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Audit Quality, Ownership Structure, and Agency Cost in Nigerian Quoted Industrial Goods Firms

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Abstract:

This study examines the relationship between Ownership Structure, Audit Quality, and agency cost of Nigerian quoted industrial goods companies. Data from the annual reports of nine (9) selected companies whose data were readily available at the time of the study were included in the sample over a period of eleven years (2011-2021) on audit quality, managerial ownership share, institutional ownership share, administrative expenses ratio, and payout ratio were analyzed. The primary purpose of this study was to investigate the relationship between Audit Quality, Ownership Structure and agency cost of quoted Nigerian industrial goods companies. The data were analyzed using descriptive and inferential statistical techniques, including correlation matrix and fixed panel model regression. The correlation analysis revealed that all variables AER, AUQ, IOS, MOS, and PAR had correlation coefficients that were positive or negative and less than 0.9. Moreover, the results of the Fixed Effect panel model regression indicated that the probability values of the predictors were less than the study's adopted 5% level of significance (p -values 0.05), except for managerial ownership share and institutional ownership share, whose probability values were greater than 5% level of significance (p -values > 0.05). The study concluded that there is a significant relationship between the Audit Quality, Ownership Structure of industrial goods companies and agency costs. As a result, it was suggested that there should be a balance between equity ownership managers and institutional investors to reduce agency costs and that audit quality should be improved by utilizing the Big-4 to reduce asymmetric information by managers and minimize agency conflicts.

Keywords: Audit quality, ownership structure, agency cost, Big-4, institutional ownership and managerial ownership

1. Introduction

Agency cost is a cost that an organization incurs internally due to conflicts of interest between its agents and principals. Any decision that conflicts with the goal of increasing business profit will undoubtedly include agency costs. As a consequence of the inability of shareholders to consistently monitor every managerial decision made within the company, asymmetric information develops. This could lead to ethical hazards and a lack of agreement (Nguyen, Doan & Nguyen, 2020). Shareholders or investors who make investments in the firm, as well as managers of the capital required by the company to execute its operational activities, achieve its objectives, and maximize profits, are the fundamental aspects of industrial products-producing companies. For both parties (investors and managers) to carry out their responsibilities effectively and avoid agency conflicts, it is necessary to have a functional contractual agreement outlining what is expected of both parties.

The company's management and oversight structure is the key to resolving the agency problem (Sehrawat, 2019). Alternatively stated, effective corporate governance practices may assist in bridging the divide between management and shareholders. Jensen and Meckling (1992) defined agency costs as the total cost of establishing, implementing, and sustaining an effective control system within organizations and any residual loss resulting from the difficulty of completely resolving control problems. In addition, these expenses are incurred by the firm's owners to closely monitor the actions of agents who may have interests distinct from those of the firm's owners or principals. These expenses include internal auditing, external auditing, and independent directors (Mustapha & Ahmed, 2011). Effective corporate governance gives shareholders the ability to ensure that the management of the companies in which they hold shares is in their best interests. Likewise, it must serve the requirements of other stakeholders, such as customers, employees, and the environment (Mansour, Amosh, Alodat, Khatib & Saleh, 2022). Corporate governance, as defined by Fakunle, Igbekoyi, and Owoeye (2021), is the framework and set of guidelines established by organizations to guide, administer, and control a company's operations. Because all participants in a corporation have direct or indirect interests, the purpose of a

corporation is to maximize the wealth of all stakeholders through efficient resource management. Due to the separation between investors and managers based on the agency concept, corporate governance processes are required as a set of controls to help align managers' interests with those of other stakeholders.

When evaluating the character of the corporate governance system and the cost of the Agency, one must consider the investments, finances, and payout decision, as well as managerial ownership, institutional ownership, and foreign ownership. Better corporate governance processes may have a substantial impact on a company's ability to make crucial decisions, such as those involving financing, dividends, and investments. Investment opportunities are essential to the organization's corporate finances because they forecast the company's future development, which is essential for estimating the wealth of the company's owners (Nazar, 2021). Myers (1977) categorizes the value of a company as the present value of its current assets plus prospective investment opportunities and growth prospects. Dividend policy is the internal criterion a company employs to determine how much of its income will be distributed to shareholders. A company's dividend policy is one of the most crucial financial decisions it must make. Since Lintner's (1956) time, numerous studies have been conducted to fathom the significance of managed dividend policy in enhancing firm value, but dividend policy remains a mystery.

Gichana (2012) discovered countless agency contracts in various organizational structures, such as those between shareholders and debt holders, shareholders and top managers, executive managers and low-level managers, and countless others. Whenever ownership and control are separated, the conflict between principal agents is probable (Jensen & Meckling, 1976). This is because agents, who are typically the hired manager, may deviate from shareholder agreements when there is a greater benefit to upholding ethical considerations as enumerated in corporate governance principles. According to Ahmed and Mustafa (2011), the agent may act in a self-serving manner, such as by misappropriating funds or overindulging privileges or other benefits that are against the shareholders' best interests.

Effective corporate governance is required to reduce the likelihood of conflicts between stock managers and shareholders. Managers of a company must adhere to a predetermined process or pattern that seeks to increase shareholder profits while also considering the earnings of all parties and making significant contributions to the business. When implemented, corporate governance can benefit all stakeholders. If the rights that should be secured by both parties, namely investors and stock managers, are guaranteed, the company's objectives will be met as efficiently as possible, and agency disputes can be avoided (Angelina, 2020).

Attention must be paid to the relationship between Audit Quality, Ownership Structure and agency cost, as well as the influence of managerial ownership and institutional ownership on the increase or decrease in agency costs; thus, the primary objective of this study is to examine the relationship between Audit Quality, Ownership Structure and agency cost in quoted Nigerian industrial goods companies.

2. Literature Review

Audit quality is defined as the degree to which an audit accurately reflects a company's financial position and operations. Audit quality is an important proxy of corporate governance, as it provides an independent and objective assessment of a company's financial statements. The quality of an audit depends on the competence, independence, and objectivity of the auditor. According to prior research, higher audit quality leads to lower agency costs. For instance, the study by DeAngelo (1981) posits that auditors can reduce agency costs by providing credible information to stakeholders. Additionally, the study by Krishnan (2005) indicates that companies with high-quality audits exhibit better financial reporting quality and lower earnings management.

Ownership structure refers to the distribution of equity ownership among a company's shareholders. The ownership structure is another important proxy of corporate governance, as it determines the distribution of control and decision-making power within a firm (Shleifer & Vishny, 1997). Prior research has shown that ownership structure can affect agency costs. For example, firms with concentrated ownership structures often have lower agency costs since the controlling shareholders have a strong incentive to monitor managers. On the other hand, firms with dispersed ownership structures may face higher agency costs since there are no dominant shareholders to keep managers in check.

Rahman and Khatun (2017) described Corporate governance as the set of guidelines, regulations, and ideal procedures connected to governance that were created to rank the organizations according to how well they are governed. Corporate governance deals with the duties and rights of a company's management, its board of directors towards shareholders, and numerous constituents, including consumers and employees. Various corporate scandals, including those involving Enron, Andersen, and Marconi in the US and UK, as well as a string of financial scandals that have occurred throughout the globe (Turrent & Ariza, 2016), have made corporate governance an emergent topic in academic research (Khanchel, 2007). The need for good corporate governance is growing since it enables improved oversight, satisfies shareholder demands for value maximization of the organization, and protects the interests of other stakeholders (Rahman & Khatun, 2017). By investigating the transparency and accountability of its governance-related concerns, one can evaluate whether a company is a better or worse run.

According to Fakunle, Igbekoyi, and Owoeye (2021), corporate governance procedures are necessary as a set of controls to assist in aligning managers' interests with the interests of other stakeholders due to the agency view of separation between investors and managers. A system created for the mutual benefit of all stakeholders and assurance that the ethical norms and regulations are not disregarded defines sound corporate governance practices.

According to the agency theory viewpoint, managerial ownership (insider holding) can close the distance between the conflicting interests of a company and its agents (managers) (Jensen & Meckling, 1976). In addition, the free cash flow (payout ratio is a metric used to evaluate the sustainability of distributions) hypothesis put out by Jensen (1986) contends that, in cases when the manager is not the owner, the firm's free cash flow is a source of agency costs. As a result,

the manager participates in actions (perquisite consumption) that deplete cash flow to advance his own interests at the expense of the company's interests. However, as the manager starts to own more, his interests start to coincide with those of the company. He invests in projects with positive net present values rather than using free cash to the firm's detriment, which further increases the buildup of free cash flow. Thus, this shows that managerial ownership and agency cost have a positive relationship. When a manager possesses a substantial stake in the company, he or she assumes full responsibility for all decisions, including those regarding the use of payout policy (Yero, Abubakar, Hamman & Saidu, 2021). He pursues his own objectives without concern for retribution (Guizani, 2018). The degree to which company managers "fail to experience discipline from the whole spectrum of corporate governance and control processes" is thus seen as a measure of entrenchment.

Typically, issues that develop between the two parties (managers and investors) cause agency disputes. A prevalent agency conflict is the conflict of interests between investors and managers. According to agency theory, agency conflict can arise when company managers who have made substantial contributions to the performance of the company at their highest levels are more concerned with optimizing their own income than the firm's intended goals (Nugraha, 2021). Additionally, they want to be compensated in the form of high earnings or remuneration for their contributions. In contrast, business proprietors and shareholders frequently only care about their own high-profit income, which aims to increase the wealth they already possess. Agency expenses may be incurred to resolve or mitigate disputes resulting from such disparities in objectives or conflicts in the respective interests of the two parties. Agency costs are required to ensure that management complies with the provisions of the agreement between the two parties (investors and company managers) to achieve the firm's objectives.

2.1. Agency Costs

Agency conflicts can arise between shareholders, business owners, and agents or administrators due to divergent interests or asymmetric information, resulting in agency costs (Jensen & Meckling, 1976). According to Wirahadi Ahmad, A. & Septriani (2008), monitoring expenses, bonding expenses, and residual losses are a few of the agency costs caused by agency conflicts. Expenses incurred by shareholders for monitoring, measuring, observing, and regulating manager behavior to ensure compliance with contractual obligations. Monitoring expenses include audit fees, management compensation plan establishment costs, budget limitation fees, and operating rule establishment costs. Bonding costs, on the other hand, are expenses incurred by managers so that they can act in accordance with the desires and interests of shareholders by creating and adhering to current processes (Ayunitha, 2020).

2.2. Managerial Ownership

Managerial ownership is determined by comparing the number of shares owned by management at the end of the year to the total number of outstanding shares (Anita, A., & Yulianto, 2016). Managerial ownership is the ownership of company shares by a manager who is also a shareholder (Christiawan, Y. J., & Tarigan, 2007). If a company has managerial ownership, a manager who is also a shareholder will unquestionably align his interests, policies, and decisions as a management and shareholder. Managerial ownership can help align the interests of managers and shareholders so that managers can directly reap the benefits of their decisions and also bear the losses resulting from making poor decisions, thereby minimizing agency conflicts (Hidayah, 2015).

2.3. Institutional Ownership

Institutional ownership can be calculated using the percentage of shares possessed by the institution at the end of the year, which is expressed as a percentage. According to Shleifer and Vishney in Arianandini (2018), institutional ownership in a company can increase the effectiveness of institutional governance. This is accomplished by playing a significant role in monitoring, reprimanding, and influencing the performance of managers so that they are more circumspect in their decision-making and do not take advantage of opportunities. According to Permanasari, institutional ownership is the ownership of firm shares by institutions such as insurance companies, investment firms, and banks (Arianandini, P. W., & Ramaratna, 2018).

2.4. Audit Quality

According to Alfraih (2016), the type of auditor is crucial for assessing the veracity of financial data and is thus a crucial component of the governance process. Audit quality, which is dependent on competence and independence, is crucial to achieving the objectives of reducing the inherent moral hazard issue between the principal and the agent. According to some experts, the capacity of the greatest audit firms to assume the responsibility for losing a mandate in the event that accounts are declassified has a significant effect on audit quality (Klein & Leffler, 1981).

2.5. Administrative Expenses Ratio

According to Hilton and Platt (2014), administrative expenses constitute a significant portion of business operations, and this metric should reflect managers' "discretionary behavior" with regard to the allocation of company resources, as it can result from excessive spending on indirect benefits such as salaries, commissions that managers receive for facilitating transactions, travel expenses, advertising and marketing expenses, rent, and other public services. Due to the increased administrative expenditure ratio, managers and shareholders should incur higher agency costs.

2.6. Payout Ratio

In their 2017 study of agency costs and dividend payout ratios of non-financial companies, Natalia and Kusumastuti defined the payout ratio as dividend per share over earnings per share. The dividend payout ratio is the proportion of income that will be distributed to investors as cash dividends (Jatmiko & Kusumastuti, 2017). The dividend payout ratio (DPR) effectively establishes the proportion of profits that will be distributed to investors and retained as part of retained earnings. The dividend distribution ratio determines the proportion of profits distributed as cash dividends and retained earnings as a source of financing. This ratio indicates the proportion of profit distributed as cash dividends to stockholders.

Several studies have investigated the relationship between audit quality, ownership structure, and agency costs. For instance, the study by Abdullah and Mohd-Nor (2018) found that higher audit quality was associated with lower agency costs in Malaysian firms. Furthermore, the study by Kang et al. (2019) indicated that ownership concentration was negatively associated with agency costs in Korean firms.

In the Nigerian context, the study by Adeniji et al. (2016) found that audit quality was negatively associated with agency costs in Nigerian firms. Similarly, the study by Adegbite et al. (2015) indicated that ownership concentration was negatively associated with agency costs in Nigerian firms. However, the study by Okaro et al. (2020) found no significant relationship between audit quality and agency costs in Nigerian firms.

Rashid (2016) investigated the relationship between managerial ownership and company agency expenses among Bangladeshi publicly traded companies. In this institutional setting, there are numerous agency expenses. In an institutional system, there is a concentration of manager ownership, but managers do not own all of the companies. According to published materials, the agency cost refers to the principal's wealth sacrifice in addition to any potential costs associated with supervising the agents. This study uses the 'expense ratio,' the 'Q-free cash flow interaction,' and the 'asset utilization ratio' to calculate agency expenses. The conclusion of the study, which is supported by a number of robustness tests, is that managerial ownership reduces the firm's agency cost only when the 'asset utilization ratio' is used to measure agency cost. In addition, non-linearity tests conclude that extremely high and low degrees of managerial ownership demonstrates the convergence of interests. The entrenchment effect of proprietors is evident at moderate levels of managerial ownership. Despite widespread skepticism among management scholars regarding the theory's applicability, the findings of this study do not undermine the general applicability of agency theory.

Chang, Kang, and Li (2016) investigated, through the lens of agency theory, how institutional ownership affected dividend payments. According to their theory, only institutions with particular characteristics are likely to monitor. Depending on the financial success of the companies, monitoring institutions may use dividend payments as a strategy to reduce agency issues with these companies. Endogeneity tests, level and change models, alternative measures of long-term institutions, and subperiod analyses did not significantly alter the results.

From the empirical review, it is discovered that not many studies investigated the relationship between Audit Quality, Ownership Structure and Agency cost. Therefore, the study aimed to fill this gap in literature by replicating studies done by investigating the relationship between Audit Quality, Ownership Structure and Agency cost in the view of investments, finances, and payout decisions.

3. Methodology

This section describes the study's methodology and the measures taken to collect relevant data. Data Sources, Population, Sample Size and Sampling Methods, Model Specifications, Variable Measurement, and Data Analysis Methods are all covered.

3.1. Sources and Instruments of Data

This research utilized secondary data. The secondary data were retrieved from the audited financial statements of the selected industrial goods companies listed on the Nigerian Stock Exchange (NSE) for the period 2011-2021. The data include: Audit Quality, Managerial Ownership share, Institutional Ownership share, Administrative Expenses Ratio, and Payout Ratio.

3.2. Population and Sample Size

Due to the availability of their data, this study's population consists of nine (9) industrial goods corporations listed on the Nigerian Stock Exchange (NSE). The cohort comprised nine (9) firms with readily accessible data at the time of the study and spanned eleven years (2011–2021).

3.3. Model Specification

For empirical estimation, dynamic panel data models, as expressed in (2) and (3), are specified on the relationship between Audit Quality, Ownership Structure and Agency Cost. Thus:

$$AgCost_{it} = \beta_{oi} + \sum_{it=1}^n \beta_i X_{it} + \varepsilon_{it} \dots \dots \dots (1)$$

Where:

X_t = vector of independent variables of firms i at time t

β_i = coefficients of X_{it}

β_{oi} = firm-specific intercept representing unobservable individual characteristics

ε = error term

This model is estimated using both fixed and random effects.

3.3.1. The Fixed Effect

By assuming a fixed intercept (i.e., time-invariant) in all cross sections (firms) but uniform slopes during the time period as described below, the fixed effect accounts for the uniqueness of each particular cross-section:

$$AgCost_{it} = \beta_{1i} + \beta_2 AUQ + \beta_3 MOS + \beta_4 IOS + \varepsilon_{it} \dots \dots \dots (2)$$

Where:

$AgCost_{it}$ = Agency cost

AUQ = Audit Quality

MOS = Managerial Ownership share

IOS = Institutional Ownership share

The subscript i on the intercept implies that the management style, production function, marketing ability, and other factors may cause the intercepts in the cross sections of the firms to differ. However, based on equation (1), the regressors' slope coefficients do not change over time or in cross sections.

3.4. Method of Analysis

The study makes the main techniques of Descriptive Statistics, Correlation analysis and Panel Regression which is Fixed Effects Model (FE) in estimating equation 2. All analyses were conducted at 5% level of significance using E-Views 10 as statistical software.

4. Data Presentation, Analysis and Interpretation

	AER	AUQ	IOS	MOS	PAR
Mean	0.228657	0.670103	0.529396	0.134036	0.704362
Median	0.139041	1.000000	0.618800	0.000597	0.333333
Maximum	1.274669	1.000000	0.948900	0.970275	6.578947
Minimum	0.000000	0.000000	0.000000	0.000000	0.000000
Std. Dev.	0.232773	0.472618	0.327404	0.246262	1.201531
Skewness	2.351955	-0.723573	-0.476790	2.123583	3.100423
Kurtosis	9.197633	1.523558	1.801861	6.260529	13.40238
Jarque-Bera	244.6721	17.27454	9.477108	115.8724	592.7508
Observations	97	97	97	97	97

Table 1: Descriptive Statistics

Source: Eviews 10, 2022

Table 1 shows the result of descriptive statistics for Audit Quality, Ownership Structure and agency cost in Nigerian quoted industrial goods firms from 2011-2021. The results indicated that corporate governance has a positive mean value of 0.670103. The median was also calculated and found to be AUQ with a value of 1.000000, MOS with a value of 0.000597, IOS with a value of 0.618880, AER with a value of 0.139041, and PAR with a value of 0.333333. These results demonstrated that there was little deviation between the median and the mean, indicating that each variable considered was suitable for the study. In addition, it was discovered that the minimum value for all variables included in the descriptive statistics is zero, whereas the maximum values are positive: 1.274669, 1.000000, 0.948900, 0.970275, and 6.578947 for AER, AUQ, IOS, MOS, and PAR. The companies' standard deviations, which measure how far they deviate from the mean, are 0.232773 for AER, 0.472618 for AUQ, 0.327404 for IOS, 0.246262 for MOS, and 1.201531 for PAR; therefore, the standard deviations do not vary significantly from the mean, indicating that each variable considered was appropriate for the study.

Alternatively, skewness quantifies the asymmetry of the values' distribution around the mean, which was determined to be a positive value of 2.351955 for AER, 2.123583 for MOS, and 3.100432 for PAR, indicating that positive values for the skewness indicate data that are skewed to the right, implying that there were a greater number of managerial ownership shares during the period, resulting in higher agency costs. In contrast, the fact that AUQ and IOS have negative values of -0.723573 and -0.476790, respectively, indicates that the data are tilted to the left, and Audit's performance was insufficient. Also, the kurtosis which measures the peakiness or the flatness of the distribution of a series in which 3.0 is the standard for normal distribution series; AER, AUQ, IOS, MOS, and PAR with the values of 9.197633, 1.523558, 1.801861, 6.260529 and 13.40238 which AER, MOS and PAR are greater than 3.0 except AUQ and IOS, then the distribution is peaked relative to the normal, being peaked means that very few observations within the region where the median resides. The fact that AUQ and IOS, with respective values of 1.523558 and 1.801861, are less than 3.0 demonstrates the relative flatness of the series' distribution.

Another statistical instrument used to quantify variables is the Jarque-Bera test, which determines whether a series is normally distributed and evaluates how different the skewness and kurtosis of the series are from those of the normal distribution. The statistical data and p-values reveal whether or not the distribution of all variables is normally distributed.

	AER	AUQ	IOS	MOS	PAR
AER	1				
AUQ	-0.0228	1			
IOS	0.0169	0.4483	1		
MOS	-0.0223	-0.6207	0.0603	1	
PAR	-0.0966	0.1484	0.3274	-0.0544	1

Table 2: Correlation Matrix

Source: EViews 10, 2022

In contrast to the descriptive output, which provides information about each data set (including the mean, standard deviation, and number of values for each variable), the correlation matrix in the output explains how the variables are associated. Table 2 displays the correlation matrix between the variables and any prospective relationships between them. This is necessary for testing multicollinearity between the independent and dependent variables. According to table 2, the correlation coefficients for all variables AER, AUQ, IOS, MOS, and PAR were either positive or negative and less than 0.9. This result demonstrated the independence of the variables, allowing them to be used as independent variables in a regression analysis without producing erroneous results.

According to the summary of the correlation matrix, table 2 demonstrates that AER correlates negatively with AUQ, MOS, and PAR, which suggests that an increase in AER will result in a decrease in audit quality, managerial ownership share, and payout ratio in the Nigerian Quoted Industrial goods Firms. In contrast, AER correlates positively with IOS, which indicates that as AER increases, the administrative expenses ratio increases, resulting in an increase in institutional ownership share. AUQ correlates positively with IOS, and PAR, indicating that the higher the audit quality, the higher the institutional ownership share in the Nigerian Quoted Industrial goods Firms and the payout ratio, whereas AUQ correlates negatively with MOS, indicating that the higher the audit quality, the higher the managerial ownership share in the Nigerian Quoted Industrial goods Firms. Positive correlations exist between IOS, MOS, and PAR, suggesting that the higher the institutional ownership share, the higher the managerial ownership share and payout ratio. Lastly, MOS correlates positively with PAR, which indicates that the higher the managerial ownership share, the lesser the payout ratio in the quoted Nigerian industrial goods firms.

Dependent Variable: AGC				
Method: Panel Least Squares				
Date: 12/17/22 Time: 15:32				
Sample: 2011-2021				
Periods included: 11				
Cross-sections included: 9				
Total panel (unbalanced) observations: 97				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
PAR	-0.022825	0.020309	-1.123875	0.2643
C	-0.403745	0.166747	-2.421302	0.0176
AUQ	0.821531	0.176491	4.654801	0.0000
MOS	0.248847	0.293782	0.847047	0.3994
IOS	0.122051	0.212190	0.575197	0.5667
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.543240	Mean dependent var	0.228657	
Adjusted R-squared	0.477988	SD dependent var	0.232773	
SE of regression	0.168180	Akaike info criterion	-0.603420	
Sum squared resid	2.375892	Schwarz criterion	-0.258355	
Log-likelihood	42.26585	Hannan-Quinn criter.	-0.463892	
F-statistic	8.325321	Durbin-Watson stat	1.058226	
Prob(F-statistic)	0.000000			

Table 3: The Fixed Effect

Source: EViews 10, 2022

From the Fixed Effect panel model regression, as shown in table 3, it was determined that the p-value of the calculated AUQ t-statistic of 0.0000 was less than the critical value of 5%. This indicated that Audit quality had a substantial impact on the agency costs of quoted Nigerian industrial goods firms. Given that the p-value of the t-statistics calculated for MOS was greater than 5%, it can be concluded that there is no significant relationship between MOS and Agency cost. The calculated p-value of the t-statistics for IOS was 0.5667, which was less than the critical value of 5%. It can also be inferred that there was no significant relationship between IOS and agency cost of Nigerian firms quoting industrial products.

In accordance with the work of Nguyen, Doan, and Nguyen (2020), the regression coefficient results for audit quality, managerial ownership share, and institutional ownership share indicate that a unit increase in audit quality, managerial ownership share, and institutional ownership share may result in a greater than a unit increase in the agency

cost of Nigerian Quoted Industrial Goods Firms. Consequently, the P-value of 0.000000 for the F-statistics derived for the variables to evaluate the global fixed effect of the regression model was below the 5% threshold. This indicated a significant relationship between Audit Quality, Ownership Structure and Agency Costs of Nigerian Quoted Industrial Goods Firms.

The coefficient of determination (R²) for the fixed panel effect estimation revealed that proxies for Audit Quality, Ownership Structure accounted for 54.3% of the agency costs of Nigerian quoted industrial goods firms. Therefore, it could be asserted that effective explanatory factors for the Agency Cost of Nigerian Quoted Industrial Goods Firms were surrogates for Corporate Governance Quality.

On the basis of the test variables' Durbin Watson statistics of 1.058226, it was possible to conclude that the variables in the study contained an independent variable that had a long-term effect or relationship on the dependent variable. This statistic indicated that there was minimal autocorrelation between the variables of the study.

The result of the antecedent Fixed Effect panel model regression demonstrated that the Fixed Effect test estimation perfectly matched the regression model. Fixed Effect panel model regression revealed the cross-sectional arrangement of panel data. These effects on Audit Quality, Ownership Structure and agency costs of Nigerian Quoted industrial goods companies are statistically significant on the basis of Audit Quality.

5. Summary of the Findings

The primary objective of this study was to investigate the relationship between Audit Quality, Ownership Structure and agency cost of Nigerian quoted industrial goods companies. The sample consisted of nine (9) companies whose data were readily available during the study and spanned eleven years (2011-2021). Data from the study were analyzed using both descriptive and inferential statistical methods. The correlation analysis revealed that all variables (AER, AUQ, IOS, MOS, and PAR) had correlation coefficients that were positive or negative and less than 0.90. This result demonstrated the independence of the variables, allowing them to be used as independent variables in a regression analysis without producing erroneous results.

The results of the Fixed Effect panel model regression revealed that the Fixed Effect test estimation perfectly matched the regression model. Fixed Effect panel model regression revealed the cross-sectional arrangement of panel data. Due to the probability values of the predictors being less than the study's adopted 5% level of significance (p-values 0.05), except for managerial ownership share and institutional ownership share, which were greater than 5% level of significance (p-values > 0.05), these effects on Audit Quality, Ownership Structure and agency costs of Nigerian Quoted industrial goods companies are statistically significant according to Audit Quality.

6. Conclusion

The study concluded that there is a significant relationship between the Audit Quality, Ownership Structure of industrial products companies and agency costs. Following the findings, the following conclusions were drawn:

The majority of the variables for Audit Quality, Ownership Structure of Nigerian Quoted industries goods companies were significantly related to variables for agency costs, indicating that Audit Quality, Ownership Structure (audit quality) had a significant effect on agency costs, while the other variables (managerial ownership share and institutional ownership share) have no significant effect on agency cost of Nigerian Quoted industries goods companies.

According to the result of the regression coefficient, the effect of the variables on Audit Quality, Ownership Structure was positive and statistically significant. This indicated that when audit quality is improved and equity ownership between managers and institutional investors is balanced, agency costs may be reduced. Effective corporate governance is required to reduce the likelihood of conflicts between stock managers and shareholders. When managing the business, managers must adhere to a predetermined procedure or pattern that aims to increase shareholder income while also considering the earnings of all stakeholders and making a high-performance contribution to the organization. When implemented, corporate governance can benefit all stakeholders. If the rights that should be secured by both parties, namely investors and stock managers, are guaranteed, the company's goals will be accomplished as efficiently as possible, and agency disputes can be avoided. This is beneficial for everyone involved (Angelina, 2020).

7. Recommendation

Therefore, the study recommended that there should be balanced equity between ownership managers and institutional investors to reduce agency costs and the audit quality should be enhanced through the use of Big-4 to reduce asymmetric information by managers and minimize agency conflicts.

8. References

- i. Abdullah, N. H., & Mohd-Nor, R. (2018). Audit quality and agency costs: Evidence from Malaysian firms. *Journal of Financial Reporting and Accounting*, 16(2), 294–310.
- ii. Adeniji, A. A., Uwuigbe, U., & Ogiedu, K. O. (2016). Audit quality and agency cost: Evidence from Nigerian listed firms. *International Journal of Accounting and Financial Reporting*, 6(2), 24–36.
- iii. Adegbite, E., Amaeshi, K., & Amao, O. (2015). Agency theory, corporate governance and SMEs: Evidence from Nigeria. *Journal of Small Business Management*, 53(4), 969–983.
- iv. Agarwal, S. (2020). Relationship between Managerial Ownership and Agency Cost. *International Journal of Financial Management* 10 (4), 35–43.
<http://publishingindia.com/ijfm/>, Available at SSRN: <https://ssrn.com/abstract=3799983>

- v. Angelina, S. (2020). Effects of Monetary Policy on Inflation and National Economy Based on Analysis of Bank Indonesia Annual Report. *Technium Social Sciences Journal*, 10(1), 423–435. <https://doi.org/10.47577/tssj.v10i1.1300>
- vi. Ayunitha, A. et al. (2020). Does the Good Corporate Governance Approach Affect Agency Cost? *Solid State Technology*, 63(4), 3760–3770. <http://solidstatetechnology.us/index.php/JSST/article/view/3199>
- vii. Balagobei, S. & Velnampy, T. (2017). A study on ownership structure and financial performance of listed beverage food and tobacco companies in Sri Lanka. *International Journal of Accounting and Financial Reporting*, 7(2), 36–47.
- viii. Chang, K., Kang, E., & Li, Y. (2016). Effect of Institutional Ownership on Dividends: An Agency-TheoryBased Analysis. *Journal of Business Research*, 69(7), 2551–2559. <http://doi.org/10.1016/j.jbusres.2015.10.088>
- ix. Christiawan, Y. J. & Tarigan, J. (2007). Kepemilikan manajerial: kebijakan hutang, kinerja dan nilai perusahaan. *Jurnal Akuntansi Dan Keuangan*, 9(1), 1–8.
- x. Cinantya, I. G. A. A. P., & Merkusiwati, N. K. L. A. (2015). Pengaruh corporate governance, financial indicators, dan ukuran perusahaan pada financial distress. *E-Jurnal Akuntansi*, 10(3), 897–915.
- xi. DeAngelo, L. E. (1981). Auditor size and audit quality. *Journal of Accounting and Economics*, 3(3), 183–199.
- xii. Fakunle, T. D., Igbekoyi, O. E. & Owwoye T. O. (2021). Corporate Governance and Financing Decision: Evidence from Listed Deposit Money Banks In Nigeria, *International Journal of Innovative Research in Accounting and Sustainability*, 6(1), 249–269.
- xiii. Gichana, O. E. (2012). Relationship between managerial ownership and agency cost of listed companies at the Nairobi Securities Exchange (Doctoral dissertation). *School of Business, University of Nairobi*.
- xiv. Guizani, M. (2018). The Mediating Effect of Dividend Payout on the Relationship between Internal Governance and Free Cash Flow. *Corporate Governance: The International Journal of Business in Society*, 18(4), 748–770. <https://doi.org/10.1108/CG-01-2018-0011>.
- xv. Gitman, I. (2012). Principles of managerial finance 13th edition. Massachusetts: Addison-Wesley Publishing Company.
- xvi. Hidayah, N. (2015). Pengaruh Investment Opportunity Set (Ios) Dan Kepemilikan Manajerial Terhadap Nilai Perusahaan Pada Perusahaan Property Dan Real Estat Di Bursa Efek Indonesia. *Jurnal Akuntansi*, 19(3), 420–432
- xvii. Hilton, R., & Platt, D. (2014). *Managerial Accounting: Creating Value in a Dynamic Business Environment* (10th ed.). McGraw-Hill Education, New York.
- xviii. Jatmiko, Indra, and Retno Kusumastuti (2017). Ownership Structure and Dividend Policy in Non-Financial Company, *MIMBAR*, 33(1).
- xix. 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.
- xx. Jensen, M. C., & Meckling, W. H. (1992). Specific and general knowledge and organization structure. *Journal of Applied Corporate Finance*, 8(2), 4–18.
- xxi. Kang, S. H., Lee, K. W., & Na, H. S. (2019). Ownership structure, board characteristics, and agency costs in Korean firms. *Asia Pacific Journal of Management*, 36(2), 487–512.
- xxii. Krishnan, J. (2005). Audit quality and the pricing of discretionary accruals. *Auditing: A Journal of Practice & Theory*, 24(1), 103–117.
- xxiii. Khanchel, I. (2007). Corporate governance, measurement and determinant analysis. *Managerial Auditing Journal*, 22, 740–760.
- xxiv. Lintner, J. (1956). Distribution of incomes of corporations among dividends retained earnings and taxes. *The American Economic Review*, 46(2), 97–113 <http://www.jstor.org/stable/1910664>
- xxv. Mansour, M.; Al Amosh, H.; Alodat, A.Y.; Khatib, S.F.A.; Saleh, M.W.A. (2022) The Relationship between Corporate Governance Quality and Firm Performance: *The Moderating Role of Capital Structure. Sustainability*, 14(10), 5–25. <https://doi.org/10.3390/su141710525>
- xxvi. Mustapha, M., & Ahmed, C. A. (2011). Agency theory and managerial ownership: Evidence from Malaysia. *Managerial Auditing Journal*, 24, 419–436.
- xxvii. Moez, D. (2018). Agency costs, Corporate Governance and the Nature of Controlling Shareholders: Evidence from French Listed Firms. *International Journal of Accounting and Financial Reporting*, 8, 256–77.
- xxviii. Myers, S. C., & Majluf N (1984). Corporate Financing and Investment Decisions when Firms have Information that Investors do not have. *Journal of Financial Economics*, 13, 187–22.
- xxix. Nazar, M. C. A. (2021). The Dynamic Impact of Corporate Governance on Investment Decisions of Non-Financial Companies in Sri Lanka. *Journal of Contemporary Issues in Business and Government*, 27(1), 2021.
- xxx. Natalia, A., & Kusumastuti, R. (2017). An analysis of agency costs and dividend payout ratio of non-financial companies.
- xxxi. Nguyen, H., Doan, D. T. & Nguyen, L. H (2020). Corporate governance and agency cost: Empirical evidence from Vietnam, *Journal of Risk and Financial Management*, ISSN 1911-8074, MDPI, Basel, 13(5), 1–15, <https://doi.org/10.3390/jrfm13050103>.
- xxxii. Nugraha, N. M. (2021). The Influence of Institutional Ownership, Managerial Ownership, and Board of Commissioners on Agency Costs. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(8), 1381–1387.

- xxxiii. Okaro, S. C., Nwagboso, C. A., & Nnabuko, J. O. (2020). Audit quality and agency cost in the Nigerian banking industry. *Journal of Accounting and Finance in Emerging Economies*, 6(2), 230–242.
- xxxiv. Rashid, A. (2016). Managerial ownership and agency cost: Evidence from Bangladesh. *Journal of business ethics*, 137(3), 609–621.
- xxxv. Rahman, M. M., & Khatun, N. (2017a). Quality of Corporate Governance: A Review from the Literature. *The Journal of Asian Finance, Economics and Business*, 4(1), 59–66.
<http://dx.doi.org/10.13106/jafeb.2017.vol4.no1.59>
- xxxvi. Rahman, M. M., & Khatun, N. (2017b). A Comparative Analysis of Corporate Governance Guidelines: Bangladesh Perspective. *The East Asian Journal of Business Management*, 7(2), 5–16.
<https://doi.org/10.13106/eajbm.2017.vol7.no2>.
- xxxvii. Sehrawat, Neeraj K., Amit Kumar, Nandita Lohia, Satvik Bansal, & Tanya Agarwal. (2019). Impact of Corporate Governance on Earnings Management: Large Sample Evidence from India. *Asian Economic and Financial Review*, 9, 1335–45.
- xxxviii. Turrent, G. D. C. B., & Ariza, L. R. (2016). Corporate governance ratings on listed companies, an institutional perspective in Latin America. *European Journal of Management and Business Economics*, 25(2), 63–75.
- xxxix. Wirahadi Ahmad, A., & Septriani, Y. (2008). Konflik Keagenan: Tinjauan Teoritis dan Cara Mengurangnya. *Jurnal Akuntansi & Manajemen*, 3(2).
- xl. Yero, J. I., Abubakar, N., Hamman, A. M., & Saidu, S. (2021). Free Cash Flow, Managerial Ownership, And Agency Cost: A Nonlinear Evidence From Nigerian Quoted Consumer And Industrial Goods Firms. *Journal of Business and Economic Analysis*, 4(02), 193–206.