

FACTORS INFLUENCING INVESTORS DECISIONS IN SHARES OF QUOTED COMPANIES IN NIGERIA

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There has been significant investment in shares market in Nigeria in recent years. This paper investigates the factors that have influenced the share investment decisions of a sample of 2000 Nigerian investors. Anchored on the behavioural finance theory, it explored and analysed the influence of various social, economic, psychological, and cultural factors and sub-groups as indicated by available literature. Our findings showed the degree of influence of each factor as well as the sub-groups. However, there were no significant differences among the sub-groups. The study therefore concluded that investment decisions in shares by Nigerians investors are influenced jointly by several groups of factors.

I. Introduction

The mobilization and allocation of both domestic and foreign savings are critical in the growth process. It is therefore obvious that capital market has a significant role to play in economic development. Growth occurs when savings are channeled into productive investments, which in turn enhance the capacity of the economy to produce goods and services which have bearing on standard of living. This means that a capital market will succeed in facilitating economic growth and development if it can encourage the flow of savings/investment through the purchase of securities issued by government or private enterprise and others, with the aim of financing the implementation of capital projects. Therefore, the capital market plays a very crucial role in stimulating industrial growth as well as economic growth and development (Alile, 2007). Nigeria, like many countries, has a formal capital market symbolized by existence of a stock exchange and an active new issues market.

Table 1 below provides information on the trends of developments on the Nigeria capital market in recent times via selected indicators. From the table, it is very indicative that the Nigeria Capital Market has experienced significant developments over the years. Underlying every other developments are increases in the number of equities listed, no of companies quoted and trading volume. These are in turn influenced by the investment decisions of individuals who have invested in the capital market through the purchase of shares etc.

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TABLE 1
Selected Indicators of Developmental Trend of the Nigeria Capital Market

Year	No. of Equities Listed	Trading Volume (m)	Trading Value (N'm)	Market Capitalization (N'm)	Stock Index	No. of Listed Securities	Change in Index (%)	Turnover Ratio %	Average P/E Ratio	Average Div. Yield (%)	No. of Quoted Companies
1980-1985	559	53.8	62.7	12300.9	227.3	1232	27.3	3.3	27.3	67.0	NA
1986-1990	543	133.6	182.3	32977.9	1427.4	1299	165	2.7	25.9	55.5	131
1991-1995	827	876.5	2803.1	322612.8	10731.5	1314	307	3.8	31.3	40.2	827
1996-2000	941	12885.8	73582.3	1573386.5	32482.7	1332	64.3	22.3	42.1	40.2	941
2001-2008	1647	366713.1	4994671.1	32626016.7	238288.5	2252	240.2	94.2	90.6	78.4	1647

Source: Nigeria Stock Exchange Fact Book, Various Issues

Generally, decision-making is a process by which an individual responds to the opportunities and threats that confront him/her by analyzing the options and making determinations or decisions, about specific goals and course of action (Akintoye, 2006). So investors in bonds and securities or shares also go through a decision making process. According to Eastlick, (1996) while many share investments may involve several participants who play such role as initiator, influencer, buyer, and user. Just as in buying behaviour, the investment decision-maker goes through a decision making process consisting of problem recognition, information search, evaluation of alternative purchase decision and post purchase behaviours. This implies that investors in bonds and securities or shares go through a decision making process which is usually influenced by number of factors. There are, however, contending theories on the factors that influence investment decisions in shares.

This study explores these alternative theories and utilizes the one considered most appropriate to investigate the factors that have influenced shares investment decisions of Nigerians. This is against the backdrop of the fact that significant investment in shares in the Nigerian Capital Market and by Nigerians has been observed in recent times. The study could also help in the development of more effective marketing programmes for shares in Nigeria as it provides insights on the behaviour of investors in the Nigerian capital market and the factors that influence them to make investment decision(s). Indeed, previous studies have shown that investors' investment decisions and/or behaviours are independent of the information contained in the financial accounting reports. Ariyo (1983) carried out a study on the relevance of projected cash flow on share investment decisions and concluded that the disclosure of projected cash flow had no significant influence on share investment decisions. Inanga (1976) also reported that financial report by public companies in Nigeria contain less than adequate information required to make informed economic decision. This implies that there are factors other than economic/financial that influence investors share investment decisions.

The rest of the paper is organized into four sections. The next section is a review of theories on factors influencing investment decisions in shares. Section III presents the theoretical framework and methodological approach to the study. The results from the analysis are discussed in section IV, while section V summarizes and concludes the paper.

II. Review of the Literature

A number of theories have been developed to explain people decision making behavior for investment, saving and borrowing money (Belsky and Gilovich, 1999). Extensive reviews of the main theories range from theory of Risk Tolerance by Investors (Bernhein, et.al., 2001), theory of Planned Behaviour [Ajzen, (1985, 1991); Ajzen and Fishbein, (2005); Armitage and Conner, (2000)], theory of Efficient Market Hypothesis [Fama, (1965, 1970); Fama and French 1996a, 1996b)], Modern Portfolio Theory [Markowitz, (1952); Lintner, (1965); Sharpe, (1964); Tobin, (1958)], and theory of Behavioural Finance [Tversky and Kahneman (1974, 1986) and Kahneman and Tversky, (1979); Tapia and Yermo, (2007)]. The rest of this section, a brief review of these theories is made in turn.

The theory of risk tolerance following from the works of Bernheim, et.al. (2001) is a construct stipulating that the decision to invest depends on willingness to accept higher risk or volatility in exchange for higher potential returns. Accordingly, investors are classified into two as (i) risk tolerant investor and (ii) risk averse investors. Risk tolerant investors are aggressive investors, willing to accept losing their capital in search for higher returns, while the risk averse, are more conservative investors who are more concerned with capital preservation. A risk tolerant investor will pursue higher potential reward investments even when there is a greater potential for a loss. In addition, a risk tolerant person would seek out high-risk investments, even if they add little to his or her portfolio.

However, Hawkins (2008) argued that risk tolerance isn't enough. The thrust of the argument is that risk tolerance is only a measure of how much risk an individual can handle, but that is not necessarily the same as the appropriate amount of risk an individual should take. The appropriate amount of risk an individual could take is dependent on the financial risk capacity of the individual. Moreover, since there are often investment options, individuals strive towards optimal risk of their portfolios by attempting to minimize the variance (risk) at the same time they try to maximize their returns. It was therefore concluded that the long-term investment strategy and strategic asset mix of an individual investor is a mix of the risk tolerance, the financial capacity for risk and the optimal risk.

The theory of planned behavior is a theory about the link between attitudes and behavior. It was proposed by Ajzen in 1985 and further extended in 1991 as an extension of the theory of reasoned action. Essentially, the theory contends that both attitude and norms toward a behaviour are the immediate determinants of intention to perform such behaviour. Attitude towards behaviour is recognized as a person's positive or negative education and is composed of a person's salient beliefs regarding the perceived outcomes of performing the behavior. The theory of planned behavior has since been widely applied as a very powerful and predictive model for explaining human behavior. Within the framework of this theory, Darden and Dorsch (1990) argued that the act of investment is a behavior that is also influenced by people's beliefs regarding the perceived outcomes of performing it. Later studies conducted by Eastlick (1996), Klein (1998), Laing and Huang (1998) and Weber and Camerer (1998), show that prior experience with purchase of shares is a significant predictor of shares investors' decision-making.

The theory of efficient markets or the efficient market hypothesis (EMH) holds that the prices of stocks and other assets automatically incorporate all available information and rapidly adjust to incorporate new information. This makes it virtually impossible for an individual — amateur or professional — to consistently outperform the stock market (in terms of predicting future returns) since the prices for a given stock already reflect any information that he or she might rely on. One might do better through sheer luck for a short while, but not over the long haul. The EMH therefore implies that no one can outperform the market either with security selection or with market timing. Thus, it carries huge negative implications for many investment strategies.

Modern portfolio theory (MPT) also called “portfolio theory” or “portfolio management theory” is a sophisticated investment approach/strategy and is the

philosophical opposite of traditional stock picking. It is the creation of economists, who try to understand the market as a whole, rather than business analysts, who look for what makes each investment opportunity unique. Investments are described statistically, in terms of their expected long-term return rate and their expected short-term volatility. The volatility is equated with "risk", measuring how much worse than average an investment's bad years are likely to be. The goal is to identify the acceptable level of risk tolerance, and then to find a portfolio with the maximum expected return for that level of risk. The key tenet of Modern Portfolio Theory therefore is that if one wishes to increase the performance, and reduce the risk in an overall investment portfolio, he or she should combine investments that are non-correlated with one another.

The theory of Behavioral finance is based on a broader social science perspective including psychology and sociology. It therefore applies scientific approach on human and social, cognitive and emotional factors to better understand economic decisions by consumers, borrowers, investors, and how they affect market prices, returns and the allocation of resources. Specifically, behavioral finance has two building blocks: cognitive psychology and the limits to arbitrage. There is a huge psychology literature documenting that people make systematic errors in the way that they think: they are overconfident, they put too much weight on recent experience, etc. Their preferences may also create distortions. Behavioral finance uses this body of knowledge, rather than taking the arrogant approach that it should be ignored. Limits to arbitrage refer to predicting in what circumstances arbitrage forces will be effective, and when they won't be. Behavioral finance uses models in which some agents are not fully rational, either because of preferences or because of mistaken beliefs.

III. Theoretical Framework, Methodology and Data

Among all the theories explaining the factors influencing investment decisions in shares of quoted companies in the literature as reviewed above, the behavioural finance theory is adjudged to be the most comprehensive, systematic and relevant to investors' decision making attitude on shares in the context of this study. This is because while all the other theories consider investment decisions only from economic perspectives, it takes into account the psychology and social context of human decision making, arguing that humans do not make rational decisions, rather they are being influenced by factors like social, economic, psychological, cultural etc factors. This theory therefore constitutes the framework for the analysis conducted in this study.

Based on this theoretical/analytical framework, we identify five factors each based on literature representing economic, cultural, social and psychological factors that could influence investment decisions in shares and use them alongside bio-data information to develop structured questionnaire to collect data and conduct the investigation. The economic factors considered include dividend paid in recent years, recent financial performance of the company, daily activities report of Nigerian Stock Exchange on gainers/losers, reputable prediction of future increment in share value of the company and bonus given in recent years. The caliber of

personalities that have major shares in the company, ownership structure of the company, recommendations by reputable and trusted stock brokers, management team of the company and composition of Board of Directors make the list of social factors. For the cultural factors, we considered friends advice/persuasion (peer pressure), predominant family culture in share investment, awareness of the prospects of the investment in shares, exposure to the business of share trading and environmental influence; while the psychological factors tested include future financial security, motivation from exploration on literature on financial securities, insight to probable operational setbacks in the future, fear of anticipated career, profession or occupational related problems and motivation by the people who have attained financial security through share investment.

The extent to which each factor under the four broad categories (economic, cultural, social and psychological) have influenced investment decisions in shares was measured using a response scale of 5, "very high" to 1 "very low".

A pilot study involving 500 share investors was conducted before administering the questionnaire to the final respondents. The pilot study was used to verify the reliability and validity of our questionnaire. A Cronbach's Alpha value of 0.843 was obtained. This indicates that the questionnaire used was reliable and valid. We then proceeded to administer the questionnaires on 2500 individuals of diverse characteristics who have at one time or the other invested in the shares of quoted companies in Nigeria. The study location was restricted to Lagos metropolis. The choice of Lagos State hinged on two important considerations. The first is that the population of Lagos is a good mix of Nigerians by ethnic composition, economic well-being, educational attainment, etc. The second is that Lagos is the commercial capital and nerve of the country.

A purposeful yet random sampling approach was adopted. Purposeful in the sense that ten stock broking firms with offices located at the central business district area of Lagos metropolis were approached and 250 questionnaires each were dropped in their offices for completion by their customers/investors in shares. The questionnaires were randomly administered on customers that visited their offices over a period of two months. A total of 2,018 were returned. The data collected from the 2000 validated questionnaires were analyzed through both descriptive and inferential analysis. The descriptive analysis was used to organize and characterize the data, while the inferential analysis was used to draw important deductions.

IV. THE RESULTS

Table 1 presents the profile of the respondents of this study. From the table, majority (71.5 per cent) of the respondents are male while the balance of 28.5 percent are female. The table also shows that by marital status; about 42 percent respondents are single while about 57 percent are married. The divorced respondents make 1.6 percent of the total. In terms of age grouping, those below 21 years constitute about 5 percent followed by those between 21-30; 31-40; 51-50; and 50 years and above with 31 percent; 41 percent; 17.2 percent and 6.2 percent, respectively. It seems investment in shares is very highly correlated with the level of education as a significant proportion (about 84 percent) of the respondents has education up to the tertiary level. Next are those with secondary education with about 14 percent representation.

TABLE 1
Respondents Profile

Variables	Category	Frequency	Percentage
Gender	Male	1430	71.5
	Female	570	28.5
Marital Status	Single	833	41.7
	Married	1135	56.8
	Divorced	32	1.6
Age Group	Below 21	96	4.8
	21-30	619	31.0
	31-40	817	41.0
	41-50	344	17.2
	Above 50	124	6.2
Educational Level	No formal Education	13	0.7
	Primary Education	22	1.1
	Secondary Education	277	13.9
	Tertiary Education	1688	84.4
Occupational Type	Government Employed	436	21.8
	Private Organizations Employed	975	48.8
	Self Employed	532	26.6
	Others (Contract works; Part time jobs)	57	2.9
Average Monthly Income	Below N20,000	210	10.5
	N20,000-N50,000	741	37.1
	N51,000-N100,000	562	28.1
	Above N100,000	487	24.4
Years of share investment	0-5	1484	74.2
	6-10	442	22.1
	11-15	47	2.4
	16-20	18	0.9
	Above 20 years	9	0.5
Frequency of Share investment	Very High	171	8.6
	High	450	22.5
	Moderately High	646	32.3
	Low	554	27.7
	Very Low	179	9.0

Source: Field Survey 2010

Those with primary and no education are few with 1.1 and 0.7 percent representations, respectively. The distribution of the respondents by occupation shows that majority of about 49 percent are employed in private organizations. Government employed respondents' makes about 22 percent while the self employed respondents account for the balance of 27 percent. The highest proportion of the respondents (about 37 percent) earned average income of between N20, 000-N50, 000 monthly. Average monthly income of between N51, 000-N100, 000 is earned by about 28 per cent of the respondents. About 24 percent of the respondents indicated they over N100, 000 average monthly incomes. The rest of the respondents constituting about 11 percent earned below N20, 000. It is evident from the table that investment in share until very recently is not an enshrined behavior among majority of Nigerians as about 74 percent of the respondents reported that commenced investing in shares just about the last five years or even less than. Those with between 6-10 years amounted to about 22 percent. The proportions of those with 11-15 years; 16-20 and 20 years above records of investing in shares are 2.4 percent; 0.9 percent and 0.5 percent accordingly. Lastly, on the frequency of share investment the largest percentage of about 32 percent average frequency of investment in shares. This followed by those with low frequency at about 28 percent. Very low frequency was reported by another 9 percent. High and very high frequency of investment was indicated by about 23 and 9 percent, respectively.

Table 2 contains the disclosure of the respondents on the factors that have influenced their investment decisions in shares and organized into four major sub-groups. These are economic, social cultural and psychological factors. Beginning with the economic factors, about 44 percent of the respondents indicated that dividends payment highly influence their investment decision. The influence was moderate in the case of about 27 percent and low for the remaining 29 percent. Recent financial performances of companies has high influence on 51 percent, moderate influence on about 32 percent and low influence on about 17 percent. The daily activities report of NSE on gainer/losers was reported by about 46 percent of the respondents to have influenced them, while its influence was reportedly moderate and low by some other 22 and 32 percent respondents, respectively.

Still on economic factors, 51 percent, 28 percent and 21 percent respondents disclosed that they were highly, moderately and less influenced respectively to invest in shares by reputable predictions of future increment in share value. Bonus payments as an economic factor accounted for high investment in shares among 45 percent of the respondents, moderate investment by 40 percent and low investment for rest 15 percent.

Coming to social factors, company major shareholders personality profile influenced about 52 percent of the respondent in their investment decisions. This factor exerted a moderate and low effect in the opinion of about 24 percent. The ownership structure of companies was a push factor in the investment decisions of at least 49 percent of the respondents. But it only had moderate influence on about other 34 percent respondent and low influence in the case of the remaining 18 percent. The other three considered social factors namely recommendations by reputable & trusted stock brokers, management team of the company and composition of board of directors all had high influence on well over half of the respondents in their investment decisions.

TABLE 2
Factors Influencing Sampled Investors' Decision Making in Share Investment

Factors/Level of Influence	High	Moderate	Low	Total Score	Rank
Economic Factors					
Dividend paid in recent years	887 (44.4)	531 (26.6)	582 (29.1)	6457.5	13th
Recent Financial Performance of the Company	1020 (51.0)	637 (31.9)	343 (17.2)	7015.5	7th
Daily activities report of NSE on gainers/losers	926 (46.3)	434 (21.7)	640 (32.0)	6429.0	14th
Reputable predictions of future increment in share value	1019 (51.0)	557 (27.9)	424 (21.2)	6892.5	9th
Bonus	894 (44.7)	800 (40.0)	306 (15.3)	6882.0	10th
				6735.3	
Social Factors					
Company Major-share holders personalities profile	1043 (52.2)	477 (23.9)	480 (24.0)	6844.5	11th
Ownership Structure of the company	980 (49.0)	670 (33.5)	350 (17.5)	6945.0	8th
Recommendations by Reputable & trusted stock brokers	1179 (59.0)	545 (27.3)	276 (13.8)	7354.5	2nd
Management Team of the company	1160 (58.0)	576 (28.8)	264 (13.2)	7344.0	4th
Composition of Board of Directors	1080 (54.0)	557 (27.9)	363 (18.2)	7075.5	6th
				7112.7	
Cultural Factors					
Friends' Advice/Persuasion	697 (34.9)	500 (25.0)	803 (40.2)	5841.0	18th
Predominant family culture in share investment	551 (27.6)	593 (29.7)	856 (42.8)	5542.5	20th
Awareness of the prospects of investing in shares	1152 (57.6)	470 (23.5)	378 (18.9)	7161.0	5th
Exposure to the business of share trading	986 (49.3)	579 (29.0)	435 (21.8)	6826.5	12th
Environmental influence	750 (37.5)	550 (27.5)	700 (35.0)	6075.0	17th
				6289.2	
Psychological Factors					
Future Financial Security	1223 (61.2)	457 (22.9)	320 (16.0)	7354.5	2nd
Motivation from Exploration of literature on financial security	768 (38.4)	621 (31.1)	611 (30.6)	6235.5	15th
Insight to probable occupational setbacks in the future	732 (36.6)	628 (31.4)	640 (32.0)	6138.0	16th
Fear of anticipated career, professional or occupational related problems	636 (31.8)	549 (27.5)	815 (40.8)	5731.5	19th
Motivation by people who have attained financial security through share investment	1234 (61.7)	490 (24.5)	276 (13.8)	7437.0	1st
				6579.3	

Source: Field Survey, 2010

The most formidable cultural factor that had the most significant influence on the respondents from the statistics is awareness of the prospects of investing in shares. It reportedly exerted high influence on the investment decisions of about 58 percent of the respondents. Exposure to the business of shareholdings comes next with high influence on respondents amounting to about 49 percent of the total. Environmental influence presents no discernable impact on the respondents' investment decisions. While it highly influences the investment decisions of about 38 percent, its influence was indicated to be low by another 35 percent. For the rest of the respondents constituting about 28 percent, the influence was moderate. In a somewhat similar pattern, friends' advice/persuasion had low influence on the investment decisions of at least 40 percent of the respondents but high influence in the case of about 35 percent others. It was a moderate influence for the balancing 25 percent. It is very evident that investment in shares is not a predominant family culture among the majority of the respondents as about 43 percent indicated that family culture of investment in shares had low influence on them. Another 30 percent, however, indicated that it had moderate effects on them. For the remaining 28 percent of the respondents nevertheless, their investment in shares is highly tied to the fact that it is a predominant family culture.

Within the set of psychological factors considered, the fear of anticipated career, professional or occupational related problems drives highly investment decisions of about 32 percent of the respondents. Its driving force was moderate and low for a set of respondents representing about 28 and 41 percent, respectively. Very instructively, foresight of probable occupational setback in the future highly motivated a relative majority (about 37 percent) of the respondents to invest in shares, and with moderate and low influence on 31 and 32 percent others, respectively. In line with expectations, significant percentage (about 61 percent) of the respondents indicated that they were highly motivated to invest in shares for future financial security. In this quest for future financial security, majority of the respondents also indicate that they drew high motivation from people who have attained financial security through share investment (by about 62 percent) and exploration of literature on financial security (by about 38 percent). In the case drawing motivation from the exploration of literature on financial security, half a piece of rest of the respondents was so moderately and less motivated.

Further attempt was made to better understand the factors as they have influence the investment decisions of the respondents by computing the total score pooled by each factor based on options of responses and ranked (see appropriate columns in Table 2). From the scores and rankings, the first ten rated factors that have influenced the investment decisions of the respondents in order of ranking 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 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 (see table for others).

On the average, the group of factors making up social factors pooled the highest scores. This is followed by economic factors and psychological factors come third while the fourth and the least in scores is cultural factors. However, the observed

differences in the scores among the different sub-groups of factors were not significant when subjected to statistical analysis by means of analysis of variance (see Table 3). This therefore implies that there is no one set of factors that predominantly explain the investors' decision making in financial investment. In other words, the investment decisions in shares market among the sampled Nigerians have been influenced jointly by economic, social, cultural and psychological factors.

TABLE 3

Analysis of Variance (ANOVA) among the Group of Factors that Influence Investors' Decisions in Share Investment

Sources of Variation	Sum of Squares (SS)	Degree of Freedom (DF)	Mean Sum of Squares (MSS)	Variance Ratio (F)	Significance F-ratio
Between (groups)	17700	3	5900	1.87	3.24
Within (errors)	50320	16	3145		
Total	68020	19			

Source: Authors Calculations

V. Summary and Conclusions

This study investigates the factors that have influenced the shares' investment decisions of a sample of Nigerians. The motivation for the study is rooted in the observed significant investment in shares in Nigeria in recent years as well as the need to understand the behaviour of investors in Nigerian capital market and the factors that influence them to invest in shares. In the hope that this will provide insights into how to develop more effective marketing programmes for shares sales in Nigeria and elsewhere. With anchor on the behavioural finance theory, a set of twenty factors including social, economic, psychological and cultural issues that could influence investment decisions in shares as suggested by the available literature were identified.

The results show that the top ten factors that have influenced the investment decisions of the respondents in order of ranking 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 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 in order of mentioning. On the average, the group of factors making up social factors pooled the highest scores. This is followed by economic factors in the second position. Psychological factors come third while the fourth and the least in scores is cultural factors. However, the observed differences in the scores among the various sub-groups of factors were not significant when subjected to statistical analysis by means of analysis of variance.

The conclusion from this study therefore is that investment decisions in shares are influenced jointly by economic, social, cultural and psychological factors.

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