



Trend and Patterns of Market Value of Listed Manufacturing Firms in Nigeria (2008 -2018)

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ABSTRACT

The study analysed the trend and pattern of market value of firms from 2008-2018. The study adopted ex-post facto research design and used secondary data. The population of the study comprised of 78 listed manufacturing firms on the Nigeria Stock Exchange as at the end of 2018. Purposive sampling technique was used to select firms with up-to-date published financial data and whose stock were traded on the Stock market totaling 56. The data were analysed using table, percentages and bar chat. The study showed upward and downward movements in the value of firms during the sample period. The market value increased from 2008 -2009 by 0.33%, declined in 2010 by 4.93% increased from 2011 to 2013 by 11.75% and decreased from 2016 to 2018 by 14.59%. A policy implication with respect to this finding is that the study confirmed that Nigeria's economy through the manufacturing sector is growing gradually. It is recommended that Nigeria need to intensify and formulate stable trade policies capable of promoting sustainable growth within and outside the country.



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INTRODUCTION

The general objective of any corporate entity is to take investment opportunities and ensure efficient and effective deployment and utilization of economic resources towards wealth creation. Undoubtedly, the value usually measured in terms of share price, market –to – book value, Tobin's Q among others are clear indicators of wealth. However, recent happenings in the capital market globally, beginning from 2008, ranges from delisting of firms from capital market,

inconsistency in earning reporting, decline in market value of stock, the collapse of corporate bodies, dwindling dividend payment, low capitalization and increasing cost of finance has further reduce investors confidence in the operation of the capital market. These situations have brought to the fore fundamental questions on the ability of management to make financial and investment decisions that can maximize the value of firms.

Overtime, the share price of firms and the performance of firms in relation to earnings and ratio of dividend payment seems to have fallen below the expectation as more returns are being agitated and expected annually on capital investment.

Analyst attributed this trend to non-payment of dividend resulting in investors losing interest in shares (Ordu, Enekwe & Anyanwaokoro, 2014) since their main objective of higher return are not being met. According to Ugah, Uche and Ogbu (2019), the concerns expressed by investors and other stakeholders suggests without any doubt that values of firms in terms of share price are not in agreement with the intrinsic value. Perhaps this might have been the source of motivation for quite a number of researches that focused on the value of firms and factors that drive value particularly in the developing economies such as Nigeria.

Recently, the behavior of firms value in the capital market has attracted considerable attention of many stakeholders, academic researchers and policy makers. To be precise, many researchers and scholars alike have adopted different variables or factors to explain the behavior of different value of stock globally but without identifying the patterns and trend of firm values over the years. Apart from government policy and regulations, institutional policy and professional code of ethical practice have been extensively related to value of firms in literature. Although there are evidence, though still limited and evolving in finance literature about the market value of stocks, this study fulfill the need of investors, scholars and stakeholders alike.

LITERATURE REVIEW

Conceptually, the firm asset earnings power is used to identify the company's value (Modigliani & Miller, 1958). Apart from asset and profit, the company's debt policy also influences changes in firm value. The total value of the firm is equal to the capitalized value of the total earnings stream plus firm's assets at a particular time minus capital of the firm at threshold level or mean value of the firm's assets (Sethi & Taksar, 2002). However, Booth and Cleary (2006) opine that firm value equate the present value of all the company's investment. Traditionally, firm value represent a major determinant of deriving stock prices and several valuation models established this position. Several researchers opine that numerous performance indicators can be adopted in business valuation resulting in diverse and conflicting results. The market value of an organisation was measured in this study using Tobin's Q model and market-to-book (MB) ratio.

Tobin's Q Model

In a seminar paper, Tobin (1969) opine that a relationship exists between the replacement costs of an asset and the market value of capital goods investments. Changes in the return rate is due to changes in replacement cost and market value of durable goods (Tobin's Q, 1969). Conversely, the relationship between the valuation of an asset and the actual cost represents the rate in the marginal efficiency of capital. Notable researchers in the field of accounting and finance has

adopted this method this in valuing the net worth of an organisation (Ahmed & Durga, 2019; Bhat, Chen, Jebran & Bhutta, 2018; Akinkoye & Akinadewo, 2018).

Market - to –Book (MB) Ratio

According to Ceccagnoli (2009), the amount that the market attached to the net asset of an organisation or the common equity or the ability of corporate managers to effectively utilize the available assets in enhancing business growth represent the market –to – book ratio. Market -to – book ratio combines both forward – looking market indicators of firm performance and historical accounting. This therefore enhances the premise for the adoption of MB ratio as a performance indicator (Lee & Makhija, 2009). Several scholars have adopted this method in measuring firm performance (Akinkoye & Akinadewo, 2018; Gupta, Kennedy & Weaver, 2009).

Empirical Review

For decades, scholars globally have been investigating various factors influencing the market value of firms among different establishments. Efni, (2017) opine that the value of any entity can be increase by the level of investment decisions and the company risk profile. Conversely, dividend and financing decisions has a direct impact on the net worth of a company. Research studies that investigated the key variables determining the market value of stock are numerous but with conflicting and contradictory positions. Some of these studies identify retained earnings, earnings per share, retained earnings per share, dividend per share, stock dividend, financial leverage, liquidity, tangibility, firm size, and firm age. Other scholars observed that factors influencing firm value would include inflation, availability of lucrative investment opportunities, level of uncertainty within the economy, lack of access to financing, borrowing capacity, profitability, ownership structure, legal constraints, growth objective and nature of the industry among others. Corporate governance compliance, board structure and size, executive compensation, ownership and control structure, disclosure and financial transparency together with shareholder’s right are major variables considered significant in affecting firm value.

Scholars opinion regarding the relationship between firm value and dividend policy or dividend per share are multi-faceted. Some opine that the effect of dividend per share on market value of shares is negative (Bezawade & Tati, 2017; Mohammed, 2017). In another perspective, some researchers established a positive relationship (Ideweke & Murad, 2019; Ugah, Uche & Ogbu, 2019; Akinkoye & Akinadewo, 2018; Bamidele & Luqman, 2018; Oyango, 2018; Kajola, Adewunmi & Oworo, 2015; Masum, 2014; Khan, 2012; Zakaria, Muhammad & Zulkitfli, 2012; Abubakar, 2012) while (Velnampy, Nimalthasan & Kalaiaarasi, 2014; Adefila, Oladipo & Adeoti, 2013) identify no relationship between firm value of shares and dividend policy. In finance literature, it is generally agreed that earnings per share positively influences the market value of an enterprise (Akinkoye & Akinadewo, 2018; Bamidele & Lukman, 2018; Inyiana & Ozonli, 2014; Khan & Zuvigar, 2012; Masum, 2014). However, scholars are unable to establish same position on the effect of retained earnings and firm value. Ugah, Uche and Ogbu, (2019) observed that retained earnings and market value of stocks are negatively correlated but other scholars (Akinkoye & Akinadewo, 2018; Urooj, Sinadhu, Hashmi & Hussain, 2017, Munir & Kharal, 2017; Ball, Grakos, Linnainman & Nikolaer, 2017; Ekwe & Inyiana, 2014) disagreed and opine that retained earnings positively influences the stock price of firm.

In terms of liquidity, Urooj, Sindhu, Hashmi and Hussain, (2017) establish a positive relationship with firm value. However, Akinkoye and Akinadewo, (2018) observed a negative correction between liquidity and market value of listed firms in Nigeria. Again the positions of researchers with regards to the relationship between firm size and firm value remain divergent and contradictory. Some scholars observed positive relationship between the two variables (Ahmed & Durga, 2019; Gworo, 2019; Bamidele & Luqman, 2018; Falah, 2017; Rohail & Maran, 2016) while Akinkoye and Akinadewo (2018) argued that firm size and firm value are negatively correlated. However, Yameen, Farhan and Tabash, (2019) established an insignificant relationship between the two variables. Contrary to general positions, Akinkoye and Akinadewo (2018) opine that tangibility and firm value are negatively corrected. Ahmed and Durga (2019) opine that firm age and firm value are negatively correlated. However, other researchers argued that firm age positively influences the firm value (Yameen, Farhan & Tabash, 2019; Rohail & Maran, 2016).

The relationship between corporate governance and firm value present an interesting scenario. The position of researcher with regards to the effect of board structure or size on market value of firm is also diverse and contradictory. Scholars who observed positive relationship among the two variables include: Yameen *et. al.*, (2019); Egbunike, Amugboro, and Ovbiebo, (2019); Aigboro and Ashafoke, (2015) and Arora (2012). According to Balagobei (2018); Olayiwola (2018) and Falah (2017), board structure and board size negatively influences firm value. Gupta, Kennedy and Weaver, (2009) however opine that board structure has no effect on the market value of firm. According to Mweta and Mungai, (2018); Darweesh (2015), executive compensation positively influences the market value of firms. But Gupta *et.al.* (2009) observed no correlation between the two variables.

According to Pradhan, Shan, Bhandari, Mohato, Adhikari and Bam, (2019), foreign ownership and dividend payout ratio are positively correlated. By implication. The greater the percentage of foreign ownership in a firm, the higher the firm value. Other scholars who share the same opinion also include: Yameen *et. al.*, (2019); Aigbovo and Ashafoke (2015) and Darweesh (2015). However, Balogobei (2018) argued that no correlation exist between firm value and ownership and control structure. Nweta and Mungai, (2018) establish a positive relationship between financial transparency and firm value while other writers opine that no relationship exist between the two variables (Gupta, Kennedy & Weaver, 2009). Despite the fact that the main objective of the corporate governance code is to ensure protection of statutory and general rights of investors, especially the interest of the minority investors and guarantees equitable treatment of shareholder. Gupta *et. al.*, (2009) however observed no correlation between shareholders right and firm's market value. It is however instructive to situate that despite the avalanche of literature reviewed as observed above, trend and patterns of market value of listed manufacturing firms in Nigeria is missing, hence the need for this study.

METHODOLOGY

For this study, *ex post facto* research design was adopted. The study adopted the *ex post facto* research design because existing data were obtained and used without manipulation. This approach therefore enables the examination of firms' value using financial data obtained from the audited financial statements for eleven (11) years i.e. from 2008 to 2018. The period was specifically selected due to the fact that capital market crisis in Nigeria started in the year 2008 when majority of investors lost their investments in several organisation. Population framework

for the study comprised of 78 listed manufacturing firms traded consistently between 2008 and 2018 on the Nigerian Stock market. A sample of 56 manufacturing firms were selected through purposive sampling technique representing about 72% of the entire population. Data on economic value of firms such as the market prices were sourced from the published accounts and other public and relevant data disclosed by the sampled firms. The study used three variables to measure firm value such as Tobin's Q, market – to – book ratio and return on asset (ROA). The analysis of the data was done using descriptive statistical techniques.

RESULTS AND DISCUSSION OF FINDINGS

The sample size consists of 56 manufacturing firms traded on Nigerian Stock Exchange from 2008 to 2018. The firms' stocks were actively traded in the floor of the market. The sample size was appropriate to represents the entire population and all the data required to construct and measure the variable used in this study were adequately available. There was no evidence of clustering in any of the years. Table 4.1 shows frequency distribution of the firms during the sample period. Data collected and used in this work is a balanced panel data that comprised both annual and cross-sectional data. The categories of firms by industry and distribution by years are shown in the Tables 4.2 below

Descriptive Analysis

Table 4.1 Distribution of Firms

Period	Fir ms	Observation (%)
2008	56	100%
2009	56	100%
2010	56	100%
2010	56	100%
2012	56	100%
2013	56	100%
2014	56	100%
2015	56	100%
2016	56	100%
2017	56	100%
2018	56	100%

Source: NSE Fact book publication 2020

Table 4.2 Distribution by Sectors

Sectors	Number of Firms	% of sample
AGRICULTURE	5	0.089
CONSUMER GOODS	20	0.357
HEALTHCARE	11	0.196
INDUSTRIAL GOODS	15	0.267
NATURAL RESOURCES	4	0.071
TOTAL	56	100

Source: Nigeria Stock Exchange Publication 2020

Patterns of Market Value of listed Manufacturing Firms in Nigeria

The pattern of the firms' value was analysed during the sample period. The pattern is shown in Table 4.1 and Figure 4.1. Tobin's Q as a measure of value was measured in three dimensions; that is, qa which is a simplified measure based on market equity to book. It is measured by taking the market value of equity and divided by the difference between non-current asset less liabilities. The market value is based on the unit price of share multiplied by the outstanding shares at year-end. This approach was used to measure Tobin's Q because investors go beyond the book value of assets and liabilities in evaluating firms. This method of measurement also gives better estimate of firms' equity. Secondly, Tobin's Q was measured as the ratio of market value of firm's equity and liabilities to the total assets of the firms. This was done annually for each firm and tagged qb. The third measure was done by calculating the average of Tobin's Q over eleven (11) years. Firms' equity and total liabilities were divided by the total assets of the firm and spread over eleven years.

The analysis of the value reveal several interesting patterns of the value of manufacturing firms in Nigeria. It showed a level of consistency in the pattern. Table 4.3 and Figure 4.1 show the pattern and percentage of value on average for all the firm. The three measures of value in the analysis shows a low Q ratio below 1 which suggest that value of all the firms in the sample taken as a whole is undervalued and that the replacement cost of the firms' assets is much higher than the value of their stock. This measure of firms' market value is a driving factor behind investment decisions and it is a simple intuition regarding the relationship between price and value. The implication of the analysis is that the firms worth more than the value/price at which the stocks are traded.

The analysis also shows an upward and a downward movement in the Q ratios during the sample period. This movement is expected because undervalued firms with ratios lower than one would definitely attract investors and this may likely result in an increased interest in the firms. The increased interest may result in an increase in their share prices and consequently increase the Tobin's Q ratio. For instance, the Q ratio in the three measures, appreciated in year 2008 to 2009 by 0.33, 4.91, and 1.17 percent respectively. Likewise, in 2010 to 2013 and in 2015, the Q ratios in all the measures increased and it was a clear indication that investors might be reacting to the basic fundamentals including the basic qualitative and quantitative information that are capable of contributing to the financial or economic well-being of the firms and their subsequent financial valuation. The observed increase in the retention ratio, the adoption and increase in corporate governance compliance by firms may have sent positive signals to the capital market.

The decline in the value of Q ratio in 2014 to the lowest in 2015 is a clear indication of reduction in the value and market prices causing the Tobin's Q ratio to fall. The fall in Q ratio is equally observed across the three measures of value. The q ratio rose to the peak in 2016 across the measures of value which suggests increase in investment asset, increased interest in the firms and increase in share price and subsequently, increase the Q ratio. The pattern is also represented graphically in Figure 4.1. The graphical representation of the value of firms shows interesting report of the value of firm. The movement in all measures of value are consistent. The market-to-book ratio determine the values of all firms in the sample relative to their actual worth. The ratio is usually used by investors and analysts to differentiate between the true value traded in the market and investors' speculation.

The analysis shows further that, just like the Q ratio, the market-to-book ratio on average is below 1 meaning the firms' stock were undervalued. This is consistent with the Q ratio and it is a clear indication that the share price of the firms was traded for less than the worth of their assets. For investors and value managers, a high ratio is preferred because it is normally interpreted to mean that firms are trading stock cheaply in the market compared to the book value.

Table: 4.3 *Pattern of Firms Value (2008-2018)*

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Tobin's Q	%	%	%	%	%	%	%	%	%	%	%
Qa	7.84	8.17	7.07	8.58	9.94	10.91	7.36	5.41	14.30	12.25	8.16
Qb	7.51	12.42	7.49	11.83	17.57	23.58	10.59	9.00	24.62	27.50	10.03
Qc	8.03	9.20	7.41	8.91	11.45	11.93	6.84	6.38	12.65	9.98	7.22
Mrk	6.37	8.31	6.31	8.81	11.39	12.91	6.65	6.46	14.61	10.92	7.26

Author's computation, 2021

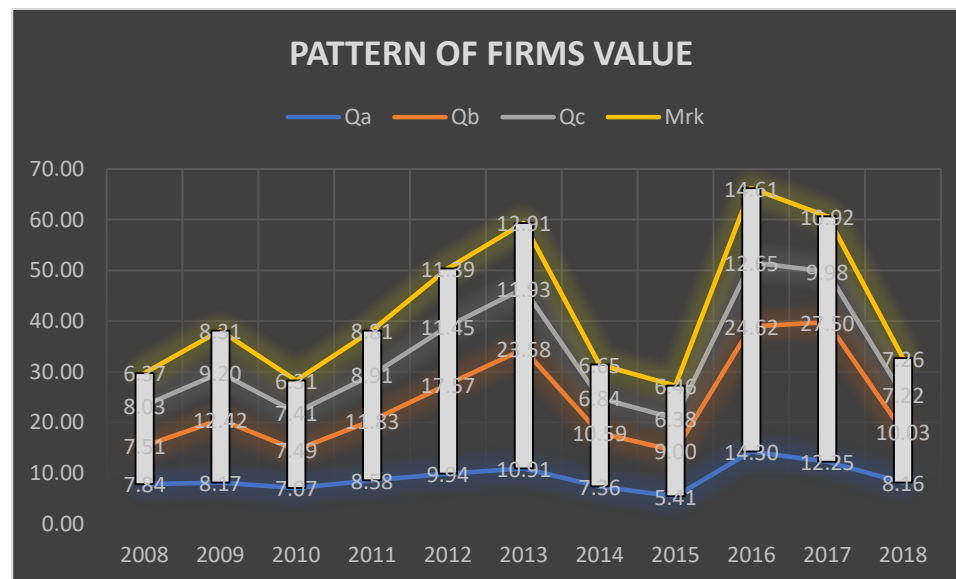


Fig. 4.1 *Pattern of Firms Value*

CONCLUSION AND RECOMMENDATIONS

The study was motivated by the ongoing concern expressed by equity investor and other stakeholders on what seemed to be a declining trend in the value of listed firms and the increasing amount of undistributed earnings among firms in Nigeria. The main objective of the study was to investigate the extent and patterns of market values among listed manufacturing firms in Nigeria. The result of the study revealed the patterns of the market value of firms was measured by Tobin's Q and market – to – book ratio and the result showed a level of consistency in the patterns. There was an upward and a downward movement in the Q ratios during the sample period and the pattern was a reflection of the intrinsic value of the firms, investors' perceptions of the values and how the stocks of the firms were traded in the capital market during the sample period. The study of this nature is valuable and crucial for policy implication. It is recommended that firms should review management policy regularly to ensure that the market of stock are increase and also the expectation of shareholders are always met. Furthermore, investment in project should go through a careful analysis in order to ensure that only those investment opportunities with a prospect of generating future and certain cash-flow and positive net present value (NPV) are taken.

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