Data was extracted from the financial statements and NSE handbooks, Excel program was used to calculate ratios relevant to the study variables. Descriptive statistics were used to summarize the study variables; group behavior, accounting information, firm characteristics, and market factors of fund managers at NSE.

Findings: The study concluded that more attention should be focused on firm characteristics to achieve the best investment choices.

Unique Contribution to Theory, Practice and Policy: The study was guided by finance theories that acted as its base that supported the empirical literature review which included Resource Based Theory (RBT), agency theory, herding theory and prospect theory. More attention should be paid to the predictors in the order of the magnitude of their effect on investment decision-making.

Keywords: *Accounting Information, Firm Characteristics, Market Factors, 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.

Regionally, Ikeobi and Jat (2015) looked at the factors that affected investors' decision to invest on Nigerian stock market-based manufacturing companies stocks. According to the results expected bonus issue, profitability of the company, future dividend, growth potential of the firm and past performance were the factors observed to influence investors' decisions. The study used factor analysis to get the five factors and the analysis also showed that the biggest variance was between the firm's growth potential and accounting information.

Locally, Ngahu (2017) studied the factors influencing investment choices in equity stock among retail investors in Kenya. Key considerations on the investment patterns among retail investors at the Nairobi Stock Exchange were observed and it was clear that herding behaviour does not influence investment decision showing that, the decision made by other investors whether to sell, buy or hold their investment did not impact retail investment choices. The study concluded 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. It was also clear that the investment choices are also greatly affected by the prices of cross listed stocks and the general divided pay out.

According to Shefrin (2017) behavioral finance is as a result of impact of psychology on how individuals act when it comes to making financial decisions. Many investors focus on making investment choices for purchases of minimal securities for their own benefit. The limiting factors that were discovered to limit people's ability to invest included, lack of investment funds and high share prices. From the foregoing discussion, it follows that there exists a range of factors that drive investment choices. In conventional financial theory, investors are assumed

to be rational wealth-maximizers, following basic financial rules and basing their investment strategies purely on the risk-return consideration (Mutswenje & Jagongo, 2014).

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).

Investor Behavior

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 questionnaire sought data from 253 participants who were traders in 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 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.

Herding, on the other hand, refers to similar thinking among individuals. In herding, if any experienced investors invest in any stock, other investors will do follow same category of investment. Some of the forces which can point out herd behavior of investment. They pointed out that under certain situations, the managers blindly imitate the investment choices taken by other managers while managing essential private information. While this behavior is

ineffective from a social viewpoint, it can be rational from the perception of managers who are panicked about their standings in the labour market.

Kimeu, Anyango and Rotich (2016) define heuristics as the simple rules of thumb that people use to make decisions, especially in complex and risky environments characterized by inadequate requisite information. Mohammed and Usman, (2016) maintains that investors often make 19 irrational and biased decisions. Instead of thinking critically they often use shortcuts since they have limited time to make the right choice and also because they have limited thinking capacities.

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

LITERATURE REVIEW

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

Herding Theory

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. They tend to seek comfort in the crowd as it is easy to push the blame to poor investment environment although this can have major implications for the stock market. Rational herding may also stem from investment managers" compensation that is based on their performance relative to those of other managers. Investment managers tend to herd towards the bench mark if their compensation is determined using the bench mark as a base (Bikhchandani & Sharma, 2001).

Herding behavior is found to be undertaken in order to favorably affect investors (Sgroi, 2003). Economists are interested in what might affect their risk and return characteristics while practitioners are concerned with what might create arbitrage profit opportunities. Investor herding has a behavioral effect on stock prices and the power to drive prices away from their fundamental values (Chiang & Zheng, 2010). Whether herding is rational or irrational, it deviates from the traditional theory of finance assumptions since investor decisions are not only influenced by fundamentals but also by following the crowd.

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

FINDINGS

Table 1: Descriptive Statistics for the Influence Group Behavior Bias on Group Investment Decision Making

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

Regression Analysis of Market Factors Bias 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 1: To find out how market factors influence group investment decision making

H$_{01}$: Market factors have significant effect on group investment decision making

The fourth objective which was to find out how firm characteristics influence group investment decision making, the relationship between firm characteristics and group investment decision making was significant.

Table 2: Regression Analysis for Market Factors on Group Investment Decision Making

Model Summary

Model	R	R Square	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.
	B	Std. Error	Beta		
(Constant)	-.230	.876		-.263	.793
MF	1.064	.231	.542	4.611	.000

The regression results shows 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 (β) was also significant (β = 0.1.064, t =4.611, p = 0.000<0.05) indicating that market factors positively influenced group investment decision making by about 0.581units. 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

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.

REFERENCES

Anna A.M, Andreas, G.M, George, S.V. (2004), Economic Factors and Individual Investor Behavior, The Case of the Greek Stock Exchange, *Prasad Journal of Applied Business Research.*Vol. 20 (93).

Awan, H &Arshad, S (2012), Factors valued by investors while investing in mutual funds-a behavioral context, *Interdisciplinary journal of contemporary research in business,*Volume 4, no 1

Awuor, J. (2017). Behavioural factors that influence individual investment decisions at the Nairobi securities exchange. (Doctoral Thesis University of Nairobi).

Ayuko, D. (2015). The effects of herding on stock returns at the Nairobi securities exchange. (Doctoral Thesis. University of Nairobi).

Baker, H.K &Haslem, J.A. (2004), "Information needs of individual investors", *Journal of Accountancy,* Vol. 136, pp.64-9.

Baker, H.K., M.B. Hargrove, and J.A. Haslem. (2007) "An Empirical Analysis of the Risk Return Preferences of individual investos," *Journal of Financial and Quantitative Analysis*, Vol. 12, No. 3, pp. 377-389

Bashir, T., Azam, N., Butt, A. A., Javed, A., Tanvir, A., 2013. Are Behavioral Biases Influenced By Demographic Characteristics & Personality Traits? Evidence from Pakistan. European Scientific Journal 9(29), 277-293

Brigham E.F. &Gapenski L.C. (2012).*Intermediate Financial Management*, (8ed), Dryden Press.

Brabazon, T. (2017). ''Behavioral Finance: A New Sunrise or a False Down?''

Chitra, M., & Sreedevi,N. (2017). Influence of seven personality traits some India evidence. Journal of Economic Psychology, 25(4): 539-55

Chandra, A., & Kumar, R. (2018). Decision Making in the Stock Market: Incorporating Psychology with Finance. In the Proceedings of the Conference on Forecasting Financial Markets in India at IIT Kharagpur, India. Available at: http://ssrn.com/abstract=1501721.

Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, Calif.: Sage Publications.

Denzin, N.K., & Lincoln, Y.S.(2005). Introduction: The discipline and practice of qualitative research. In N.K. Denzin& Y.S. Lincoln (Eds.), *The sage handbook of qualitative research* (2nded.). Thousand Oaks, CA: Sage.

Eckel, C. C., & Grossman, P. J. (2018). Forecasting Risk Attitudes: An experimental Study using Actual and Forecast Gamble Choices. Journal of Economic Behavior and Organization, 68, 1, 1-17.

Jagongo A. and Mutswenje V. (2014). A Survey of the Factors Influencing Investment Decisions: The Case of Individual Investors at the NSE. *International Journal of Humanities and Social Science*. Vol. 4 No. 4

Jain, D., & Mandot, N. (2012).Impact of Demographic Factors on Investment Decision of Investors in Rajasthan.*Journal of Arts, Science & Commerce,* 3(2, 3), 81 -92.

Kengatharan N. (2014). The Influence of Behavioral Factors in Making Investment Decisions and Performance: Study on Investors of Colombo Stock Exchange, Sri Lanka. *Asian Journal of Finance & Accounting*.Vol. 6 No. 1.

Kahneman, D., & Tversky, A. (1979). Prospect theory: an analysis of decision-making under risk", Econometrica, 47, (2) 263-291

King, R., Clarkson, P. & Wallace S. (2010).Budgeting practices and performance in small healthcare businesses.*Management Accounting Research*, Vol. 21(1), p. 40-55.

Kombo, D. K., & Tromp, D. L. A. (2016). *Proposal and thesis writing: An introduction*.`Paulines Publications Africa.

Kwenga, M. (2018), Investors Attitudes towards Investment in Financial Securities.Retrieved August 9, 2012, from: http ://etd-library. ku. ac. ke/ir/handle/1234567 89/2956

Lewellen, W., & Schlarbaum, G. G. (2017). Patterns of Investment Strategy and Behaviour among Individual Investors. The Journal of Business, 50(3), 296 - 333.

Mwimali, H. (2017). The existence of herd behaviour: evidence from the Nairobi Securities Exchange. (Doctoral Thesis University of Nairobi).

Nairobi Stock Exchange - NSE (2018). Annual Report 2017, Nairobi: Nairobi Stock Exchange. NSE.(2018). Retrieved 23rd October, 2018 from www.nse.co.ke

Nyamute, W., Lishenga, J., & Oloko, M. (2015). The relationship between investor behavior and portfolio performance at the Nairobi Securities Exchange. International journal of multidisciplinary research and development, 2, (5), 548-551.

Qadri, S. U., Shabbir, M., 2014. An Empirical Study of Overconfidence and Illusion of Control Biases, Impact on Investor's Decision Making: An Evidence from ISE. European Journal of Business and Management 6(14), 38-44

Shikuku, M. (2016). Effects of behavioral factors on investment decisions making by unit trust companies in Kenya. (Doctoral Thesis University of Nairobi).

Shiller, R. J. (2015). Irrational exuberance: Revised and expanded third edition. Princeton university press

Oxford Business Group (2015). *Economic News Update: Kenya Looks to woo investors amid global Securities market slowdown*. 23 September 2017. Retrieved from www.oxfordbusinessgroup.com

Tversky, A. &Kahneman, D. (1981).The framing of decisions and the psychology of choice.*Science* 21 1:453-58.

Winchester, D.D.Huston, S.J., & Finke, M.S. (2017). Investor Prudence and the Role of Financial Advice.Journal of Financial Service Professionals, July 2011.