

# Audit Reporting Lag and Firm Value in Nigerian Food and Beverage Companies

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## Abstract

Delays in financial reporting give a negative signal to the market and adversely affect the company's market value. Financial reporting lags raise suspicions among market participants regarding concealment of any potential bad news by a firm, which may affect its share value. Thus, the study investigates the interaction of audit reporting lag and firm value in Nigerian beverage and food companies. Audit delays lead to the late publication of financial statements, enhancing the information asymmetry problem, and affecting firm value. We obtained the data from annual reports of 10 listed companies for five years. The Generalized Method of Moments (GMM) estimation is used to analyze the data. The results suggest that audit delays do not affect the market value of a firm. Previous studies mainly focus on the relationship between corporate governance firm characteristics, and audit reporting lag in Nigeria. To the best of our knowledge, the impact of audit delays on firm value in Nigeria is yet to be adequately explored. The finding may help statutory bodies in reducing the period of financial reporting. The results may also help firms improve their performance and promote an environment that may give investors confidence. This study has focused on the food and beverage sector in Nigeria. Future studies can be undertaken in other sectors which may bring more insight to the issues related to financial reporting lags.

**Keywords:** *Audit reporting lag, firm value, food, beverage, Nigeria.*

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## **Introduction**

Firm value is a measure of shareholder wealth. Firm value is determined in the stock market, i.e., the market value of shares owned by shareholders (Sanyaolu, Odunayo, & Graig, 2019). Investors' financing decisions are highly dependent on the prospects of capital appreciation and growth opportunities. Traditionally, shareholders do not take part in the management of a company. Instead, they appoint agents (i.e., the board of directors) to manage the firm on their behalf. Thus, the publication of audited financial statements regularly is highly imperative (Al-Khaddash et al., 2013). The financial statements serve as a primary source of information for financial analysis and investment decision making. Financial statements also provide information about the financial health to the stakeholders of a firm.

Moreover, financial statements provide information about the book value of a firm's net assets. However, investors tend to compare the book value of equity with equity's market value before making investment decisions. Furthermore, financial statements also help reduce the agency problem and information asymmetry between managers and shareholders by disclosing information about the company's performance. Hence, reliable financial statements are imperative for objectively gauging management's success in operating the company (Berle & Means, 1932).

Relevance and faithful representation are key qualitative attributes of financial statements. These attributes facilitate stakeholders in decision making and allow them to assess the market value of a firm. Relevance means that financial statements provide information relevant to decision making. However, relevance alone does not assure the reliability of information (Arenes et al., 2012). Financial statements are reliable if they have adequate quality and facilitate informed decisions. An external auditor helps reduce the information asymmetry problem for firms and increases the credibility of financial statements. Audit reports, issued by an independent external auditor, provide an opinion about the truth and fairness of financial information (Rojas et al., 2017; Petu et al., 2014). Thus, a corporation must get its financial statements audited to increase its relevance and credibility for stakeholders' decisions (Robu & Robu, 2015). Audit quality depends on several factors, such as the organization's complexity, number of labor days spent completing the audit and auditor's expertise. For achieving acceptable audit quality, the auditor needs to devote reasonable time to complete the audit procedures and make an opinion about the financial statements (Salwu, Adedeji, 2017). However, sometimes a thorough audit causes unnecessary delays in the publication of financial statements. In other words, audit delay may occur when an auditor spends more time to complete the audit than usual. The uncertainty creates several problems, including late disclosure of financial statements and information asymmetry, which may affect

investment decisions.

According to Ghosh and Huang (2018), agency conflicts between managers and shareholders occur due to the information asymmetry problem. Information asymmetry makes it difficult to analyze management effectiveness and determine firm value. Information asymmetry due to audit delays may also cause high uncertainty about a firm's future and higher cost of financing in debt markets. Lack of strict adherence to corporate reporting procedures may also result in financial reporting delays in developing countries (Asthana, 2014; Kajuter, et al., 2019). Therefore, it is necessary to investigate further whether the audit reporting lag affects a firm's value. The study is unique, as it focuses on the Nigerian economy and includes several other factors that may affect firm value. Previous studies mainly focus on the relationship between corporate governance and audit reporting lag (Ahmed & Ahmed, 2016; Iloboya & Iyafekhe, 2014), firm characteristics, and audit reporting lag in Nigeria (Akingunola, Soyemi & Okunuga, 2018). To the best of our knowledge, the impact of audit delays on firm value in Nigeria is yet to be adequately explored. Thus, we investigate the dynamic interaction of audit reporting lags and firm value in the context of Nigerian beverage and food companies.

## **Literature Review**

### **Conceptual Review**

Delays in financial reporting give a negative signal to the market and adversely affect the company's market value. Financial reporting lags raise suspicions among market participants regarding concealment of any potential bad news by a firm, which may affect its share value. While a company cannot publish its financial statements until they are properly audited, auditing delays may cause delayed publication of financial statements and disciplinary action from regulatory bodies.

In perfect markets, firm value and investment decisions are not affected by capital structure (Modigliani & Miller, 1958). However, in the real world, we cannot rely on the perfect market assumption. In practice, firms pay taxes, transaction costs and information asymmetries affect firm value (Modigliani & Miller, 1963). Many developing countries, such as Nigeria, suffer from market imperfections. Thus, a firm's value may be affected by the high cost of debt finance and tax shields on debt as they influence the cost of capital and investors' returns.

Every company aims to attract potential investors to invest in a firm's equity. However, investors are attracted when there is positive news about the company in the market. Positive earnings announcements signal a positive outlook for a firm

and attract investors. Positive information also helps to increase the value of a firm's outstanding shares. Firm size is traditionally measured through the total assets of a firm. It is assumed that firms with a larger asset base and strong cash flow position tend to be more profitable and stable in the long run (Putu, Moeljadi, Djumahir & Djazuli, 2014). Thus, large firms' stakeholders are more confident in their investment decisions, which enhances their stability in the market.

### **Theoretical Review**

The agency problem arises in organizations where ownership is separate from management (Jensen & Meckling, 1976). In a corporation, the ownership belongs to the shareholders (or principal), who do not participate in daily management affairs. Instead, they appoint agents (or managers) to work on their behalf. However, the interests of the principal and agents may differ significantly over time. Managers may prefer short term private gains over the long term strategic objectives of the organization. On the contrary, owners expect managers to maximize their interests and actively pursue their long-term strategic goals. This dilemma is called the agency problem.

Akerlof (1970) applied the signaling theory in his seminal paper "The Market for "Lemons": Quality Uncertainty and the Market Mechanism." To decrease information asymmetries, managers, from time to time, sent signals to market stakeholders. The information disclosed through signals can be either implicit or explicit. However, these signals are perceived differently by stakeholders and allow the market to assess firm value correctly. The timely reporting of financial information is important for a firm as it reduces the likelihood of concealing material information from shareholders. This practice not only increases firm value but enhances managements' credibility. Timely financial information also enables shareholders to make timely decisions and reduces information misuse by managers. However, audit delays may adversely affect the timely reporting of financial information and a firms' reputation. Furthermore, delayed financial reporting may raise the suspicion of material information concealment, which may affect firm value.

Al-Slehat (2020) investigated several mining firms in Jordan's industrial sector and found that firm size and capital structure are important for firm value. The study concludes that the Jordanian firm's values were not particularly affected by financial leverage during 2010-2018. Fajaria and Isnalita (2018) analyzed 146 companies listed on the Jakarta Stock Exchange and found that firm value increases with the growth and profitability as they create a positive impact on investors. However, it was argued that excess liquidity and high leverage dampened investor outlook towards a firm.

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Aggarwal and Padhan (2017) examined how several factors (i.e., default risk, leverage,

size, profitability, growth, liquidity, GDP, and inflation) affected firm value. The results reveal a positive relationship between a firm's attributes and its value. The study did not find any evidence in support of the Modigliani-Miller theory. On the contrary, Lumapow and Tumiwa (2017) found a negative relationship between firm value and dividend payout in manufacturing companies. The study reports a significant positive relationship between firm value, productivity, and firm size. Ogbulu and Emeni (2012) advised managers of Nigerian listed companies to follow the pecking order theory as long term debt was observed to be a key factor in determining firm value.

Odum, Okeye, and Odum (2017) observed that many companies in Nigeria do not adhere to corporate governance. The study found that companies following the code and professional audit practices have a positive relationship between CGC adherence, audit quality, and financial performance. A positive association between audit reporting delays and poor earnings quality was observed by Asthana (2014). He concluded that earnings reported after a delayed audit process suffer from deficiencies and adversely affect investor opinions about earnings quality. Al-Khaddash, Al-Nawas, and Ramadam (2013) found that auditor efficiency, auditor reputation, audit fees, and auditor proficiency significantly affect audit quality, while internal control systems, auditor independence, and auditor size negatively affect audit quality in Jordanian commercial banks.

When the Securities and Exchange Commission reduces the audit reporting period, auditors come under immense pressure to complete a company's audit in a limited time. Thus, the capacity of an auditor to critically evaluate the evidence gets compromised. This phenomenon is called audit time pressure, which adversely affects both audit and earnings quality. Lambart, Jones, Brazel, and Showalter (2017) found that a reduction of 15 days in the filing deadline by SEC hurt US firms' earnings quality. While studying audit clients' attributes, Akingunola, Soyemi, and Okunuga (2018) observed that company age and ROA positively affect audit reporting lag, implying that mature and profitable firms have a longer reporting time.

Moreover, audit lags are common when firms have a larger asset base. Similarly, firms audited by Big 4 accounting firms also report a longer audit reporting lag. To examine the effect of audit quality on earnings management and firm value in Indonesian firms, Challen & Siregar (2012) found that industries audited by industry-specific auditors reduce accruals earnings management. Further, industry-specific audits lead to real earnings management, which reduces firm value. It was also concluded that apart from firm profitability, audit firm size and client size do not affect firm value.

## Methodology

The study uses secondary data from the annual reports of Nigerian food and beverage companies. Out of 15 food and beverage based companies listed in Nigeria, ten were selected using convenient sampling, representing 67% of the total population. Financial data is compiled from the annual reports of companies chosen for six years ranging from 2012 to 2017. The study uses the Generalized Methods of Moments (GMM) for estimating the panel data model. Moreover, the Hausman specification test was conducted to ascertain whether the fixed or random-effects model is suitable. The dependent variable in the model is the firm value proxied through the modified Tobin's Q. The modified Tobin's Q was calculated through the Chung & Pruitt (1994) approach. Audit reporting lag, the independent variable, was calculated by taking the difference between a firm's financial year-end date and the audit report date. Three additional variables, firm size, operating profit, and capital structure, were added to the model as control variables, as they are highly likely to affect firm value, besides the audit report lag.

**Table 1: Variables Measurement**

Variable	Acronym	Measure	
<i>Dependent variable</i>			
Firms Value	Tobin's Q	The Chung and Pruitt (1984) modified Tobin's Q . Tobin's Q=(MVS+D)/TA. Where: MVS =Market value of all outstanding shares measured by firm Stock Price*Outstanding Shares, TA= Firm' assets, D =(Short Term Debt+Taxes Payable- Firms Current Assets)+Firm long Term Debt, TA =Total Assets.	
<i>Independent variables</i>			
Variable	Acronym	Measure	Expected effect
Auditor's Reporting Lag	AURLAG	Difference between the Client Fiscal year and the Audited Report Date.	-
Capital Structure	CAP	<u>Total Debt</u> Total Asset	+/-
Operating Profit	OPP	Natural logarithm of operating profit	+
Firm Size	FZ	Natural logarithm of total asset	+

## Model Specification

The model is adopted from Iloboya & Iyafekhe (2014) to examine the relationship between audit reporting lag and firm value in Nigerian food and beverage companies. The model is exhibited below;

$$TBQ_{it} = \beta_0 + \beta_1 AUDRLAG_{it} + \beta_2 CAP_{it} + \beta_3 OPP_{it} + \beta_4 FZ_{it} + \mu_{it}$$

Where:

$TBQ_{it}$  = Tobins Q of firm i in period t

$AUDRLAG_{it}$  = Auditor's Reporting Lag of firm i in period t

$CAP_{it}$  = capital structure of firm i in period t

$OPP_{it}$  = operating profit of firm i in period t

$FZ_{it}$  = firm size of firm i in period t

$\mu$  = error term.

## Results and Discussion

### Descriptive Statistics

The results of the descriptive statistics are shown in table 2. On average, the audit reporting lag duration has been 4.33 days, with a minimum and maximum duration between 3 to 5 days. The duration of the audit reporting lag poses a problem in timely financial reporting. Firm value has a mean value of 2.25 with a high standard deviation. Operating profit fluctuated significantly, ranging between 13.47 and 18.01, with a mean of 16.27. Firm size has a mean of 18.41 and ranges from 17.16 to 19.76.

**Table 2: Descriptive Statistics**

Variable	Mean	Minimum	Maximum	Std. Deviation	Skewness	Kurtosis
TBQ	2.257	0.0178	8.6948	2.1221	1.3991	4.3901
AUDRLAG	4.3308	3.4340	4.8040	0.3113	-0.9280	3.8590
CAP	0.2958	0.000	3.8584	0.5454	5.4307	35.7970
OPP	16.2771	13.4749	18.0181	1.1224	-0.3054	2.5418
FZ	18.4102	17.1617	19.7628	0.7278	0.1582	2.1209

### Correlations

Table 3 depicts the correlation matrix of the dependent and independent variables. All coefficient of correlation is below 0.8; thus, no high multicollinearity issue exists between the regressors (Gujrati, 2003). A negative correlation exists between firm value and the audit reporting lag. This result implies that firms with a firm value have less audit reporting lags. A negative correlation also exists between firm value and capital structure, which is inconsistent with the literature.

**Table 3: Correlation Matrix**

Variables	TBQ	AUDRLAG	CAP	OPP	FZ
TBQ	1.000				
AUDRLAG	-0.5495	1.000			
CAP	-0.1740	0.2587	1.000		
OPP	0.5167	-0.4909	-0.2499	1.000	
FZ	0.1303	-0.3343	-0.2032	0.7601	1.000

### Panel Regression

The results from the panel estimation of the regression equation are exhibited in Table 4. For comparative purposes, pooled OLS, fixed effects, and random effects model results are presented.



Table 4: Panel Regression

	Pooled OLS			Fixed Effects			Random Effects		
	Coeff	t-stat	P-Val	Coeff	t-stat	P-val	Coeff	t-stat	p-val
Constant	3.166	0.448	0.65	36.431	2.0304	0.05	3.166	0.555	0.58
AUDRLAG	-0.270	-0.367	0.71	-0.047	-0.0378	0.97	-0.270	-0.455	0.65
CAP	0.040	0.126	0.90	-0.220	-0.6752	0.50	0.040	0.156	0.87
OPP	0.665	2.164	0.03	1.045	2.7389	0.01	0.665	2.682	0.01
FZ	-0.667	-1.524	0.13	-2.740	-2.8823	0.00	-0.667	-1.889	0.06
R-squared	0.752			0.877			0.752		
Adjusted squared	0.714			0.814			0.714		
J-stat	33.00			25.00			33.00		
Prob J-stat	0.000			0.000			0.000		
Durbin Watson	1.847			2.068			1.847		
Instrument Rank	7			15			7		
Test Summary				Chi-Sq. Statistic		Chi-Sq. d.f.		Prob.	
Cross-section random				23.494394		5		0.0003	

The results suggest that audit report lag negatively affects firm value while holding other factors as constant. However, the relationship between the two variables is not statistically significant. The  $R^2$  and adjusted  $R^2$  values indicate that the model has a good fit. For example, an approximately 87% variation in the dependent variable is explained by the fixed effects model. Moreover, the Durbin Watson statistics are close to 2, which suggests that the models do not suffer from autocorrelation (Gujarati, 2003; Al-Saeed, 2006). The Hausman (1978) specification test results indicate that the fixed effects model is more appropriate for the study, as the chi-square statistic is quite high and significant at the 1% level.

## Discussion

The Hausman specification test suggests that the fixed effects GMM model is the most appropriate model to test our hypothesis, as the Chi-square value is significant at 1%. Chartists, also known as technical analysts, believe that firm value does not follow a random walk and can be predicted through past trend analysis. However, the fixed effects model insignificant results imply that we cannot forecast future firm value, which contradicts the technical analysts' view of firm valuation.

The fixed-effects model also shows an insignificant negative relationship between audit reporting and firm value. Therefore, it may be concluded that delay in audit reporting has an insignificant influence on firm value. These findings are consistent with the view of Asthana (2014). The Modigliani-Miller theory suggests that in a perfect market, the absence of information asymmetries, taxes, transaction costs, and bankruptcy, firm value is not dependent on capital structure. Our findings are consistent



with Al-Slehat (2020) and Fajaria and Isnalita (2018) that a firm's capital structure does not significantly influence firm value. Through our analysis, we also find a significant negative relationship between financial leverage and firm value. These findings contrast with the observations of Aggarwal and Padhan (2017) and Ogbulu and Emeni (2012).

Fajaria and Isnalita (2018) corroborated the MM theory and found that firm value depends on operations, not financing structure. Our findings also support the same conclusion. Operating profit and firm value are positively related and significant. It supports the importance of a firm's operations in determining its value. In contrast, with Al-Slehat (2020) findings, we find a significant negative relationship between firm value and firm size. It implies that larger firms are valued lower by markets. This may be possible in emerging markets where investors prefer growth stocks over income stocks.

## **Conclusions and Recommendations**

The aim of this study was to understand the nexus between audit reporting lag and firm value. The research has focused on 10 Nigerian listed food and beverage companies from 2012 to 2017. Several control variables, i.e., capital structure, operating profit, and firm size, were also incorporated. The research concludes that lag in audit reporting does not significantly affect firm value in Nigeria's selected food and beverage companies. The study finds a significant impact of operating profit and firm size on firm value, but the effect of capital structure on firm value is consistent with the Modigliani-Miller theory. We argue that, however insignificant, audit delays may adversely affect firm value. Thus, management and the audit firm should be committed to reasonable and timely financial reporting practices to minimize adverse consequences for stakeholders.

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