

# FACTORS INFLUENCING INVESTMENT DECISIONS IN CAPITAL MARKET: A STUDY OF INDIVIDUAL INVESTORS IN NIGERIA

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**Abstract.** *The study seeks to determine the main factors influencing investment decisions of investors and how these factors are related to the investors' socio-economic characteristics in the Nigerian Capital Market. The study covers individual investors using convenient sampling method to obtain information from 297 respondents through a modified questionnaire developed by Al-Tamimi (2005). Independent t- test, Analysis of variance (ANOVA) and post hoc tests were employed. The results indicate that the five most influencing factors on investment decisions of investors in Nigeria are past performance of the company's stock, expected stock split/capital increases/bonus, dividend policy, expected corporate earnings and get-rich-quick. Also, the five least influencing factors include religions, rumors, loyalty to the company's products/services, opinions of members of the family and expected losses in other investments. The study finds that the socio-economic characteristics of investors (age, gender, marital status and educational qualifications) statistically and significantly influenced the investment decisions of investors in Nigeria. With regard to the past performance of the company's stock as an assessing factor, groups of investors statistically differed in factor assessment, as segments of a group considered the factor as the most important/unimportant. Since the identified most influencing factors are usually classified as wealth maximising factors, the study recommends that the investment climate and the market environment be made friendly and conducive to attract investors by creatively developing programmes and policies that impact on investors' decisions in order to maximise the value of the firms and enhance the wealth of the investors. The market players should re-organise the market and implement accommodating policies which will eliminate fraud and resolve the leadership crisis in the market.*

**Key words:** *factors influencing investment decision, capital market, individual investors, Nigeria*

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## Introduction

The basic function of capital markets is to allow the efficient transfer of funds between borrowers and lenders. As a result of the opportunities provided by the market, everyone (borrowers and lenders) is better off than he would have been without capital market. It is therefore expected that the decision to establish the Nigerian Capital Market was born from the benefits accruable from the performance of its traditional functions.

The origins of the Nigerian Capital Market date back to the colonial times when the British Government ruling Nigeria at the time sought funds for running the local administration (Ozaze, 2011), and subsequently promulgated the 1946 10-year plan Local Loan Ordinance for the floatation of the first N300,000, 3% Government stock 1956/61 (Odife, 2006, cited in Ozaze, 2011). However, the market became known in 1960 when the Nigerian Stock Exchange (Lagos Stock Exchange) was opened. As noted in Nwude (2012b), the capital market at present has 10 trading floors in Lagos (1960), Kaduna (1978), Port-Harcourt (1980), Kano (1989), Onisha (1990), Ibadan (1990), Abuja (1999), Yola (2002), Benin (2005) and Uyo (2007). The Capital Market provides facilities for mobilizing and dealings in medium and long term funds. The players on the capital market are the operators who act as intermediaries between the surplus economic units (savers) and the deficit economic units (borrowers). They include Securities Exchanges, Brokers/Dealers, Issuing Houses, Registrars and Investment Advisors.

The two major factors that have contributed to the development of the Nigerian capital market in recent times were (i) the public sector reform of the Structural Adjustment Programme (SAP) in 1987, which involves the full or partial privatization and commercialization of public owned enterprises, and (ii) the consolidation/recapitalization of banks in 2005/2006, where banks were asked to raise their minimum paid-up capital from N2 billion to N25 billion. The consolidation exercise made the capital market be very active and shares of the banks were over-subscribed. Many investors were attracted to the market as a result of the high share prices. The banks also enticed the investors with heavy (margin) loans for the purpose of buying their shares in the capital market. However, the tempo could not be sustained as the global financial crisis had its ripple effect on the Nigerian economy, and the market crashed in 2009. Accordingly, the market capitalization nose-dived from an all time high of N13.5 trillion in March, 2008, to less than N4.6 trillion by the second week of January, 2009 (Olisaemeka, 2009; Nwude, 2012a). Also, the Nigerian Stock Exchange (NSE) All-Share Index (a gauge for measuring aggregate growth in the capital market) decreased from about 66000 basis points to less than 22000 basis points in the same period. The Nigerian equities market also decreased from a comparative 38.8 percent of Nigeria's GDP in 2008 (at the market's high) to a meager 6.8 percent (Okumagba, 2012). The continuous down movement of stock prices created panic among the investors in the market, leading to disequilibrium between supply and demand, with supply exceeding demand. As Nwude (2012a) observed, the decline was propelled by the actions of

profit takers who disposed stocks in order to reap off quick gains. The actions of the investors confirmed the study by Shanmugsundaram and Balakrishnan (2011) that small corrections in a capital market have often disintegrated into full-scale crashes fueled by panicked investors, who made rash decisions to avoid losing money in the short term, rather than focusing on an investment's long term potential. The position of the investors is understandable, when viewed from the point of psychological studies, as cited by Shanmugsundaram and Balakrishnan (2011) that the pain of losing money from investments is nearly three times greater than the joy of earning money.

The basic questions arising from the scenario above are: What are the main factors that have attracted the investors to invest in the capital market? Are these factors of investment decisions related to the investors' socio-economic characteristics? The motivation, therefore, for embarking on this research is to answer the questions above and the fact that there have been limited empirical studies that investigated the factors influencing individual investors' decision making in the capital market in Nigeria.

The main objective of the study is to determine the most influencing factors on investment decisions of investors, and compare how one of the factors relates to the socio-economic characteristics of the investors in the Nigerian Capital Market. The socio-economic factors include age, gender, marital status, educational qualification and monthly income. Specifically, the objectives of the study are to:

- (i) Identify and prioritise the factors influencing investment decisions of investors in the Nigerian Capital Market; and
- (ii) Investigate the effect of socio-economic characteristics of investors on any of the most affecting factors.

Based on the objectives of the study, the following hypotheses were formulated:

- (i) Socio-economic characteristics of investors significantly affect their investment decisions.
- (ii) Factors influencing investment decisions of investors differ significantly according to age, gender, marital status, educational qualification and monthly income.

The paper is relevant and timely in view of the effect of the recent crisis in the capital market, which if not carefully handled, can destabilize the economy. Also, to the best of the author's knowledge, empirical research on factors influencing investors' decision in Nigeria is limited. Thus, the findings of the study will guide the investors, the regulators and the government on investors' behaviour and investment policy needed to restore confidence in the capital market.

The paper is divided into six sections. The first section introduces the paper, while the second section presents the literature review. The third section examines the methodology of the study. The fourth section covers data presentation, analysis and discussions of results. The fifth section provides the main findings of the study. Finally, the sixth section concludes with the summary and implications of the study.

## 1. Literature review

Investment in the capital market can be undertaken by an investor for three basic objectives: (i) wealth maximisation; (ii) liquidity maintenance; and (iii) risk minimisation. This implies that a rational investor is influenced by these objectives when making investment decisions. As Masomi and Ghayekhloo (2011) observed, under the paradigm of traditional financial economics, decision makers are considered to be rational and utility maximising. According to Chandra and Kumar (2008), investor rationality is defined as being reasonable and making decisions that are in their best interest. Somil (2007) observed that the proponent of the theory of rational investor assume that an individual makes a decision on the basis of the principles of maximisation, self-interest and consistent choice. According to Somil (2007), rationality also assumes that an investor has perfect information of his surroundings and makes the decisions with the sole objective of profit maximisation. The reasoning derivable from this principle of rationality is that the capital market must be efficient. Capital market efficiency implies that all information regarding the market is fully and instantaneously reflected in security prices and available to all investors. But most capital markets operate under inefficient conditions, making rational decisions impossible. Also, Mahmood, Ahmad, Khan and Anjum, (2011) posit that various empirical investigations conducted during 1980 revealed that the market is not efficient as explained by efficient market hypothesis (EMH) of traditional finance theories, because of certain anomalies of the market. As Somil (2007) recorded, the theory of rational investor has been opposed by neoclassical economic theory which proposes that every investor or every person has limited access to information and an individual is bounded by external constraints and one's own behaviour. Simon (1986) believed that investors make irrational decisions and do not behave rationally because of their limitations of capacity to process the information. Tversky and Kahneman, (1974), cited in Shanmugsundaram and Balakrishnan (2011) identified that the decision-making process is not a strictly rational one, where all relevant information is collected and objectively evaluated, rather, the decision maker makes mental '*short cuts*' in the process. The principles of rationality have also been opposed by the behavioral finance theory, which is more concerned about the decision environment and individual differences between decision makers. The behavioral finance asserted that investor market behaviour derives from psychological principles of decision making, to explain why people buy or sell the stocks (Al -Tamimi, 2005). Therefore, the foregoing has clearly demonstrated that investors are not rational in their decision and that their investment decisions are based on some factors.

Al-Tamimi (2005) investigated the factors influencing individual investor behaviour on the United Arab Emirates (UAE) financial markets. The study found that the six most influencing factors in order of importance were: expected corporate earnings, get rich quick, stock marketability, past performance of the firm's stock, government holdings and the creation of the organised financial markets. He also found the least influencing factors to be expected losses in other local investments, minimising risk,

expected losses in international financial markets, family member opinions and gut feeling on the economy. But the results of a similar study carried out by Al-Tamimi and Kalli (2009) on UAE investors indicate that the most influencing factor that affects the investment decision is religious reasons and the least affecting factor is rumors. However, the results of the two studies are acceptable based on Hossain and Nasrin (2012) submission that all possible factors influencing investors' investment decisions are not constant over time and that they may vary widely from investor to investor for distinct demographic features.

Mojgan and Ali (2011) studied the effect of earnings per share and cash dividend per share on investor decision making in the Tehran stock market, and found that the two factors influenced investors' decision to buy stocks. Azam and Kumar (2011) examined the factors influencing Pakistan investors' behaviour on the Karachi Stock Exchange and found that the earning per share, foreign direct investment and gross domestic product growth rate have a significant impact on stock prices. Merikas, Merikas, Vozikis and Prasad (2008) investigated factors influencing investors' decision in the Greek Stock Exchange and found that investors principally favour expected corporate earnings, condition of financial statements, and firm status in the industry. Also Masomi and Ghayekloo (2011), studying the consequences of human behaviours in economies in Tehran market found that behavioural factors influenced investment decision making of investors. Kaleem, Wajid and Hussain (2009), in a study of factors affecting financial advisors perception in portfolio management in Pakistan, found that age, income, language and orientation of education have a significant role in determining the investment style of an investor. Lewellen (1977), cited in Shanmugsundaram and Balakrishnan (2011), found that age, gender, income and education affect investors' preference and attitudes towards investment decisions. Shaikh and Kalkundrikar (2011), 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. Geetha and Ramesh (2012) studied the relevance of demographic factors in investment decisions in Tamilnadu, India, and claimed that the demographic factors have a significant influence over some of the investment decision elements, while insignificant influence was found on some other elements. Also, Jain and Mandot (2012) studying the impact of demographic factors on investment decision of investors in Rajasthan, concluded that various demographic factors like age, marital status, gender, city, income level, market knowledge, occupations and qualifications have a major impact on investment decision of investors. Fares and Khamis (2011) investigated individual investors' stock trading behaviour at the Amman Stock Exchange, Jordan, using the multiple regression technique. They identified four behavioral factors (age, education, accessibility to the internet and interaction between the investor and his/her broker) that influenced investors' trading decisions. According to the authors, investor's age, education, and his/her accessibility to the internet had a significant and positive effect on stock trading, while the interaction between the investor and his/her broker, had a highly significant and negative effect.

Sultana and Pardhasadhi (2012) investigated factors influencing Indian individual equity investors' decision making and behaviour. After applying factor analysis, the 40 attributes were reduced to ten factors of individual eccentric, wealth maximisation, risk minimisation, brand perception, social responsibility, financial expectation, accounting information, government and media, economic expectation and advocate recommendation factors. Nagy and Obenberger (1994) examined the factors influencing investment behaviour and found that classical wealth maximisation criteria are the most important to investors, even though investors employ diverse criteria when choosing stocks.

In Sri Lanka, Cooray (2003) identified the factors affecting investment decisions as risk factor, return on investment, liquidity of investment, tax consequences of an investment, inflation and the term of an investment. Sharma and Gupta (2011) identified factors affecting investment decisions in India to include risk, return, peer influence, recommendation of financial advisors and market trends. Rashid and Nishat (2009) found that in Bangladesh, the most influencing factors on investors' decisions are efficiency of the company, inflation rate, easy and quick transactions, transaction cost, access to the company and industry information, quality of information and prior knowledge of securities. Also, Hussain and Nasrin (2012) in a study of Bangladesh found that the eight most important principal factors influencing retain investors are company specific attributes/reputation, net asset value, accounting information, trading opportunity, publicity, ownership structure, influence of people and personal finance needs.

In Nigeria, the study by Aregbeyen and Mbadiugha (2011) found that the ten most influencing factors on investor's decision in order of importance are: motivation by people who have attained financial security through share investment, future financial security, recommendations by reputable and trusted stock brokers, management team of the company, awareness of the prospects of investing in shares, composition of the board of directors of companies, recent financial performance of the company, ownership structure of the company, reputable predictions of future increment in share value and bonus payments.

The consensus from the review of literature above is that investors' investment decisions are not rational, based on the limitation of their capacity to process information. Most importantly, investors' decisions are influenced by certain identified factors categorized as wealth maximising factors (corporate earnings, get rich quick, dividend policy, past performance of the firm's stock) and other factors related to the investor's socio-economic characteristics and accounting information among others.

## **2. Methodology**

The aim of the study is to determine the most influencing factors on investment decisions of investors, and compare how one of the factors relates to the socio-economic characteristics of the investors in the Nigerian Capital Market. The socio-

economic factors include age, gender, marital status, educational qualification and monthly income.

The population of the study consists of all individual investors in the Nigerian capital market. Since the population is large, a survey was carried out among a sample of 320 respondents. The respondents, mainly civil servants, academics, business men, the clergy and other professionals were selected based on their informed knowledge about financial markets. It was the policy of the researcher that for a respondent to be included in the study, he/she must, at least, have attended the elementary school, which to some extent provides basic understanding of the financial markets. Thus, managers of brokerage firms were asked to select respondents based on the minimum primary-six qualification.

The structural questionnaire developed by Al-Tamimi (2005) was employed for this study, with some modifications. The amended questionnaire consists of thirty five questions divided into two sections. The first section contains ten questions relating to socio-economic characteristics of the investors. The second section covers the twenty five identified factors influencing investors' investment decisions in Nigeria, using a 5-point Likert scale ranking from 1 (Strongly disagree) to 5 (Strongly agree). The motivation for the use of the questionnaire developed by Al-Tamimi (2005) was based on the fact that it covered most of the factors specified in literature and provided a standardised instrument, which had been previously tested and found useful in determining investors' investment decisions in similar studies (Al-Tamimi, (2005; Al-Tamimi & Kalli, 2009). However, the researcher had carefully amended and adapted the questionnaire to the Nigerian environment in line with the objective of the study, after conducting a pilot study with five academics not below the rank of Senior Lecturers and five General Managers in the brokerage firms. The questionnaires were distributed in Lagos and Abuja for three reasons. First, Lagos was formerly the capital of Nigeria, before the movement of the Federal Government to Abuja. Second, the Stock Exchanges in Lagos and Abuja are the most active capital markets in Nigeria. Third, the level of economic activities, infrastructural development, income level and population in the two cities ensure excellent representation of investors in Nigeria. The questionnaires were purposefully distributed to the respondents in two ways: first, the questionnaires were distributed to some Managers of brokerage firms for onward distribution among their clients who had earlier been selected based on the primary six minimum education. Second, following the same procedure, investors who visited Lagos and Abuja Stock Exchanges between October and December, 2012, were given some of the questionnaires to fill in by five well-trained Research Assistants. Out of the 320 questionnaires distributed, 297 valid questionnaires were available for the study, representing a response rate of 92.81% of the total sample.

The questionnaire was subjected to reliability test using Cronbach's Alpha scale. According to Matzler and Renzl (2006), the reliability and validity of a measurement instrument/scale can be tested by looking at the reliability of individual items and the convergent validity of the measures associated with individual constructs. The results

of the factor loadings of individual items in the questionnaire (not shown here) indicate that they varied from 0.797 to 0.810. Thus, it can be concluded that the individual items are reliable. When using the combined construct validity coefficient, a scale is deemed to be viable or valid if the Cronbach's Alpha exceeds the value of 0.7 (see Ranganathan & Henley, 2008; Arteaga-Ortiz & Fernandez-Ortiz, 2010). Therefore, the viability or validity of the instrument was deemed sufficient and satisfactory since the Cronbach's Alpha ( $\alpha = 0.81$ ) exceeded the minimum acceptable level.

### 3. Data Presentation, Analysis and Discussions

#### 3.1. Socio-Economic Characteristics of the Respondents

The socio-economic characteristics of the respondents in the Nigerian capital market are presented in Table 1 below.

TABLE 1. Investors' Socio-Economic Characteristics

Variable	Investors' Grouping (n=297)	Frequency	Percent
Gender	Male	183	61.6
	Female	114	38.4
Age	18-25 years	49	16.5
	26-35 years	58	19.5
	36-45 years	81	27.3
	46-55 years	68	22.9
	56-65 years	26	8.8
	65 years and more	15	5.1
Marital status	Single	90	30.3
	Married	199	67.0
	Divorced	8	2.7
Educational Qualification	Less than high school	15	5.1
	High school or equivalent	10	3.4
	Diploma or equivalent	35	11.8
	High Diploma/Bachelor	119	40.1
	Graduate degree (Masters or PhD)	118	39.7
Monthly Income	N100,000 or less	149	50.2
	N100,000 - N200,000	51	17.2
	N200,000 - N300,000	50	16.8
	N300,000 - N400,000	15	5.1
	N400,000 - N500,000	7	2.4
	N500,000 and above	25	8.4
Years of Capital Market Investment	0 - 5 years	88	29.6
	6 - 10 years	63	21.2
	11 - 15 years	51	17.2
	16 - 20 years	55	18.5
	20 and more	40	13.5

Source: Field Survey, 2012



A shown in Table 1, 61.6% of the respondents that participated in the study were males, while 38.4% were female investors. The result is reasonable in view of the fact that capital market is sometimes perceived to be risky and women are generally seen to be risk averse. The study confirms the work of Babajide and Adetiloye (2012), who observed that most of the activities in the securities market are carried out by men. The age profile of the respondents reveals that many of the respondents (27.3%) were in the age category of 36 – 45 years, 22.9% were in the age category of 46 – 55 years and 19.5% were in the age bracket of 26 – 35 years. The results of the age distribution show that most of the investors in the Nigerian Capital Market were in the age category of 26 – 55 years, which incidentally coincides with the productive age of the people. In terms of marital classification, 67.0% of the respondents were married, 30.3% were single, while 2.7% were divorced. Interestingly, the results show that most of the respondents are highly educated, and hence well informed about activities in the capital market. For instance, 79.8% have Bachelor/Masters/PhD degree, 15.2% have high school or diploma, while only 5.1% have less than high school education.

The distribution for monthly income depicts the low level of income and poverty in Nigeria and that most of the investors were small investors. More than half (50.3%) of the respondents were on income level of less than N100,000 per month (less than \$625). Finally, the analysis of the years of capital market investment of the investors, which to some extent determines the experience of the investors' investment selection and/or timing, shows that 29.6% of the respondents had less than five years capital market experience, with only 13.5% having more than 20 years. As Mahmood *et al.* (2011) asserted, knowledge of investors regarding financial market and their past experience contribute a lot towards the risk assessment in various products.

### ***3.2. Prioritization of Factors Influencing Investors' Investment Decisions***

Table 2 presents the means and standard deviation of the identified factors most influencing investors' investment decisions in Nigeria.

From Table 2, the five most influencing factors on investors' investment decision in the Nigerian capital market in order of importance (with their means and standard deviation) are: past performance of the company stock ( $M = 4.08, SD = .924$ ), expected stock split/capital increases/bonus ( $M = 4.00, SD = .950$ ), dividend policy ( $M = 3.99, SD = .988$ ), expected corporate earnings ( $M = 3.94, SD = 1.015$ ) and get-rich-quick ( $M = 3.86, SD = 1.015$ ). The results indicated that the five most important factors are usually categorized as wealth maximising criteria. The finding is consistent with the works of Nagy and Obenberger (1994) and Al-Tamimi (2005). On the other hand, the five least influencing factors include: religions ( $M = 1.97, SD = 1.075$ ), rumors ( $M = 2.33, SD = 1.182$ ), loyalty to the company's products/ services ( $M = 2.56, SD = 1.193$ ), opinions of members of the family ( $M = 2.60, SD = 1.165$ ) and expected losses in other investments ( $M = 2.60, SD = 1.144$ ).

TABLE 2. Factors Influencing Investment Decisions in the Nigerian Capital Market

S/N	Factors	Mean (M)	Std Deviation (SD)
1	Past performance of the company's stock	4.08	.924
2	Expected stock split/Capital increases/Bonus	4.00	.950
3	Divided policy	3.99	.988
4	Expected corporate earnings	3.94	1.015
5	Get-rich-quick	3.86	1.015
6	Marketability of the company	3.81	1.039
7	Diversification of investment	3.78	.998
8	Recommendations of financial advisors and analysts	3.78	.982
9	Recent price movement in the company's stock	3.68	1.064
10	The company's reputation	3.67	1.284
11	Stock broker's recommendation	3.56	1.080
12	Current economic indicators	3.56	1.052
13	Best opportunities for speculation	3.12	1.277
14	Credit availability	3.03	1.099
15	Low level of risk	3.03	1.223
16	Reputation of the company's Board of Directors	3.01	1.244
17	Friend recommendations	2.98	1.209
18	Level of publicity received by the company press	2.93	1.196
19	Government has a share in the company	2.86	1.301
20	Insiders' information	2.61	1.212
21	Expected losses in other investments	2.60	1.144
22	Opinions of members of the family	2.60	1.165
23	Loyalty to the company product	2.56	1.193
24	Rumors	2.33	1.182
25	Religious reasons	1.97	1.075

Source: Field Survey, 2012

### 3.3. Results of the T-Test and ANOVA of Factors Affecting Investors' Investment Decisions

The effects of the socio-economic characteristics of investors on the assessing factors of investment were analysed in this section. Meanwhile, more emphasis was placed on the factor of past performance of the company's stock, since it was reported highest by investors.

#### 3.3.1 Gender and Factors Influencing Investors' Investment Decisions

The results of the independent t-test in Table 3 reveal that there was a statistically significant difference for gender in the assessing factors of past performance of the company's stock  $\{t(295) = 2.686, p = .008\}$ , expected corporate earnings  $\{t(295) = 2.791, p = .006\}$ , and dividend policy  $\{t(295) = 2.866, p = .004\}$ . For instance,

results indicate that male investors reported significantly higher preference for past performance of the company's stock ( $M = 4.20$ ,  $SD = .835$ ) than did the females ( $M = 3.90$ ,  $SD = 1.030$ ). The results imply that the gender of investors matters when making investment decision based on the past performance of the company's stock, expected corporate earnings and dividend policy.

TABLE 3. T-Test for Influence of Gender on the Respondents in Five Most Influencing Factors

The Most Influencing Factors	Mean value		t-value	Sig.
	Male	Female		
Past performance of the company	4.20	3.90	2.686	.008
Expected stock/capital increases/bonus	4.08	3.89	1.354	.177
Expected corporate earnings	4.07	3.73	2.791	.006
Dividend policy	4.11	3.79	2.866	.004
Get-rich-quick	3.92	3.75	1.687	.093

However, it was observed that the assessing factors of expected stock/capital increases/bonus  $\{t(295) = 1.354, p = .177\}$  and get rich quick  $\{t(295) = 1.687, p = .093\}$  has insignificant effect for gender. This is reasonable, because both males and females are ambitious and expectant of the bright future gains from their investments.

### 3.4.2 Age and Factors Influencing Investors' Investment Decisions

Table 4 shows the results of one way ANOVA test between the different age groups of the respondents and the five most influencing factors.

TABLE 4. Influence of Age on Investors' Investment Decisions

Between Groups	Sum of Square	df	Mean Square	F	Sig.
Past performance of the company	33.800	5	6.760	8.879	.000
Expected stock/capital increases/bonus	21.801	5	4.360	5.175	.000
Expected corporate earnings	37.934	5	7.587	8.270	.000
Dividend policy	26.996	5	5.399	5.997	.000
Get-rich-quick	35.739	5	7.148	7.731	.000

The results of the ANOVA show that there was a statistically significant difference among the different age groups and each of the five most influencing factors [past performance  $\{F(5,291) = 8.879, p = .001\}$ ; expected stock split/capital increases/bonus  $\{F(5,291) = 5.175, p = .001\}$ , dividend policy  $\{F(5,291) = 8.270, p = .001\}$ , expected corporate earnings  $\{F(5,291) = 5.997, p = .001\}$  and get-rich-quick  $\{F(5,291) = 7.731, p = .000\}$ ] at five percent significant level. This shows that age is a factor affecting investment decision of investors in the Nigerian capital market.

To measure the strength of association (omega square,  $\omega^2$ ) between the independent variable and the dependent variable, since there is a significant  $F$ , from the one way

analysis of variance of the effect of age groups on past performance of the company's stock,  $F(5, 291) = 8.979, p = .001$ ), the omega square is calculated as:

$$\begin{aligned} \text{Omega square } (\omega^2) &= SS_B - (K - 1)MS_W / (SS_T + MS_W) \\ &= 33.800 - (6 - 1) .753 / (252.896 + .753) = 30.035 / 253.649 = .12 \end{aligned}$$

The results indicated that the independent variable (six age groups) accounts for approximately 12% of the variance in the dependent variable (past performance of the company stock) for the investors.

Also, the study proceeded to check the assumption that the variances of the age groups are equal for the assessing factor of past performance of the company's stock using Levene's test of homogeneity of variance (Table 5). Levene's test was not significant;  $F(5, 291) = .995, p = .421$ , at the .05 alpha level. Thus, the assumption of homogeneity of variance had not been violated.

TABLE 5. Test of Homogeneity of Variance

Dependent variable: Past performance of the company's stock			
Levene Statistic	df1	df2	Sig.
.995	5	291	.421

Scheffé's post hoc range test was used to identify homogeneous subsets of means that are not different from each other (see Table 6). The results indicate that there was a statistically significant difference between the age group of 18 – 25 years and the other age groups, although 18 – 25 years had marginally statistical significant difference,  $p = .055$ , with those in the age group of 26 – 35 years. However, the means of the age groups shown in column/subset 2 do not differ significantly.

TABLE 6. Homogeneous Subsets

Dependent variable: Past performance of the company's stock				
	Age	N	Subset for alpha = 0.05	
			1	2
Scheffe <sup>a,b</sup>	18 - 25yrs	49	3.37	
	26 - 35yrs	58	4.05	4.05
	56 - 65yrs	26		4.19
	36 - 45yrs	81		4.21
	65yrs and more	15		4.33
	46 - 55yrs	68		4.38
	Sig.			.055

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 35.330.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

In order to quantify the size of the difference between groups, an effect size (ES) was calculated. Effect size is a standardized mean difference between groups, calculated as follows:

$$\text{Effect Size (ES)} = \bar{x}_i - \bar{x}_j / \sqrt{MS_W}$$

where,  $\bar{x}_i - \bar{x}_j$  represents mean difference obtained from the multiple comparisons table and  $MS_W$  is the within mean square from the ANOVA table.

For 18-25 years/26-35years,  $ES = -.684 / \sqrt{.753} = \mathbf{-.18}$

For 18-25 years/36-45years,  $ES = -.843 / \sqrt{.753} = \mathbf{-.97}$

For 18-25 years/46-55years,  $ES = -1.015 / \sqrt{.753} = \mathbf{-1.17}$

For 18-25 years/56-65years,  $ES = -.825 / \sqrt{.753} = \mathbf{-.95}$

For 18-25 years/over 65years,  $ES = -.966 / \sqrt{.753} = \mathbf{-1.11}$

The benchmarks presented by Cohen (1988), as cited in Schuele and Justice (2006) for interpreting Cohen's  $d$ , equate 0.2 to a small effect, 0.5 to a medium effect, and effects larger than 0.8 to large effects. Based on the effect size calculated above, the effect size for 18-25 years/26-35 years indicates a small effect, while that of 18-25 years/36-45 years, 18-25 years/46-55 years, 18-25 years/66-65 years and 18-25 years/over 65 years represents large effects. For example, ES of -1.17 for 18-25 years/46-55 years indicates that an average person between 18 – 25 years is 1.17 standard deviation less attracted to past performance of the company's stock than the average person between 46 – 55 years. The least effect size was for 18-25 years/26-35 years.

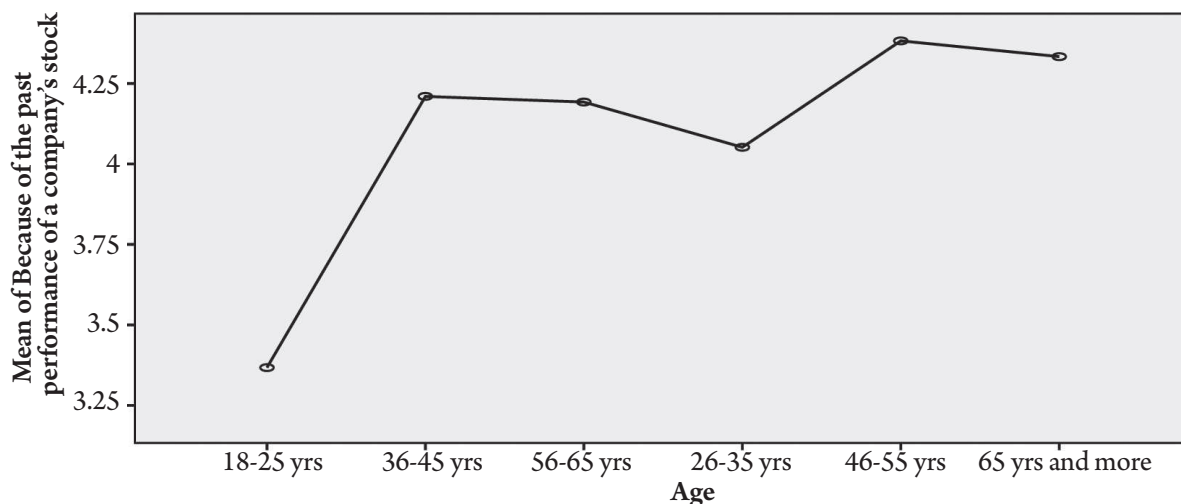


FIG. 1. Means Plot of Age Group for Assessing the Factor of Past Performance of Company

### 3.3.3 Marital Status and Factors Affecting Investors' Investment Decisions

Table 7 shows the results of one way ANOVA test between the different marital groups of respondents and the five most influencing factors.

TABLE 7. Influences of Marital Status on Investors' Investment Decisions

Between Groups	Sum of Square	df	Mean Square	F	Sig.
Past performance of the company	27.532	2	13.766	17.959	.000
Expected stock/capital increases/bonus	22.976	2	11.488	13.841	.000
Expected corporate earnings	23.250	2	11.625	12.134	.000
Dividend policy	15.837	2	7.918	8.523	.000
Get-rich-quick	21.732	2	10.866	11.287	.000

The main statistically significant difference was found for all the five most influencing factors [past performance –  $F(2,4) = 17.959, p = .001$ ; expected stock split/capital increases/bonus –  $F(2,4) = 13.841, p = .001$ ; expected corporate earnings-  $F(2,4) = 12.134, p = .001$ ; dividend policy-  $F(2,4) = 8.523, p = .001$ , and get-rich-quick –  $F(2,4) = 11.287, p = .001$ ) based on the different marital groups of the investors at five percent significant level. However, an analysis of the means shows that investors who are divorced ( $M = 3.00, SD = 1.309$ ) and single ( $M = 3.74, SD = 1.012$ ) reported significantly less attraction to past performance of the company's stock than those who are married. This indicates that marital status is a factor affecting investment decision of investors.

Again, before examining the effect of marital status on past performance, the Levene's test of homogeneity of variance of the marital status groups was conducted and found not to be equal for the assessing factor of past performance of the company's stock. This implies that Levene's test was significant;  $F(2,294) = 5.072, p = .007$ , at the .05 alpha level. As shown in Table 8, the assumption of homogeneity of variance was violated.

TABLE 8. Test of Homogeneity of Variances

Dependent variable: Past performance of the company's stock			
Levene Statistic	df1	df2	Sig.
5.072	2	294	.007

Thus, the violation of the assumption of homogeneity of variance indicated that an alternative ANOVA had to be conducted. This warranted the use an adjusted  $F$  test of Welch statistic, which was found to be significant (Table 9). Thereafter, the Games-Howell post hoc test was applied (Table 10).

TABLE 9. Robust Tests of Equality of Means

Dependent variable: Past performance of the company's stock			
Welch Statistic <sup>a</sup>	df1	df2	Sig.
12.632	2	18.154	.000

From Table 10, the Games-Howell post hoc test of multiple comparisons for significance indicated that the single group ( $M = 3.74$ ) was statistically significantly

different from the married group ( $M = 4.28$ ), with mean difference of .537 and a  $p$  value of .001. However, the single and divorced groups did not differ significantly.

TABLE 10. Games-Howell Post Hoc Test of Multiple Comparisons

Dependent Variable: Past performance of the company's stock						
(I) Marital Status	(J) Marital Status	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Single	Married	-.537*	.120	.000	-.82	-.25
	Divorce	.744	.475	.315	-.62	2.11
Married	Single	.537*	.120	.000	.25	.82
	Divorce	1.281	.466	.064	-.08	2.65
Divorce	Single	-.744	.475	.315	-2.11	.62
	Married	-1.281	.466	.064	-2.65	.08

### 3.3.4 Educational Qualifications and Factors Affecting Investors' Investment Decisions

Table 11 presents the results of one way ANOVA test between the different educational groups of respondents and the five most influencing factors.

TABLE 11. Influences of Educational Qualifications on Investors' Investment Decisions

Between Groups	Sum of Square	df	Mean Square	F	Sig.
Past performance of the company	18.624	4	4.656	5.803	.000
Expected stock/capital increases/bonus	15.132	4	3.783	4.386	.002
Expected corporate earnings	18.948	4	4.737	4.837	.001
Dividend policy	12.711	4	3.178	3.359	.010
Get-rich-quick	14.15	4	3.529	3.545	.008

The five most influencing factors of past performance  $\{F(4,292) = 5.803, p = .001\}$ , expected stock split/capital increases/bonus  $\{F(4,292) = 4.386, p = .002\}$ , expected corporate earnings  $\{F(4,292) = 4.837, p = .001\}$ , dividend policy  $\{F(4,292) = 3.359, p = .010\}$ , and get-rich-quick  $\{F(4,292) = 3.545, p = .008\}$  showed significant difference among the different educational groups at five percent significant level. This reveals that education is a factor affecting investment decision of investors. However, an analysis of the means shows that investors with Master/PhD ( $M = 4.33, SD = .817$ ) and High Diploma/Bachelor ( $M = 4.04, SD = .887$ ) reported significantly more attraction to past performance of the company's stock than those with High School ( $M = 3.80, SD = .1.398$ ), Diploma ( $M = 3.77, SD = .1.003$ ) and less than High School ( $M = 3.40, SD = .910$ ). This indicates that marital status is a factor affecting the investment decision of investors.

Levene's test of homogeneity of variance was found to be significant;  $F(4,292) = 3.239, p = .013$ , at the .05 alpha level, which implies that the assumption of homogeneity of variance was violated (Table 12).

TABLE 12. Test of Homogeneity of Variances

Dependent variable: Past performance of the company's stock			
Levene Statistic	df1	df2	Sig.
3.239	4	292	.013

Again, to solve the problem of homogeneity of variance, the study employed an adjusted *F* test of Welch statistic (Table 13). The Welch statistic was significant,  $F(4,39.396) = 5.445, p = .001$ , at the .05 alpha level

TABLE 13. Robust Tests of Equality of Means

Dependent variable: Past performance of the company's stock			
Welch Statistic <sup>a</sup>	df1	df2	Sig.
5.445	4	39.396	.001

Thereafter, the Games-Howell post hoc test for the multiple comparisons was conducted (Table 14). The Games-Howell post hoc test of multiple comparisons for significance indicates that the investors with Master/PhD were significantly different from those with less than high school, and also statistically different from those with diploma or equivalent.

TABLE 14. Games-Howell Post Hoc Tests of Multiple Comparisons

Dependent Variable: Past performance of the company's stock						
(I) Educational Level	(J) Educational Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Less than high school	High school or equivalent	-.400	.501	.927	-1.96	1.16
	Diploma or equivalent	-.371	.290	.704	-1.21	.47
	High diploma/ Bachelor	-.642	.249	.117	-1.40	.11
	Graduate degree (Master's or PhD)	-.931*	.247	.012	-1.68	-.18
High school or equivalent	Less than high school	.400	.501	.927	-1.16	1.96
	Diploma or equivalent	.029	.474	1.000	-1.49	1.54
	High diploma/ Bachelor	-.242	.450	.981	-1.73	1.25
	Graduate degree (Master's or PhD)	-.531	.449	.761	-2.02	.96
Diploma or equivalent	Less than high school	.371	.290	.704	-.47	1.21
	High school or equivalent	-.029	.474	1.000	-1.54	1.49
	High diploma/ Bachelor	-.271	.188	.605	-.80	.26
	Graduate degree (Master's or PhD)	-.559*	.185	.032	-1.08	-.03
High diploma/ Bachelor	Less than high school	.642	.249	.117	-.11	1.40
	High school or equivalent	.242	.450	.981	-1.25	1.73
	Diploma or equivalent	.271	.188	.605	-.26	.80
	Graduate degree (Master's or PhD)	-.288	.111	.073	-.59	.02
Graduate degree (Master's or PhD)	Less than high school	.931*	.247	<b>.012</b>	.18	1.68
	High school or equivalent	.531	.449	.761	-.96	2.02
	Diploma or equivalent	.559*	.185	<b>.032</b>	.03	1.08
	High diploma/ Bachelor	.288	.111	.073	-.02	.59



Again, to quantify the size of the difference between groups, an effect size (ES) was calculated as follows:

$$\text{Effect Size (ES)} = \bar{x}_i - \bar{x}_j / \sqrt{MS_W}$$

Graduate degree (Master's or PhD)/ Less than high school, ES = .931/√.802 = **1.03**

Graduate degree (Master's or PhD)/ Diploma or equivalent, ES = .559/√.802 = **.62**

Based on the effect size calculated above, the effect size for Graduate degree (Master's or PhD)/ Less than high school shows a large effect, while that of Graduate degree (Master's or PhD)/ diploma or equivalent represents a medium effect. For example, ES of 1.03 for Graduate degree (Master's or PhD)/ Less than high school indicates that an average person with Graduate degree (Master's or PhD) is 1.03 standard deviation more attracted to past performance of the company's stock than the average person with maximum of high school.

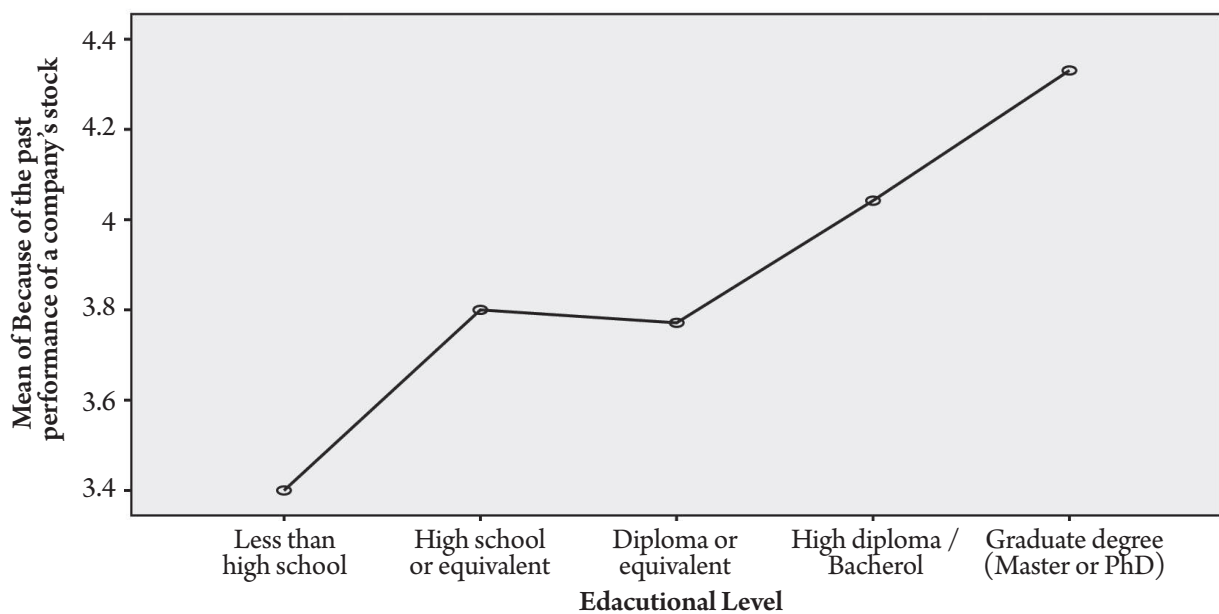


FIG. 2. Means Plot of Education and the factor of Past Performance of the Company

### 3.3.5 Monthly Income and Factors Affecting Investors' Investment Decisions

Table 15 revealed the results of the one way ANOVA test between the different income groups of the respondents and the five most influencing factors.

TABLE 15. Influences of Income on Investors' Investment Decisions

Between Groups	Sum of Square	df	Mean Square	F	Sig.
Past performance of the company	8.634	5	1.727	2.057	.071
Expected stock/capital increases/bonus	3.993	5	.799	.884	.492
Expected corporate earnings	18.150	5	3.630	3.684	.003
Dividend policy	8.066	5	1.613	1.671	.141
Get-rich-quick	6.090	5	1.218	1.187	.316

The results indicate that out of the five most influencing factors only the factor of expected corporate earnings  $\{F(5,291) = 3.684, p = .003\}$  shows significant difference among the different income groups of the respondents at five percent significant level. The factors of past performance of the company's stock  $\{F(5,291) = 3.684, p = .003\}$ ; expected stock split/capital increases/bonus  $\{F(5,291) = .884, p = .492\}$ ; dividend policy  $\{F(5,291) = 1.671, p = .141\}$ ; and get-rich-quick  $\{F(5,291) = 1.187, p = .316\}$  were insignificantly different among the different income groups of the respondents. However, an analysis of the means shows that investors who are on monthly income of above N500,000 ( $M = 4.32, SD = 1.030$ ); N100,000 – N200,000 ( $M = 4.27, SD = .750$ ) and N200,000 – N300,000 ( $M = 4.26, SD = .944$ ) reported higher, though insignificant attraction to past performance of the company's stock than those with N400,000 ( $M = 4.14, SD = .690$ ), N300,000 – N400,000 ( $M = 4.00, SD = 1.069$ ) and less N100,000 ( $M = 3.93, SD = .931$ ). Since the results of ANOVA indicated no significant difference among the different income groups for the assessing factor of past performance, a post hoc analysis would not be performed.

#### 4. Main research findings

The main findings of the study are highlighted as follows:

1. The five most influencing factors of investors' investment decisions in the Nigerian capital market in order of importance are: past performance of the company's stock, expected stock split/capital increases/bonus, dividend policy, expected corporate earnings and get-rich-quick. On the other hand, the five least influencing factors include: religions, rumors, loyalty to the company's products/services, opinions of members of the family and expected losses in other investments.
2. The identified most influencing factors are mostly classified as wealth maximising factors (see Nagy & Obenberger, 1994; Aswath, 2001). This is also in line with the theory of investor rationality (see Somil, 2007).
3. The most influencing factors of investors' investment decisions in Nigeria also confirmed the results of similar studies in other countries (Al- Tamimi, 2005; Merikas *et al.*, 2008).
4. The socio-economic characteristics of investors (age, gender, marital status and educational qualifications) have statistically significant influence on the investment decisions of investors in Nigeria. This confirms the studies for countries like Pakistan (Kaleem *et al.*, 2009), India (Geetha & Ramesh, 2012), and Rajasthan (Jain & Mandot, 2012).
5. With regard to the past performance of the company's stock as an assessing factor, groups of investors statistically differed in factor assessment, and segments of a group considered the factor as the most important/unimportant.

## **Conclusions and implications**

Investment decisions of investors in Nigeria are influenced by certain identified factors. The most important principal factors are past performance of the company stock, expected stock split/capital increases/bonus, dividend policy, expected corporate earnings and get-rich-quick. These factors were significantly influenced by gender, age, marital status and educational qualification of investors in the Nigerian capital market. Specifically, the investment decisions of investors relating to past performance of the company's stock differ based on their socio-economic characteristics (age, gender, marital status and educational qualification).

Thus, policy makers and managers of companies must identify the factors that appeal to different groups and segments of investors in an attempt to make the investment climate and the market environment friendly and attractive to the investors. Nigeria, and other countries in similar economic situations, can creatively adapt the results of this study to improve their investment climate by developing programmes and policies that impact on investors' decisions in order to maximize the value of the firms and enhance the wealth of the investors. Such programmes and policies include the re-organisation of the market, effective monitoring and enforcement of policy, elimination of fraud, proper information dissemination, the resolution of the leadership crisis in the market, and provisions of infrastructural facilities. All these recommendations will assist to deepen the market and encourage more investment in the capital market by the investors.

The implications of the findings of the study are that: (i) Investors are enlightened on the factors that are necessary to maximise their wealth in the capital market; (ii) Companies quoted on the Stock Exchange will be able to build-in the identified factors that affect investors' investment decision when designing products in order to appeal to the interests of the investors for the companies to remain relevant and competitive; and (iii) the policy makers will guide against any form of manipulation of share prices meant to deceive unsuspecting investors and ensure the orderly trading on the Stock Exchange. Investors' investment should be seen to be protected in order to guarantee confidence in the market. Thus, the paper, by identifying the most and the least influencing factors, provides reasonable managerial implications for the formulation of policies that will enhance a robust performance of the companies operating in the Nigerian capital market by identifying the socio-economic characteristics of investors that impact on their investment decisions.

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## References

- Al-Tamimi, H. A. H. (2005). Factors Influencing Individual Investors Behaviour: An Empirical study of the UAE Financial Markets, IBRC Athens, Aryan Hellas Limited. Available at: [www.aryanhellas.com/107/ha.pdf](http://www.aryanhellas.com/107/ha.pdf)
- Al-Tamimi, H.A.H., & Kalli A.A.B (2009). Financial Literacy and Investment Decisions of UAE Investors, *Journal of Risk Finance*, 10(5): 500-516: Available at: [http://www.emeraldinsight.com/bibliographic\\_databases.htm?id=1823233&show=abstract](http://www.emeraldinsight.com/bibliographic_databases.htm?id=1823233&show=abstract)
- Aregbeyen, O., & Mbadiugha, S. O. (2011). Factors Influencing Investors Decisions in Shares of Quoted Companies in Nigeria. *The Social Science*, 6(3): 205 – 212.
- Arteaga-Ortiz, J., & Fernandez-Ortiz, R. (2010). Why Don't We use the Same Export Barrier Measurement Scale? An Empirical Analysis in Small and Medium-Sized Enterprises. *Journal of Small Business Management*, 48(3), 395- 420.
- Aswath, D. (2001). *Corporate Finance Theory & Practice*. Chichester : Wiley. 2<sup>nd</sup> edition
- Azam, M., & Kumar, D. (2011). Factors Influencing the Individual Investor and Stock Price Variation: Evidence from Karachi Stock Exchange. *Australian Journal of Basic and Applied Sciences*, 5(12): 3040-3043, 2011.
- Babajide, A. A., & Adetiloye, K. A. (2012). Investors' Behavioural Biases and the Security Market: An Empirical Study of the Nigerian Security Market. *Accounting and Finance Research*, 1(1), 219 - 229.
- Byrne, K. (2005). How do consumers evaluate risk in financial products? *Journal of Financial Services Marketing*, 10, 1-36.
- Chandra, A., & Kumar, R. (2008). 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. December 2008 (Available at: <http://ssrn.com/abstract=1501721>).
- Cooray, A. (2003). *Factors Affecting Investments and Business confidence with Special Regard to political Stability in Sri Lanka*. Available at: <http://www.bizlk.com/Articles/Formulate%20sound%20National%20Policies%20on%20Economy%20.pdf>
- Fares, A. R. F., & Khamis, F. G. (2011). Individual Investors' Stock Trading Behavior at Amman Stock Exchange. *International Journal of Economics and Finance*, 3(6), 128 – 134.
- Geetha, N., & Ramesh, M. (2012), A Study on Relevance of Demographic Factors in Investment Decisions. *International Journal of Financial Management (IJFM)*, 1(1), 39-56.
- Hossain, M. F., & Nasrin, S.(2012). Factors Affecting Selection of Equity Shares: The Case of Retail Investors in Bangladesh. *European Journal of Business and Management*, 4(20), 110 - 124.
- 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.
- Kaleem, A., Wajid, R.A., & Hussain, H. S. (2009). *Factors Affecting Financial Advisor's Perception in Portfolio Management: With Reference to Pakistan*. 2009 Oxford Business and Economics Conference Program, June 24-26.
- Mahmood, I., Ahmad, H., Khan, A. Z., & Anjum, M. (2011). Behavioral Implications of Investors for Investments in the Stock Market. *European Journal of Social Sciences*, 20(2), 240 - 247.
- Masomi, S. R., & Ghayekhloo, S. (2011). Consequences of human behaviors' in Economic: the Effects of Behavioral Factors in Investment decision making at Tehran Stock Exchange. *International Conference on Business and Economics Research*, 1, 234-237.
- Matzler, K., & Renzl, B. (2006). The Relationship between Interpersonal Trust, Employee Satisfaction, and Employee Loyalty. *Total Quality Management*, 17(10), 1261 – 1271.
- Merikas A.A., Merikas A.G., Vozikis G.S., & Prasad D. (2008). Economic factors and individual investor behavior: The case of the Greek stock exchange. *Journal of Applied Business Research*, 20(4), 93-98.

- Mojgan, S., & Ali, M. (2011). Examining the Effect of Earnings per Share and Cash Dividends per Share on Investor Decision Making in Tehran Stock Exchange from the Capital Market Participants' View. *American Journal of Scientific Research*, 36, 99-106.
- Nagy, R.A., & Obenberger, R.W. (1994). Factors influencing Investor Behaviour. *Financial Analysts Journal*, 50(40), 63-68.
- Nwude, E. C. (2012a). The Crash of the Nigerian Stock Market: What Went Wrong, The Consequences and the Panacea. *Developing Country Studies*, 2(9), 105 – 117.
- Nwude, E. C. (2012b). The Push and Pull Factors of the Capital Market in a Developing Economy. *European Journal of Business and Management*, 4(16), 141 – 150.
- Okumagba, A. (2012). Nigeria's Capital Market: Roadmap for Recovery (1). *Business Day* 21 May. Available at: <http://www.businessdayonline.com/NG/index.php/analysis/commentary/38016-nigerias-capital-market-roadmap-for-recovery-1?format=pdf>
- Olisaemeka, A. G. (2009). *The Meltdown of the Nigerian capital Market: Causes and Consequences*. Available at: <http://www.nairaland.com/241080/meltdown-nigerian-capital-market-causes>. Accessed on 2nd January, 2013.
- Ozaze, E. B. (2011). *The Historical Evolution of the Nigerian Capital Market*. Available at: [http://www.proshareng.com/articles/2349/The-Historical-Evolution-of-the-Nigerian Capital Market](http://www.proshareng.com/articles/2349/The-Historical-Evolution-of-the-Nigerian-Capital-Market).
- Ranganathan, S. K., & Henley, W.H. (2008). Determinants of Charitable Donation Intentions: A Structural Equation Model. *International Journal of Non-Profit and Voluntary Sector Marketing*, 13, 1 -11.
- Rashid, M. & Nishat, M.A. (2009). Satisfaction of Retail Investors on The Structural Efficiency of The Market: Evidence from A Developing Country. *Asian Academy of Management Journal*, 14(2), 41–64.
- Shaikh, A. R. H., & Kalkundrikar, A. B. (2011). Impact of Demographic Factors on Retail Investors' Investment Decisions- An Exploratory Study. *Indian Journal of Finance*, 5(9), 35 – 44.
- Schuele, M., & Justice L. M. (2006). *The Importance of Effect Sizes in the Interpretation of Research, Primer on Research: Part 3*. Available at: <http://www.asha.org/Publications/leader/2006/060815/f060815d/>
- Shanmugsundaram, V., & Balakrishnan, V. (2011). Investment Decisions – Influence of Behavioural Factors. *Indian Journal of Finance*, 5(9), 25 – 34.
- Sharma, M., & Gupta, S. (2011). Role of Subjective Norm in Investment Decision Making of Casual Investors. *Indian Journal of Finance*, 5(11), 39 - 46.
- Simon, H. A. (1986). Rationality in Psychology and Economics. *Journal of Business*, 59, 209- 224.
- Somil, N. (2007). *Investigating the Factors Affecting the Investment Decision in Residential Development*. An Individual Management report presented in part consideration for the degree of MBA (Finance), The University of Nottingham.
- Sultana, S. T., & Pardhasaradhi, S. (2012). An Empirical Analysis of Factors Influencing Indian Individual Equity Investors' Decision Making and Behavior. *European Journal of Business and Management*, 4(18), 50 – 61.