Fundamental Factors Influencing Individual Investors to Invest in Shares of Manufacturing Companies in the Nigerian Capital Market

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Abstract

In a bid to diversify the economy and shore up the revenue base of the country, the Nigerian Government has shifted its attention to the manufacturing sector which it believes has the greatest potential to realize this objective. This paper aims at identifying the fundamental factors that influence individual investors to invest in the shares of manufacturing companies quoted on the Nigerian capital market. A structured questionnaire was used to obtain primary data from 130 respondents which were analyzed using descriptive statistical techniques employing mean scores and standard deviation to assess the relative importance of each factor that influence investment decisions. The results showed that the five most influencing factors are past performance, expected bonus issue, growth potential, future dividend and the profitability of the company. Five principal factors were extracted using factor analysis which showed that accounting information and company growth potential accounted for the larger percentage of variance. This study has shown that investors place more importance on those economic factors which are commonly classified in literature as wealth maximizing criteria. High price of manufacturing shares and lack of access to borrowed funds were found to be the most limiting factors to investing in manufacturing shares. This reflects the low level of income in the country which could have adverse consequences on the level of funds that will ultimately be channeled to the capital market and subsequently made available to the manufacturing sector which remains the most promising sector for the diversification of the economy.

Keywords: Fundamental factors influencing investment, Individual investors, Manufacturing companies, Nigerian capital market.

1. Introduction

The extent to which the capital market mobilizes funds and efficiently and effectively allocates same to businesses and governments for industrial growth and development of the economy determines its relevance. Capital markets are established to provide long-term funds for projects with long gestation periods by channeling savings in the hands of savers to the users of such funds. Manufacturing firms by their nature, require long-term capital which can best be provided by the capital market. Manufacturing firms are considered vital to economic growth and development as they are deemed to have the greatest potential for diversification and expansion of industrial production. This has been seen in many developed economies where the manufacturing sector is a leading sector in terms of providing increased productivity in relation to import replacement and export expansion, creating foreign exchange earning capacity, raising employment and per capita income. Also growth in the manufacturing sector enables growth in other sectors leading to more jobs and investment. It follows, therefore, that under-developed and developing countries can significantly improve their relative position by accelerating growth through increase in the rate of investment in manufacturing. Thus the success of a capital market can be assessed by how far it is able to channel funds to manufacturing.

Nigeria's manufacturing sector has not been performing well and this can be seen in the influx of imports especially from China and other countries. The manufacturing sector's contribution to gross domestic products (GDP) and exports rather than increasing has been on the decline. The sector also faces high cost of production arising from increasing energy costs, equipment deficiency and infrastructure inadequacy. Added to these is the lack of adequate funding. It follows that if the manufacturing sector is to grow, then more funds must be channeled to it so that it can contribute more positively to the economy. The need to develop the manufacturing sector as an avenue to diversifying the Nigerian economy is very critical at this time following the current crash in prices in the global oil market – a sector which the economy has almost entirely depended on for its revenue generation and economic development.

The level of funds mobilized and allocated for productive investment in the economy will be determined by the decisions taken by investors to invest in the manufacturing firms quoted on the Nigerian Stock Exchange. Thus, the investment behaviour of the individual investor cannot be ignored by regulators and policy makers and so it is important to understand the reasons influencing why and where they invest. This study is designed to identify and prioritize, mainly, the economic factors that individual investors consider in the decision

to channel their savings to the manufacturing firms quoted on the Nigerian Stock Exchange. To this end, this paper will address three questions. First, what is the relative importance of identified economic factors that influence individual investors' decision to invest in manufacturing stocks? Second, are there homogenous clusters or groups of these economic factors that form distinctive decision determinants that investors depend on to choose which manufacturing stocks to invest in? What factors have limited the level of investors' investment in manufacturing stocks?

The findings are expected to guide regulators and policy makers in coming up with policies targeted at measures that will enhance greater participation of individual investors in the manufacturing sector of the Nigerian capital market.

2. Literature Review

The motivation of an investor to invest in the capital market is complex and depends on a number of factors. Some of the factors have major influence, while others have little or no role in influencing investment decisions. Kaur and Vohra (2012) classed the factors into three main groups- stock fundamentals (economic), demographic and psychological factors. The stock fundamentals include variables such as beta, past return, risk, earnings per share, firm size, firm age, share price, share turnover and book-to-market equity ratio. The demographic factors include age, gender, income level, marital status, education and occupation, while variables such as desires, goals, prejudices, biases and emotions make up the psychological factors. This review focuses on the economic factors that influence investors in the course of investing in the capital market.

Peter (1970) and Baker and Haslem (1974) in their studies to investigate the economic factors which influence the investment decisions of individual investors, identified several profitability variables such as income from dividends, rapid growth, quick profits and long-term growth. Maditinos, Sevic and Theriou (2007) noted that investors look at the price earnings (P/E) ratio as their first priority, earnings per share (EPS) as their second priority, the net operating profit after taxes (NOPAT) as the third priority and return on equity (ROE) as their fourth priority when choosing stocks.

Nagy and Obenberger (1994) found that although investors employ diverse criteria when choosing where to invest, classical wealth maximization criteria are very important. Merikas, Merikas, Vozikis and Prasad (2008) analyzed the factors influencing Greek investors' behaviour, and found that individual investors base their decisions on economic criteria combined with diverse other variables, but primarily favour expected corporate earnings, condition of financial statement and firm status in the industry. Al-Tamimi (2006) found that expected corporate earnings, stock marketability, past performance of the firm's stock were among the six most influencing factors for individual investors in the United Arab Emirates (UAE)'s capital market.

In Sri Lanka, Cooray, (2003) identified risk factors such as return on investment, liquidity of investment, tax consequences of an investment, inflation, and the term of an investment as factors affecting investors' investment decisions. Rashid and Nishat (2009) found the most influencing factors to be efficiency of the company, inflation rate, easy and quick transactions, access to company and industry information, quality of information and prior knowledge of securities among investors in Bangladesh. In another study in Bangladesh, Hossain and Nasrin (2012) reported that the eight most important factors influencing retail investors are company specific attributes/ reputation, net asset value, accounting information, trading opportunity, publicity, ownership structure, influence of people and personal finance needs.

A few studies have been conducted on the factors that influence investors in the Nigerian capital market. Ako (1996) documented that Nigerian investors use the usual economic and financial indices found in literature such as capital gains, dividends and retained earnings to make investment decisions. Another study carried out in Nigeria by Aregbeyen and Mbadiugha (2012) reported that composition of the board of directors of companies, recent financial performance of the company, ownership structure of the company, future prospects of increment in share value and bonus payments were the factors that had the most influence on investors' decisions. In a separate study, Obamuyi (2013) found that four out of the five most influencing factors were wealth maximizing factors, namely, past performance of the company's stock, expected stock split/capital increases/bonus, dividend policy and expected corporate earnings.

The foregoing review has highlighted the economic factors that have been found to influence individual investors' decision to invest in the stocks of companies quoted in developing and developed capital markets. It revealed that individual investors are influenced primarily by economic factors which are financial in nature. This indicates that classical wealth maximization criteria are more important to investors than other qualitative economic factors. However, differences exist among individual investors in terms of the economic factors that influence their investment decisions. Literature on factors influencing investors' decisions in the Nigerian capital market is very scanty. As a result, there is a need to conduct more studies to address this gap. Specifically, the researcher did not come across any study that focused on factors that influence investors to invest in particular sectors of the market. More so at this time when the Federal Government is shifting its attention to the productive sectors to diversify the economy so as to improve on its revenue base, it is pertinent to

take a closer look at what motivates the individual investor to invest in the shares of manufacturing companies in Nigeria. Consequently, this study was designed to identify the economic factors that most influence investors to channel their resources to manufacturing firms quoted on the Nigerian Stock Exchange.

3. Methodology

Primary data collected through a structured questionnaire was used to obtain information for this study. The respondents were individual investors in the Nigerian capital market who had invested in manufacturing stocks. The survey was carried out in three cities in Nigeria, namely Abuja, Lagos and Jos. Abuja and Lagos are the major cities in Nigeria with active stock exchanges. Jos is a growing city in the middle Belt (Central part) of Nigeria and was included because it is the resident town of the researcher. These three towns were chosen to give a fair representation of respondents from the Northern and Southern parts of the country. Questionnaires were mailed to stockbrokers in Abuja and Lagos, who distributed them to identified stock investors. Questionnaires were also given to stockbrokers in Jos for onward distribution to individual stock investors. Out of about180 questionnaires distributed, 130 were received giving a response rate of 72.2%.

Respondents were asked to evaluate the importance of sixteen (16) variables that had been identified from the survey of literature and personal interviews as important fundamental (economic) factors that could influence share investment decisions. They were also asked to evaluate the importance of four (4) variables that limit their level of investment in manufacturing shares. The variables were presented as close-ended questions measured on a five-point Likert-like scale which ranked from 1 (strongly disagree) to 5 (strongly agree). Descriptive statistical techniques which employed mean scores and standard deviation were used to assess the relative importance of each factor that influences investment decisions.

Factor analysis was used to determine the principal factors and the number of dimensions that exist in the set of factors influencing individual investors' decision to invest in manufacturing firms' shares. By so doing, similar variables were grouped into distinctive categories. To examine whether the 16 variables are deemed appropriate for factor analysis, Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were calculated. The data is appropriate for factor analysis if the KMO value is above 0.5 (Hossain and Nasrin (2012). A significant Chi-square value from Bartlett's test rejects the hypothesis that the correlation matrix is an identity matrix. This means that the variables are duly correlated and indicate the appropriateness of using factor analysis for the data. Data analysis was carried out with SPSS statistical software version 21.

4. Results and Discussions

4.1 *Factors Influencing Investors to invest in Manufacturing Firms' Shares*

Table 1 shows the mean scores and standard deviations of the identified factors that influence individual investors to invest in the shares of manufacturing companies. From the table the five most influencing factors are past performance, expected bonus issue, growth potential, future dividend and the profitability of the company with mean score values of 4.2, 4.05, 3.98, 3.92 and 3.85 respectively out of a maximum score of 5.0. The five least influencing factors are foreign ownership, familiarity with company's products and age of the firm, liquidity of shares and size of the company with mean scores of 2.8, 2.93, 3.03, 3.07 and 3.15 respectively.

Table 1: Factors influencing investors to invest in manufacturing firms' shares

S/No	Factors	Mean Score	Standard Deviation
1	Past performance	4.26	0.90
2	Expected bonus issue	4.05	1.03
3	Growth potential	3.98	0.95
4	Future dividend	3.92	1.04
5	Profitability (ROA, ROE)	3.85	0.90
6	Historical dividend payout	3.74	1.02
7	Reputation of firm	3.57	1.05
8	Historical earnings per share	3.56	0.99
9	Projected earnings per share	3.52	1.17
10	Industrial Sector	3.31	1.12
11	Diversification of investment	3.18	1.15
12	Size of company	3.15	1.23
13	Liquidity of shares	3.07	1.14
14	Age of firm	3.03	1.13
15	Familiarity with company's product	2.93	1.14
16	Foreign ownership	2.80	1.10

Source: Field Survey, 2014

These results indicate that investors place more importance on those factors that are commonly classified as the wealth maximization criteria. These findings agree with those of Nagy and Obenberger (1994), Ako (1996), Merikas, Merikas, Vozikis and Prasad (2008), and Obamuyi (2013).

4.2. *Factor Analysis for the Factors Influencing Investors to Invest in Manufacturing firms' Shares*

Factor analysis was employed to determine the principal factors and the number of dimensions of the factors influencing investors to invest in manufacturing shares. Table 2 shows the result of the KMO and Bartlett's test carried out to determine the appropriateness of the variables for factor analysis. The table shows a KMO value of 0.728 which is above the recommended value of 0.5 which implies that factor analysis is suitable for the data. The Chi-square value of 507.272 obtained for Bartlett's test was highly significant at 0.000 and strongly allows for the appropriateness of using factor analysis for the data.

Table 2: KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.728
Bartlett's Test of Sphericity	Approx. Chi-Square	507.272
	Df	120
	Sig.	.000

Source: SPSS Output

To extract the number of principal factors from the 16 variables under the method of principal component analysis, Eigen values greater than one rule was taken. The result is shown in table 3. Five principal factors were extracted which explain 60.88% of total variance. To include a variable in its respective principal factor, Hair, Anderson, Tatham and Black (1998) suggested a minimum loading of 0.4 or greater. Thus all variables with factor loading of 0.4 and above were retained. Consequently, one variable, historical EPS with a factor loading of 0.374 was subsequently dropped. Cronbach's alpha coefficient was used to measure the internal consistency of factors in each group. In this study all the principal factors had Cronbach's alpha above 0.50. This level is acceptable as suggested by Hossain and Nasrin (2012).

Table 3: Result of factor analysis

Principal Factor	Factor Loading	Eigen Value	% of Variance	Cronbach's alpha
Factor 1: Accounting Information		4.113	25.7	.745
Expected Bonus issue	.787			
Historical Dividend	.759			
Future Dividend	.683			
Past Performance	.652			
Projected Earnings per Share (EPS)	.417			
Factor 2: Company Growth Potential		1.803	11.27	.610
Growth Potential	.828			
Profitability (ROA, ROE)	.713			
Factor 3: Company Specific Attributes		1.480	9.248	.613
Size of Company	.769			
Age of the Company	.701			
Reputation of the Company	.618			
Factor 4: Company Identity		1.202	7.509	.596
Foreign Ownership	.744			
Familiarity with Company's Product				
Industrial Sector	.615			
	.446			
Factor 5: Risk Diversification		1.144	7.147	.590
Heavily Traded	.727			
Diversification	.615			

Source: SPSS Output

Factor 1 in table 2 was recognized as 'accounting information' from the nature of the five variables included therein and it accounted for 25.7% of total variance. The second principal factor with two items was labeled 'company growth potential' and it accounted for 11.27% of total variance. Factor 3 comprised of three items relating to 'specific attributes' of the company and accounted for 9.248% of total variance. The three items in Factor 4 were recognized as 'company identity' and accounted for 7.509% of total variance. Factor 5 consists

of two items related to liquidity and diversification and has been labeled 'risk diversification'. It accounted for 7.147% of total variance.

4.3. *Factors Limiting Individual Investors' Investment in Manufacturing Shares*

Table 4 shows the ranking of the factors that limit investors' investment in manufacturing firms' shares

Table 4: Ranking of factors limiting investment in manufacturing firms' shares

Factor	Mean Score	Standard Deviation	Rank
Unavailability of shares (Insufficient supply)	2.41	1.24	4
Non-receipt of dividends	2.71	1.31	3
Lack of access to borrowed funds	2.87	1.30	2
High share price	3.34	1.35	1

Source: Field Survey, 2014

From the ranking of the factors which have limited investors from investing in manufacturing shares high share price is identified as the most limiting factor. This was followed by lack of access to borrowed funds. Delay in receipt of dividends and unavailability of shares were the least limiting factors. The result indicates the importance of price in investment and also the lack of funds to increase investment in manufacturing shares which investors perceive to be highly priced. The highest priced shares in the Nigerian capital market are manufacturing shares and usually beyond the reach of the average investor. The companies which pay the highest dividends also belong to the manufacturing sector. So although manufacturing shares offer opportunity for high returns, investors are prohibited from investing in them because of their relative high price. These results reflect the general low level of income in the country and limited fund available to individual investors for investment in the capital market.

5.0 Conclusions

From the findings of this study the five most influencing fundamental factors that influence investors to invest in the shares of manufacturing companies are past performance, expected bonus issue, growth potential, future dividend and the profitability of the company while the least influencing were foreign ownership, familiarity with company's products and age of the firm, liquidity of shares and size of the company. Five principal factors were extracted using factor analysis which showed that accounting information and company growth potential accounted for the larger percentage of variance. This study has shown that investors place more importance on those economic factors which are commonly classified in literature as wealth maximizing criteria. High price of manufacturing shares and lack of access to borrowed funds were found to be the limiting factors to investing in manufacturing shares. This finding corroborates the reality in the Nigerian capital market as manufacturing shares are among the highest priced shares in the market and as a result are usually beyond the reach of the average retail investor. This reflects the low level of income in the country which has adverse effects on the level of funds that will be ultimately channeled to the capital market and subsequently made available to the manufacturing sector which is seen to be the most promising sector for the diversification of the economy especially at this time of dwindling oil prices on which the Nigerian economy has been depending on for decades.

The implication from these findings is that there is need to ensure that investors have adequate access to the information they need to make investment decisions since it is clear that most of them rely mainly on accounting information. Thus regulators and policy makers should ensure that manufacturing companies provide adequate and timely information which investors can use to make investment decisions. More importantly, Government should embark on serious infrastructural development like the provision of adequate electricity, better transportation systems and water, among others so as to engender a more conducive environment for entrepreneurial growth and development. This will go a long way to ensure that there is greater participation by the private sector in the development of the producing sectors of the economy like manufacturing. Ultimately it is hoped that the manufacturing sector will replace the oil sector as the major source of revenue for economic development. The multiplier effect that would result from this development will ensure higher incomes for the people who will then have more funds to invest in the capital market and subsequently channeled to manufacturing for even greater production.

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