

DETERMINANTS OF CORPORATE PERFORMANCE: EVIDENCE FROM LISTED MANUFACTURING FIRMS IN NIGERIA

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ABSTRACT

These are not the best of times for manufacturing firms in Nigeria as corporate profits continue to decline, no thanks to unfavourable business environment. This study therefore sought to empirically examine the fundamental determinants of corporate performance of manufacturing firms in Nigeria from 2011 to 2017. Data for this study were mainly sourced from selected firms' financial statements and Central Bank of Nigeria Statistical Bulletin. In conducting the empirical analyses, the descriptive statistics of the collated data were analysed to determine the nature and properties of the data. Adopting panel data regression model through fixed effect regression model, the result from the study showed that a leverage exert negative influence on corporate performance of manufacturing firms in Nigeria. It was also discovered that interest rate and inflation rate was also a drag to corporate performance. It is therefore recommended that Nigerian manufacturing firms' managers rely more on internal sources of financing and use less of external sources of financing to avoid payment of exorbitant interest charges to lenders.

Keywords: *Corporate, Performance, Macroeconomic, Firm-specific, Panel data*

1.0 Introduction

These are not the best of times for manufacturing firms in Nigeria. In the recent times, aggregate capacity utilization and purchasing managers' index have been on the downward trend. Similarly, average return on asset declined from 3.1% in 2010 to 2.7% in 2011, before it plunged to 2.5% in 2016. Experts attributed this to prevailing unfavourable business environment. The more conducive business environment in some other African countries such as Ghana and

South Africa has prompted most manufacturing companies to close their plants in Nigeria and relocate to these neighbouring African countries. For example, Dunlop and Michelin tyres recently relocated to Ghana. The harsh business environment in Nigeria has been a knotty issue to Manufacturers Association of Nigeria (MAN). This development has prompted most Nigeria corporate managers to devise survival strategies to weather the turbulence storm.

Economic experts and monetary authorities have focused attention on macroeconomic factors that determine corporate performance such as interest rate, inflation, exchange rate and general business environment. Yet, the performance indicators of most manufacturing firms are in their lowest ebb. It therefore becomes imperative to empirically examine the fundamental determinants of corporate performance among Nigeria manufacturing firms.

Several scholars such as (Asimakopoulos, Samitas & Papadogonas 2009; Bhayani 2010; Burga 2011; Ayele 2012; Al-Jafari & Alchami 2014; and Al-Jafari & Al-Samman 2015) have devoted much time to unravel the main determinants of corporate profitability.

Surprisingly, the findings of these studies are mixed and inconclusive. Moreover, most of these studies are conducted in developed countries, perhaps with institutional similarities. Empirical studies on emerging economies like Nigeria are scanty. Few studies on the determinants of corporate performance are either concentrated on banks (Aburime, 2008; Aremu, Ekpo & Mustapha 2013; Osuagwu, 2014) or industry specific, Enekwe, Okwo & Ordu (2013). Considering the institutional dissimilarities, it is essential to carry out an empirical study that could unravel the major determinants of corporate performance in an emerging economy like Nigeria. It is also important to state that Nigerian manufacturing firms have peculiar features that are different from manufacturing firms in developed economies. Corporate financial managers have devoted much resource to maximize profitability and shareholders wealth. Meanwhile, Ehi-Oshio, Adeyemi and Enofe (2013) had showed that corporate profitability determinants are firm specific. However, it has been argued recently that corporate performance could also be determined by both firm-specific factors and macroeconomic variables

(Asimakopoulos, Samitas and Papadogonas, 2009). The above arguments notwithstanding, the sharp drop of corporate profits of most firms during the 2016/2017 recession in Nigeria had prompted corporate managers to now pay more attention to corporate profitability enhancers. For example, Nestle Foods, one of the blue chips in Nigeria recently refocused its corporate strategy to spur profitability through robust alignment of financing, investment and dividend decisions, as proper alignment of such decisions is not only a necessary but also a sufficient condition to the survival of corporate organisations.

This study is therefore motivated by two main factors; first, is the issue of lack of consensus among scholars on the major determinants of corporate performance; second, is an attempt to develop a better understanding of the main determinants of corporate performance among Nigerian manufacturing firms.

The evidence from the study provides a good opportunity to understand the integrated process of corporate profitability in the Nigerian manufacturing firms. A unique contribution of this study over other similar studies in Nigeria is the adoption of a detailed company level panel data set and looking at both firm-specific and macroeconomic determinants of corporate profitability in integrated framework.

The rest of this study is divided into four sections as follows: Section 2 reviews of some related literatures while section 3 details the methodology and section 4 provides empirical results while section 5, concludes with policy implications and recommendations.

2.2 Empirical Literature Review

The fundamental determinants of corporate performance are emerging issues in corporate finance literature. Earlier studies on corporate performance began with two variables studies, such as leverage and corporate performance; liquidity and corporate performance; firm size

and corporate performance. Recently however, scholars have started looking at corporate performance as a united framework by aggregating several of these factors in a multiple regression model.

Beginning with Jim (2009), numerous studies have documented that several factors are associated with corporate performance both in developed and developing countries (Measut 2013; Bayaraa 2017; Al-Jafari & Al Samman 2015; Mirza&Javed 2013). These studies investigated the main determinants of corporate performance. Jim (2009) did an extensive work aimed at providing a clue on whether firm size influence performance. The author employed fixed effect dynamic panel data for over 7000 United States publicly quoted firms for the period 1987 to 2006. Results of the study suggest that firm profitability is positively correlated with firm size, though correlation is non-linear in nature. A similar study by Umar, Tanveer, Aslami and Sajid (2012) argued that capital structure can exert significant impact on corporate performance. The authors examined 100 top Pakistani firms listed in Karachi Stock Exchange for the period 2006 to 2009. Employing exponential generalized Least Square Regression to analyse cross sectional data obtained from the firm's annual reports and accounts, the results from the study showed that current liabilities to total assets, total liabilities to total assets and long term liabilities to total assets are negatively related to earnings before interest and taxes, return on assets, earning per share and net profit margin.

In another study, Mirza and Javed (2013) provided further evidence on the relationship between financial performance of the Pakistani firms and macroeconomic indicators, corporate governance, ownership structure, capital structure, and risk management, using a sample of sixty (60) Pakistani corporate firms listed in the Karachi Stock Exchange from 2007

to 2011. Adopting a fixed effect regression model, the results revealed a positive association between corporate governance and risk management and corporate performance, while mixed results are found for other variables.

Following unpredictable performance of Greece non-financial firms, Asimakpoulus, Samita and Papadogonas (2009) employed panel data to examine the firm specific and economy- wide determinants of firm profitability in the Athens Stock Exchange for a period 1995 to 2003. The results from their study revealed that firm profitability was positively related to size, sales growth and investment, but negatively related by leverage and current assets.

In view of conflicting, reports from other countries on the fundamental determinants of corporate financial performance. Al-Jafari and Al-Samman (2015) investigated the main determinants of profitability of industrial firms listed on Maseat securities market using cross sectional data sourced from 17 Industrial companies for the period 2006 to 2013 to run a panel ordinary Least Square. Results from the study indicate a significant positive relationship between size, growth, fixed asset, working capital and profitability. Surprisingly, average tax rate exert insignificant negative relationship with profitability. However, financial leverage exerted a significant negative relationship with profitability.

Bayaraa (2017) investigated the impact of firm specific variables on the financial performance of six (6) sectors in Mangolian. The author employed the panel regression estimate to analyze data sourced from Mongolian Joint Stock Companies for the period 2012 to 2015. Results that emanate from the study showed that earning per share and return on cost have positive impact on return on asset, while short term debts to total asset ratio and cost to revenue ratio have negative impact. Mesut (2013) re-examined the effect of firm size on

profitability of 200 companies listed in this Istanbul Stock Exchange (ISE) for the period 2008 to 2011. Findings from the empirical study showed a positive relationship between size and profitability. Results also indicated a strong and positive relationship between liquidity and profitability. A negative relationship was found between leverage, and age size of the firm with and profitability.

In a recent study by Ali and Bilal (2018) examined the fundamental factors that affect the financial performance of the Jordanian manufacturing industrial firms, using data from 23 industrial firms listed in Amman Stock Exchange for the period 2005 to 2015.

Employing multiple regression analyses Via E-View software package, the results showed that liquidity, profitability and revenues were positively related with return on asset, while leverage and firm size were found to be negatively related with financial performance.

In Nigeria, some of earliest studies on this topic are Owolabi and Obida (2012); Akinlo and Asaolu (2012); Ehi-Oshio, Adeyemi and Enofe (2013); Ogebe, Ogebe and Alewi (2013); Ojo (2012); Enekwe, Agu and Eziedo (2014); and recently Jeleel and Olayiwola (2017); Olawale, Ilo and Lawal (2017); Egbunike and Okerekeoti (2018).

Owolabi and Obida (2012) tried to establish the relationship between liquidity management and profitability of 12 listed manufacturing companies listed in the Nigerian stock Exchange for the period 2005 to 2009 using descriptive statistics to analyze the data. Results from their study revealed that the selected firms showed a reasonable level of liquidity management in relation to profitability.

Akinlo and Asaolu (2012) also explored the nature of relationship between leverage and profitability of Nigerian firms for the period 1999 to 2007 using a panel data set of sixty (60) listed non-financial firms listed on the

Nigeria Stock Exchange (NSE) comprising of fifteen sectors. Results from the panel data regression showed that leverage exerted negative relationship with profitability.

A similar study by Ojo (2012) centred on the effect of financial leverage on corporate performance of some selected listed companies in Nigeria using panel data regression for the period 1993 to 2005. The author went further to estimate the effect of leverage on selected variables in Vector Auto Regressive (VAR) framework, and then decomposed the forecast error variance to establish how a unit shock generated by leverage is transmitted to the variables in the system. Results show that leverage shocks have substantial effect on corporate governance.(or performance?)

Ehi-Oshio, Adeyemi and Enofe (2013) attempted to examine the determinants of corporate profitability behaviour in developing countries, with emphasis on the Nigerian environment using a panel data set of 40 selected firms for a period of five years. Empirical findings showed that firm size and leverage profitability(check and correct), while liquidity has negative relationship with corporate profitability.

Ogebe, Ogebe and Alewi (2013) examined the impact of capital structure on firm the performance of listed firms on the Nigeria Stock Exchange for the period 2000 to 2010 utilizing data obtained from annual report and Central Bank Statistical Bulletin to run the so-called panel data regression. Results from the study revealed that leverage is a statistically significant determinant of firm performance, macroeconomic variables were also found to have a significant effect on the performance of highly leveraged firms. Enekwe, Agu and Eziedo (2014) examined the impact? of leverage on financial performance of listed pharmaceutical companies in Nigeria using data of six (6) quoted companies for the period 2001 to 2012 to run multiple regression

via SPSS software package. The results showed that leverage is negatively related to financial performance.

Conflicting results from these national studies led to the resurgence of many other studies with diverse methodologies and findings.

Olawale, Ilo and Lawal (2017) to re-examine the effect of firm size on performance of 23 listed non financial firms operating in Nigeria for the period 2005 to 2013, using the three traditional methods of panel data regression.

Empirical findings from the study revealed that firm size exert a negative relationship with performance, in terms of total asset while, in terms of total sales, firm size has a positive relationship with the performance of Nigerian manufacturing firms. In a related study by Jaleel, Olayiwola (2017) examined the relationship between leverage and return on asset of chemical and paint manufacturing firms using a sample of three (3) firms for the period 2000 to 2009. Adopting Ordinary Least Square estimation techniques, the results show that equity finance produced a positive and significant relationship with return on asset, while debt finance had a negative but insignificant relationship with return on asset.

However, Egbunike and Okerekeoti (2018) explored the interrelationship between macroeconomics factors, firm-specific characteristics and financial performance of manufacturing firms in Nigeria using a panel data set of 21 selected manufacturing companies for the period 2011 to 2017. Finding from the study indicate that inflation rate, GDP, Firm size, leverage and liquidity are significant determinants of financial performance of manufacturing firms in Nigeria.

Recently, Odusanya and Yinusa (2018) examined the determinants of firms corporate profitability for one hundred and fourteen (144 or 114?) firms listed on the Nigerian Stock Exchange for the period 1998 to 2012 using the system of

generalized methods of Moments (GMM). Findings from the study suggest that previous year profit exerted significant negative effect on the firms profitability.

In summary, the review of extant literature showed that most of the earlier studies on this topic concentrated on two variables relationships. For example, Owolabi and Obida (2012) studied the effect of liquidity management on corporate profitability, Akinlo and Asaolu (2012) examined profitability and leverage. Ojo (2012) examined the relationship between financial leverage and corporate performance; Enekwe *et al.*, (2014) investigated the effect of financial leverage on financial performance. Findings from these studies could (or could not?) be a basis of policy formulation because of the narrow view of these studies. Corporate performance cannot be studied on the basis of a single variable. However, recent studies such as Odusanya and Yinusa (2018); Egbunike and Okerekeoti (2018); EhiOshio *et al.*, (2013) tried to expanded the scope of this topic by looking at both firm specific and macroeconomic factors, but these studies suffered from methodological problems and hence could not be relied upon. A more robust study on the determinants of corporate profitability is that of Ebunike and Okerekeoti (2018), but their study was criticized based on sampling method. Hence this study addressed some of the shortcomings of these previous studies.

Review of extant literature showed that a lot of studies have been conducted in both developed and developing countries on this area with conflicting results. While some authors looked at firm-specific characteristics and corporate performance, others examined macroeconomic factors and corporate performance. To the best of our knowledge, no study has jointly examined both firm-specific and macroeconomic variables on corporate performance in a unified framework as this.

Besides, some of the empirical studies in Nigeria are either focused on insurance or banks. This study therefore sought to contribute to this raging debate using recent manufacturing firms data

3.0 Methodology

3.1 Population and Selection Criteria

The population of the study is made up of twenty six manufacturing firms listed on Nigerian Stock Exchange. Two firms were selected from each of the thirteen (13) manufacturing sectors of the Nigerian Stock Exchange daily official list. They are: food beverages and Tobacco, Healthcare, Breweries, Building materials, chemical and paints, Automobile and tyre, computer and office equipments, conglomerates, construction, industrial and domestic products, machinery, packaging and petroleum.

3.2 Source of Data

Data used in this study were mainly from two sources: Data for firm specific determinants were obtained from the selected firms annual reports and accounts, while, macroeconomic data were sourced from Central Bank of Nigeria Statistical Bulletin.

3.3 Analytical Framework and Model Specification

This study made use of panel data regression model. The model becomes handy in this case because the data are obtained from individual firms from several sectors over time, hence there is likely to be problem of heterogeneity. Application of panel data regression will take such heterogeneity problems into account (Baltagi, 2001). The econometric model is specified thus;

$$ROA_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 LIQ_{it} + \beta_3 LVR_{it} + \beta_4 SIZE_{it} + \beta_5 GDP_{it} + \beta_6 INF_{it} + \beta_7 INTR_{it} + \mu_{it} \dots (i)$$

Where ROA is the dependent variable and seven explanatory variables as performance determinants namely; earning per share,

liquidity, leverage, size, Gross domestic product inflation rate and interest Rate, β_0 is the intercept, while μ_{it} is the error term.

3.4 Variable Selection and Justification

The selection and justification of the variables used for the study are presented.

3.4.1 Dependent Variable

Return on Assets (ROA): This variable serves as the dependent variable. The main objective of the study is to examine the determinants of this variable given the unpredictable nature of corporate performance of manufacturing firms in Nigeria. Previous studies (for example, Ojo 2012; Akinlo & Asaolu 2012; Enekwe, Agu & Eziedo 2014; Osuagwu 2014) amongst others opined that corporate performance could be influenced by both firm-specific factors and macroeconomic factors. It is measured by the ratio of annual profit after tax to total assets.

3.4.2 Independent Variable

Leverage (LVR): This is one of the main determinants of corporate performance from review of extant literature. Several empirical evidences suggest that leverage could influence corporate performance. For example, Ali and Bilal (2018) argued that leverage of a highly geared firm would be detrimental to the performance of the firm due to repayment of principal and interest. Al-Jafari and Samman (2015); Jeleel and Olayiwola (2017); Bayaraa (2017); Odusanya and Yinusa (2018) posit that a firm that borrows to fund its operation, will most likely to be constrained to invest in profitable risky projects. Leverage is measured in this study as the ratio of total debt to net worth.

Liquidity (LIQ): Ehi-Oshio *et al.*, (2013), Egbunike and Okerekeoti (2018); Owolabi and Obida (2012) have shown how liquidity can influence corporate performance. They argued

that a highly liquid firm could be counterproductive in the sense that too much liquid asset could hamper profitable businesses of an organization. Liquidity could be a two edged sword. While liquidity could be a profitable goal for an organization to pursue, high liquidity could also constrain profitability. On the contrary, illiquidity can upset a profitable business plan. Organization should therefore strike a balance between liquidity and profitability.

Earnings per share (EPS): Earnings per share can influence corporate performance. Bayarara (2017) showed that EPS is a significant determinant of corporate performance. EPS is a measure of what is available to shareholders after a firm has met all its commitments. A robust EPS conveys information to investors that the firm is well managed with profitable future opportunities.

A positive relationship is expected between EPS and corporate performance. It is measured in this study as a ratio of profit after tax to the total number of ordinary shares outstanding. However, Umar; Tanveer; Aslami and Sajid (2012) found a negative relationship between earning per share and profitability.

Firm size (SIZE): The size of the firm could influence the firm's corporate performance in either way. Measut (2013); Jim (2009); Olawale, Ilo and Lawal (2017) found that bigger firms can be more profitable from the benefit of economies of scale. Bigger organizations can attract cheaper sources of funds relative to smaller firms, which will in turn enhance their profitability. Furthermore, they are able to enjoy quantity discount from suppliers as a result of size. They normally take advantages of cheaper cost of inventory to lower prices that attract customers. In addition, bigger firms can attract and retain high calibre staff when compared to smaller firms. Firm size is measured in this study as

the natural logarithm of total asset. Firm size is expected to be positively related to corporate performance.

Real Gross domestic Product (GDP)

Ebunike and Okerekeoti (2018) posit that a country's productivity level can significantly influence the corporate performance of firms. During boom when productivity is expected to be at its peak, consumers purchasing power is enhanced, thereby promoting profitability of the firms. On the other hand, during recession, the consumers' purchasing power is constrained, thereby forcing consumers to cut down consumption. The implication of this is large build-up of unsold stocks that are likely to expire in the manufacturers' warehouse. The end result of this is huge loss to the firms. Real GDP is measured in this study as the percentage change in the total amount of goods and services produced in a country in a particular year by both citizens and foreigners.

Interest Rate (INTR): Literature is replete with the relationship between interest rate and corporate performance. Interest rate is the cost of borrowed funds. A firm that borrows at a high rate is likely to suffer reduced profit, since interest must be paid before declaring profit. Odusanya and Yinusa (2018) in their study showed how interest rate could be detrimental to corporate performance. Interest rate in this study is measured as the average lending rate by banks. It is expected to exert negative and significant relationship with corporate performance.

Inflation Rate (INF): Inflation rate in an economy has significant influence on the performance of companies. High inflation rate could upset business plans, lead to high cost of production and subsequently squeeze profit margins. Besides, inflation could lower demand for goods and services, hence lower profit for companies. Odusanya and Yinusa

(2018); found a negative relationship between inflation rate and corporate performance. Inflation rate in this study is measured by consumer price index (CPI). It is expected to exert a significant negative impact on corporate performance.

4.0 Empirical Results

Table one below presents the result of descriptive statistics of the dependent and independent variables.

Table 1: Descriptive Statistics

	ROA	EPS	LIQ	LVR	SIZE	GDP	INF	INTR
Maximum	2.5600	26.8000	5.5000	1.2100	8.4500	6.6400	17.9000	18.1400
Minimum	-0.7000	-2.4400	0.2400	-0.4100	4.9400	-2.2400	8.5000	15.2500
Std. Dev.	0.2271	4.1558	0.6321	0.2074	0.8228	2.9585	3.0903	0.9591
Skewness	6.6944	3.5730	1.7607	-0.0744	-0.1770	-1.6894	1.0224	-0.5657
Kurtosis	78.8047	18.3821	12.2439	5.3958	2.1035	4.3010	3.0925	2.2370
Jarque-Bera	46170.43	2241.50	762.42	44.898	17.2388	102.1431	32.6515	14.5114
Probability	0.0000	0.0000	0.0000	0.0000	0.0267	0.0000	0.0000	0.0000
Observation	187	187	187	187	187	187	187	187
Cross sections	27	27	27	27	27	27	27	27

Source: Authors Computation from E-views.

Table 1 presents the result of the descriptive statistics, result showed that the sampled firms have a maximum return on asset of 2.56, the maximum earning per share is 26.8, the maximum liquidity of 5.5, leverage is 1.21, the maximum size of the sampled firm is 8.43. in the period under study, the maximum GDP growth rate was 6.64, inflation rate peaked at 17.9% and the maximum rate of interest is 18.14. The minimum values of the variables ROA, EPS, LIQ,

LVR, SIZE, GDP, INF, and INTR are -0.7, -2.44, 0.24, -0.41, 4.94, -2.24, 8.5 and 15.25 respectively.

The standard deviation, which measures the extent to which the variables disperse from the mean are 0.2271, 4.1558, 0.6321, 0.2074, 0.8228, 2.9585, 3.0903 and 0.9591 for ROA, EPS, LIQ, LVR, SIZE, GDP, INF and INTR respectively. Results of the descriptive statistics showed that ROA, EPS, LIQ and INF are positively skewed, while LVR, SIZE, GDP and INTR are negatively skewed.

Table 2: Correlation Matrix

	ROA	EPS	LIQ	LVR	SIZE	GDP	INF	INTR
ROA	1.0000	0.3424	0.1706	-0.1028	0.3224	0.0844	0.0081	0.0097
EPS		1.0000	-0.0426	0.0601	0.4899	-0.0676	-0.0001	-0.0679
LIQ			1.0000	-0.3389	0.0104	0.0069	-0.0009	-0.0229
LVR				1.0000	-0.0871	0.1390	-0.0271	0.1267
SIZE					1.0000	-0.0798	0.0152	-0.0789
GDP						1.0000	-0.7221	0.7584
INF							1.0000	0.0517
INTR								1.0000

Source: Authors computation from E-views.

Table 2 presents the result of correlation matrix. The result showed that almost all the variables are positively correlated with ROA except LVR which is negatively correlated with ROA. It reveals that, apart from GDP which is strongly positively correlated with INTR and strongly negatively correlated with INF, most of the variables do not appear to be strongly correlated with each other.

Table 3: Panel Data Regression Results
Dependent variable; Return on Asset (ROA)

Independent variables	Pooled OLS	Fixed Effect	Random Effect
C	-0.2011 (-0.4750)	1.9133 (1.8267)	-0.2081 (-0.5477)
EPS	0.0150*** (3.5973)	-0.0364** (-4.0627)	0.0108** (2.5393)
LIQ	0.0528** (2.0933)	0.0167 (0.5265)	0.0457** (1.8886)
LVR	-0.0912 (-1.1569)	-0.1557 (-0.6210)	-0.1008 (-1.3537)
SIZE	0.0541** (2.5687)	-0.1686 (-1.2849)	0.0606** (2.7279)
GDP	0.0281** (2.8718)	0.0131 (1.3257)	0.0280*** (3.2790)
INF	-0.0154** (-2.1777)	0.0046 (0.6628)	-0.0152** (-2.4687)
INTR	-0.0267 (-1.1106)	-0.0372 (-1.7709)	-0.0274 (-1.3125)
R ²	0.22	0.50	0.15
Adj R ²	0.19	0.39	0.12
F-stat.	7.32	4.80	4.80

Source: Authors computation from E views

***, ** denote significance at 1% and 5% respectively t-values are in parenthesis Table 3 presents the result of panel data regression analysis. The estimates are calculated using three estimation models earlier stated in the methodology (The Ordinary Least Square, Fixed Effect Model and Random Effect Model). The results are presented in column two for pooled OLS, column three for fixed effect model and column four for random effect model for robustness.

Based on the significance of the t-statistics, the Random Effect Model (Column four) produced the most robust result. As robustness check, when the probability of Hausman specification test is significant, random effect result becomes acceptable. The

random effect result is quite similar to that of panel OLS. Therefore, the discussion on the determinants of corporate performance is based on the random effect estimate (Column 4).

The results show that all the variables except for leverage and interest rate are significant in influencing corporate performance GDP is significant at 1% level while EPS, LIQ, SIZE and INF are significant at 5% level.

The significantly positive relationship between earning per share and profitability is consistent with Bayaraa (2017) who found a significant positive relationship between some firm specific variables and financial performance in Mangolian firms.

Firms with robust profit in relation to the number of outstanding shares are likely to perform better than firms with low profit after tax. Investors believe that a highly profitable firm will have enough fund for profitable future investment.

Similar to the result of earning per share is the result of liquidity. As proxied by the ratio of current assets to current liabilities, liquid firms would be able to meet their short term obligations as at when due.

Ali and Bilal (2018) expect that liquid firms are likely to have invested in working capital by negotiating quantity discount with suppliers, unlike less liquid firms that may procure inventory at higher cost and may even experience stock out.

The negative relationship found between leverage and corporate performance is consistent with several previous studies such as Odusanya and Yinusa (2018), Bayaraa (2017), Jeel and Olayiwola (2017), Ali and Bilal (2018). A highly leveraged firm implies debt repayment with interest have to be made by potentially profitable firms. Debt repayment will also hamper efficient working capital management that may undermine profitability of the firms. Though some scholars argued that lenders put pressure on borrowers to better manage their business through loan monitoring, it is unclear whether Nigerian lenders have mastered the act of loan monitoring that could upscale businesses.

Odusanya and Yinusa (2018) found significant negative relationship between interest rate and corporate performance. A similar result emerged in this study and the finding is consistent with other studies. Interest repayment, especially, higher rate as charged by Nigerian banks can exert negative pressure on firms' profitability.

The positive and significant relationship observed between firm size and corporate performance could be attributed to economies of scale enjoyed by larger firms.

Big firms can negotiate quantity discounts in procurement of inventories and also possess superior inventory management techniques. Larger firms are also able to attract staff with superior managerial skills with shorter learning curves. This is unlike smaller firms that would have oriented and trained staff who are most times attracted to larger firms. The result is consistent with the studies by Ehi-Oshio *et al.*, (2013); and Al-Jafari and Al Samman (2015).

Another non-firm specific variable GDP was found to exert positive and significant relationship with corporate performance. This is expected, considering the fact that during economic boom, the purchasing power of the citizenry is enhanced which will translate into procurement of stocks of inventories from manufacturers.

An interesting finding from the study is the positive and significant relationship found between inflation and corporate performance. This is consistent with the findings of Odusanya and Yinusa (2018). During inflationary period, cost of production rises without corresponding rise in the price of goods and services. This situation lowers the profitability of the firms.

Conclusion and Policy Implications

The unimpressive performance of manufacturing firms in Nigeria over the past years raises the questions on the probable reasons and solutions. Hence, this study is motivated to unravel the causes of abysmal performance of Nigerian manufacturing firms. Using data from 26 manufacturing firms over a period of 7 years 2011 to 2011, the relationship between firm-specific, macroeconomic variables and corporate performance are studied. The results of the random effect panel data regression model provide findings for this conclusion.

Consistent with extant literature, the major determinants of corporate performance

were examined from both firm specific factors and macroeconomic factors. Result from the analysis revealed that both firm specific factors and macroeconomic variables jointly determine corporate performance of listed Nigerian manufacturing companies. Specifically, leverage, inflation and interest rate are found to exert negative relationship with corporate performance. While inflation exerts significant negative relationship with corporate performance, leverage and interest rate exert insignificant negative effect.

On the contrary, earning per share, liquidity, size and gross domestic product exert positive and significant relationship with corporate performance. There is no doubt that this study has contributed to the scarce but important area in corporate finance literature. The diagnostic statistics however show a very low R^2 and adjusted R^2 but significant F-statistics. The low coefficient of determination and adjusted R^2 is an indication that there may

be other corporate profitability determinants not captured in the model. The result of this study would be useful to investors in evaluating profitable firms when making investment decisions as it may provide a guide to the financial health of such firms. It is found that two of the negative determinants (interest rate and leverage) are within the control of corporate managers. It is therefore imperative that corporate managers closely monitor capital structure and cost of borrowing from lenders.

Based on the findings of this study, it is therefore recommended that management and board of manufacturing firms in Nigeria rely more on internal sources of funding such as equity than external sources, due to burden of repayment of principal and interest which is usually high. Similarly, they should pay adequate attention to corporate performance enhancers such as earning per share, liquidity and firm size.

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