

EFFECT OF FIRM ATTRIBUTES ON FINANCIAL REPORTING TIMELINESS OF QUOTED OIL AND GAS COMPANIES IN NIGERIA

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Abstract

This study examines the effect of firm attributes on financial reporting timeliness of oil and gas companies listed on the Nigerian Stock Exchange for the period 2010 to 2019. A sample of 8 out of 10 firms was selected using purposive sampling. The study uses Ex-post facto research design. The proxies for firm attributes include; firm size, profitability, leverage and firm age while financial reporting timeliness was measured using audit report lag (ARL). Panel data were collected from the annual reports and accounts of the sampled firms. The fixed effect regression model was used to analyse the data. The result of the study indicates that firm size, profitability and firm age significantly affect financial reporting timeliness measured by ARL while leverage does not influence financial reporting timeliness proxy. Therefore, the study concludes that large firms that have come of age used their profitability to enhance financial reporting timeliness. The study recommends that moderate and relatively small firms as well as newly listed firms should thrive to deploy a portion of their profit to provide timely financial reports to the public.

Keywords: Financial reporting timeliness, audit report lag, firm attributes, oil and gas companies, Nigeria

1. Introduction

Published information may lose its importance if there is unjustified delay in it being reported. However, world over, delay in the auditing of financial statements have been identified as leading to an overall delay in their publication. The annual financial report of an organization is one of the significant factors that affect decision making processes of the users of accounting information especially, shareholders and potential investors. A timely issue of financial statement enhances the decision-making abilities of existing and potential investors. A financial statement is said to be timely when it is prepared and presented as at when due to the users and is otherwise, when it is delayed for whatever reason beyond the reasonable period. The usefulness of publishing corporate financial statements for monitoring corporate activities, facilitating investment decisions and ensuring transparency of operation has been accepted by many regulatory bodies. It has also, been asserted that decisions based on information from financial statements may be affected by the timeliness of its release. This means that the published information may lose its relevance if there is undue delay in it being reported (Mahajan & Chander, 2008).

Timely reporting contributes to the prompt and efficient performance of stock markets in their pricing and evaluation functions (Owusu-Ansah & Stephen, 2000) and undue delay in releasing financial statements increases the uncertainty associated with investment decisions (Ashton, Willingham & Elliott, 1987). Therefore, the need to ensure timely financial

reporting among publicly traded companies cannot be overemphasized. This is not only because financial statements communicate crucial information about the financial health of a company but timely information release guarantee relevance of financial information for decision making purposes. Financial statements must be available to users timely in order to make use of the information for informed economic decisions. Irrespective of the quality of financial information, its value diminishes if not made available in time for informed decisions. Therefore, the worth of published accounting information depends largely on their timeliness and accuracy (Bala & Idris, 2015).

Around the world however, delay in the auditing of financial statements have been identified as leading to an overall delay in their publication. While auditing is indispensable for ensuring the accuracy and transparency of published financial statements, there is a need to address the delays caused by auditing. This problem is predominantly evident in less developed economies where monitoring for timeliness of financial reporting is not appropriately mandated and where the overall business environment is not attuned to observing promptness and efficacy on issues like financial reporting. Furthermore, there are deficits in the sustenance structure of the profession with regards to skilled professionals or the number of auditing firms, which again add to the problem of audit delay (Ohaka & Akani, 2017).

Delay in auditing and subsequent submission of audited accounting reports remain a concern for investors and regulators. Finding the factors responsible for these delays remains an academic research problem. Previous empirical studies have focus on timeliness of financial reporting of listed firms generally (Owusu-Ansah, 2000; Iyoha, 2012; Appah & Emeh, 2013; Efobi & Akougbo, 2014; Adebayo & Adebisi, 2016; Ohaka & Akani, 2017). This study identifies that timeliness of annual reports of listed oil companies has not been given research attention. Again, no study as extant literature reveals and to the best of researcher's knowledge has studied the effects of firm size, profitability, leverage and age on financial reporting timeliness in the oil and gas sector. This constitutes the first gap in literature to be filled. The findings from this study will be of immense significance to the oil and gas sector in Nigeria and as well makes invaluable contribution to extant literature arising from the peculiarity of the audit market and the nature of the Nigerian corporate environment.

Secondly, CAMA (2020) as amended stipulates that the maximum time within which companies are expected to complete and make public their financial report is three (3) months. However, most companies present their reports much later than this date (Modugu, Eragbe & Ikhatua, 2012), as a result of the delay, stakeholders may have to take investment decisions without proper verification or resort to information from unofficial channels that may provide wrong information or wrong interpretation and that could mislead decision makers and decision making processes. Why does this trend persist? Financial analysts may thus interpret undue delay in reporting as an attempt to conceal information and this may adversely affect the value of the firm. On the other hand, there is an incentive for such firms to provide timely reports in order to avoid speculative trading on their shares in the stock market (Ohaka & Akani, 2017). Therefore, a study on the current level of timeliness of audit report in Nigeria and relating it to firm attributes is in the right direction and this gap motivates the study.

Therefore, given the problems articulated and the gap existing in literature, this study therefore, seek to contribute to closing the research gap by empirically examining the effect of firm attributes on financial reporting timeliness of listed oil and gas companies in Nigeria.

The following hypotheses were formulated in line with the specific objectives of the study;

HO₁ Firm size has no significant effect on audit report lag of quoted oil and gas companies in Nigeria.

HO₂ Firm Profitability has no significant effect on audit report lag of quoted oil and gas companies in Nigeria.

HO₃ Firm leverage has no significant effect on audit report lag of quoted oil and gas companies in Nigeria.

HO₄ Firm age have no significant effect on audit report lag of quoted oil and gas companies in Nigeria.

2. Literature Review

2.1 Conceptual clarifications

Firm Attributes

Corporate organisations are mostly distinguished from each other by certain characteristics they possess. Such characteristics are referred to as firm attribute – which are typical to the firm and are capable of influencing the managerial decisions. Shehu and Farouk (2014) defined firm attributes as variables at the firm level that affect the decision of the firm both internally and externally over time. Such variables include size, leverage, growth, value, profitability, capital structure, and others. Those attributes of the firm are usually unique to a specific company and they usually portray certain perception in the mind of the user of information regarding the performance and future of the firm. Some of the attributes and their relationship with financial reporting timeliness discussed hereunder include firm size, profitability, leverage and firm age.

Firm size

Firm size has often been recognized as one of the important corporate attributes associated with financial reporting timeliness. It has been a major variable of interest in most timeliness reporting studies examining its association with financial information reporting delays. The notion that firm size is associated with financial reporting timeliness is supported by many arguments. First, theoretically the larger the firm, the greater the involvement of outside interests. Moreover, large firms have larger analyst followings. In addition, when larger firms are more visible, they have more external stakeholders and are more closely monitored by analysts. Large firms are also more visible than smaller firms and are subsequently more likely to adopt strategies to reduce regulatory intervention (Ismail & Chandler, 2004). The increase in outside interests may be countered by reducing any financial reporting time lag to quickly eliminate uncertainty in the market about firm performance (Davies & Whittred, 1980). Larger firms have more to lose from the negative signals provided by an unexpectedly long audit delay, which pressures the auditor to expedite the audit process, resulting in shorter reporting time lags.

Second, size has been associated with a higher demand for quality audited annual reports (Al-Ajmi, 2008). Al Ajmi (2008) examines the association of firm size with audit report lag and finds the larger the firm, the higher the demand for high-quality audits. Size has been associated with higher agency costs (Chow, 1982), which are mitigated by high audit quality. As a firm grows larger, duties must be delegated and reduced transparency leads to moral hazard risk and possible opportunistic behaviour. Moreover, large firms are more dependent on external financing and therefore may be more sensitive to the needs of existing and potential investors who demand high-quality audited annual reports with a high-

quality audit process. Such concerns will influence the time taken to release audited annual reports to the public (Al-Ajmi, 2008). Third, larger firms are associated with greater resources than smaller firms, such as more advanced accounting information systems and greater technological development. These attributes should help larger firms ensure timelier reporting. Fourth, Ismail and Chandler (2004) have argued that large firms are likely to have stronger internal controls, internal auditing, and greater accountability, all of which should make it easier to audit large numbers of transactions in a shorter time, thus leading to the quicker release of audited annual reports.

Finally, big companies have more resources to afford higher audit fees demanded by the Big4 audit firms and are thus better equipped to undertake audits in no distance time. However, one can also argue that the larger the auditee, the easier it is for the auditor to achieve economies of scale when conducting an audit (Firth, 1985) and that any savings may be passed on to the client.

Profitability

Profitability is expected to influence the timeliness of firm financial reporting. A firms' performance has a signaling effect on the market for corporate securities (Watts & Zimmerman, 1990). A rise in the market due to good news (positive performance) will raise the market value of outstanding equity shares and management and the opposite is true of a firm with bad news (negative performance). Therefore, it is reasonable to expect the management of a successful firm to report good news to the public on a timely basis (Mahajan &Chander, 2008).

Prior empirical findings suggest that firms with bad news, or that experienced losses, tend to delay reports longer than firms with good news (e.g., Al-Ajmi, 2008; Ismail & Chandler, 2004; Mahajan &Chander, 2008; Owusu-Ansah, 2000). As determined by (Al-Ajmi, 2008), good and bad news are factors that determine both audit report time lags and financial reporting time lags. In addition, early publication signals positive news about firm performance.

Leverage

According to Chartered Institute of Management Accountants (CIMA) Official Terminology, financial leverage is defined as amount of debt in relation to equity in the capital structure of an entity or debt interest in relation to profit (CIMA 2005). Firm leverage is the degree to which a company uses fixed-income securities, such as debt and preferred equity. Leverage is simply the ratio between total debt and total assets of the company that shows the extent to which the total assets are financed by loans. An increase in this ratio shows the dependence of the company on external debt financing and greater score being given to the firm by debt providers. This however, may curtail firms' autonomy because of the restrictive covenants imposed by debt providers and may in the worst-case scenario lead to financial solvency. This is because with a high level of debt is associated with increased interest payments.

Firms with high volume of debt may have incentives to report faster than their counterparts. In line with agency theory, this opinion is tilted towards the fact that more cost of monitoring costs are associated with highly geared firms. Since highly leveraged firms have an incentive to invest sub-optimally, debt holders normally include clauses in their debt contracts that constrain the activities of management (Jensen &Meckling, 1976). One such clause is to require prompt and frequent disclosure so that debt holders can reassess the firm's long-term financial performance and position (Owusu-Ansah, 2000).

Firm Age

The length of time of existence of the company is the age of a company. According to Ofuan and Izien (2016) the time interval during which a being or thing has existed is the age. Shumway (2001) revealed that some are of the believe that listing age, should define the age of the company, however, he is of the view that firm's age should be defined as the number of years of incorporation of the company. Shumway (2001) argues that listing is a defining moment in a company's life, hence, age listing has become more economical. His argument is set straight from the viewpoint of the company as a legal personality. This is based on the belief that as a legal person, a company is born through incorporation (Gitzmann, 2008, Pickering, 2011). Prior literature has identified the age of a company as a feature that may likely have impact on the quality of accounting practice with regards to timeliness. The assertion is that when a firm grows older the tendency that the internal control procedures would be strong is higher. Thus, in older firm's expectations are high on fewer internal control weaknesses which could possibly cause reporting delays. In the same vein, younger firms have less experience in accounting controls as they are more prone to failure. This has shown that age is a potential instrument to reduce audit reporting lag.

Also, previous studies have found age to have a high association with timely financial reporting. Because as firms grow older, they are likely to have stronger internal control procedures thus, lesser control deficiencies are expected in older firms. Equally, younger companies are more disposed to collapse and have less experience with accounting controls (Hope & Langli, 2008). That is, age has a high likelihood to prevent financial reporting delays.

Financial Reporting Timeliness

Timeliness has long been recognised as one of the qualitative attributes of general-purpose financial reports (AICPA, 1973; FASB, 1979). In fact, a lot of attention has been paid to the subject of the timeliness of financial reporting in recent years and timeliness has been universally accepted as an important characteristic of financial statements by accountants, managers and financial analysts. It is not only necessary that users have financial information that is relevant to their predictions and decisions, but that they have up-to-date information relating to the current financial period as stale information or information relating to past financial years cannot help them in their business decisions for the year ahead (Chai & Tung, 2002).

Empirical research on timeliness of financial reporting provides evidence that the degree of timeliness of information release has information content (Beaver, 1968) and affects firm value (Chambers & Penman, 1984; Givoly & Palmon, 1982). Recognising the theoretical and practical importance of timely release of financial information, regulatory agencies around the world have set statutory maximum time limits within which public companies are required to issue audited financial statements to shareholders and other external users and file them with concerned regulatory bodies. In emerging economies, the provision of timely information in corporate report assumes more importance since other non-financial statement sources such as media releases, news conferences and financial analyst's forecasts are not well developed and the regulatory bodies are not as effective as in Western developed countries (Wallace, 1993).

A broad definition of timeliness was proposed by Garsombke (1981), who defined it as the difference between the date on which the accounting period ended and the date on which information was received by the users of the financial statements. Patton (1990) also states that, Timeliness is the reporting lag from the end of the fiscal period covered by the report to the date of report. The longer the information takes to reach users in the time of need, the less relevant it is to potential investors and creditors. The timely release of audit

reports and their accompanying information is of utmost concern to users of financial statements (Kothari et al., 2008).

Davies and Whittred (1980) have argued that the concept of timeliness in financial reporting has two dimensions: there is the frequency of reporting and length of the reporting period and there is the lag between the end of the reporting period and the date the financial statements are issued. Similarly, Enarsson (2006) stated that there are two aspects of timeliness in financial reporting: one is the frequency of the reports and the other is the delay from the accounting date of the report to the date of the report's release. Timeliness in this study is concerned with the second aspect of the delay in the issue of financial statements to users.

Theoretical Review

Signaling theory provides the theoretical underpinnings for this study. The signaling theory was proposed by Michael Spence in 1973. The thrust of signaling theory is that it is useful in describing behavior when two parties (individuals or organizations) have access to different information. Management personnel know more about the company's prospects and future opportunities than outside parties (investors). Information asymmetry will occur if management does not fully convey all information that can affect the company's value to the capital market (Bergh, 2014). To avoid asymmetric information, companies must provide information as a signal to investors. Asymmetrical information needs to be minimized, so public companies must give the company financial information in a transparent manner to investors (Saqr, 2015).

According to Siwy and Ayu (2012), signal theory is an announcement published in order to provide signals for investors to make investment decisions. The profits and losses generated by a company will be both good and bad news in capital market. In this case, profits may give positive signals that are likely to attract investors, and vice versa. Thus, this theory says about the company drive to provide information the external parties with information. According to Shabrina (2014), the information given by a company will be immediately responded by market as a signal of good or bad news. It is expected that the market can distinguish between good and bad quality company. Signal theory is useful as accuracy and timeliness in conducting financial reporting to the public. To sum up, longer audit report lag may cause less usefulness of the information in decision-making as the information would be less relevant.

Signaling through auditor choice stands on the agency theory, and is a manner by which managers and/or directors may impart to the market additional information about their company and their own behaviour. Signaling theory suggests that companies with good performance use financial information disclosure to send signals to the market. Craven and Marston (1999), show that firms will attempt to accept the same level of disclosure as similar firms operating in the same industry since if a firm does not keep up with the same level of disclosure as others, it may be perceived by stakeholders that it is hiding bad news or negative information. As the types of financial statements produced have become standardized, potential information differentiation that a company can use to send a signal to the market through its financial statements is reduced. Companies are thus provided an incentive to signal, other than through transparency in their notes to the accounts and other voluntary disclosures, through their choice of auditor. Moreover, even voluntary disclosures that may be used as signals achieve enhanced credibility in the presence of a quality auditor. A high-quality audit sends a signal to the market that the financial statements are more credible than those audited by lower quality auditors. The market perceives audit firm size and specialist auditors to be of a higher quality than others and rewards (punishes) companies

with larger improvements (or falls) in share prices accordingly (Teoh & Wong, 1993; Krishnan & Yang, 1999; Menon & Williams, 1994).

Furthermore, signaling theory does not actually require timely financial reporting, it merely needs the market to believe that Top Tier firms are associated with higher audit quality because of the fee premiums they are able to command (Moizer, 1997). It has been shown that the market's perception of the quality of the company's auditor influences that company's share price. As such, directors and management may want to signal to the stakeholders that their interest is being well monitored. Therefore, signaling should, theoretically, affect the demand for timely financial reporting over and beyond the monitoring function alone. The positive Signal of transparency and credibility it sends to the market and the assurance it provides to stakeholders about the quality of earnings performance disclosures.

Empirical Review

Oraka, Okoye and Ezejiofor (2019) assessed the determinants of financial reporting timeliness of Nigerian deposit money banks. The study determined the effect of bank size and audit firm type on the timeliness of financial reporting in Nigeria. Ex-Post facto research design was adopted. The population of the study consists of sixteen (16) quoted banks on the Nigerian Stock Exchange. Regression analysis was employed to test the formulated hypotheses with aid of SPSS version 20.0. The study discovered that bank size, age of bank, audit firm type and bank performance have effect on the timeliness of financial reporting in Nigerian banks.

Andreas and Surya (2019) examined the effects of profitability, leverage, firm size, outsider ownership, the reputation of the public accounting firm and financial risk on the timeliness of financial report submissions. This study used a sample of all the trade, services and investment companies listed in Indonesia Stock Exchange in 2014-2016. A total of 78 companies were examined. Multiple linear regression was used to test the hypotheses. Results showed that profitability, outsider ownership, the reputation of the public accounting firm and financial risk had significant effects on the timeliness of financial report submissions, but leverage and firm size did not have the effect. This study was done in a different economy with characteristics different from Nigeria. The findings of a Nigeria study may be different from those of the previous study in other jurisdiction which not applicable to Nigeria situation.

Adediran, Adejoh and Oyewole (2019) investigated the effect of firm characteristics on timeliness of financial reports on Nigerian insurance companies from 2008-2017. The study adopted ex-post facto research design and the data were sourced from the financial statements of the sampled companies. The dependent variable was measured by audit report delay while the independent variable was proxied by board size, firm leverage ratio and firm size. The analysis was conducted with the aid of STATA 12 software. The data were analysed by Pairwise correlation, descriptive statistics and ordinary least square (OLS) multiple regression technique. The result reveals that board size has a significant negative effect on audit report delay while firm size has a significant negative effect on audit report delay. The result further reveals that firm leverage has an insignificant negative effect on audit report delay. The current study used more variables as determinants of audit report lag

Ekienabor and Olukoya (2018) examines corporate attributes and timeliness of financial reporting in selected quoted companies. The specific objectives are to examine the effect of firm age, profitability and firm size on timelines. The longitudinal research design was used for the study with an extensive reliance on secondary data retrieved from annual reports. The sample for the study comprises of quoted firms across sectors of the Nigerian stock exchange. A sample of 40 companies from 2010-2015 was used for the study. The method of data

analysis adopted is the descriptive statistics, correlation statistics and the regression analysis. Specifically, the Generalized Least Square Regression (GLS) was conducted. The technique is employed to provide robust insight into the subject matter. This study found the following; firm age has no significant effect on financial reporting timelines; profitability has no significant effect on financial reporting timelines and firm size has no significant effect on financial reporting timelines. This study used the entire quoted companies in Nigeria while this current looks at specific industry estimation since the result from a few quoted companies cannot be used to make conclusions in the oil and gas sector.

3. Methodology

The study adopts descriptive Ex-Post Facto research design. The design is informed by the research paradigm which is the positivism approach following a deductive reasoning. The population used in this study is all the ten (10) oil and gas companies listed on the floors of the Nigerian stock exchange within the period 2010-2019. Oil and gas firms are chosen because literature presents a dearth of studies in the sector in Nigeria. However, through a filtering process, the study embraces a total of eight companies as sample size. The study utilizes secondary sources of data. The necessary data is extracted from the annual reports of all listed oil and gas companies for the period 2010-2019 financial years. The study adopts the use of panel multiple regression to test the relationship between accounting annual reporting timeliness (explained by audit report lag) and firm attributes (firm size, profitability, leverage and firm age). The model for the study is specified thus;

$$ARL = \beta_0 + \beta_1 FZE_{it} + \beta_2 LEV_{it} + \beta_3 PROF_{it} + \beta_4 FA_{it} + \mu_{it} \dots \dots \dots (i)$$

Where:

ARL= audit report lag

FZE=Firm size

PROF= profitability

LEV= Leverage

FA=Age

i =ith firm

t = time period

μ_{it} = Model disturbance term

Measurement of Variables

Table 3.1. Variable, Definition, Measurement and Source

Variable	Definition	Measurement	Construct Validity	Aprori sign
FRT	Financial Reporting Timeliness	Audit Report lag	Owusu-Ansah, 2000; Iyoha, 2012; Appah&Emeh, 2013.	
FSIZE	Firm size	Log of total assets	Ibadin and Afensimi (2015); Ömer (2017); Oraka, Okoye and Ezejiofor (2019).	+
PROF	Profitability	Return on assets	Adebayo and Adebisi (2016); Mutiara, Zakaria and Anggraini (2018).	+
LEV	Leverage	Debt-equity ratio	Al-Shwiyat (2013); Efobi and Okougbo (2015).	-
FA	Firm age	Natural log of firm age	Iyoha (2012); Dibia and Onwuchekwa (2013); AL-Tahat (2015)	+

Source: Researcher’s compilation (2021)

4. Data Analysis and Results

In this section of the data and results for the study are presented and analysed

Descriptive Statistics

A descriptive statistic is an analysis of data that helps to describe, show or summarize the behaviour of data in a meaningful way, which allows for simpler interpretation of the data. This section contains the description of the properties of the variables ranging from the mean of each variable, minimum, maximum and standard deviation.

Table 1: Descriptive Statistics

	FRT	FA	FZE	LEV	PROF
Mean	85.7625	28.2500	7.8302	0.4720	0.7595
Median	88.0000	30.5000	7.7850	9.0000	3.3800
Maximum	93.0000	48.0000	9.0300	0.7340	26.2000
Minimum	50.0000	5.0000	6.9700	0.18000	-71.3600
Std. Dev.	7.5778	11.3489	0.4637	0.2072	13.7746
Skewness	-3.1030	-0.2940	0.9166	1.5661	-2.9038
Kurtosis	12.9050	1.9935	3.8382	6.7738	13.5905
Jarque-Bera	455.4153	4.5295	13.5446	80.1772	486.2917
Probability	0.0000	0.1038	0.0011	0.0000	0.0000
Sum	6861.000	2260.000	626.4200	757.7600	60.7600
Sum Sq. Dev.	4536.487	10175.00	16.9896	3043.912	14989.46
Observations	80	80	80	80	80

Source: Eviews Output, 2021.

The outcomes in Table 1 indicates that the measure of financial reporting timeliness (), which is measured using audit report lag (ARL) for quoted oil and gas firms has an average value of 85.76250 with standard deviation of 7.577855, and minimum and maximum are 50 and 93 days respectively. The value of the mean indicates that on average, firms spent 85 days between financial year end and when they are expected to prepare and present their annual reports. However, the value of the standard deviation indicates that the companies might prepare and present annual reports within 78 days or 92 days.

Also, the Table also indicates that the sample firms have an average firm size (FSZ) of 7.830250 with standard deviation of 0.4367 respectively. This means as logged, the mean value for firm size stood at 7.830250 million naira. The figure of the standard deviation shows that there is a high level of variance in the value of total assets for the companies sampled for the study. The minimum and the maximum as shown by the table is 6.970000 and 9.030000. This implies that the least number of is 6.97 million naira and the largest is 9.0300 million naira.

Furthermore, the descriptive statistics in Table 1 shows that on average, the 47% of the capital is debt and the value of standard deviation of 0.20729 i.e. 21% which shows that there is variance in the mean capital structure of the companies by 21%. The table shows that the minimum and maximum figures are 18% and 73% respectively.

Again, the descriptive statistics from Table 1 also indicates the mean for profitability to be 0.75950 and a standard deviation of 13.77461. This means that the average return on assets for firms within the period of the study stood at 75 kobo however, the value of the SD shows the data is clustered around the mean. This also, signifies that the return of assets across the companies deviates by 14kobo from the mean ROA. The table indicates that profitability has a minimum and maximum of -71.36000 and 26.0000 respectively which means that in some years, companies register negative return on assets.

For firm age (FA), the table above shows a mean value of 28.25000 and a corresponding standard deviation of 11.34890. This shows that the average age of firm within the sample stood at 28 years and the value of the SD shows little variation in this outcome. The table further revealed that the minimum age 5 years while the maximum age is 48 years.

Correlation Matrix

A correlation matrix is a table showing correlation coefficients between variables. Each cell in the table shows the correlation between two variables. A correlation matrix is used to summarize data, as an input into a more advanced analysis, and as a diagnostic for advanced analyses. The Karl Pearson correlation was used to show the strength of the effect of selected firm characteristics on financial reporting timeliness of listed oil and gas companies on the Nigerian Stock Exchange.

Table 2: Correlation Matrix

Correlation Probability	ART	FA	FZE	LEV	PROF
ART	1.000000 -----				
FA	0.388982 0.0004	1.000000 -----			
FZE	0.003511 0.9753	0.181793 0.1066	1.000000 -----		
LEV	0.073630 0.5163	0.184237 0.1018	-0.166858 0.1391	1.000000 -----	
PROF	0.087223 0.4417	0.412931 0.0001	0.008987 0.9369	-0.033974 0.7648	1.000000 -----

Source: Eviews Output, 2021.

Table 2 shows the correlation between the dependent variable, financial reporting timeliness and the independent variables, firm size, leverage, profitability and firm age on one hand, and among the independent variables themselves on the other hand. Generally, high correlation is expected between dependent and independent variables while low correlation is expected among independent variables. According to Gujarati (2004), a correlation coefficient between two independent variables 0.80 is considered excessive and thus certain measures are required to correct that anomaly in the data. From Table 4.2, it can be seen that all the correlation coefficients among the independent variables are below 0.80. This points to the absence of possible Multicollinearity though the value inflation factor (VIF) and tolerance value (TV) test is still required to confirm the assumption.

The table reveals a positive correlation between the dependent variable of financial reporting timeliness and the explanatory variables of FSZ, LEV, PROF and FA have coefficients of 0.388982, 0.003511, 0.073630 and 0.087223 respectively. This implies that the explanatory variables move in the same direction with audit report lag.

Regression Diagnostics

The following healthiness tests are carried out to find out whether data used for analysis are reliable.

Test for Multicollinearity

Non-existence of Multicollinearity is a key assumption of linear regression analysis. Multicollinearity occurs when the explanatory variables are not independent of each other. Multicollinearity is examined using tolerance and variance inflation factor (VIF) values. The result of Multicollinearity test is shown in the table below.

Table 3: Tolerance and VIF Values

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	197.6402	312.6684	NA
FZE	3.250371	316.3695	1.092030
LEV	0.018337	3.706455	1.103773
PROF	0.004173	1.240805	1.236996
FA	0.006677	9.774199	1.343589

Source: Eviews Output, 2021.

Based on the evidence presented in Table 3, it can be concluded that there is no Multicollinearity problem. This is because the VIF values for all the variables are less than 10 and the tolerance values for all the variables are greater than 1 (rule of thumb).

Test for Heteroscedasticity

Heteroscedasticity arises when the error terms along the regression are not equal. Heteroscedasticity was tested using Breusch Pagan's Test. Based on the results, it can be concluded that there is no problem of heteroscedasticity as the chi square is 0.42, with a corresponding probability of 0.7338 which is insignificant, implying absence of heteroscedasticity.

Hausman Speciation Test

In panel data analysis (the analysis of data over time), the Hausman Test can help to choose which between fixed effects model or a random effects model is appropriate for interpretation. The null hypothesis is that the preferred model is random effects. The alternate hypothesis is that the model is fixed effects. Essentially, the tests look to see if there is a correlation between the unique errors and the regressors in the model. The null hypothesis is that there is no correlation between the two. Therefore, because of the homogeneity of data used in this study, which assumes that fixed effects and random effects models are similar, Hausman test is performed to determine which of the two models is more efficient.

Table 4: Hausman Speciation Test

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	18.138145	4	0.0012

Source: output from Eviews, 2021.

The Hausman Speciation Test is conducted to choose between the fixed and random effect model. The result of the Hausman Test revealed that the value of chi2 is 18.138145 and the prob>chi 0.0012. The significant value as reported by the probability of chi2 indicates that the Hausman Test is in favour of fixed effect model.

Table 5: Fixed Effect Regression Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	154.1164	35.02964	4.399600	0.0000
FZE	0.044680	5.344039	2.066729	0.0426
LEV	-0.007856	0.129797	0.060524	0.9519
FA	0.644346	0.361178	1.784011	0.0389
PROF	0.195497	0.065156	3.000447	0.0038

Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.469789	Mean dependent var		85.76250
Adjusted R-squared	0.384020	S.D. dependent var		7.577855
S.E. of regression	5.947436	Akaike info criterion		6.541278
Sum squared resid	2405.295	Schwarz criterion		6.898582
Log likelihood	-249.6511	Hannan-Quinn criter.		6.684532
F-statistic	5.477349	Durbin-Watson stat		1.502453
Prob(F-statistic)	0.000003			

Source: Output from Eviews, 2021.

Multiple regression analysis was fitted to show the nature of the relationship firm size, leverage, profitability, firm age and financial reporting timeliness. These results were used to test the study hypothesis. Table 5 shows fixed effect regression model summary which revealed that 47% of changes in financial reporting timeliness can be jointly accounted for by firm size, leverage, profitability and firm age. The remaining 53% was attributable to variables not included in the model. The R-square value showed the level at which the explanatory variables explain the dependent variable. The value of F-statistics stood at 5.4773 with probability of chi2 = 0.000. The probability of chi2 is significant at 5%, indicating that the model is fit. This serves as a substantial evidence to conclude that the variables selected are suitable for the study on the effect of firm attributes on financial reporting timeliness of quoted oil and gas firms in Nigeria. The hypotheses are tested at 95% level of confidence.

The first hypothesis of the study states that firm size has no significant effect on financial reporting timeliness of quoted oil and gas companies in Nigeria. Results of the study revealed positive and significant effect of firm size on financial reporting timeliness of quoted oil and gas companies in Nigeria. ($\beta = 0.044680$, p value <0.05). This implies that a unit change in firm size will lead to a significant positive increase in financial reporting timeliness while holding leverage, profitability and firm age constant. Based on this, the study rejects the null hypothesis one (H_01) which states that, firm size has no significant effect on financial reporting timeliness of listed oil and gas firms in Nigeria. This finding is at variance with that of Andreas and Surya (2019) but is in line with Oraka, Okoye and Ezejiofor (2019).

The second hypothesis states that leverage has no significant effect on financial reporting timeliness of quoted oil and gas companies in Nigeria. Results of the study reveals that leverage has negative and insignificant effect on financial reporting timeliness of quoted oil and gas companies in Nigeria. ($\beta = -0.007856$, p value >0.05). This implies that an increase in leverage decreases timely financial reporting by -0.0078 units while holding firm size, profitability and firm age constant. Based on this, the study accepts the null hypothesis two (H_02) which states that, leverage has no significant effect on financial reporting timeliness of quoted oil and gas companies in Nigeria.

The third hypothesis states that profitability has no significant effect on financial reporting timeliness of quoted oil and gas companies in Nigeria. Results of the study reveals positive and significant effect of profitability on financial reporting timeliness ($\beta = 0.195497$, p value <0.05). This implies that a unit change in profitability increases the timeliness of financial reporting by 19% while holding firm size, leverage and firm age constant. This finding is in line with that of Oraka, Okoye and Ezejiofor (2019) and at variance with Andreas and Surya (2019).

The fourth objective of the study states that firm age has no significant effect on financial reporting timeliness of quoted oil and gas companies in Nigeria. Results of the study reveals positive and significant effect of firm age on financial reporting timeliness of quoted oil and gas companies in Nigeria. ($\beta = 0.644346$, p value <0.05). This implies that a unit increase in firm age increases financial reporting timeliness by 64% while holding firm size, profitability and leverage constant. This study finding is in tandem with that of Oraka, Okoye and Ezejiofor (2019).

5. Conclusion and Recommendation

The overall results of this study suggest that there is a significant positive effect of firm size, age and profitability on financial reporting timeliness. In particular, the results from standardized regressions showed that firm size has a positive significant influence on audit report lag. The study therefore, concluded that firm size does play a vital function in improving in constraining the ARL. The study also resolved that profitability has positive and significant effect on financial reporting timeliness of oil and gas firms in Nigeria. Suggesting that profitability is a necessary performance factor that determine the timing of release of financial information. The study further avers that leverage has negative insignificant effect on financial reporting timeliness of oil and gas firms in Nigeria. The study therefore, lacks any statistical evidence to conclude that a firm with increased debt ratio can inspire the timely release of financial information. The study finally, revealed that firm age positively and significantly influences financial reporting timeliness of oil and gas firms in Nigeria. Thus, this study has the statistical evidence to conclude that the age of a company greatly contributes to early release of the financial information.

The following recommendations were made in line with the findings and conclusion:

- i. This study recommends larger firms should deploy more resources for earlier preparation and release of financial reports since more work is required in audit of such companies.
- ii. It is recommended that companies should strive to make profit as this serves as a motivation for early release of financial statements. This can help in sending positive signals to the market thereby attracting potential investors and improving market performance.
- iii. Thirdly, since no evidence exist associating leverage with financial reporting timeliness, the study recommends that less debts should be incurred unless critical situations call for such. This is partly, because other viewers believe that a high ratio of debt to total assets increases the probability of failure, particularly when the general economy is poor.

- iv. Lastly, it is recommended that younger companies should invest in their internal control measures by devising ways of eradicating the inherent weaknesses and vulnerabilities embedded in them. This is one of the advantages older companies have over small companies that bring about the timing differences in financial reporting.

References

- Adebayo, S. A & Adebisi, M.A (2016). Institutional framework, interest rate policy and the financing of the Nigerian manufacturing sub-sector. African Development and Poverty Reduction: The Macro-Micro Linkage, Forum Paper.
- Adediran, I., Adejoh, A. & Oyewole, A. T. (2019). Internal control system on fraud detection: Nigeria Experience. *Journal of Accounting and Finance*, 13 (5), 141 – 152.
- Al-Ajmi, J. (2008). Audit and reporting delays: evidence from an emerging market. *Advances in Accounting*, 24(2), 217-226.
- Andreas, S. & Surya, K., (2019). Determinants of profitability: An analysis of large Australian firms. Intellectual Property Research Institute of Australian working paper.no.3.
- Appah, E. & Emeh, K. (2011). Ethical Compliance by the Accountant on the Quality of Financial Reporting and Performance of Quoted Companies in Nigeria. *Asian Journal of Business and Management*, 3(3), 152-160.
- Ashton, R. H., Willingham, J. J., & Elliott, R. K. (1987). An empirical analysis of audit delay. *Journal of Accounting Research*, 25(2), 275-292.
- Bala, H., & Idris, I. (2015). Firm's specific characteristics and stock market returns: Evidence from listed food and beverages firms in Nigeria. *Research Journal of Finance and Accounting*, 6 (16), 188-200.
- Beaver, W. (1968). The information content of annual earnings announcements. *Journal of Accounting Research, Supplement*, 67-92.
- Berghe, V. D. & Baelden, T. (2014). The complex relation between director independence and board effectiveness. *Corporate Governance*, (5)5, 61-83.
- CAMA, (1990), Laws of the Federation of Nigeria, CAP 56(111).
- Chai, M. L., & Tung, S. (2002). The effect of earnings announcement timing on earnings management. *Journal of Business Finance & Accounting*, 29(9/10), 1337-1354.
- Chow, C. (1982). The demand for external auditing: size, debt and ownership influences. *Accounting Review*, 57, 272-291.
- Davies, B., & Whittred, G. P. (1980). The association between selected corporate attributes and timeliness in corporate reporting: further analysis. *Abacus*, 16(1), 48-60.
- Efobi, U. & Akougbo, I., (2014). The Efficient Market Hypothesis: Realities from the Nigerian Stock Market. *Global Journal of Finance and Management* 2 (2) 321-331.
- Efobi, U. & Okougbo, P. O. (2015). Corporate governance and firm performance: Empirical evidence from selected listed companies in Nigeria. Master's dissertation, College of Development Studies, Covenant University, Ota, Ogun State, Nigeria.
- Eames, M. J., & Glover, D., (2003). Earnings management to avoid losses and earnings decrease: Are Analysts fooled? *Contemporary Accounting Research*, 20, 253–294.

- Fama, E.F., & Jensen, M.C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301–325.
- Gilling, D. M. (1977). Timeliness of corporate reporting: some further comment. *Accounting and Business Research* (Winter), 34-36.
- Givoly, D., & Palmon, D. (1982). Timeliness of annual earnings announcements: some empirical evidence. *Accounting Review*, 57(3), 486.
- Gluam, M, & Street, D. (2003). Compliance with disclosure requirements of German's new market: IAS versus US GAAP. *J. Int. Finance Manage. Account*, 14(1), 64-100.
- Habbash, M. (2010). The effectiveness of corporate governance and external audit on constraining earnings nmanagement practice in UK, Durham theses, Durham University.
- Haw, I.-M., Qi, D., & Wu, W. (2000). Timeliness of annual report releases and market reaction to earnings announcements in an emerging capital market: the case of China. *Journal of International Financial Management and Accounting*, 11(2), 108-131.
- Ibadin, P.A., & Afensimi, E. (2015). Earnings management and ownership structure: Evidence from Nigeria. *Research Journal of Finance and Accounting*, 12–45.
- Ismail, K. N. I., & Chandler, R. (2004). The timeliness of quarterly financial reports of companies in Malaysia. *Asian Review of Accounting*, 12(1), 1-18.
- Iyoha, F.O. (2012). Company attributes and the timeliness of financial reporting in Nigeria, *Business Intelligence Journal*, 5(1), 41-49.
- Jensen, M.C, & Meckling, W.H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 20(2).
- Karim, S., Ahmad, K. & Islam, A. (2006). Financial reporting in Bangladesh: The regulatory framework. *Journal of Business Administration*, 24 (1 & 2), 57-88.
- Kothari, S. P., Leone, A. J., & Wasley, C. E. (2008). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1), 163-197.
- Krishnan, J. & Yang, J. S. (2009). Auditor industry specialization and earnings quality. *Auditing: A Journal of Practice & Theory*, 22(2), 71–97.
- LaFond, R., & Watts, R. L., (2008). Does stock price synchronicity represent firm-specific information? The international evidence. MIT Sloan Research Paper.
- Mahajan, P. & Chander, S. (2008). Timelines of corporate disclosure: An evidence from Indian companies. *Decision*, 35(2), 39-62.
- Menon K., & Williams, J.D. (1994). The use of audit committee for monitoring. *Journal of Accounting and Public Policy*, 13, 121- 139.
- Mizruchi, M.S. & L.B. Stearns, (1988). A longitudinal study of the formation of interlocking directorates. *Administrative Science Quarterly*, 33, 194-210.
- Modugu, K. P., Eragbe, L., & Ikhatua E. L. (2012). Discourses on corporate governance and earnings management: A theoretical approach. *Journal of Accounting and Finance*, 3(1), 31- 33.
- Moizer, P. (1997). The meaning of auditing reports. *Accounting and Business Research*, 20(78), 111-121.

- Ohaka, K. & Akani, D. (2017). IFRS adoption and accounting quality of quoted manufacturing firms in Nigeria: A cross sectional study of brewery and cement manufacturing firms. *International Journal of Business Management Review*, 3(6), 61-77.
- Oraka, K., Okoye, I. E., & Ezejiofor, B. (2019). The ethics of creative accounting in financial reporting: The challenges of regulatory agencies in Nigeria. *The Certified National Accountant*, 16, 45-55.
- Owusu-Ansah, S. & Stephen. G. (2000). Timeliness of corporate financial reporting in emerging capital markets: Empirical evidence from the Zimbabwe stock exchange. *Accounting & Business Research*, 30(2), 241-254.
- Owusu-Ansah, S. (2005). Factors influencing corporate compliance with financial reporting requirements in New Zealand. *International Journal of Commerce and Management*, 15(2), 141-157.
- Patton, J. (1990). An empirical analysis of the determinants of the extent of disclosure in annual reports of joint stock firms in the Czech Republic, *The European Accounting Review* 6(4), 605-626.
- Penrose, E.T. (1959). *The theory of the growth of the firm*. Oxford: Basil Blackwell.
- Pearce, J.A., & Zahra, S. (1992). Board composition from a strategic contingency perspective. *Journal of Management Studies*, 29(4), 411-438.
- Schwartz, K. B., & Soo, B. S. (1996). The association between auditor changes and reporting lags. *Contemporary Accounting Research*, 13(1), 353-370.
- Stearns, L.B. & Mizruchi, M.S. (1993). Board composition and corporate financing: The impact of financial institution representation on borrowing. *Academy of Management Journal* 36, 603- 618.
- Shehu, U. H. & Farouk, B. (2014). Firm characteristics and financial reporting quality of listed manufacturing firms in Nigeria. *International Journal of Accounting, Banking and Management*, 1 (6), 47-63
- Wallace, R. S. O. (1993). Development of accounting standards for developing and newly industrialized countries. *Research in Accounting in Emerging Economies*, 2, 121-165.
- Watts, R. L., & Zimmerman, J. L. (1990). Positive accounting theory: A ten-year perspective. *Accounting Review*, 65, 131-156.
- Westphal, J (2001). The strategic context of external network ties: Examining the impact of director appointments on board involvement in strategic decision-making. *Academy of Management Journal*, 44(4). 639-660.
- Whittred, G. P. (1980). The timeliness of the Australian annual report: 1972-1977. *Journal of Accounting Research*, 18(2), 623-628.
- Whittred, G., & Zimmer, I. (1984). Timeliness of financial reporting and financial distress. *Accounting Review*, 59(2), 287.
- Zeghal, D. (1984). Timeliness of accounting reports and their informational content on the capital market. *Journal of Business Finance and Accounting*, 11(3), 367-380.