

OWNERSHIP CONCENTRATION AND FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS IN NIGERIA

Ajao, Mayowa Gabriel¹

Ejokehuma, Jude Osazuwa¹

Abstract

This study investigates the effect of ownership concentration on financial performance of manufacturing firms in Nigeria. The study collected secondary data from various financial reports of the sampled listed manufacturing firms in the Nigerian Stock Exchange. It employed the use of co-integration test and the system-GMM for a period 2009-2019 as analytical technique with return on asset, and Tobin-Q serving as dependent variables while government ownership concentration, block ownership concentration, and institutional ownership concentration were used as explanatory variables. The empirical results revealed that government ownership concentration, block ownership concentration and institutional ownership concentration all have significant effect (direct and inverse) on the performance indicators (ROA, TOBIN Q) used in the study. The results of robustness check also revealed that government ownership concentration has predominately negative effect on financial performance for the respective firms. The coefficient of block ownership concentration is also largely positive for most of the manufacturing firms, while that of institutional ownership concentration is largely negative. Based on these, the study recommends that the policy makers and government should create favourable policies to encourage balanced investment from all categories of investors and ensure that ownership does not only grow among spread owners but rather few owners who have the where withal to diversify and attract skills and competencies to improve firm performance. Government should also retain some ownership in foreign and local firms to enhance shareholders' confidence.

Keywords: Manufacturing firms, Ownership concentration, Performance, Sub-Saharan Africa, Return on Asset. **JEL Classification:** G32, L25, L60

Introduction

In the era of industrialisation and liberal markets, firms across the world are more opened to extreme competition from other firms around the globe (Gomez (2005). The last twenty years have witnessed significant changes in ownership concentration with respect to ownership structure mechanism, due to liquidation of reputable firms like Enron and WorldCom in U.S.A. The trend was

¹ Dept. of Banking and Finance, Faculty of Management Sciences, University of Benin, Benin City, Nigeria. ajao.mayowa@uniben.edu +234-803-568-1851

replicated across the globe as evidenced by collapse of Parmalat Company in Europe, Chuo Aoyama in Asia, JCl and Randgold in South Africa, Skye bank in Nigeria, Uchumi, imperial bank and chase bank in Kenya (Ongore & K'Obonyo, 2011). Attracting keen scholarly attention to the relevance of the various ownership concentration influencing profitability of firms. In the last twenty years, the link between ownership concentration and profitability of firms has led to a serious concern to corporate investors leading to a significant consideration in the larger scope of modern finance among various participants (Benjamin & Dirk, 2015; Madhani, 2016).

Corporate governance is to safeguard the interest of business activities making sure that board exercise rational efforts to attain the shareholder goals, (Jensen & Meckling, 1976). Hence, corporate governance mechanism and guidelines have led to huge consideration on an international scale as they enhance the completely cost-effective mechanism for the benefits of all stakeholders; evidence has revealed that both local and international investors are largely interested in firms with decent corporate governance structure (Mugobo, Mutize & Aspelung, 2016). According to Nganga (2017), the principals and management in an effort to combine their welfare result to a structure-conduct-performance framework aimed at enhancing increased efficiency of a firm, the principals and management engage in a trade-off strategy through the incentives to reduce agency conflicts and maximise wealth creation for the firm.

Jiang (2015) recommends that since ownership concentration is an important component in present corporate governance structure, there should be a departure of firm ownership from firm management. In order to enhance the growth of firms, firms owners (principals) should take the firm operational rights to skilled agents to run the firm hence retaining the residual right to acquire control. Clash of interest between owners and managers results in manager's self-seeking attitude of short-run profit damaging the welfare of principal by extension the prescribed agreement. Villalonga and Amit (2006) suggest a direct relationship between rights acquisition and company's profitability because board members elected by the owners' function as the intermediary between them and their managers. The board is saddled with four main obligations such as leadership obligation; stewardship obligation; monitoring obligation; and reporting to owners, which has a direct bearing on financial performance. Jensen (1989) and Lins (2002) argue that the effectiveness of the board helps to alleviate the agency conflicts whenever business decisions and choices of principals are at variance through controlling and monitoring the managerial actions. The internal influence imposed by the board reinforces the external function of the markets in monitoring and controlling managers (Jensen, 1989).

Berle and Means' (1932) that proposed an indirect association among the diffusion of equity holdings and company's profitability initiated the modern argument about the owner-manager relationship. They proposed that a complex diffuse rights breakdown the relationship among management and ownership, in furtherance optimisation of income is hence not certain. The fewer equities each

equity holder holds the less authority he or she can exert on the skilled agent. Their findings reveals that principal managed companies were more lucrative than companies managed by agents. They suggested that time perspective and the kind of industry were also relevant while firm size had no impact on firm profitability.

Mudi (2017) observes the impact of dispersed structure on performance of firms listed at the Nairobi Stock Exchange (NSE). He discovered a positive correlation among dispersed claims and profitability of quoted firms at the NSE. The study however failed to argue out the case of firms in a concentrated ownership platform. This study explores the case of government, block, and institutional ownership structures, which form a constituent of ownership concentration. This study therefore, intends to try to resolve the contradictory results in the study done by Mudi (2017) by reassessing concentrated ownership and its role on the profitability of quoted manufacturing companies in Nigeria

Conceptual Review

Financial performance

Performance more often discussed within the context of set goals and their attainment includes outcomes through contributions of individuals or teams to the organisation's strategic goals. Recognising the firm as a going concern, financial performance becomes very germane in meeting a firm's financial obligations to keep the entity going. Brealey, Myers and Marcus (2009) characterise firm performance as a product of how best a company employs its resources for its entire processes and generate income for a specific time. Firm performance is a function of organisational effectiveness that incorporate three regions of performance, which are financial, market performance and shareholder value.

Measurement of financial performance: Peters and Bagshaw (2014) focused on parameters that are significantly required for the profitability of the firm. From reviewed studies many researchers used numerous methods to quantify profitability of companies that includes; Return on Asset (ROA) and Return on Equity (ROE) (Peters & Bagshaw, 2014; Ahamed, 2014; Ofori, 2014), while Flammer (2013) employed Net Profit Margin (NPM) and Return On Asset (ROA). Singh (2014) used (ROA) and Tobin's Q, and total shareholder returns (TSR), Cavaco and Crifo (2013) use Tobin Q and ROA. Therefore, this study measured company's profitability with (Return on Asset and Tobin's Q). Thus, Tobin's Q is an onward-looking indicator that delivers sufficient information about firm profitability with a consideration of investors' valuation of both real and intangible assets. Tobin's Q is a significant measure when equating various businesses because the ratio signifies the future cash flows of net present value divided by the replacement expenses of real assets. For ROA, it is probably one of the best overall indicator of profitability. It ties together the results of operations with the resources' used to produce such results.

Ownership concentration: Ownership concentration is a vital internal corporate governance component where principals can scrutinise and oversee the operations of the company to safeguard their investment, (Madhani, 2016). It signifies the

proportion of equity owned by single shareholder and huge block of shareholders (individuals that holds minimum 5 % of shares within the firm). According to Maina (2014), Benjamin and Dirk (2015) and Nahila and Amarjeet (2016) concentrated ownership is defined by the distribution of stakes in relation to the distinctiveness of the equity holders and its classification within company's governance structure that has impacted firm financial performance for several decades. Jiang (2015) recommends that since rights concentration is an important component in present company's governance structure, there should be a departure of firm ownership from firm management. In order to enhance the growth of firms, firms' owners (principals) should take the firm operational privileges to skilled agents to run the firm hence retaining the residual power to acquire control. Clash of interest between owners and managers results in manager's self-seeking attitude of short-run profit damaging the welfare of principal by extension the prescribed agreement. Incentives provided by shareholders for managers can unite the owners and the agent towards promoting welfare of the two groups so that agents will give maximum concentration to the advancement of organisational goals besides considering themselves, thus leading to accomplishment of the contractual agreement (Matengo, 2008). Three basic types of ownership concentration have been identified in the extant literature.

Block ownership concentration: Block ownership concentration denotes proportion of a firm's equity acquired by major equity holders. A major acquisition of equity intends to provide additional burden on agents to act in manners that are profit optimising. In backing this debate, Gorton and Schmid (1996), Shleifer and Vishny (1997), Morck et al. (1988), and Wruck (1989) assert that at least limits of rights acquisition, an upsurge in acquisition will be linked with a rise in company financial performance; however, if it exceeds a particular limit of acquisition, the correlation may be adverse. Further works by Renneboog (2000) gave findings not completely in support with the assumption of an affirmative relationship. Employing a host of parameters recommended by Agrawal and Knoeber (1996), the result suggested no claims to justify the assumption of a direct correlation among company's profitability and rights acquisition. Holderness and Sheehan (1988) find that major ownership concentration does not significantly influence financial performance.

Government ownership concentration: Government ownership is estimated to enhance performance through political appointment of the managers. Mutisaya (2015) posit that government ownership is incompetent and rigid and the ownership rights of government firms do not have distinct incentive to better firm performance. Boubakri and Cosset (2005) suggest that government owned firms are advantageous as the government can allocate capital to them for investment to promote economic and financial improvement, mostly, for nations that have economic institutions that are underdeveloped and utilising government funds to finance projects with social benefits. However, he points out that government should transfer control rights of the decision making process from politicians to

managers to improve firm performance as agents are highly interested in firm profitability than the officials.

Institutional ownership concentration: Institutional equity holders are organisations that own huge sums of resources to invest and they do commit huge amount of funds into a firm's equity e.g. pension reserves, insurance firms, mutual funds and combined performance is termed as the neutrality assumption. Institutions play a supervising duty in minimising the agency conflicts between principal and agent.

Empirical Review

Conceptual review on the impact of ownership concentration and profitability of firms are typically of two kinds—monitoring and expropriation assumption. Monitoring assumption can be connected with the mechanisms of Berle and Means (1932) and the study of Shleifer and Vishny (1986). Their position was based on the agency conflicts arising after defective conventions based on asymmetry information between the owner and the manager once there is a departure of control from ownership. They regarded ownership concentration as a company's governance device, which necessitate incentive for checking agents against actualising their selfish interest at the detriment of principals.

Ownership structure can be along two scopes: rights acquisition and ownership mix. Right acquisition implies stakes of the biggest shareholder while ownership mix is the allotment of company's equity with reference to the distinctiveness of the biggest equity holders. Gonzalez and Molina (2010) noted that, superior rights-acquisition enhances company's profitability and concluded that rights structure is the essential factor that affects firm's ownership and supervises resources distribution, and it has a huge effect on firm performance. Though studies by Chen (2013), Zahoor (2014) and Iqbal (2014) pointed, out that, key factors that influence firm's financial performance are corporate social responsibility activities adopted by a company and that costs on social development have an impact on performance on deposit money banks in Kenya. Though according to Friedman (1953), Saunders (2000) and Nganga (2017) firms operate uniformly well under various rights settings since competition in the market will reduce all ineffective forms in the end. Therefore, there is no influence of rights structure on profitability, an ideal rights structure and profitability depends on the environment.

Santamaria and Azofra (2011) carry out an examination on the association for ownership structure and corporate profitability of eighty banks in Spain. Employing panel data collected between 1996 and 2004, analysed by regression models and estimated by the GMM (Generalised Methods of Moments) the study found a point of departure for voting rights and the larger shareholders cash flow for smaller firms by ROA. The study was well conducted with reference to financial ratios determining bank performance. In a related study Adebisi and Kajola (2011) examines the correlation between rights structure and firm performance in Nigeria, using a sample of thirty listed companies from 2001 to 2008, using pooled OLS, the outcome being a significant negative association

between rights structure and performance of the company. The research does not back a non-linear correlation for rights structure and profitability of the firm.

Wanjiku (2014) investigates the effect of ownership structure on profitability of sixty-three quoted companies at the NSE between 2010 to 2014. The researcher employed both cross-sectional and descriptive survey method to allow for evaluation of the results of the research. The study found that ownership concentration alleviates conflicting interest between managers and owners thus promoting improved monitoring. Mutisya (2015) examines the correlation among investors' shareholding and firm profitability by adopting a descriptive research design of sixty-four listed companies on the NSE from 2010 to 2014. Multiple regression analysis was deployed in evaluating the influence of ownership structure on listed companies' profitability. Percentage of foreign shareholdings and return on assets reported a weak positive correlation as the outcome of the study. However, the researcher was limited to one set of ownership identity. Mugobo et al. (2016) investigate the influence of company's control through ownership structures; rights acquisition, state ownership and administrative ownership on firm profitability. A multiple regression analysis was used on sampled data gathered over ten years from 2001 to 2010 for eighty South Africa firms with ROA as indicator for profitability. Findings revealed a positive relationship between rights acquisition and profitability of the firm.

Mudi (2017) investigates the influence of rights structure on profitability of firms quoted on the NSE. It employed descriptive survey and longitudinal research design of fifty-two companies quoted on the NSE between 2011 and 2016. The research found out that rights acquisition has a huge influence on firm profitability. Nganga (2017) examines the correlation among ownership structure and profitability of companies, cross-sectional survey design was adopted. A sample of thirty-nine firms was drawn using stratified random sampling. The multivariate analysis and multiple regression analysis models results reported that each type of rights acquisition has a huge influence on performance of the firm.

Ogaluzor (2019) the study examines the correlation between share rights acquisition and profitability of quoted companies in NSE. A cross-sectional secondary data for 2016 was used for a sample size of twenty quoted firms on the NSE using judgmental sampling technique. Share ownership structure was viewed from the dimensions of rights acquisition and administrative share possession while profitability was measured with ROA. A Generalised Least Square (GLS) regression technique was used. Results obtained confirmed a negative significant association between rights acquisition and profitability. This study was contradictory after findings of both positive relationships among rights acquisition and managerial share possession with firm profitability and the study was limited to one set of ownership concentration identity.

Established on the extensive and robust empirical review above, it is clear that ownership acquisition and firm performance has been largely explored from diverse perspectives and methodologies such as correlation, ANOVA, ordinary least square regression, multiple regression analysis, panel regression analysis,

data envelopment analysis. These methods are largely part of conventional techniques regrettably, these approaches have their drawbacks and demerits in that they are sensitive to outliers, focuses on the mean of the dependent variables, the test statistics might be unreliable when data is not normally distributed. This can also include that it converges gradually to absolute efficiency i.e. it is only suitable for relative efficiency and the problem of computation with respect to large decision-making units. This study however adopts the system Generalised Method of Moment (GMM) technique. Accordingly, the system GMM technique in active panel data models pools moment settings for the differenced equation with moment settings for the models in ranks. An early optimal weight matrix underneath homoscedasticity and non-serial link is not identified for the assessment technique. The system GMM pools moment settings of both difference and level equations, that can make assessment most effectual. This technique supports the premise that the first difference of instrumental parameters for rank parameters are not connected with unobserved specific effects, that is an indication that the difference of scheduled parameters can be used as tools for rank equations.

Methodology

The study adopts the causal research design to investigate the impact of ownership concentration on firm performance of selected manufacturing firms in Nigeria. It involves the gathering of data for any given variable over a period with the aim of monitoring changes in such data. The variables involved are secondary in nature, which the researcher has no power to influence because they have already occurred. All quoted manufacturing firms listed on the Nigerian Stock Exchange constitute the population of this study while a sample of one hundred manufacturing firms were purposively selected based on data accessibility and the requisite information for the period under study. The selected quoted manufacturing firms have also witnessed significant modifications in ownership concentration during the period. The relevant data for this study were obtained from the various audited financial statements of sampled manufacturing firms.

Model Specification

This study employs two specific models such as bookkeeping base performance and the market base performance indicators. The model incorporating a market based valuation measure (Tobin Q) and decomposing ownership concentration into various variables (government ownership, block ownership, institutional ownership) to suit, the study is stated in functional form as follow:

$$ROA_{it} = f(GOWN, BLOWN, INOWN, ASSETS, AGE) \dots \dots \dots I$$

$$TOBIN Q_{it} = f(GOWN, BLOWN, INOWN, ASSETS, AGE) \dots \dots \dots II$$

The econometric form of the models is stated below as:

$$ROA_{it} = \beta_0 + \beta_1 GOWN_{it} + \beta_2 BLOWN_{it} + \beta_3 INOWN_{it} + \beta_4 ASSETS_{it} + \beta_5 AGE_{it} + U_t \dots \dots \dots III$$

$$TOBIN Q_{it} = \alpha_0 + \beta_1 GOWN_{it} + \alpha_2 BLOWN_{it} + \alpha_3 INOWN_{it} + \alpha_4 ASSETS_{it} + \alpha_5 AGE_{it} + U_t) \dots \dots \dots IV$$

Where;

GOWN =	Government Ownership	BLOWN =	Block Ownership
INOWN =	Institutional Ownership	ASSETS =	Total Asset
AGE =	Age of Firm	ROA =	Return on Assets
TOBIN Q =	Tobin Q		

Where *i* represent companies in all sample and *t* represents the scope or period of study.

β_0 to β_5 are coefficients of the variables to be appraised and U_t is the error term.

Hence the GMM model specification is:

$$ROA_{it,t-1} = \alpha_t + \sum_{j=1}^m \beta_j ROA_{t-1} + \sum_{j=1}^m \beta_j GOWN + \sum_{j=1}^m \beta_j BLOWN + \sum_{j=1}^m \beta_j INOWN + \sum_{j=1}^m \beta_j AGE + \sum_{j=1}^m \beta_j ASSETS + F_i + \varepsilon_{it} \dots \dots (V)$$

$$TOBIN Q_{it,t-1} = \alpha_t + \sum_{j=1}^m \alpha_j TOBIN Q_{t-1} + \sum_{j=1}^m \alpha_j GOWN + \sum_{j=1}^m \alpha_j BLOWN + \sum_{j=1}^m \alpha_j INOWN + \sum_{j=1}^m \alpha_j AGE + \sum_{j=1}^m \alpha_j ASSETS + F_i + \varepsilon_{it} \dots \dots (VI)$$

Empirical Analysis

Testing for Stationarity

Table I reports the outcome of the stationary tests conducted for the variables. From the stationarity tests results, all the variables under consideration have first-order integration. This implies that, all the parameters used in this study were stationary at first difference I (1); thus, the panel estimations exhibit a common unit root process. Explicitly, unit root tests for Firm Listing Age could not be computed in any of the tests approaches sequel to near singular matrix error, which is evidenced of Co- linearity among the listing age of successive firms in the panel arrangement. This implies that, the listing age of most of the sampled firms exhibit exact Co-linearity. Consequently, Firm Listing Age will not be captured in our GMM estimation, but only in the traditional estimations, since the underlying theory is premised on stationarity assumption (Arellano & Bond, 1991; Arellano & Bover, 1995; Blundell & Bond, 1998). However, Block Ownership, Institutional Ownership, Government Ownership, Total Assets, Tobin’s Q and Return on Assets were stationary at 1% levels in all the tests results (though, only Tobin’s Q and ROA were tested for unit root using the Im, Pesaran and Shin procedure). Thus, all other variables captured in our dynamic panel modeling procedure, (GMM) with the exception of Firm Listing Age, following the recommendation of Arellano and Bond (1991), Arellano and Bover (1995) and Blundell and Bond (1998), those variables of the GMM equations must be stationary in their first difference.

Table I: Stationarity Test at First Differences: The Levin, Lin and Chu; Im, Pesaran and Shin; ADF - Fisher and PP - Fisher Approach

Variables	Levin, Lin and Chu			Im, Pesaran and Shin W-stat			ADF - Fisher Chi-square			PP - Fisher Chi-square		
	Null Hypothesis: Unit root (assumes common unit root process)			Null Hypothesis: Unit root (assumes individual unit root process)			Null Hypothesis: Unit root (assumes individual unit root process)			Null Hypothesis: Unit root (assumes individual unit root process)		
	Statistic	Prob	Remark	Statistic	Prob	Remark	Statistic	Prob	Remark	Statistic	Prob	Remark
AGE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BLOWN	-4.4	0.00***	(I)	NA	NA	NA	26.06	0.00***	(I)	43.48	0.00***	(I)
GOWN	-2.83	0.00***	(I)	NA	NA	NA	10.41	0.03**	(I)	13.6	0.01***	(I)
INOWN	-4.4	0.00***	(I)	NA	NA	NA	26.06	0.00***	(I)	43.48	0.00***	(I)
ASSETS	-4.69	0.00***	(I)	NA	NA	NA	37.71	0.01***	(I)	79.19	0.00***	(I)
ROA	-3.82	0.00***	(I)	-1.66	0.05**	(I)	37.54	0.01***	(I)	62.84	0.00***	(I)
TOBINQ	-7.96	0.00***	(I)	-4.39	0.00***	(I)	58.18	0.00***	(I)	78.56	0.00***	(I)

NB: *Significant at 10%, **Significant at 5%, ***Significant at 1%. NA: not available.
 Source: Authors' Computation, 2019

Panel Co-Integration Test

The panel co-integration test also adopts the procedure advanced by Johansen Fisher. The co-integration result for the firms' parameters indicates the presence of a co-integrating relationship among the parameters in both Tobin's Q and ROA models as revealed by the significance of the Fisher Ratio from Trace test and that from Max-Tobin's Eigen test. Precisely, Trace test reveals 2 co-integrating equations at the 5% level and 1 co-integrating equation at the 1% level, while the Max-eigen value test reveals 1 co-integrating equation at both 5% and 1% level from the ROA model. In similar manner, the Trace test indicates 6 co-integrating equations at the 5% level and 2 co-integrating equations at the 1% level, while the Max-eigen value test indicates 1 co-integrating equation at the 5% level and no co-integration at the 1% level from the TOBINQ model. The result indicates that all the parameters used in the study are all significant at the conventional test levels as shown in Panel A and B of Table II. Therefore, the results from the co-integration test are in agreement with panel pooling procedure for assessment in this study.

Table II: Johansen-Fisher Co-Integration Test Results

PANEL A: Fisher Statistics from Trace & Max-Eigen Test Result for ROA Model Variables							
Variables	Hypothesized No. of CE(s)	Trace Statistic	5 Percent Critical Value	1 Percent Critical Value	Max-Eigen statistic	5 Percent Critical Value	1 Percent Critical Value
Series: AGE BLOWN GOWN INOWN ROA	None	116.45**	94.15	103.18	46.20**	39.37	45.10
	At most 1	70.25**	68.52	76.07	27.26	33.46	38.77
	At most 2	42.98	47.21	54.46	16.66	27.07	32.24
	At most 3	26.32	29.68	35.65	10.95	20.97	25.52
	At most 4	15.37	15.41	20.04	10.17	14.07	18.63
	At most 5	5.20	3.76	6.65	5.20	3.76	6.65
PANEL B: Fisher Statistics from Trace & Max-Eigen Test Result for TOBINQ Model Variables							
Variables	Hypothesized No. of CE(s)	Trace Statistic	5 Percent Critical Value	1 Percent Critical Value	Max-Eigen statistic	5 Percent Critical Value	1 Percent Critical Value
Series: AGE BLOWN GOWN INOWN TOBINQ	None	116.49**	94.15	103.18	40.10*	39.37	45.10
	At most 1	76.39**	68.52	76.07	24.96	33.46	38.77
	At most 2	51.43*	47.21	54.46	20.86	27.07	32.24
	At most 3	30.58*	29.68	35.65	14.59	20.97	25.52
	At most 4	15.98*	15.41	20.04	9.06	14.07	18.63
	At most 5	6.92**	3.76	6.65	6.92	3.76	6.65

*** denotes rejection of the hypothesis at the 5%(1%) level*

Source: Authors' Computation, 2019

Analysis of the Relationship between Ownership Concentration and Financial Performance

The outcome for the panel estimation for the manufacturing firms are presented in Table III and Table IV. Generally, the dynamic panel estimation model (GMM) is the preferred model for this study. Nonetheless, results from the traditional estimation (fixed effects and random effects model) are produced and discussed as part of our robustness check. In addition, the Hausman specification tests conveyed in the lower part of Table III and Table IV reject the random-effects model in favour of the fixed effects model for both ROA and Tobin's Q equations. The consequence of the above results is that some variables may vary over time, but fixed across firms, and others may vary across firms, but fixed over time. The inference that can be drawn from the Hausman specification test is that the fixed-effects model is preferred to the random-effects model for the levels regression assessments for both Tobin's Q and ROA models.

More so, results of the dynamic model for both ROA and Tobin's Q are presented in the second parts of Table III and Table IV respectively. The outcomes of the second-order serial correlation test for both equations (the Arellano-Bond test) indicate that residuals from the dynamic panel equation are not serially correlated. This further proves the validity and unbiased nature of the set of instrumental variables employed in our dynamic panel estimations. The p-value of the Sargan test is considerably large for both models. As a result, we fail to reject the null hypothesis at 1% level, that the set of instruments we used in GMM for both the ROA and TOBINQ models are correctly specified (no misspecification in our GMM modelling).

From the results in Table III, the coefficient of one-period lagged value of ROA was positive, (though, statistically insignificant) in the dynamic panel model. Specifically, the result indicates that a unit rise in one period lagged value of ROA will lead to a rise in financial performance in the current year by 0.23 unit. From the results in Table IV also, the coefficient of one-period lagged value of TOBINQ was positive and statistically significant at 1% in the dynamic panel model and is in line with our earlier findings. Specifically, the result depicts that a unit increase in the TOBINQ in the previous year will lead to a corresponding increase in financial performance (proxied by Tobin's Q) in the current year by 0.06 unit.

Furthermore, the coefficient of Government ownership concentration was negative in all panel estimations except in Tobin's Q random effects model. Furthermore, it was statistically significant at 1% level only in the ROA fixed effects model and 5% in both random effects and fixed effects models from the Tobin's Q equation. Obviously, it can be inferred from the results that, a unit rise in Government ownership concentration will reduce the firm's profitability in terms of ROA by 0.77 unit and 0.57 unit respectively and a decrease in Tobin's Q by 0.02 unit. Also, the coefficient of one-period lagged value of Government ownership concentration was positive in both random effects, fixed effects and dynamic panel estimation results from the ROA model, while it was found to be negative in all estimations for the Tobin's Q model. Likewise, it was statistically significant at 1% in the ROA fixed effects model as well as dynamic panel model from the Tobin's Q equation.

In addition, the results show that, 1 unit increase in one-period lagged value of Government ownership concentration will lead to an increase in return on Assets by 1.16 units and 0.40 unit, and a decrease in the Tobin's Q value by 0.04 and 0.05 respectively. This finding further substantiates earlier findings of Netter et al. (2001) and Boubakri and Cosset (2005) who argue that government owned firms are advantaged as the government can allocate capital to them for investment to prompt financial and economic development, mostly for nations that have economic institutions that are underdeveloped and are undertaking government funds for projects with social benefits. Ongore, K'Obonyo and Ogutu (2011), Mrad and Hallara (2012) and Munisi and Randey (2013) further posit that, government retains some ownership in privatised firms to boost shareholder confidence, investment protection and managerial monitoring. However, the inverse results of the Tobin's Q model further confirm previous findings of Ongore, K'Obonyo and Ogutu (2011), Mishari (2012), Alulamusi (2013) and Mutisaya (2015) who observe that government ownership is inefficient, characterised by bureaucratic bottlenecks and the ownership rights of government firms do not have clear incentives to improve firm profitability.

From the Panel data estimation results, the coefficient of Block Ownership concentration was negative in ROA random effects, fixed effects and dynamic panel models, while it was found to be positive in all estimations for the Tobin's Q models. In addition, it was statistically significant at 1% level only in the Tobin's Q models. Explicitly, the results imply that, 1 unit rise in Block

Ownership concentration will cause the performance level (ROA) to drop by about 0.46unit and 0.01unit respectively and an increase in the value of Tobin's Q by 0.08unit and 0.12unit respectively. Similarly, the coefficient of one-period lagged value of Block ownership concentration was negative in both random effects estimation results from the ROA and Tobin's Q models, while it was discovered to be positive in both fixed effects and GMM estimations for both Tobin's Q and ROA models. Likewise, it was statistically significant only at 10% level in the Tobin's Q fixed effects model. Evidently, the results indicate that, about 0.50 unit and 0.44 unit increase in ROA as well as 0.03 unit and 0.02 unit increase in Tobin's Q respectively, is attributed to a unit rise in one-period lagged value of Block ownership concentration in Nigeria. Our results on the positive impacts of Block ownership concentration on firm's profitability further conform to previous findings of Holderness and Sheehan (1988), Morck et al (1988), Wruck (1989), Gorton and Schmid (1996), Shleifer and Vishny (1997) who emphasise that, a high acquisition of equity tends to create more pressure on agents to behave in ways that are value-optimising.

In addition, the coefficient of Institutional Ownership concentration was positive in the ROA fixed effects and random effects models, while it was found to be negative in all estimations for the Tobin's Q model as well as the ROA GMM model. Remarkably, it was statistically significant at 1% level in all estimations for the Tobin's Q model (fixed effects, random effects and GMM models). Clearly, the outcomes depict that, about 0.07unit and 0.12unit decline in Tobin's Q, 0.01unit drop as well as 0.59unit increase in the ROA of the Nigeria manufacturing sector respectively, can be concomitant with a unit increase in Institutional Ownership concentration in the country. Similarly, the coefficient of one-period lagged value of Institutional ownership concentration was negative in both fixed effects and panel estimation results from the ROA model as well as all estimations for the Tobin's Q model. However, it was discovered to be positive in ROA random effects model. In addition, it was significant statistically at 5% level in the TOBINQ fixed effects Model and 10% level in ROA fixed effects models. From the result, about 0.82unit and 0.66unit upsurge in the value of ROA as well as 0.04unit rise in firm's Tobin's Q respectively is due to 1unit decline in one-period lagged value of Institutional ownership concentration.

In addition, the coefficient of total Assets was positive in all panel estimations for ROA in addition to Tobin's Q fixed effects and GMM models. Similarly, it was statistically significant at 10% in ROA fixed effects model and 5% in Tobin's Q fixed effects model. The results however imply that, on the average, about 0.02unit rise in the value ROA and 0.003unit drop in Tobin's Q of the selected manufacturing firms in Nigeria is due to 1unit increase in their total Assets. Additionally, the coefficient representing firms listing age was negative in all panel estimations for the ROA and Tobin's Q (except in Tobin's Q random effects model). More so, it was significant statistically at 1% level in both ROA random effects and fixed effects models respectively and 5% in Tobin's Q fixed effects model. Furthermore, the results reveal that, 1 unit rise in firm's age will

Ownership Concentration and Financial Performance of Manufacturing Firms in Nigeria

lead to a fall in its profitability by 0.85 unit and 0.01unit respectively. The positive relationships in the ROA random effects and dynamic panel models were in line with previous findings of Rhoades (2000), Elyasiani and Jia (2010), Mishari (2012) and Gayan and Ishari (2016); who believe that, supervision by institutional shareholders mostly lead to improved company profitability because, as sophisticated and major investors, institutional shareholders have the strength and expertise to supervise organisation at low cost, and capable to wield enough authority to change the control formation and the firms path of operations.

Table III: Panel Data Estimation Results for ROA Model

Variables	Random Effect Model			Fixed Effect Model			Panel GMM Model		
	Coeff	t-stats	Prob.	Coeff	t-stats	Prob.	Coeff	t-stats	Prob.
C	15.86	3.64	0.00***	36.49	3.68	0.00***	-	-	-
ROA(-1)	-	-	-	-	-	-	0.23	1.56	0.13
GOWN	-0.40	-0.91	0.37	-0.77	-3.50	0.00***	-0.57	-1.12	0.27
GOWN(-1)	0.59	1.21	0.23	1.16	3.50	0.00***	0.40	0.72	0.48
BLOWN	-0.13	-0.34	0.74	-0.46	-1.18	0.24	-0.01	-0.03	0.98
BLOWN(-1)	-0.23	-0.57	0.57	0.50	1.36	0.18	0.44	0.72	0.48
INOWN	0.13	0.24	0.81	0.59	1.21	0.23	-0.01	-0.01	0.99
INOWN(-1)	0.21	0.37	0.71	-0.82	-1.71	0.09*	-0.66	-0.76	0.45
ASSETS	0.01	0.92	0.36	0.03	1.91	0.06*	0.03	1.93	0.06*
AGE	-0.30	-2.60	0.01***	-0.85	-12.43	0.00***	-	-	-
<i>No. of Observation</i>			89				59		
<i>R-Square</i>			0.18				0.64		
<i>Adjusted R-Square</i>			0.10				0.56		
<i>F-Statistics (prob)</i>			2.20(0.04)***			7.51 (0.00)***			
<i>Hausman Test</i>			Chi ² (8) = 23.89(0.0024)						
<i>Sargan Test</i>									
<i>Test for Second Order Autocorrelation</i>			Chi ² (43) = 53.24(0.136) Z = 0.72(0.4685)						

NB: *Significant at 10%, **Significant at 5%, ***Significant at 1%.

Source: Authors' Computation, 2019

Table IV: Panel Data Estimation Results for TOBINQ Model

Variables	Random Effect Model			Fixed Effect Model			Panel GMM Model		
	Coeff	t-stats	Prob.	Coeff	t-stats	Prob.	Coeff	t-stats	Prob.
C	0.42	0.70	0.49	2.13	6.00	0.00***	-	-	-
TOBINQ(-1)	-	-	-	-	-	-	0.06	4.85	0.00***
GOWN	0.05	2.30	0.02**	-0.02	-2.35	0.02**	0.00	-0.01	0.99
GOWN(-1)	-0.04	-1.11	0.27	-0.04	-0.84	0.41	-0.05	-3.16	0.00***
BLOWN	0.08	6.70	0.00***	0.08	4.50	0.00***	0.12	4.53	0.00***
BLOWN(-1)	0.00	-0.10	0.92	0.03	1.93	0.06*	0.02	0.88	0.38
INOWN	-0.06	-3.71	0.00***	-0.07	-2.82	0.01***	-0.12	-3.28	0.00***
INOWN(-1)	-0.01	-0.19	0.85	-0.04	-1.97	0.05**	-0.04	-1.26	0.21
ASSETS	0.00	0.65	0.52	0.00	-5.60	0.00**	0.00	0.06	0.95
AGE	0.00	0.28	0.78	-0.01	-2.05	0.04**	-	-	-
No. of Observation	89			89			69		
R-Square	0.24			0.77					
Adjusted R-Square	0.16			0.72					
F-Statistics (prob)	3.13(0.00)***			14.18(0.00)***					
Hausman Test	Chi ² (8) = 51.46 (0.00)								
Sargan Test	Chi ² (32) = 30.428(0.546)								
Test for Second Order Autocorrelation	Z = -1.03(0.282)								

NB: *Significant at 10%, **Significant at 5% ***Significant at 1%.

Source: Authors' Computation, 2019

Conclusion

The focus of the study was to examine the effect of ownership concentration on the performance of manufacturing firms quoted on the Nigeria Stock Exchange. Data gathered and analysed through both descriptive statistics and correlation analysis established that all concentrated ownership had a huge impact on manufacturing firms' performance. The coefficient of determination from the empirical analysis shows that there was a robust relationship between rights acquisition and profitability of listed firms. Therefore, it can be concluded that different ownership structures were statistically significant in clarifying the profitability of Nigeria manufacturing companies. From the several findings derived from the study, we concluded that government ownership concentration, block ownership concentration, and institutional ownership concentration, have significant effect on profitability of quoted manufacturing firms in Nigeria.

Ownership structure of manufacturing firms has been embraced by most firms and has taken centre stage of most economies in the world. This is so because it helps in building an efficient and robust corporate governance, which can enhance performance of the individual manufacturing firm and lead to the overall growth of the various national economies. In order to gain extensively from the benefits of an effective corporate governance mechanism, regulatory

agencies should put in place different institutional reforms that will help in carrying out operational activities in Nigeria with little or no stringent rules that can help manufacturing firm operate efficiently.

Recommendations

The results from the empirical analysis provide strong background and inferences for certain policy and practical recommendations for practitioners and policy makers. In the first place, the study shows that a long run correlation occurs between ownership concentration and profitability among the manufacturing firms in Nigeria. Thus, firms need to consider corporate governance as a long run strategy for promoting growth and other forms of expansions. Since the study has shown that the impact of rights acquisition differs based on possession dimension, there is need for investors to consider the area of interest before engaging in investment. Block ownership of equity in most manufacturing firms tends to create more pressure on agents to behave in ways that are value optimising hence, highly recommended in today's competitive business world. Supervision by institutional shareholders should be strengthened as it mostly leads to improved company performance because, as sophisticated and major investors, institutional shareholders have the strength and expertise to supervise organisation at low cost, and capable to wield enough authority to change the control formation and the firms' path of operations. Government ownership of sensitive firms should be minimised, as such ownership are usually inefficient and characterised by bureaucratic bottlenecks, which do not have clear incentives to improve firm profitability. The regulatory agencies should also consider providing enabling environment for encouraging diversified ownership base for manufacturing firms to enhance operational activities.

References

- Adebiyi, A.J., & Kajola, S.O. (2011). Ownership structure and firm performance: evidence from Nigerian listed companies. *Corporate Ownership & Control*, 8(4), 25 – 45.
- Agrawal, A., & Knoeber, C.R. (1996). Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis*, 31(3), 377–97.
- Ahmed, P.K. (2014). The quality and ethics connection: towards virtuous organisations. *Total Quality Management*, 15(4), 527-545.
- Alulamasi, F. (2013). The examination of the effect of ownership structure on firm performance in listed firms of tehran stock exchange. *Journal of Business Management*, 6(3), 249-266.

- Arellano, M., & Bond S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equation. *Review of Economic Studies*, 58, 277–297.
- Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error component models. *Journal of Econometrics*, 68, 29–51.
- Benjamin, B., & Dirk, C. (2015). Ownership concentration, institutional development and firm performance in central and eastern Europe. *Managerial and Decision Economics Journal*, 2(1), 119-124.
- Berle, A., & Means, G. (1932). *The modern corporation and private property*. New York: The Macmillan Company.
- Berle, A., & Means, G. (1967). *The Modern Corporation and Private Property*. New York: Macmillian.
- Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics*, 87, 115-143.
- Boubakri, N., & Cosset, J. (2005). *Does Privatisation Meet the Expectations? Evidence from African Countries*. Retrieved from: www.ssrn.com/abstract, accessed on 17 August 2019.
- Cavaco, S., & Crifo, P. (2013). The CSR-firm performance missing link: complementarity between environmental, social and business behaviour criteria? *Europe*, 37–41.
- Chen, S. (2013). Corporate social responsibility, ownership, and financial performance: Evidence from Chinese listed firms. *International Journal on Advances in Information Sciences and Service Sciences*, 5(4), 809–816.
- Elyasiani, E., & Jia, J. (2010). Distribution of institutional ownership and corporate firm performance. *Journal of Banking & Finance*, 34(3), 606-620.
- Flammer, C. (2013). Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach. *Journal of Chemical Information and Modelling*, 53(1), 1689–1699.
- Friedman, M. (1953). The methodology of positive economics. In *essays in positive economics*. Chicago: Chicago University Press.
- Gayan, M.A., & Ishari, S. (2016). Impact of ownership structure on firms' performance of manufacturing companies in Sri Lanka. *International Journal of Scientific and Research Publications*, 6(10), 2250-3153.

Ownership Concentration and Financial Performance of Manufacturing Firms in Nigeria

- Gomez, A. (2005). *Dynamics of stock prices, manager ownership and private benefit control*. Harvard: Manuscript Harvard University.
- Gonzalez, F., & Molina, K. (2010). Bank regulation and risk-taking incentives: An international comparison of bank risk. *Journal of Banking and Finance*, 29(5), 1153-1184.
- Gorton, G., & Schmid, F. (1996). Universal banking and performance of German firms. Working paper 5453, National Bureau of Economic Research, Cambridge, Massachusetts USA.
- Holderness, C. G., & Sheehan, D. P. (1988). The role of majority shareholders in publicly held corporations: An exploratory analysis. *Journal of Financial Economics*, 20(0), 317-346.
- Iqbal, R. (2014). Ownership concentration, corporate governance and firm performance: evidence from Pakistan. *Pakistan Development Review*, 47(4), 643-659.
- Jensen, H. (1989). Toward a stewardship theory of management. *The Academy of Management Review*, 20-47.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305- 360.
- Jiang, P. (2015). The relationship between ownership structure and firm performance: an empirical analysis over Heilongjiang listed companies. *Nature and Science*, 2(4), 87-90.
- Lins, K. (2002). *Equity Ownership and Firm Value in Emerging Markets*. Working paper, Utah: University of Utah.
- Madhani, P. M. (2016). Ownership concentration, corporate governance and disclosure practices: A study of firms listed in Bombay stock exchange. *The IUP Journal of Corporate Governance*, 15(4), 7-36.
- Mishari, A. (2012). The influence of institutional and government ownership on firm performance: evidence from Kuwait. *International Business Research Journal*, 5(10), 192-200.
- Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, 20, 293-315.

- Mrad, M., & Hallara, S. (2012). The impact of residual government ownership on performance and value creation: The case of privatised French companies. *Procedia Soc. Behav. Sci.*,62, 473-488.
- Mudi, O.L. (2017). Ownership structure and financial performance of firms listed at the Nairobi Securities Exchange. A thesis submitted in partial fulfilment for the degree of master of business administration (finance) University of Nairobi.
- Mugobo, V.V., Mutize, M., &Aspeling, J. (2016). The ownership structure effect on firm performance in South Africa. *Corporate ownership & Control*,13(2),462-465.
- Munisi, G., & Randøy, T. (2013). Corporate governance and company performance across Sub-Saharan African countries. *Journal of Economics and Business*, 70(C), 92-110.
- Mutisya, B. (2015). *The relationship between ownership structure and financial performance of companies listed at the Nairobi securities exchange*. Unpublished MBA thesis, Nairobi: University of Nairobi.
- Nahila, N., & Amarjeet, K. (2016). The effect of ownership structure on firm profitability in India. *International Journal of Economics and Finance*, 8(6).
- Nganga, N.P. (2017). Effect of ownership structure on financial performance of companies listed at the Nairobi securities exchange in Kenya. A thesis submitted in partial fulfilment for the degree of doctor of philosophy in business administration (finance) in the Jomo Kenyatta University of Agriculture and Technology, Kenya.
- Netter, J., & Megginson, W. (2001). From state to market: a survey of empirical studies on privatisation. *Journal of Economic Literature*, 39(2), 321-389.
- Ofori, D.F. (2014). Corporate social responsibility and financial performance: fact or fiction? A look at Ghanaian banks. *Acta Commercii*, 14(1), 1–11.
- Ongore, O., & K’Obonyo, O. P. (2011). Implications of firm ownership identity and managerial discretion on financial performance: empirical evidence from Nairobi stock exchange. *International Journal of Humanities and Social Science*, 13(1), 136-156.
- Peters, G. T., & Bagshaw, K. B. (2014). Corporate governance mechanisms and financial performance of listed firms in Nigeria: a content analysis. *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics*, 1(2), 103–128.

Ownership Concentration and Financial Performance of Manufacturing Firms in Nigeria

- Renneboog, L. (2000). Ownership, managerial control and governance of companies listed on the Brussels stock exchange. *Journal of Banking and Finance*, 24(12), 1959–95.
- Rhoades, A. (2000). Bank mergers and industry-wide structure, 1980–94, staff studies. *Journal of Monetary Economics*, 2, 399–408.
- Santamaría, M., & Azofra, V. (2011). Ownership, control, and pyramids in Spanish commercial banks. *Journal of Banking & Finance*, 35(6), 1464-1476.
- Saunders, A. (2000). Ownership structure, deregulation, and bank risk taking. *Journal of Finance*, 45(2), 643-654.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *Journal of Finance*, 52(2), 737-783.
- Singh, S. (2014). Impact of corporate social responsibility disclosure on the financial performance of firms in UK. *Business Administration- Financial Management*, 10(1), 9–19.
- Villalonga, B., & Amit, R. (2006). How do family ownership, control, and management affect firm value? *Journal of Financial Economics*, 80(2), 385-417.
- Wanjiku, P.K. (2013). The effect of ownership structure on the financial performance of firms listed at the Nairobi securities exchange.
- Wruck, K. H. (1989). Equity ownership concentration and firm value: evidence from private equity financings. *Journal of Financial Economics*, 23, 3-28.
- Zahoor, A. (2014). Corporate social responsibility and financial performance. *Journal of Commerce and Management*, 27(1), 42–56.