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*Shareholding Structure and Agency Cost of Listed Firms  
in Nigeria*

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## Shareholding Structure and Agency Cost of Listed Firms in Nigeria

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### **Abstract**

*Corporate managers and owners have different self-interests hence agency issues arise due to the separation of ownership from management. The shareholding structure of a firm is viewed as part of companies' governance mechanism and is considered an instrument to lessen the divergent interest between owners and management and lower agency costs. To this end, this study was conducted to examine the relationship between shareholding structure and agency costs of listed manufacturing firms in Nigeria. The quantitative research design was used in the study, which has agency theory as its foundation. Nigeria's listed manufacturing companies make up the study's population. The Generalised Method of Moments (GMM) approach was adopted to determine the relationship between shareholding structure and agency costs and to cater for possible endogenous factors. Findings of the study indicate a negative and a significant relationship between agency cost and the single largest shareholders, and employees' shareholding. The study also found that agency cost has a negative but not significant relationship with shareholding concentration and further revealed that board managerial shareholding and executive compensation have a significant positive link with agency cost. The study concludes that the agency costs of listed manufacturing firms in Nigeria are influenced by ownership structure, and recommends amongst others that board members should not be encouraged to have majority shares which could lead to managerial entrenchment and higher agency costs.*

**Keywords:** *Agency Cost, Shareholding Structure, Concentrated shareholding, Employees' shareholding, board managerial shareholding*

### **Introduction**

The principal-agent relationship was first cited in Adams Smith's Wealth of Nations (Smith, 1776) in which he mentioned that managers cannot oversee the affairs of a company with the same intensity as proprietorship or partnerships where such managers are not the owners. Agency problems in companies arise as a result of the separation of ownership from management. Jensen and Meckling (1976) as one of the first studies on agency conflict stated that both the principals (owners) and agents (managers) are driven by different self-interests.

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In theory, a company's shareholding structure is thought to be a way to limit agency costs and lessen the conflicting interests of management and owners. The shareholding structure is regarded as a component of companies' governance mechanism designed as a tool for maximizing shareholders' wealth by minimizing the conflict of interests between principal and agent.

There is a current academic research interest in understanding the dynamics between shareholding structure and agency cost in publicly listed companies (Alanazi, 2021; Chaudhary, 2021; Din et al., 2021; Ejokehuma, 2020; Etale & Boloumbele, 2022; Haroon et al., 2020; Hoang & Oh, 2023; Kazeem & Omole, 2022; Khandelwal et al, 2023; Li, 2021; Muslim & Setiawan, 2021; Nguyen et al., 2020; Nwonu & Ibedu, 2023; Okewale et al., 2020; Okerekeoti, 2022; Roy & Chakraborty, 2023; Sakawa & Watanabel, 2020; Varzaly, 2021). On one part, studies such as (Alanazi, 2021; Nguyen et al., 2020; Okewale et al., 2020) have argued that block shareholding is capable of reducing agency conflict since having a large controlling shareholder (with majority voting) would ultimately decrease the company's monitoring costs. Okewale et al. (2020), and Alanazi (2021) reached the same conclusion. On the other part, studies (Chinelo & Iyiegbuniwe, 2018; Etale & Boloumbele, 2022; Kazeem & Omole, 2022) have also investigated shareholding identities such as managerial, institutional, and foreign ownership. The empirical results on managerial ownership point to both a non-linear relationship (ownership impact may be negative at some levels, the entrenchment hypothesis) and a linear relationship (reducing agency conflict is an increasing function of managing ownership, the alignment of interest hypothesis). For example, when looking at managerial ownership as an explanatory variable on agency cost, Chinelo and Iyiegbuniwe (2018) discovered that a firm's agency cost rises with a large manager-owner share. Using asset turnover as a stand-in for agency cost, Nguyen et al. (2020) discovered that managerial ownership lessens agency conflict.

This study makes a pioneering attempt in two ways. First, the paper delves into this debate by providing evidence using a new method of shareholding classification in a developing economy of Nigeria. As a measure of ownership concentration, this study uses in addition to the percentage of cumulative shares of 10 per cent shareholding, the shares of the first owner (single largest shareholder) which is not often the case in prior studies in Nigeria. The study further unbundles

managerial shareholding by clarifying the role of employee-ownership on one side and director - ownership on the other hand in influencing agency cost. Ahmad and Aifa (2021) in a study of Malaysian firms argue that managerial ownership may impact differently on agency costs when employee shares ownership is separated.

Second, this study acknowledges the shortcomings of panel data analysis using the OLS model in studies pertaining to agency cost and shareholding mechanism. The endogeneity effect of insider ownership is largely disregarded in prior research. In his paper, Allam (2018) discussed the challenges associated with earlier research concerning endogeneity concerns and the ordinary least squares (OLS) approach to regression equation estimation. Consequently, in order to address the drawbacks of earlier econometrics techniques including the OLS, fixed effect, and random effects panel data analysis, this study uses a generalised method of moments (GMM) dynamic panel approach. Consequently, employing manufacturing companies listed on the Nigeria Exchange Group (NGX), this study closes these gaps by utilising novel techniques and methodologies to investigate the relationship between ownership structure and agency cost.

Following is the arrangement of the remaining sections of the paper: Review of relevant literature and creation of hypotheses are covered in part two. The empirical approach used for the study is described in full in Section Three, along with the design and data, model specifications, theoretical background, and variable measurement. While the final portion wraps up the investigation, section four provides the data analysis and findings discussion.

## **Literature Review and Hypothesis Development**

### **Agency Cost**

The aggregate of the principal's monitoring cost, the agent's bonding costs, and the residual loss is what Jensen and Meckling (1976) refer to as agency costs. The costs incurred by the principals in an attempt to oversee or regulate the actions of the agents are known as monitoring costs. For instance, shareholders appoint board members to supervise and monitor management and ensure that managers' behaviour aligns with shareholders' wealth maximization goals. Expenses incurred in maintaining such a board can to some extent be described as agency costs (Wilkinson, 2013).

There is a plethora of different methods of measuring agency cost in the literature. The measurements are normally in terms of input to output showing performance recorded in response to resources deployed. Ang et al. (2000) made one of the first attempts to measure the magnitude of agency costs by two ratios from financial statements. The first ratio is a proxy for direct agency costs. It is standardised as the operating expenses to sales ratio to make comparisons easier. The second ratio serves as a stand-in for the revenue loss brought on by inefficient asset use. This kind of agency cost results from incompetent management or bad investment choices. The annual sales to total assets ratio is used to compute this ratio. Since profit efficiency shows how well managers increase revenues while cutting costs and has a closer relationship with the idea of value maximisation, it is used to evaluate managers' performance rather than cost efficiency.

### **Shareholding Structure**

The shareholding structure of a corporate organization is considered from two key perspectives: shareholding concentration and shareholding identity. Shareholding concentration describes the volume of shares held by majority shareholders. Ownership identity, on the other hand, refers to the class of people who have shares in the corporation and how they use such shares to generate revenues for the shareholders. Shareholding classifications in terms of identity involve types of shares ownership such as institutional, managerial, foreign, private and employee association ownership. Grassa (2018) explain shareholding structure as a combination of large stockholdings by institutional owners and block shareholding for productivity.

### **Shareholding Concentration and Agency Cost**

Regarding shareholder concentration and the associated agency problem, the empirical literature on shareholding structure offers two opposing points of view. According to the first viewpoint, which is based on the efficient monitoring hypothesis, majority shareholders are more watchful than minority owners since they have larger shares in the company. The monitoring view is predicated on the agency cost which arises as a result of incomplete contracts inherent in asymmetric information between the principal and the agent when there is a separation of ownership from control. Proponents of the efficient monitoring perspective view shareholding

concentration as a corporate governance mechanism that provides the incentive for monitoring managers from maximizing their utilities at the expense of shareholders. Due to efficient monitoring, the majority shareholders can reduce managerial expropriation.

The second view, the expropriation hypothesis, argues that the dominant shareholders use their influence to exert undue advantage on managers to promote their self-interest. The argument for this theory is that the minority shareholders are not only exploited by managers but also by the majority shareholders (Grassa, 2018; Jalila & Devi, 2012). It is believed that monitoring was not a big problem in a firm with concentrated shareholding as the majority shareholders were capable of performing that role. However, concentrated ownership is seen as a response to the risk of expropriation by large shareholders.

Mixed findings have also been found on the relationship between ownership concentration and agency cost. For example, greater concentration of shareholding lowers agency conflict, according to Andow and Bature (2016) and Chinelo and Iyiegbuniwe (2018). On the other hand, distinct investigations by Arowolo and Che-Ahmad (2016), Obembe et al. (2010), Ejokehuma (2020), and Okewale et al. (2020) demonstrated that concentrated shareholding raises agency cost. In light of the aforementioned, we frame our first hypothesis, which holds that concentrated ownership and agency cost are positively correlated.

### **Single Largest Shareholding and Agency Cost**

The term "single largest shareholding" refers to a class of share ownership in which, at any given moment, more than 50% of the outstanding voting rights for the ordinary shares in the company are represented by shareholders. The largest shareholder's ownership concentration has been shown to reduce agency costs, which in turn improves business performance (Hamadi & Heinen, 2015). However, another indicator of largest/majority ownership concentration shows a quadratic correlation with business performance, emphasising the entrenchment effect as well as the incentive (Faccio & Lang, 2002). Family substantial stock owners are frequently lifelong investors since their ownership is passed down through several generations, according to Anderson and Reeb (2003). Nonetheless, family shareholders that hold large shares frequently have a propensity to be

long-term, risk-averse investors, which could negatively impact the success of the company if they avoid taking on riskier ventures (Hamadi & Heinen, 2015). Furthermore, it has been discovered by Fama and Jensen (1983) that first owners, have the ability to expropriate, or take private benefits from minority shareholders. Large ownership concentrations on a single person have been found to have a positive mitigating effect on firm agency costs. However, it is noted that this influence may diminish after a certain level of shareholdings because majority shareholders have a tendency to extract personal benefits at the expense of minority shareholders. Additionally, Claessens et al. (2000) looked at the relationship between ownership structure and agency cost and discovered that when a controlling shareholder is present on the Chinese capital market, the greatest shareholdings play a significant role in determining agency cost. We present a second hypothesis that the single greatest shareholding and agency costs have a negative connection, in light of the aforementioned information.

### **Board Managerial Shareholding and Agency Cost**

Board managerial shareholding is an insider shareholding model wherein corporate managers who participate in decision-making processes are allocated a portion of the ownership of the company's shares (Chinelo & Iyiegbuniwe, 2018). Jensen and Meckling (1976) validate the association between managerial shareholding and agency cost by arguing that the convergence-of-interest hypothesis explains the positive effect of managerial shareholding. Thus, larger managerial ownership motivates the manager to put in significant efforts in value-maximizing activities and also immunizes himself from misappropriating corporate resources. Fama and Jensen (1983), however, support the managerial entrenchment theory and explain that a company with a substantial manager-owner shareholding may incur higher agency costs as they might indulge in non-value maximizing activities. It is argued that agency conflict is set to arise when managers with significant equity have enough voting power to ensure their position inside the firm or to protect them from outside checks. Nguyen et al. (2020), Din et al. (2021) and Kruse (2022) are some of the empirical studies that provide support for the convergence of interest hypothesis. The entrenchment hypothesis is supported by the following studies: McKnight and Weir (2009), Ang et al. (2000), and Vijayakumaran (2019). A third hypothesis is developed in light of this, which holds that there is a positive correlation between agency cost and board managerial shareholding.

## **Employee Shareholding and Agency Cost**

Employee share ownership is defined as giving staff members the opportunity to hold shares of a company where they work. Although agency costs have been referred to extensively in previous literature on managerial shareholding, the relationship between employee shareholding and agency costs has been rarely studied directly. Abdelnour et al. (2022) using three proxies for agency costs—the asset utilization ratio, overinvestment and audit fees—from a sample of 125 French - listed companies between 2002 and 2016, found an inverted U-shaped relationship between employee shareholding and agency costs. Similarly, Hollandts et al. (2018) found that employee share ownership favours managerial entrenchment as employees would be management’s natural allies against takeover with managers potentially implementing employee share options to keep shares in “friendly hands”. Other stakeholders may be concerned about giving employees decision-making rights via an employee share ownership scheme because that may enable employees to fully control the firm, which may erode the company’s value and, thus, shareholder value.

Accordingly, employee shareholding as argued by Kruse, (2022) can be said to affect agency costs. In his view, such an effect may be either positive or negative, with employee owners taking on the dual role of agents and principals. These two contrasting effects are based on the analysis of two agency relationships: the manager-employee versus the shareholder-manager relationship. In the former, employee ownership would influence the productivity of employees by giving them an interest in the results of their work. In the latter, employee ownership would be instrumentalized by managers for entrenchment. In light of the aforementioned, a fourth hypothesis—that there is a negative correlation between employee shareholding and agency cost—is developed.

## **Theoretical Framework and Model Specification**

### **Theoretical Framework**

Jensen and Meckling (1976) agency theory serves as the foundation for the investigation of the connection between ownership structure and agency cost. According to the agency theory argument, those who contribute money to keep a business operating are seen as risk-takers rather than owners. Investors trust the managers to use it wisely for the advantage of fund suppliers. The



managers then sign agreements that outline the operational tasks they must complete and the allocation of profits between them and the investors. However, managers sometimes fail to completely implement contracts they engage into since it is difficult to predict future circumstances (Shleifer & Vishny, 1997).

From the agency theory perspective, concentrated shareholding is used to fulfil the dominant shareholders' role in monitoring the activities of management. This is because agency theorists (Jensen & Meckling, 1976) believe that managers may not always act in the best interest of shareholders. Against the backdrop of the above, we expect a functional relationship between shareholding concentration and agency cost index:

$$\text{Agency Cost Index} = f(\text{Shareholding Concentration}) \dots\dots\dots (i)$$

In line with the agency's theory, ownership concentration on a single largest shareholder can mitigate agency costs based on the efficient monitoring hypothesis. It is believed that the largest shareholders may put in extra efforts to ensure that the business survives as a result of vested business interests and resultant private benefits. Against the backdrop of the above, we expect a functional relationship between the single largest shareholding and agency cost index:

$$\text{Agency Cost Index} = f(\text{Single Largest Shareholding}) \dots\dots\dots (ii)$$

From the agency's theoretical vantage point, the managerial shareholding structure mitigates agency costs as it offers a higher alignment between executive management and shareholders' interests (Jensen & Meckling, 1976). The theory suggests that a lower proportion of managerial shareholding is associated with lesser incentives and therefore effort exerted by executive directors in their duties to pursue feasible investments. Against the backdrop of the above, we expect a functional relationship between managerial shareholding and agency cost index as follows:

$$\text{Agency Cost Index} = f(\text{Managerial Shareholding}) \dots\dots\dots (iii)$$

Finally, the theoretical explanation for the link between employee shareholding and agency cost is premised on the notion of convergence of interest between owners and managers to have a mitigating effect on agency cost. Oyer and Schaefer (2022) suggested that employee share

ownership compensates for the negative incentives of individual motivations, and creates a more trustful environment at a company. Against the backdrop of the above, we expect a functional relationship between employee shareholding and agency cost index as follows:

$$\text{Agency Cost Index} = f(\text{Employee Shareholding}) \dots\dots\dots (iv)$$

Figure 1 provides a further illustrative view showing how the variables in the study are analyzed and linked to agency cost.

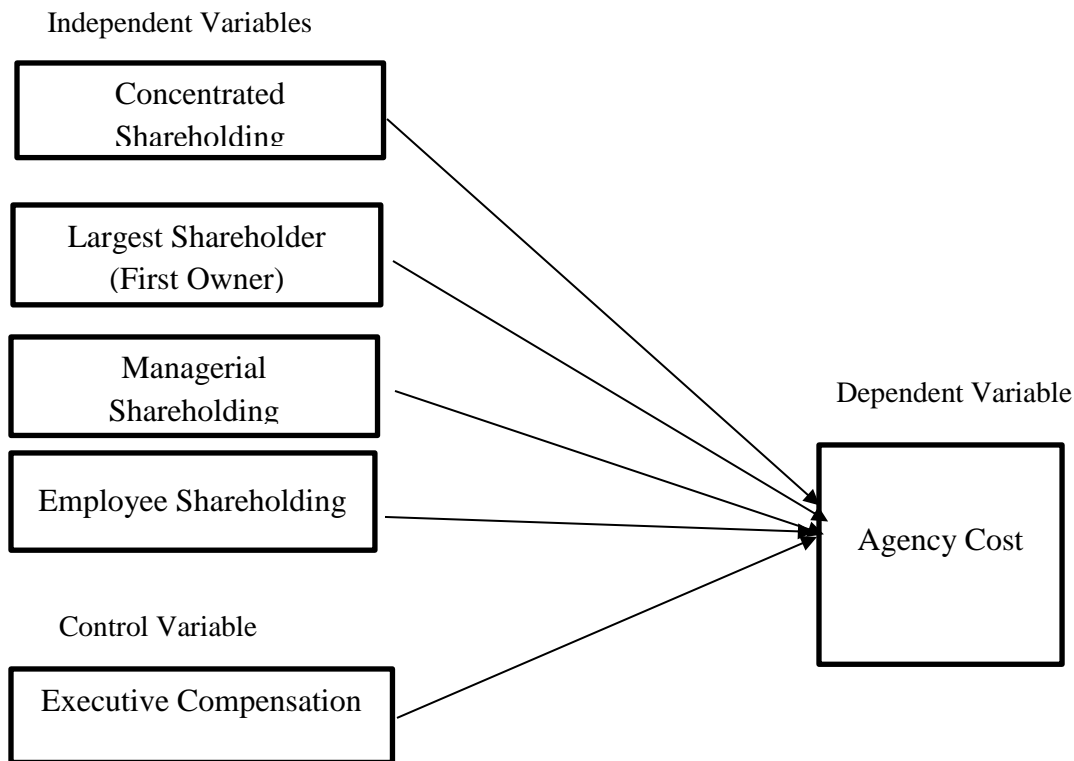


Figure 1: Theoretical Framework for the study

**Model Specification**

Collecting equations (i, ii, iii, and iv), the general form of the model is represented as:

$$\text{Agency Cost Index (ACIDX)} = f(\text{SHCON, SISHA, MASHA, EMSHA}) \dots\dots\dots (v)$$

Introducing the control variable into equation (v)

$$\text{Agency Cost Index (ACIDX)} = f(\text{Shareholding structure} + \text{Executive Compensation}) \dots\dots (vi).$$

Using the acronyms,

Agency Cost Index (ACIDX) = f (SHCON, SISHA, MASHA, EMSHA, EXCOM) ..... (vii)

Equation (vii) is transferred to econometric form as:

$$ACIDX_{it} = \beta_0 + \beta_1 SHCON_{it} + \beta_2 SISHA_{it} + \beta_3 MASHA_{it} + \beta_4 EMSHA_{it} + \beta_5 EXCOM_{it} + \epsilon_{it}$$

Where:

ACIDX = Agency Cost Index; SHCON = Shareholding Concentration; SISHA = Single Largest Shareholder; MASHA = Managerial Shareholding; EMSHA = Employee Shareholding; EXCOM = Executive Compensation;  $\beta_1$  to  $\beta_5$  are the unknown coefficient of the variables; i = the number of companies (1,2, 3, ..... 41); t = time dimension (1,2, 3, .....12).

Presumptively, we expect that  $\beta_1, \beta_2, \dots, \beta_5$  to be <0 which signifies that the shareholding structure reduces agency cost.

**Table 1: Operationalization of the Variables**

SN	Variable	Acronym	Measurement	Source	A Priori Expectation
1	Agency Cost	ACIDX	Agency cost will be measured using the operating cost efficiency ratio. This is given as operating cost divided by turnover	Roy and Chakraborty. (2023)	
1	Shareholding Concentration	SHCON	Cumulative total of the shares of first ten shareholders of the company divided by total outstanding shares at the end of the financial year.	<b>Nwonu and Ibedu (2023)</b> Chinelo and Iyiegbuniwe (2018).	-
3	Single Largest Shareholder	SISHA	Total number of shares held by the first owner or the largest single shareholder scaled by outstanding shares at the end of the period.	Hoang and Oh (2023)	-
4	Managerial shareholding	MASHA	Board members' shareholding divided by outstanding shares at the end of the period.	Ang et al. (2000), Okewale et al. (2020)	-
5	Employees' shareholding	EMSHA	Computed as Dummy which takes the value of '1' if the company practised employee share option for the year otherwise '0'	Din et al. (2021) Okewale et al. (2020)	-
10	Executive compensation	EXCON	Total remunerations to directors scaled by total operating expenses	Omuemu and Olowe (2020), Li (2021)	-

### Estimation Results and Discussion of Findings

Results from the quantitative data analysis form the basis of discussion, conclusion and recommendations.

**Table 2: Descriptive Statistics of the Variables**

ACIDX	SHCON	SISHA	MASHA	EMSHA	EXCON
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Mean	9.996305	58.31733	45.85386	14.77340	0.181800	0.061361
Median	8.170000	62.00000	51.00000	1.810000	0.000000	0.056000
Maximum	77.17000	96.00000	95.00000	98.24000	1.000000	13.80000
Minimum	0.023410	0.32000	0.281000	0.000000	0.000000	0.014000
Std. Dev.	8.939151	19.84763	21.91787	23.26800	0.387463	0.035089
Jarque-Bera	6877.785	46.70258	20.02292	256.4142	2.612424	3941.241
Probability	0.000000	0.000000	0.000045	0.000000	0.000000	0.000000
Observations	451	451	451	451	451	451

The table 2 displays the descriptive statistics for the data. As observed, agency cost has a mean value of 9.996 per cent for the time examined. The maximum and minimum values for ACIDX for the 11 year period are 77.1 per cent and 0.02 per cent respectively. The standard deviation measuring the spread of distribution stood at 8.93 indicating no considerable variations in the data series.

Likewise, for the period under investigation, the mean value of shareholding concentration (SHCON) is 58.3%. During the time, the maximum and minimum percentages of SHCON were 96.0 and 32.0%, respectively. The distribution's standard deviation, which quantifies the spread, was 19.8, a low number when compared to the mean value. This suggests that there is little variance from the mean and that the distribution includes years with stable ownership concentration structures. Further, the descriptive statistics result from the table on the single largest shareholders (SISHA) and board managerial shareholding (MASHA) point to the fact that while the sampled companies had an average of about 45.8 per cent shares for the single largest shareholders for the period under consideration; the percentage of board managerial shareholding within the same period under consideration stood at an average of about 14.77 per cent. The descriptive statistics also shows that during the period the maximum proportion for single largest shareowners was 95.0 per cent with the lowest being 0.281 per cent. The MASHA also recorded the maximum value of 98.2 per cent and minimum value of 0.000 during the period. The standard deviation of 21.98 per cent for the single largest shareholding and 23.2 percent for board managerial shareholding shows that there is a wider dispersion in terms of single largest shareholding and board managerial shareholding for sampled companies.

Furthermore, the mean value for EMSHA (Employee shareholding) is 0.1818 per cent with maximum and minimum values of 1.0 and 0.00 per cent respectively. The standard deviation which stood at 0.387 indicates the non-existence of clustering of the percentage of the samples around the sample means hence the gap in distribution. The table also shows statistics for the control variable EXCON with a mean of 0.061 and maximum and minimum values of 13.8 and 0.14 respectively. The standard deviation of 0.035 is low indicating no significant variation in the distribution.

**Table 3: Panel Data Regression Results**

	<b>PANEL OLS (RANDOM EFFECTS)</b>		<b>PANEL OLS (FIXED EFFECTS)</b>		<b>PANEL GMM</b>	
<b>Variable</b>	<b>Coefficient</b>	<b>Prob.</b>	<b>Coefficient</b>	<b>Prob.</b>	<b>Coefficient</b>	<b>Prob.</b>
C	14.10798	0.0000	14.10798	0.0000	8.476185	0.0000
SHCON	-0.034459	0.0473	-0.034459	0.0473	-0.016017	0.7807
SISHA	-0.022174	0.0561	-0.022174	0.0561	-0.041379	0.1744
MASHA	0.036076	0.0000	0.036076	0.0000	0.039020	0.0094
EMSHA	-0.029280	0.2412	-0.029280	0.2412	-0.100478	0.0494
EXCOM	5.208518	0.1498	5.208518	0.1498	18.47320	0.0237
<b>Model Parameters</b>						
R <sup>2</sup>	0.596350		0.596350		0.46825	
ADJ R <sup>2</sup>	0.494649		0.492941		0.28533	
F-Stat	56.62880		28.26109			
P(f-stat)	0.000000		0.000000			
<b>Model Diagnostics</b>						
First order serial autocorrelation (DW)			1.54		1.54	
	1.86					
Breusch-Pagan Godfrey Test	21565(0.0540)					
Sargan Test						
	22.753(0.00002)					
Hausman Test			x <sup>2</sup> =1.56, df =9,p=0.67			

Table 3 presents the findings from the panel data estimation for the studied listed manufacturing companies in Nigeria. The GMM method of panel estimation is the model chosen for this investigation, as was previously indicated. However, as part of our robustness assessment, data from the conventional estimation (fixed effects and random effects model) are generated and analysed. In addition, the Hausman specification tests conveyed in the lower part of the table which gave a chi-square statistics value of  $\chi^2 = 1.56$ ,  $df = 9$ ,  $p = 0.677$ , ( $p > 0.05$ ) reject the fixed effects model in favour of the random effects model for the agency cost equation. In the case of the model with a probability value less than 0.05, the Sargan test's p-value is noticeably high. The Sargan test result gives us sufficient evidence to conclude that the set of instruments we utilised in our GMM modelling for the agency cost model is correctly stated, meaning that we are unable to reject the null hypothesis at the 5% level.

The findings of the study are discussed herein. First, the regression estimates on the relationship between concentrated shareholding and agency cost reveal a negative coefficient but not significant ACIDX and SHCON ( $\beta_1 SHCON_{it} = -0.016017$ ,  $p = 0.7807 > 0.05$ ). This indicates that an increase in shareholding concentration by one unit (SHCON) leads to a decrease in agency cost by 1.6 per cent. The result meets our *a priori* expectation. We projected that a higher concentration of shareholdings would provide more oversight of management operations, hence mitigating agency conflict. This viewpoint is consistent with those of (Boubaker et al., 2017; Grassa, 2018), who contend that investors in ownership structures with concentrated ownership possess a greater degree of sway on management, hence reducing agency costs. Second, the results from regression estimates reveals a negative coefficient between SISHA and ACIDX. ( $\beta_2 SISHA_{it} = -0.0041379$ ,  $p = 0.1744$ ,  $P > 0.05$ ). By implication, companies with a substantial volume of single largest shareholding, experience reduced agency conflict. This result meets our *a priori* expectation because we envisaged that being a dominant shareholder implies greater concern and involvement in corporate board activities thus reducing information asymmetry. This finding also conforms to Etale and Boloumbele (2022), and Chen et al. (2007).

As regards board managerial shareholding, findings from regression estimates indicate that a positive and significant association exists between board managerial shareholding and agency cost ( $\beta_3 MASHA_{it} = 0.039020$ ,  $p = 0.0094$ ,  $p < 0.05$ ). This result implies that a company with a larger percentage of managerial share ownership is more likely to experience greater agency conflicts and by extension incur higher agency cost. The finding did not meet our *a priori* expectation. Based on the convergence-of-interest hypothesis

which is used to explain the positive effect of managerial shareholding on agency cost, we expected that a large proportion of share ownership by board members and top managers should help to align the interests of managers and shareholders resulting in reducing agency conflict. Previous studies such as Khalil and Ozkan (2016) and Ang et al. (2000) suggest that an increase in managerial shareholding offers effective management monitoring and control. This result however agrees with Vijayakumaran (2019), Somayeh and Mahdi (2013), and Stulz (1988).

Fourth, the relationship between employees' shareholding and agency cost shows a negative association and is statistically significant ( $\beta_4\text{EMSHAx} = -0.100478, p=0.0494$ ). The result meets our *a priori* expectations. Consistent with the convergence of interest hypothesis, Jensen (1993) states that employees' shareholdings support the alignment of both shareholders' and employees' interests. Proponents of the agency theory such as (Agburuga & Ibanichuka, 2016; Ang et al., 2000, Hollandts et al., 2018; Kruse, 2022) also postulate that as more and more employees of an organization are given ownership rights and the ability to get involved in annual general meetings of the firm, there will be less information asymmetry, which by extension reduces agency problems.

### **Control Variable**

The control variable was further tested to ascertain their relationship agency cost. The relationship between executive compensation and agency cost showed a positive coefficient ( $\beta_9\text{EXCOMit} = 18.473, p=0.0237, p<0.05$ ). The interpretation is that as executive compensation increases in manufacturing companies, agency costs also rise by 18 per cent. The results imply that high compensation to board members does not mitigate agency conflicts.

### **Conclusions and Recommendations**

The literature on the shareholding structure and the resulting agency cost is indeed diverse and has been a subject of intense research in accounting, finance and management in recent times. However, a review of the literature brings up some research gaps. First, available empirical evidence regarding the relationship between shareholding structure and agency cost provides an unclear picture with some studies showing different patterns of shareholding as having a mitigating effect on agency cost while others provide divergent and conflicting results.

Against this backdrop, this study adopted a unique share classification methodology to establish a more precise understanding and, therefore, extend the existing literature on the relationship between shareholding structure and agency cost.

The study using a GMM regression model showed that the single largest shareholders, and employees' shareholding, have a negative and significant association with agency cost. The study also finds that agency cost has a negative but not significant relationship with shareholding concentration as well as a significant positive link between executive compensation and agency cost. The study, therefore, concludes that shareholding structure influences agency costs of listed manufacturing firms in Nigeria. In line with the findings of this study, the following recommendations are proffered:

1. This study recommends that companies' governance policies should encourage shareholding concentration.
2. The single largest share ownership is one of the identified shareholding structures that have proven empirically to reduce agency conflict. This is connected to the constant monitoring and personal interest of the first owner in the performance and corporate survival of the firm. Given this, dominant shareholding should be encouraged against dispersed ownership for agency relations.
3. The study recommends that board members should not control majority shareholdings allotted in the company, as it gives them too much power and control over other shareholders which may be responsible for increased agency costs.
4. Employees' shareholding was observed to mitigate agency cost in this research hence corporate boards should encourage share options to employees of the company as a way of encouraging goal congruence and promoting a sense of belonging among the employees of the companies.

## References

- Abdelnour, J., Aubert, N., & Campa, D. (2022). Does employee ownership decrease agency cost? Evidence from French listed companies. *Journal of Economics and Finance*, 4(3), 1-23
- Agburuga, U.T. & Ibanichuk, E.A.L. (2016). Managerial and controlling ownership, profitability, firm size and financial leverage in Nigeria. *International Journal of Business and Management Review*, 4(9), 43-57



- Ahmad, I.I., & Aifa, A.B.A. (2021). Impact of ownership structure on capital structure: a study of corporate financing of manufacturing companies in Malaysia. *International Journal of Business and Social Science*, 12(1), 39-45
- Allam, B.S. (2018). The impact of board characteristics and ownership identity on agency costs and firm performance: UK evidence. *Corporate Governance (Bingley)*, 18(6), 1147-1176.
- Alanazi, A.S. (2021). The impact of ownership structure on firm's performance. *Capital Market Authority*, 1(4), 2-59
- Anderson, R. C., & Reeb, D.D. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500. *The Journal of Finance*, 58(3), 1301- 1328.
- Aubert, N., Kern, A., & Hollandts, X. (2017). Employee stock ownership and the cost of capital. *Research in International Business and Finance*, 41, 67–78.
- Andow, H. A., & Bature, D. B. M. (2016). Ownership structure and the financial performance of listed conglomerate firms in Nigeria. *The Business and Management Review*, 7(3), 231-240.
- Ang, J. S., Cole, R. A. & Lin, J. W. (2000). Agency costs and ownership structure. *Journal of Finance*, 55, 81-106.
- Arowolo, R.O. & Che-Ahmad, A. (2016). Effect of horizontal-agency-costs and managerial ownership on monitoring mechanisms. *International Journal of Economics and Financial Issues*, 6(S7), 186-191
- Boehmer, E. (2000). Business groups, bank control, and large shareholders: An analysis of German take-overs. *Journal of Financial Intermediation*, 9, 117- 148.
- Boubaker, S., Rouatbi, W., & Saffar, W. (2017). The role of multiple large shareholders in the choice of debt source. *Financial Management Journal*, 46(1), 241 – 274.
- Chaudhary, P. (2021). Agency costs, board structure and institutional investors: Case of India. *Asian Journal of Accounting Research*, 13(2), 111-156.
- Chen, X., Harford, J., & Li, K. (2007). Monitoring: Which institutions matter? *Journal of financial Economics*, 4(1), 279-305.
- Chinelo, E. O., & Iyiegbuniwe, W. (2018). Ownership structure, corporate governance and agency cost of manufacturing companies in Nigeria. *Research Journal of Finance and Accounting*, 9(16), 16-26.
- Claessens, S., Djankov, S., & Lang, L.H.P. (2000). The separation of ownership and control in East Asian Corporations. *Journal of Financial Economics*, 58, 81–112

- Din, S.U., Arshad Khan, M., Khan, M.J. & Khan, M.Y. (2021). Ownership structure and corporate financial performance in an emerging market: a dynamic panel data analysis. *International Journal of Emerging Markets*, 3(1), 11-31
- Ejokehuma, J.O. (2020). Ownership concentration and financial performance of manufacturing firms in Nigeria. *African Journal of Management*, 5(3), 60-78
- Etale, M.L., & Boloumbele, Y. (2022). Ownership structure and firm performance of listed consumer goods sector firms in Nigeria. *International Journal of Development and Economic Sustainability*, 10(1), 1-12
- Faccio, M.; & Lang, L.H.P. (2002) Executive stock option repricing, internal governance mechanisms, and management turnover. *Journal of Finance and Economy*, 65, 419–449.
- Fama, E. & Jensen, M.C. (1983). Agency problems and residual claims. *The Journal of Law & Economics*, 26(2), 327-349.
- Grassa, R. (2018). Deposit structure, ownership concentration, and corporate governance disclosure in GCC Islamic banks: Empirical evidence. *Journal of Islamic Accounting and Business Research*, 9(4), 587-606.
- Hamadi, M., & Heinen, A. (2015). Firm performance when ownership is very concentrated: Evidence from a semi parametric panel, *Journal of Empirical Finance*, 34(C), 172-194.
- Hermalin, B., & Weisbach, M.S. (1988). The determinants of board composition. *The Journal of Economics*, 19, 589-606
- Hollandts, X., Aubert, N., Ben, A., & Prieur, V. (2018). Beyond dichotomy: the curvilinear impact of employee ownership on CEO entrenchment. *Management international*, 22(2), 111-143
- Hoang, G., & Oh, K.B. (2023). The effect of board of directors, chairman, and ownership attributes on the agency cost: empirical evidence. In: An Empirical Study of SOE Corporate Governance Attributes for Emerging Markets. *Springer*, Singapore. [https://doi.org/10.1007/978-981-99-1505-7\\_5](https://doi.org/10.1007/978-981-99-1505-7_5)
- Jalila, S., & Devi, J. (2012). Ownership structure effect on the extent of segment disclosure: Evidence from Malaysia. *Procedia Economics and Finance*, 2(1), 247-256.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firms: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 881-880.
- Jensen, M. (1986), Agency costs of free cash flow, corporate finance and takeovers. *American Economic Review*, 76, 323-39.

- Kazeem, T. C., & Omole, I. I, (2022). Ownership structure and performance of selected quoted manufacturing companies in Nigeria, *International Journal of Business and Management Review*, 10(5), 117-136
- Khandelwal, V., Tripathi, P., Chotia, V., Srivastava, M., Sharma, P., & Kalyani, S. (2023). Examining the impact of agency issues on corporate performance: a bibliometric analysis. *Journal of Risk and Financial Management*, 16(12):497. <https://doi.org/10.3390/jrfm16120497>
- Kim, E., & Ouimet, P. (2014). Broad-based employee stock ownership: Motives and outcomes. *The Journal of Finance*, 69(3), 1273–1319
- Kruse, D. L. (2022). Does employee ownership improve performance?, *IZA World of Labor*, Institute of Labor Economics (IZA), Bonn, <https://doi.org/10.15185/izawol.311.v2>
- Kruse, D., J. Blasi, D. Weltmann, S. Kang, J. O. Kim, & Castellano, W. (2022). Do employee share owners face too much financial risk? *ILR Review* 75(3), 716–740.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A., (1999). Corporate ownership around the world. *The Journal of Finance*, 54(2), 471-517.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R.W. (2000). Agency problems and dividend policies around the world. *The Journal of Finance*, 55(1), 1-33
- Li, J. (2021). The impact of equity mix and executive incentives on corporate performance. *Open Journal of Business and Management*, 9, 1409-1423. <https://doi.org/10.4236/ojbm.2021.9307>
- McKnight, P. J., & Weir, C. (2009). Agency costs, corporate governance mechanisms and ownership structure in large UK publicly quoted companies: A panel data analysis. *The Quarterly Review of Economics and Finance*, 49(2), 139-158.
- Morck, R., Shleifer, A., & Vishny, R.W. (1988). Management ownership and market valuation: an empirical analysis. *Journal of Financial Economics*, 20, 293-315.
- Muslim, A.I., & Setiawan, D. (2021). Information asymmetry, ownership structure and cost of equity capital: the formation for open innovation. *Journal of Open Innovation and Technology*, 7(2), 87-91
- Mustapha, M., & Che-Ahmad, A. (2011), Agency theory and managerial ownership: Evidence from Malaysia. *Managerial Auditing Journal*, 26(5), 419-436.
- Nguyen, A. H., Doan, D.T., & Nguyen, L.H. (2020). Corporate governance and agency cost: empirical evidence from Vietnam. *Journal of Risk and Financial Management*, 13, 103; doi: 10.3390/jrfm13050103

- Nigerian Exchange Group. (2022). Market Reports. Available online at [www.nigerianstockexchange.com/Issuers-section/listing...company/industry](http://www.nigerianstockexchange.com/Issuers-section/listing...company/industry).
- Nwonu, C.O., & Ibedu, O.K. (2023). Ownership composition and the management of family owned businesses in the South-East, Nigeria. *International Journal of Research and Innovation in Social Science*, 6(1), 39-42
- Obembe, O.B., Adebisi, S.A., & Adeleye, A.A. (2020). Corporate governance, ownership structure and performance of manufacturing firms in Nigeria. *Corporate Ownership & Control*, 8(1), 701-707.
- Okerekeoti, C. U. (2022). Effect of managerial ownership on audit quality of quoted companies in Nigeria. *International Journal of Innovative Development and Policy Studies* 10(2), 51-58
- Okewale, J.A., Mustapha, O.A., & Aina, G.O. (2020). Ownership structure and financial performance of quoted food and beverage firms in Nigeria. *KIU Journal of Social Sciences*, 6(2), 263–273
- Oyer, P., & Schaefer, S. (2022), Why do some firms give stock options to all employees?: an empirical examination of alternative theories. NBER Working Paper No. w10222, Available at SSRN: <https://ssrn.com/abstract=486226>
- Roy, U., & Chakraborty, I. (2023). Market concentration, agency cost and firm performance: a case study on Indian corporate firms. *Economy, Change Restructuring*, 56, 2645–2693. <https://doi.org/10.1007/s10644-023-09529>
- Sakawa, H., & Watanabel, N. (2020). Institutional ownership and firm performance under stakeholder-oriented corporate governance. *Sustainability*, 12, 2-21; doi: 10.3390/su12031021
- Shleifer, A., & Vishny, R.W. (1997). A survey of corporate governance. *Journal of Finance* 52, 737-784.
- Smith, A. (1776). *An inquiry into the wealth of nations*. London: Strahan and Cadell
- Somayeh, B., & Mahdi, S. (2013). The effect of management entrenchment on the equity capital in Iran, Pakistan. *Journal of Commerce and Social Sciences*, 7(1), 19-26
- Stulz, R., (1988), Managerial control of voting rights: Financing policies and the market for corporate control. *Journal of Financial Economics*, 20, 25-54.
- Varzaly, J. (2021). The dynamics of shareholder dispersion and control in University of Cambridge Faculty of Law Research Paper No. 5/2021, Available at SSRN: <https://ssrn.com/abstract=3768856> or <http://dx.doi.org/10.2139/ssrn.3768856>
- Vijayakumar, R. (2019). Agency cost, ownership, and internal governance mechanisms: Evidence from Chinese listed companies. *Asian Economic and Financial Review*, 9, 133–54