

## Determinants of Individual Short-Term Investment Decisions: The Moderating Effect of Investors' Personal Quality in Nairobi Securities Exchange

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### Abstract:

#### **Purpose**

*This study aimed at identifying the determinants of individual short-term investment decisions and the moderating effect of investor characteristics in the Nairobi Securities Exchange (NSE)*

#### **Design/Methodology/Approach**

*The questionnaire was used to obtain data pertaining to the model's constructs. A multiple regression equation models tested the hypotheses. The study employed an explanatory research design to identify the determinants of individual short term investment decisions and the moderating effect of investor characteristics. Behavioral Finance Theory guided the study. The target population was individual investors in the member firms of the NSE. Stratified random sampling and systematic random sampling techniques were used to select firms and the respondents respectively. Questionnaires were used to collect data from the respondents. A multiple regression equation models tested the hypotheses.*

#### **Findings**

*Findings indicated that accounting information and personal financial needs had a positive effect on individual short-term investment decisions. Moderated regression model indicated that under higher education, accounting information positively determined individual short-term investment decision. Under high investor experiences, accounting information negatively affects individual short-term investment decision. In addition, the higher the investor's age, the more personal financial needs will determine individual short-term investment decision, while accounting information negatively affect individual short-term investment decision.*

#### **Research Limitations/Implications**

*The study was only limited to determinants of investment behavior and their relative importance in shaping the behavior of individual investors. Thus, other studies should be carried out to determine other factors that affect investment such as expected return from investments, the cost of capital in terms of interest rate, the taxation of returns and the availability of savings to meet investments.*

#### **Practical Implications**

*The growth of the related financial services sector has extensively contributed towards the deepening of the stock market. It should be appreciated that in as much as an economy can have savings, there is usually a lack of established mechanisms for channeling those savings into activities that create wealth. The establishment of an efficient securities market is therefore indispensable for any economy that is keen on using scarce capital resources to achieve economic growth*

#### **Social Implications**

*The very fact that institutions exist where savers can safely invest their money and in addition earn a return is an incentive to investors to consume less and save more. Education, age, and experience of the investors are the areas which can improve these intentions.*

**Keywords:** *Individual Short-Term Investment Decisions, Investor Personal Characteristics, Nairobi Securities Exchange in Kenya this*

## INTRODUCTION

In conventional financial theory, individual investors are assumed to be rational wealth-maximizers and base their investment decisions on the risk-return considerations. However, in practice, the level of risk investors are willing to assume is not the same, and depends mainly on their personal attitudes towards risk (Shefrin, 2000; Shleifer, 2000; Warneryd, 2001). Individual investors aim to maximize their utility based on classic wealth criteria of making a choice between consumption today and investment through time.

Much of the economic and financial theories presume that individuals act rationally and consider all available information in the investment decision-making process. However, studies done by Evans (2006), Gao and Schmidt (2005), Statman

(1995, 1999), Tversky and Kahneman (1974) and Thaler (1994) suggest that this is not always the case. Bernstein (1996) presented evidence to show repeated patterns of irrationality, inconsistency, and incompetence in the way human beings arrive at decisions and choices when faced with uncertainty.

According to Gichohi (2011), the Nairobi Securities Exchange (NSE) is currently a buyer's market which presents foreign investors with massive bargain opportunities. This situation is a result of various factors that have converged to push stock prices to levels that are out of whack with the fundamentals on the ground. These factors include a weakening currency (which has finally begun to stabilize), escalating fuel prices; a surge in local liquidity prompted by heavy bank lending to the private sector, and food inflation caused by the region's persistent drought. As a result, despite healthy turnover levels, stock prices have suffered recently. It will thus be worth establishing whether the investors' investment decisions vary from the assumptions of rationality or not.

The existence of securities markets promotes higher standards of accounting, resource management and transparency in the management of the business. This is because financial markets encourage the separation of owners' capital from managers of capital. This separation is important as people who have money may not have the best business ideas and people who have the best ideas may not have money to invest. The Securities Exchange thus becomes an important link. This arrangement benefits both those with excess funds and the entrepreneur, who is able to access capital to turn his idea into a reality, while the shareholders receive a return on their investment (NSE, 2014).

*H<sub>01</sub>: Accounting information has no significant effect on individual short-term investment decisions making.*

*H<sub>02</sub>: Personal financial needs has no significant effect on individual short-term investment decisions making*

*H<sub>05i</sub>: Investor characteristic has no significant moderating effect on relationship between accounting information and individual short-term investment decisions.*

## LITERATURE REVIEW

Research in behavioral finance has developed rapidly in the recent years and provides evidence that investors' financial decisions are also affected by internal and external behavior factors (Shefrin, 2000; Shleifer, 2000; Warneryd, 2001). Behavioral finance focuses upon how investors interpret and act on information to make investment decisions. Behavioral finance encompasses research that drops the traditional assumptions of expected utility maximization with rational investors in efficient markets. These cognitive illusions can be grouped into two classifications: illusions due to heuristic decision processes and illusions caused by the adoption of mental frames, which are conveniently grouped in the prospect theory. These two categories form the basis of the behavioural theories.

Lebaron (1999) suggests that people become considerably more distressed at the prospect of losses than they are pleased by equivalent gains. In situations where the probability of loss is quite large, people exhibit risk-seeking rather than risk-averse behaviour (Tversky, 1990). Prospect theory describes several states of mind that can be expected to influence an individual's decision-making processes. The key concepts include Regret, Loss aversion, and mental accounting.

### Accounting Information and Individual Short Term Investment Decision-Making

The study by Mirshekary and Saudagaran (2005) examined how investors use the information disclosed in financial statements and the significance of various information sources on investment decision making. The researchers concluded that investment decision makers use the annual financial statement of different companies for investment decision making purposes.

Shareholders understand accounting information as an input for investment decisions. Investment analysts often work as the middlemen between corporations as information providers and other users of accounting information. They gather, analyze and deduce accounting numbers and disseminate the results to the users of financial statements data. On the basis of these findings and interpretations, many investment decisions are made. Investment analysts are the most important for the fact that if they become the victims of interpreting financial information wrongly, this may lead the others to make the wrong investment decisions.

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**Personal Financial Needs and Individual Short Term Investment Decision-Making**

Nagy and Obenberger (1994) examined factors influencing investor behavior. Their findings suggested that classical wealth – maximization criteria are important to investors, even though investors employ diverse criteria when choosing stocks. Contemporary concerns such as local or international operations, environmental track record and the firm's ethical posture appear to be given only cursory consideration.

Merikas *et al.*, (2003) adopted a modified questionnaire to analyze factor influencing Greek investor behaviour on the Athens Stock Exchange. The results indicated that individuals base their stock purchase decisions on economic criteria combined with other diverse variables. The results also revealed that there is a certain degree of correlation between the factors that behavioral finance theory and empirical evidence identify as the influencing factors for the average equity investor, and the individual behavior of active investors in the Athens Stock Exchange (ASE) influenced by the overall trends prevailing at the time of the survey in the ASE.

The flow of information like decisions made by government bodies, media news, etc. causes the stock prices to move up or down. Due to this behavior of the stock market and due to new information, stock investors make their investment decisions (Warneryd, 2001). Prior to negative earnings surprises, those investors decrease their holdings that have insider information as compared to those investors who don't have this information. Also, the investors who possess private information about future prospects of the firms, trade more actively as compared to the investors without such information (Baik, Kang, & Kim 2010). Information about the firms irrespectively of its sources enables the investors to form an opinion about the value of a firm (Nwezeaku, Okpara, 2010). Many studies have been conducted on finding the impact of information flooding on stock prices both if it is a hidden source or known public source of information (Warneryd, 2001).

Hodge (2003) analyzes investors' perceptions of earnings quality, auditor independence, and the usefulness of audited financial information. He concluded that lower perceptions of earnings quality are associated with greater reliance on a firm's audited financial statements and fundamental analysis of those statements when making investment decisions. Epstein (1994) examined the demand for social information by individual investors. The results indicated the usefulness of annual reports to corporate shareholders and strong demand for information about product safety, quality, and the company's environmental activities.

**Research Methodology**

The explanatory design was used. The target population was individual investors in the member firms of the NSE. Stratified random sampling and systematic random sampling techniques were used to select firms and the respondents respectively. Questionnaires were used to collect data from the respondents.

**Measurement of Variables**

**Dependent variables:** Short-term investor's decision was measured in terms of buying many shares from different stock brokers, intention to increase the number of shares, number of shares bought and sold at regular trading in the stock market (Weisbenner *et al.*, 2008).

**Independent variables:** The study's independent variables measurements were adopted from Al-Tamimi *et al.*, (2005). They used five point likert scales to measure the responses of the respondents. Accounting Information was a proxy of Disclosure and Transparency, Expected dividends, Firm's past performance and Security's liquidity/ affordability. Personal Financial Needs was a proxy of diversification needs; get rich quick, feeling for the firm's products and ease of obtaining fund.

**Data Analysis**

Multiple regressions and correlation as a form of descriptive and inferential statistic analysis respectively were used in determining the relationship between the dependent and independent variables. Descriptive statistics gave the profile of the target population that is the frequencies and percentages, means, standard deviations whereas inferential statistics such as Pearson correlation and the Multiple Regression Analysis Model were used in order to determine the influence of explanatory variables on the issues of the determinants of individual short-term investment decisions and the moderating effect of investor characteristics.

### Correlation Results

Pearson Correlations results showed that accounting information was positively and significantly correlated with investment ( $r=0.608$ ,  $p<0.05$ ). Thus accounting information had 60.8% positive relationship with investment. Personal financial needs were positively related to investment ( $r=0.627$ ,  $p<0.05$ ) an indication that personal financial needs had a 62.7% significant positive relationship with investment. Findings provided enough evidence to suggest that there was a linear relationship between accounting information and personal financing needs

### Regression results (hypothesis testing)

Regression model Analysis showed that the two predictors (accounting information and personal financing needs) explained 54 percent variation of investment. This showed that considering the study of the two independent variables, there is a probability of predicting investment by 54% (R squared =0.54). Study findings in ANOVA indicated that the above discussed coefficient of determination was significant as evidenced by an F ratio of 78.077 with a p-value of  $0.000<0.05$  (level of significance). Thus, the model was fit to predict investment using accounting information and personal financing needs.

**Table 1: Regression results (hypothesis testing)**

	Unstandardized Coefficients		Standardized Coefficients			Colinearity Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(Constant)	0.605	0.19		3.178	0.002		
Accounting information	0.342	0.047	0.356	7.269	0	0.729	1.372
Personal financial needs	0.318	0.07	0.272	4.528	0	0.484	2.067
Accounting information*age	-0.019	0.014	-0.104	-1.354	0.177	0.275	3.637
Accounting information*experience	-0.022	0.009	-0.22	-2.582	0.01	0.794	1.259
Accounting information *education	0.033	0.01	0.267	3.48	0.001	0.73	1.369
Personal Financial Needs *Education	0.011	0.012	0.047	0.953	0.341	0.709	1.411
Personal finance*age	0.032	0.016	0.164	2.012	0.045	0.245	4.084
Personal Financial Needs *Experience	-0.006	0.01	-0.025	-0.535	0.593	0.8	1.25
R Square	0.547						
Adjusted R Square	0.54						
F	78.077						
Sig.	0.000						

a Dependent Variable: Investment decisions

### Hypothesis testing

Hypothesis 1 ( $H_{01}$ ) stated that there is no relationship between accounting information and investment. Findings showed that accounting information had an estimated coefficient which was significant ( $\beta_1=0.356$ ;  $p\text{-value}<0.05$ ) implying that the null hypothesis is rejected. Thus the results indicate that there is a significant relationship between accounting information and individual short-term decisions making in investment. This indicates that for each unit increase in the positive effect of accounting information, there is 0.356 units increase in investment decisions.

Hypothesis 2 ( $H_{02}$ ) stated that there is no relationship between personal financial needs and short term investment. Findings showed that personal financial needs had estimated coefficient which was significant ( $\beta_2=0.272$ ;  $p\text{-value}=0.000$  which is less than  $\alpha=0.05$ ), indicating that the null hypothesis is rejected stating that there is no significant relationship between personal financial needs and individual short-term decisions making the investment. This implies that for each unit increase in personal financial needs, there is up to 0.272 unit increase in investment decisions. Also, the effect of

personal financial needs is shown by the t-test value of 4.528 which implies that the effect of personal financial needs surpasses that of the error by over 4 times.

### **Moderating effects**

#### **Moderating Effect of Investor Education on Relationship between Accounting Information and Investment Decisions**

The findings revealed that education had positive and significant moderating effect on the relationship between accounting information and individual short-term decisions making an investment ( $\beta = 0.267$ ,  $\rho < 0.05$ ). Thus, hypothesis  $H_{03ai}$  was rejected thus investors with higher levels of education are likely to pursue short term investment decisions when the information is freely available.

#### **Moderating Effect of Investor Education on Relationship between Personal Financial Needs and Investment Decisions**

The results showed that investor education had no significant moderating effect on the relationship between Personal Financial Needs and investment decision ( $\beta = 0.047$ ,  $\rho > 0.05$ ). Thus, the null hypothesis was accepted. Hence, investor education and personal financial needs do not determine individual short-term investment decisions are making.

#### **Moderating Effect of Investor Experiences on Relationship between Accounting Information and Investment Decisions**

The study revealed that with an increase in investor experiences, accounting information would negatively determine individual short-term investment decisions are making. ( $\beta = -0.220$ ,  $\rho < 0.05$ ). Thus, the null hypothesis was rejected.

#### **Moderating Effect of Investor Experiences on the Relationship between Personal Financial Needs and Investment Decisions**

The findings showed that investor experiences had no moderating effect on the relationship between Personal Financial Needs and individual short-term investment decision making ( $\beta = -0.025$ ,  $\rho > 0.05$ ). Hence, the null hypothesis was accepted. As such the study infers that an experience does not increase or decrease the relationship between Personal Financial Needs and short-term investment decision making.

#### **Moderating Effect of Investor Age on Relationship between Accounting Information and Investment Decisions**

Results indicate that investor age had positive and significant moderating effect on the relationship between accounting Information and short-term investment decision making ( $\beta = -0.113$ ,  $\rho < 0.05$ ) thus, the null hypothesis was rejected. Hence, with an increase in investor age, accounting information will less determine short-term investment decision making.

#### **Moderating Effect of Investor Age on Relationship between Personal Financial Needs and Investment Decisions**

Results in revealed that investor age positively and significantly moderates the relationship between Personal Financial Needs and short-term investment decisions ( $\beta = 0.121$ ,  $\rho < 0.05$ ). Thus, the hypothesis was rejected. The study, therefore, concluded that as investor age increases the more his/her personal financial needs will determine short-term investment decisions.

### **Summary of Findings**

Hypothesis 1 postulated that accounting information has no significant effect on individual short-term investment decision making. Research findings show inconsistency with the hypothesis. Hence, accounting information was positively correlated with individual short-term investment decisions making ( $\beta_1 = 0.356$ ,  $p \text{ value} = 0.000$ ). This is consistent with the study by Mirshekary and Saudagaran (2005) which revealed how investors use the information disclosed in financial statements and also the significance of various information sources on investment decision making.

The researchers concluded that investment decision makers use the annual financial statement of different companies for investment and decision making purpose which is in agreement with the fact that shareholders use accounting information as an input for an investment decision.

As stated by Hypothesis 2, that personal financial needs have no significant effect on individual short-term investment decision making. Research findings showed inconsistency with the hypothesis. Hence, personal financial needs were positively correlated with individual short-term investment decisions making (estimated coefficient  $\beta_2 = 0.272$ ,  $p \text{ value} = 0.000$ ). This is in agreement with findings by Nagy and Obenberger (1994) that classical wealth-maximization criteria are important to investors, even though investors employ diverse criteria when choosing stocks.

Finally, findings showed that investors with more education depend on their personal financial need to determine their short-term decisions making an investment ( $\beta = 0.047$ ,  $\rho > 0.05$ ). The study also argues that with an increase in investor experiences, accounting information will negatively determine individual short-term investment decision making ( $\beta = -0.220$ ,  $\rho < 0.05$ ). Also, the findings revealed that as an investor is ageing the less, he/she will depend on accounting information to determine short-term investment decisions ( $\beta = -0.113$ ,  $\rho < 0.05$ ). However, older investors depend more on their personal financial needs ( $\beta = 0.121$ ,  $\rho < 0.05$ ) to determine their short investment decision making. Previous scholars have argued that the factors influencing investors' investment decisions are based on various demographic factors like age, gender, marital status, level of income, level of market knowledge, educational qualification and the number of dependents (Lewellen *et al.*, 1977; Shaikh and Kalkundrikar, 2011; Jain and Mandot, 2012); Geetha and Ramesh, 2012).

### Conclusion

These study findings provide direct evidence of a relationship between accounting information and individual short-term investment decisions making, and an indication of its magnitude effect. From the study findings, there is enough evidence to conclude that accounting information is associated with a higher individual short-term investment decision making. The study provides some preliminary evidence that personal financial needs play a vital role in individual short-term investment decision making. Specifically, when personal financial needs are met, individual short-term investment decision making is likely to improve. The study also concluded that with an increase in age of investors, the more they are likely to base their short term investment decision on personal financial needs while they less base it on accounting information.

### The implication of the Findings

From the study findings, it was deduced that accounting information has a profound effect on individual short-term investment decision making. The findings suggest that investors with access to proper, adequate accounting information are most likely to make the right investment decisions. Therefore investors should thoroughly analyze accounting information since it is a valuable indicator of how stocks will perform in the stock exchange rates. Based on these findings, education, age, and experience of the investors are the areas which can improve these intentions while demographic alone does suffice as the basis of the segmentation of individual investors.

This main study objective was to identify the determinants of investment behaviour and their relative importance in shaping the behaviour of individual investors. From the study, findings were only limited to determinants of investment behavior and their relative importance in shaping the behavior of individual investors. Thus, more research and studies should be carried out to determine other factors that affect investment. Some of the factors can be those in the expected return from investments, the cost of capital in terms of interest rate, the taxation of returns and the availability of savings to meet investments. This would enable the researchers and concerned investors to mitigate the negative effects of such factors and hence enhance individual short-term investment decisions making. The government should support the stock market which automatically enhances the confidence level of the investors and their intentions to invest.

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