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Abstract
The study analysed the trend and pattern of the market value of firms quoted on the Nigeria stock exchange from 2008-2018. The study adopted an ex-post facto research design and used secondary data. The population of the study comprised 78 listed manufacturing firms quoted on the Nigeria Stock Exchange as of the end of 2018. A purposive sampling technique was used to select firms with up-to-date published financial data and whose stocks were traded on the Stock market totalling 56. The data were analysed using tables, 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 concerning 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.

Keywords: Capital market, market value, manufacturing firms, investors, debt policy

JEL Classification Code: E44

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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, and Tobin’s Q among others are clear indicators of wealth. However, recent happenings in the capital market globally, beginning in 2008, ranges from the delisting of firms from the capital market, inconsistency in earning reporting, the decline in the market value of the stock, the collapse of corporate bodies, dwindling dividend payment, low capitalization and increasing cost of finance has further reduced 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.

Over time, the share price of firms and the performance of firms about earnings and ratio of dividend payment seem to have fallen below expectation as more returns are being agitation and expected annually on capital investment.

Analysts attributed this trend to non-payment of dividends resulting in investors losing interest in shares (Ordu, Enekwe & Anyanwaokoro, 2014) since their main objective of higher return is not being met.

According to Ugah, Uche and Ogbu (2019), the concerns expressed by investors and other stakeholders suggest that without any doubt that the 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 several research that focused on the value of firms and factors that drive value, particularly in developing economies such as Nigeria.

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

2.0 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 the firm’s assets at a particular time minus the capital of the firm at the threshold level or mean value of the firm’s assets (Sethi & Taksar, 2002). However, Booth and Cleary (2006) opine that firm value equates to the present value of all the company’s investments. 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 could 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 the market-to-book (MB) ratio.

**Tobin’s Q Model**
Tobin (1969) opines that a relationship exists between the replacement costs of an asset and the market value of capital goods investments. Changes in the return rate are 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 of the marginal efficiency of capital. Notable researchers in the field of accounting and finance have adopted this method 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 represents the market–to–book ratio. The 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 the 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).

**2.1 Empirical Review**
For decades, scholars globally have been investigating various factors influencing the market value of firms among different establishments. Efni (2017) opines that the value of any entity can be increased by the level of investment decisions and the company’s risk profile. Conversely, dividend and financing decisions have a direct impact on the net worth of a company. Research studies that investigated the key variables determining the market value of a 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 rights are major variables considered significant in affecting firm value.

Scholars' opinions regarding the relationship between firm value and dividend policy or dividend per share are multi-faceted. Some opine that the effect of dividends per share on the market value of shares is negative (Bezawade & Tati, 2017; Mohammed, 2017). From another perspective, some researchers established a positive relationship (Idewele & Murad, 2019; Ugah, Uche & Ogbu, 2019; Akinkoye & Akinadewo, 2018; Bamidele & Luqman, 2018; Onyango, 2018; Kajola, Adewunmi & Oworo, 2015; Masum, 2014; Khan, 2012; Zakaria, Muhammad & Zulkitfli, 2012;
Abubakar, 2012) while (Velnampy, Nimalthasan & Kalaivarasi, 2014; Adefila, Oladipo & Adeoti, 2013) identify no relationship between the firm value of shares and dividend policy. In the 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 the same position on the effect of retained earnings and firm value. Ugah, Uche and Ogolu, (2019) observed that retained earnings and the market value of stocks are negatively correlated but other scholars (Akinkoye & Akinadewo, 2018; Urooj, Sinadh, Hashmi & Hussain, 2017; Munir & Kharal, 2017; Ball, Grakos, Linnainman & Nikolaer, 2017; Ekwe & Inyiama, 2014) disagreed and opine that retained earnings positively influences the stock price of the 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 the liquidity and market value of listed firms in Nigeria. Again, the positions of researchers about the relationship between firm size and firm value remain divergent and contradictory. Some scholars observed a 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 firm value (Yameen, Farhan & Tabash, 2019; Rohail & Marn, 2016).

The relationship between corporate governance and firm value presents an interesting scenario. The position of the researcher regarding the effect of board structure or size on the market value of the firm is also diverse and contradictory. Scholars who observed a positive relationship between the two variables include Yameen et. al., (2019); Egbunike, Amugoro, and Ovbiebo, (2019); Aigboro and Ashafoke, (2015) and Arora (2012). According to Balagoei (2018); Olayiwola (2018) and Falah (2017), board structure and board size negatively influences firm value. Gupta, Kennedy and Weaver, (2009) opine that board structure does not affect the firm's market value. 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, Balogoei (2018) argued that no correlation exists 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 exists between the two variables (Gupta, Kennedy & Weaver, 2009). Even though the main objective of the corporate governance code is to ensure the protection of statutory and general rights of investors, especially the interest of the minority investors and guarantees equitable treatment of shareholders. Gupta et. al., (2009) however observed no correlation between shareholders’ rights and the firm’s market value. However, it is instructive to situate that despite the avalanche of literature reviewed as observed above, the trend and patterns of the market value of listed manufacturing firms in Nigeria are missing, hence the need for this study.

3.0 Methodology
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 because capital market crises in Nigeria started in the year 2008 when the majority of investors lost their investments in several organisations. Population 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 was selected through the purposive sampling technique representing about 72% of the entire population. Data on the 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.

4.0 Results and Discussion of findings
The sample consists of 56 manufacturing firms traded on the Nigerian Stock Exchange from 2008 to 2018. The sampled firms’ stocks were actively traded on the floor of the market. The sample size was appropriate to represent 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 the frequency distribution of the firms during the sample period. Data collected and used in this work is balanced panel data that comprised both annual and cross-sectional data. The categories of firms by industry and distribution by year are shown in Table 4.2 below.

4.1 Descriptive Analysis

Table 4.1 Distribution of Firms

<table>
<thead>
<tr>
<th>Period</th>
<th>Firms</th>
<th>Observation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>56</td>
<td>100%</td>
</tr>
<tr>
<td>2009</td>
<td>56</td>
<td>100%</td>
</tr>
<tr>
<td>2010</td>
<td>56</td>
<td>100%</td>
</tr>
</tbody>
</table>
Patterns of Market Value of listed Manufacturing Firms in Nigeria

The pattern of the firms’ values 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; which is a simplified measure based on market equity to book value. It is measured by taking the market value of equity and divided by the difference between non-current assets and fewer liabilities. The market value is based on the unit price of the 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 a better estimate of firms’ equity. Secondly, Tobin’s Q was measured as the ratio of the market value of the firm’s equity and liabilities to the total assets of the firm. This was done annually for each firm. 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 reveals 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 the entire firm. The three measures of value in the analysis show a low Q ratio below 1 which suggests that the 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

### Table 4.2    Distribution by Sectors

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Number of Firms</th>
<th>% of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRICULTURE</td>
<td>5</td>
<td>0.089</td>
</tr>
<tr>
<td>CONSUMER GOODS</td>
<td>20</td>
<td>0.357</td>
</tr>
<tr>
<td>HEALTHCARE</td>
<td>11</td>
<td>0.196</td>
</tr>
<tr>
<td>INDUSTRIAL GOODS</td>
<td>15</td>
<td>0.267</td>
</tr>
<tr>
<td>NATURAL</td>
<td>4</td>
<td>0.071</td>
</tr>
<tr>
<td>RESOURCES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>56</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Nigeria Stock Exchange Publication 2020

Source: NSE Fact book publication 2020
driving factor behind investment decisions and it is a simple intuition regarding the relationship between price and value. The analysis implies that the firms are 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 increase their share prices and consequently increase Tobin's Q ratio. For instance, the Q ratio in the three measures, appreciated in the year 2008 to 2009 by 0.33, 4.91, and 1.17 per cent respectively. Likewise, from 2010 to 2013 and 2015, the Q ratios in all the measures increased and it was a clear indication that investors might be reacting to the fundamentals including the basic qualitative and quantitative information that is 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 the increase in corporate governance compliance by firms may have sent positive signals to the capital market.

The decline in the value of the Q ratio in 2014 to the lowest in 2015 is a clear indication of a reduction in the value and market prices causing Tobin’s Q ratio to fall. The fall in the 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 an increase in investment assets, increased interest in the firms and an increase in share price, and subsequently, an increase in the Q ratio. The pattern is also represented graphically in Figure 4.1. The graphical representation of the value of firms shows an interesting report of the value of the firm. The movement in all measures of value is consistent. The market-to-book ratio determines 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>
<thead>
<tr>
<th>Table: 4.3 Pattern of Firms Value (2008-2018)</th>
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<tbody>
<tr>
<td>------</td>
</tr>
<tr>
<td>Tobin’s Q</td>
</tr>
<tr>
<td>Qa</td>
</tr>
<tr>
<td>Qb</td>
</tr>
<tr>
<td>Qc</td>
</tr>
</tbody>
</table>

*Author’s computation, 2021*
5.0 Conclusion and Recommendations

The study was motivated by the ongoing concern expressed by equity investors 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 as 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.

A 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 is increasing and the expectation of shareholders are always met. Furthermore, investment in the project should go through careful analysis 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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