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International Public Sector Accounting Standards and Organisational Characteristics as Determinants of Timeliness of Financial Reporting in Nigerian Public Sector Institutions

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Abstract:
The timeliness of financial reporting is crucial for transparency and accountability in public sector organisations. This study aimed to examine the effect of International Public Sector Accounting Standards (IPSAS) adoption and organisational factors on the timeliness of financial reporting of Nigerian public institutions. Data were sourced from the audited financial statements of ninety public institutions for 2017 and 2018. Panel regression analysis was adopted. The findings revealed a poor quality of timeliness in public sector financial reporting is poor in Nigeria. IPSAS adoption and organisational characteristics jointly did not demonstrate a significant effect on timeliness (Adj R^2 = 0.0190, Wald $chi^2_{(4)}$ = 7.75, $p > 0.05$). The study concluded that the quality of timeliness in financial reporting in the Nigerian public sector is poor and is affected by other unmeasured factors rather than IPSAS adoption and organisational characteristics. Regulators need to enforce statutory timeframes for submission of financial reports by public institutions. There is also a need for further research to identify the determinants of timeliness in public sector financial reporting in Nigeria.

Keywords: *Financial reporting quality, Timeliness, IPSAS, Organisational characteristics*

1. Introduction

In recent years, the quality of financial reporting has been a critical source of concern to stakeholders in public sector settings globally. This has been as a result of its implication for government accountability and transparency. Olayinka, Uchenna, Nwanneka and Ogunsele (2016) opined that the global space has witnessed unwavering demand for better disclosure of financial information among countries and across sectors within the context of enhanced transparency. This was in a bid to ensure that public confidence in the aspect of public financial reporting remained undoubtedly sustainable. Besides, the private sector has equally been besieged with corporate failures and economic predicaments that have heightened the need to restore the credibility of financial statements (Salehi & Shirazi, 2016). In like manner, attention has been drawn towards financial crises across public sector organisations with great impact on government's resources (Fuchs, Bergmann, & Brusca, 2017). Further investigations suggested that low morale towards ethical standards by preparers of financial statements contributed to low quality reports across sectors. These have therefore impeded these organisations from meeting various expectations of their stakeholders (Ezelibe, Nwosu & Orazulike, 2017; Ekwueme & Aniefor, 2019). Hence, the significance of financial reporting remains an issue of critical discourse.

Within the overall context of financial reporting quality, timeliness of financial reporting has been of specific concern. Timeliness is an enhancing qualitative characteristic of financial reporting (Ochung, 2017) that entails having information available to decision makers before losing relevance. That is, information must be readily available to influence decisions that users intend to make. Timeliness is largely related to the decision usefulness of information made available. Efobi and Okougbo (2014) opined that the usability of financial statements reduces as the time of its public presentation increases. This availability is however subject to the independent review of auditors. According to Rudzioniene and Juozapaviciute (2014), timeliness is described as quality of information while emphasising the period of communicating such information when it is still useful. The authors stressed that timeliness can only be achieved when financial reports are presented within their period of usefulness for decision makers. Also, Bukenya (2014) added that as a qualitative characteristic of financial information, timeliness entails presenting information to the right persons and at the right time in order to enhance their decision making function. Tambingon *et al.*(2018) related the usefulness of financial reports as a function of timeliness that can positively influence accountability assessment. In the authors' words, useful information made available in a timely manner can improve accountability of the preparers and as well stimulate informed decisions.

A number of factors have been identified as determinants of timeliness of financial reporting. Notable among these have been IPSAS adoption and organisational factors. IPSAS represents a strategic innovation in New Public Management. IPSAS adoption has been empirically associated with improved timeliness of financial reporting (Galera& Bolivar, 2012). Opanyi (2016) studying the Kenyan public sector equally observed that IPSAS adoption improved timeliness of financial reporting.

Public sector organisations generally portray complex stakeholder networks. These organisations secure legitimacy when there is an alignment between their institutional values and the societal norms within which they operate.This establishes a social contract between the operations of these organisations and their environment (Greiling & Grub, 2014; Greiling, Traxler & Stötzer, 2015; Nicolo, Znellato, Manes- Rossi, & Tiron- Tudor, 2020). In this connection, organisational factors such as age, size, type and liquidity tend to affect the quality of their financial reporting. For instance, because larger organisations have greater proneness to public scrutiny, easier access to necessary infrastructure and skills needed for optimal financial reporting, the quality of their financial reports may be better (Ekwueme& Aniefor, 2019; Mokhtar, 2017). The organisational sector in which an organisation operates has also been observed as a promoter of financial and non-financial reporting (Efobi & Okougbo, 2014). In the same vein, the organisational age is likely to provide the necessary experience for producing useful information for stakeholders. In terms of sector type, Watson, Shrives and Marston (2002)have suggested that organisations operating under strict regulators may be more likely to supply information about their activities with a view to reducing information asymmetry between them and their stakeholders. While liquidity has been observed as having a positive effect on financial reporting quality in most cases, it is not very clear what its effect on timeliness of financial reporting specifically might be.

In furtherance to the above, a number of Nigerian studies have investigated the effect of IPSAS adoption on financial reporting quality. Extant local literature mostly contained studies examining either users' perception of IPSAS or the cost- benefit implication of IPSAS adoption within the Nigerian context. However, there is scarcity of research investigating the contribution of organisational factors as well as IPSAS adoption to the timeliness of financial reports specifically within the public sector. Therefore, this study will empirically investigate IPSAS adoption and the role of organisational characteristics as determinants of financial reporting quality measured as timeliness among Nigerian public sector organisations.

This article is organized as follows: the next section highlights the theoretical framework of the study. Section 3 details the review of previous studies and presents the research hypotheses. The fourth section focuses on the methodology of the study. The results are reported in the fifth section. The last section presents the discussion, conclusions and recommendations of the study.

2. Theoretical Framework

2.1. Stakeholder Theory

This study became prominent from the works of Edward Freeman in 1984. It has remained notable in explaining the triangular relationship that subsists between business owners, managers and stakeholders (Freeman, 1984). While assessing the gap from an agency relationship point of view, a more realistic approach to maximising organisational value was sponsored through the stakeholder theory. Stakeholder relationship involves the principal (usually owners), the agent (the manager or board of directors) and stakeholders (other members whose decisions affect the organisation including creditors, suppliers and government (Aifuwa et al., 2018). The stakeholder theory has been employed in providing clarifications in extant literature relating to adoption of standards in the public sector. Egbunike, Onoja, Adeaga and Utojuba (2017) justified the importance of defining specific stakeholders in the public sector for IPSAS application and circumstances under which they must be treated as stakeholders. Other studies have used the theory to provide insights from stakeholders' perception (accounting practitioners) of China's compliance with international financial reporting standards (IFRS) (Yang *et al*., 2017). Also, accountants' views of IPSAS implementation as regards financial management and reporting in the Nigerian public sector (Egbunike et al., 2017), determining the quality of financial reporting (Abang'a, 2017) in the Kenyan public sector, adoption and implementation of IPSAS in Nigeria (Ademola*et al.,* 2020), and observing neo-institutionalism of IPSAS (Baskerville & Grossi, 2019) have all benefited from the theoretical basis provided by the stakeholder theory.

This study is framed by the stakeholder's theory with particular reference to IPSAS adoption in the public sector of Nigeria as well as the function of quality financial reports in meeting the information needs of current and prospective stakeholders. As inferred from the theory, a proper definition of stakeholders as well as their importance within the public sector is critical to the realisation of the objectives. In other words, in maximising the total wealth in the public sector as it were, critical stakeholders' objective must be clearly defined and appropriately managed. Within this context, adoption of IPSAS hinges towards accountability and transparency of government activities. Hence, in realising this, all stakeholders' needs including: government, taxpayers, contractors, international communities, financial analysts, the public must be identified and managed accordingly by agent(s) within the public sector. This suggests the need for a balanced tripartite relationship between the managers/ agents (members of boards of parastatals and agencies), the owners (government and the public) and other stakeholders (government, public, contractor, international community, regulators, investors, contractors among others). Ademola*et al*., (2020) posit that financial statements prepared with quality standards by government institutions will attract relevant stakeholders. These reports showing the magnitude of value created by such public sector institution will invariably display value created and connect with critical stakeholders for value maximisation of the institution.

2.2. Agency Theory

This theory was propounded by Berle and Beans in 1932 (Alghamdi, Donleavy, Farooque, Anderson, & Khan, 2018) to explain organisational settings characterised with the separation between ownership and control. In this light, agency theory emphasises how conflicts arising between the manager and owner or equity providers over business resources can be resolved with contracts. Its origin can be linked with the growth of industrial revolution among Anglo-American countries. The agency theory centres on such factors as finance, accounting issues that appear endogenous within organisational settings (Berle & Means, 1932; Rahman *et al*., 2010).

In furtherance to the above, Jensen and Meckling (1976) extended the agency conflict to include debt providers whose presence in the structure of an organisation would monitor the manager and reduce agency costs. In essence, the manager is assumed to be devoid of exploiting business owners for his own personal gains when he has to meet such responsibilities as interest payments and other obligations (Alghamdi *et al*., 2018).Ekwueme&Aniefor (2019) submit that agency relationships are to mitigate the possibility of the agent (manager) acting against the interests of equity providers (principal). The authors stressed that while information asymmetry contributes to agents' diversity of interests and against their principals' interest, having quality reporting and regulations can further reduce agency costs.

Notwithstanding the structural and economic arguments against the agency theory, its uses in financial reporting literature are numerous. Agency theory has underpinned studies including: the determinants of financial reporting quality of state owned enterprises in Indonesia (Dewata*et al.,* 2016), determinants of financial reporting quality among government agencies in Kenya (Abang'a, 2017) and assessment of IPSAS impact on financial reporting in Nigerian public sector (Oko, 2018).

Within the purview of this study, there is a presumed relationship between stakeholders within the public sector entity in Nigeria (the public, contractors, government among others) and the board of parastatals and agencies. While these agents (board members and management) are appointed to manage the affairs of these organisations, they may act against the interests of stakeholders. The reporting responsibility of the board and management fulfils their expected role as agents to the principal. In this instance, deploying regulations such as adoption of quality reporting standards (IPSAS) will reduce costs from such agency relationship. Ball (2001) expressed that an intervention indulged by public corporations to mitigate agency problem was to source the service of independent audit practices. Furthermore, the agency theory serves as sound theoretical framework for this study in explaining the conceptual link between organisational characteristics, IPSAS adoption and the quality of financial reporting.

3. Empirical Review

3.1. IPSAS Adoption and Timeliness

Timeliness refers to obtaining financial information in time to possess some influence on the decision of stakeholders (IASB, 2010). Galera and Bolivar (2012) examined the impact of IPSAS adoption (specifically fair value accounting) on governmental accountability in Spain. It was observed that the adoption of fair value accounting had the potential of increasing the timeliness of financial statements thereby enhancing their usefulness for the purpose of determining service costs. This is in spite of the considerable implementation cost of IPSAS adoption. Kartiko*et al*. (2018), in a study of IPSAS adoption and fiscal transparency, focused on availability, timeliness and comprehensiveness of government financial information among 77 countries. While this study did not report on timeliness specifically, it underscores the importance of timeliness in the construct of fiscal transparency. Overall, the research on IPSAS adoption and timeliness specifically within the public sector in scarce. This study aims to bridge this gap by focusing particularly on timeliness within the more general framework of financial reporting quality.

3.2. Organisational Characteristics and Timeliness

Abang'a (2017) studied the influence of certain attributes of semi-autonomous government agencies (SAGA) on financial reporting quality in Kenya. Fifty Semi-autonomous government agencies (SAGA) were selected for the period 2011-2015. The independent variables included total assets, leverage, liquidity, age of SAGA, audit committee size and profitability. While deploying multiple regression analysis for probable predictions, IPSAS adoption was observed to marginally improve financial reporting quality. In addition, age of SAGA, liquidity and total assets were found to be significant in predicting financial reporting quality.

Rakhman and Wijayana (2019) explored the determinants of financial reporting quality in the Indonesian public sector.

The independent variables examined in the study were capital expenditure ratio, total assets, financial independency ratio, mayor's experience, age of mayor, managerial effectiveness, incentives, location of local government and local government status. The financial reporting quality was proxied with the audit opinions of firms gathered from their annual reports. While applying regression analysis on data, results obtained from the study indicated that local governments with high ratio of capital expenditure to total budget, smaller sizes, lower financial independence and those with less experienced mayors demonstrated an association with lower financial reporting quality.

Nirwana (2018) aimed at re-testing the determinant factors of the quality of financial statements and the performance of the government by adding contextual factors that jointly affect these variables. The study concluded that personal factors, system/administration factors and political factors all predict high financial statement quality from regression results obtained afterwards. In investigating factors affecting the quality of financial reporting in Local governments in Indonesia, Tambingon, Yadiati and Kewo (2018) randomly selected accounting and audit personnel in 66 local governments in Indonesia for a mail survey. Explanatory variables explored were apparatus commitment, role of internal audit, accounting information system and the quality of financial statement while quality of accounting information system was the dependent variable. Structural equation model analysis showed a significant effect of apparatus commitment and role of internal audit on quality of accounting information.

Similarly, Saxton, Kuo and Ho (2012) investigated the determinants of voluntary financial disclosure by non-profit organisations. The study employed the entire population of Taiwan's not-for-profit medical institutions. In this wise, the dependent variables were financial leverage, size, profitability, community benefit service expenditure, board size, percentage of outside board members, percentage of non- executive board members and independent auditing. A disclosure score was utilised to measure the problem of the study (determinants of voluntary financial disclosure). The study confirmed a great likelihood of disclosure practices in smaller organisations with lower debt/asset ratios and managed by larger boards with more inside members from multivariate analysis conducted on the data.

On the basis of the literature review conducted above, the following hypotheses were developed for the study in the null form:

- H_{01}. Organisational age has no effect on the timeliness of financial reporting in the Nigerian public sector
- H_{02}. Organisational size exerts no effect on the timeliness of financial reporting in the Nigerian public sector
- H_{03}. Liquidity does not significantly affect the timeliness of financial reporting in the Nigerian public sector
- H_{04}. Organisational type has no effect on the timeliness of financial reporting in the Nigerian public sector
- H_{05}. IPSAS adoption demonstrates no effect on the timeliness of financial reporting in the Nigerian public sector

4. Methodology

The *Ex post facto* design was adopted for this study. This research design has also been used in previous accounting research (Ada &Christiaens, 2018; Captain &Ogbonna, 2019).The sample population consisted of all parastatals and agencies in the public sector of Nigeria which have migrated to the GIFMIS platform (N = 766) (Office of the Accountant-General of the Federation, 2018). A purposive sample of 90 institutions was selected and their general-purpose financial statements for 2017 and 2018 were utilised for the study. Content analysis of the financial statements was performed.

Timeliness of financial reporting was measured by a single item based on the natural logarithm of the time taken for the auditor to sign the auditor's report after book year end (Abang'a, 2017; Opanyi, 2016; van Beest et al., 2009). A higher score was given to a shorter interval.al reporting, the approach by Opanyi (2016) was adopted. IPSAS adoption level was determined using a 124-item IPSAS disclosure index (based on IPSAS 1, 2, 3, 14, 24, 33) adapted from an IPSAS compliance checklist developed by Ernst and Young (2019). In agreement with previous studies (Glaum, Schmidt, Street & Vogel (2013);Sellami&Gafsi, 2020), the disclosure index was scored in a dichotomous manner whereby each item is given a score of 1 if disclosed and a score of 0 if not disclosed. An overall compliance score for each institution score was determined as the ratio of the total number of items disclosed to the maximum number of items on the index (Glaum et al., 2013; Sellami&Gafsi, 2020).

Given that the data was panel data, the estimated regression model was achieved using random effects GLS model based on the outcome of diagnostic tests. The Hausman test, the Breusch Pagan Lagrange Multiplier (LM) test and test of parameters were conducted to determine the model best suited to the data. Due to the categorical nature of the variable, Organisation Type (OT), it was included in all models as three dummy variables. These dummy variables represented the economic, administrative and social organisation types respectively. The last category which was the law and justice organisation type was treated as a reference category and dropped from each model to prevent perfect multicollinearity. All statistical tests were significant at $p < 0.05$. The data was analysed with STATA version 11.

4.1. Measurement of Variables

In this study, organisation age was defined as the number (in absolute terms) of years in existence of a public organisation determined from its establishment act. Organisation size was defined as the natural logarithm of the total assets of an organisation. Liquidity was determined as the ratio of current assets to the current liabilities of the organisation while organisation type was based on the sector category a public organisation belongs to on the Government Integrated Financial Management Information System (GIFMIS). These sectors include the Economic, Social, Administrative, Regional and Law & Justice Sectors.

4.2. ModelSpecification

The model for the study was specified as follows:

$TL_{it} = \beta_0 + \beta_{11}IA_{it} + \beta_{12}OA_{it} + \beta_{13}OS_{it} + \beta_{14}LQ_{it} + u_{11}OTAD_{it} + u_{12}OTSV_{it} + u_{13}OTE_{it} + \varepsilon_i$ .....Model 1

Where

TL = Timeliness

IA = IPSAS Adoption

OA = Organisational Age

OS = Organisational Size

LQ = Liquidity

OT = Organisational Sector-Type

ε_i= Error term

β_0 = regression intercept which is constant
$\beta_{11} - \beta_{14}$ = regression coefficients of explanatory variables
$u_{11} - u_{13}$= variance terms for dummy variables

5. Results

5.1. Descriptive Analysis

The descriptive analysis as presented in table 4.1 shows the shows the mean and standard deviation as well as the minimum and maximum values of timeliness, IPSAS Adoption (IA) and all organisational characteristics as measured by Organisational size (OS), Liquidity (LQ), Organisational age (OA) and Organisational type (OT) are also summarized. Given the categorical nature of organisational type, three dummy variables were created representing Economic (OTE), Administrative (OTAD) and Social (OTSV) organisational types.

5.1.1. Descriptive Statistics

	MEAN	STD. DEV	MIN	MAX
TL	1.18	0.42	1	3
IA	0.70	0.09	0.4	0.87
OS	8.17	1.56	4.52	12.19
LQ	94.86	469.18	0	4234.92
OA	32.79	15.84	6	91
OTAD	0.12	0.33	0	1
OTSV	0.64	0.48	0	1
OTE	0.21	0.41	0	1

Table 1: Descriptive Statistics Showing Mean Scores of Timeliness, Organisational Factors and IPSAS Adoption
Source: Researcher's Computation, 2021 Observation: 180

From the descriptive analysis table, Timeliness (TL) showed a minimum and maximum value of 1 and 3 respectively while the mean and standard deviation were reported to be 1.18 and 0.42. The range of values shows the different level of providing information timely enough for users' utilisation. The mean value of 1.18 indicates that the average public sector institution demonstrates a poor record of timeliness in presenting their financial statement after book year end. The standard deviation of 0.42 shows that the public sector institutions are minimally different from one another in their tendency to delay the presentation of their annual reports.

IPSAS Adoption (IA) levels ranged from a below average (40%) to a high level (87%) of disclosure. The standard deviation of 0.09 indicates that the level of disclosure among federal institutions demonstrates minimal dispersion and reveals similarities in their reporting tendency. Organisational Size (OS) showed minimum and maximum values of 4.52 and 12.19 while the mean and standard deviation were 8.17 and 1.56 respectively. In actual terms, this shows values of total assets between 91.83 million naira and 196.811 billion naira. This implies that the institutions under review consisted of those with small as well as large sizes as evidenced by the naira values of the total assets of these institutions. Liquidity (LQ) had minimum value of 0 and maximum value of 4,234,920,000 naira. This indicates that a wide gap exists within the liquidity profile of sampled institutions. Organisation age (OA) was reported to have minimum and maximum values of 6 and 91 years. This depicts the age of institution as calculated from their various establishment acts. Administrative, social and economic organisation types constituted 12%, 64% and 21% respectively of the entire data set.

5.1.2. Correlation Analysis

This analysis was performed to rule out any unhealthy relationship – multicollinearity – among the independent variables. The result in table 4.2 from the analysis revealed that there was absence of multicollinearity among the independent variables with correlation coefficient values less than 0.8. Similarly, the Variance Inflation Factor also presents result indicating that most of the independent variables do not correlate strongly together with values ranging from 1.12 to 8.45. However, the dummy variable OTSV representing Social Organisation type had a VIF value of 10.94 which is slightly greater than the cut-off value of 10.

	IA	OS	LQ	OA	OTAD	OTSV	OTE	VIF
IA	1.000							1.13
OS	0.25**	1.000						1.21
LQ	0.03	0.26**	1.000					1.12
OA	-0.15*	0.10	-0.13	1.000				1.13
OTAD	-0.10	-0.08	-0.07	-0.05	1.000			5.81
OTSV	-0.08	-0.04	-0.01	0.21*	-0.50**	1.000		10.94
OTE	0.16*	0.15*	0.07	-0.18*	-0.19**	-0.70**	1.000	8.45

Table 2: Result of Correlation Matrix and Variance Inflation Factor (VIF)

Table 4.2shows the Pearson pairwise correlation matrix. The independent variables are IPSAS Adoption (IA), Organisation size (OS), Liquidity (LQ), Organisation age (OA) and Organisation type (OT). *p < 0.05, ** < 0.01

5.2. Regression Analysis

This section presents the regression results from Pooled OLS, Fixed Effect Models and Random Effect Models. The Hausman test was conducted to determine the model of best fit. Statistical significance on this test will however justify the use of Fixed Effect Model instead of Random Effect Model. To establish the suitability of the Random Effect Model, the Breusch Pagan Lagrange Multiplier (LM) test was conducted. Whenever it was found significant, the Random Effect Model was used. Similarly, in solving the problem of Heteroskedasticity, Robust Standard Errors were estimated for the regression coefficients. Mixed Effects REML modelling was adopted in accounting for the dummy variables (OTE, OTAD, OTSV) representing the organisation type. The significance of the dummy variables in the resulting model was tested using the Likelihood Ratio Chi-square test while the overall mixed effects models were tested using the Log restricted-likelihood Chi-square test.

Variable	Coeff	Std. Err	T-Stat	Prob
Constant	1.43	0.37	3.82	0.000
IA	0.28	0.46	0.59	0.553
OS	-0.05	0.03	-1.65	0.100
LQ	-0.00003	0.00003	-1.20	0.228
OA	-0.002	0.002	-0.63	0.528
Adj R^2	0.0190			
Wald Stat (Prob)	Wald $chi^2_{(4)}$ = 7.75 (0.1013)			
Hausman Test	$chi^2_{(4)}$ = 2.80 (0.5913)			
Testparm Test/LM Test	$chi^2_{(1)}$ = 7.84 (0.003)			
Heteroskedasticity Test	$chi^2_{(1)}$ = 28.31 (0.000)			
OTAD	0.08			
OTSV	2.76e-07			
OTE	0.14			
LR test vs. linear regression	$chi^2_{(6)}$ = 2.17 (0.9030)			

Table 3: Regression and Post-Estimation Results Showing Effect of Organisational Factors and IPSAS Adoption on Timeliness

Table 3 reports Random effects model (with robust standard errors) results of the effect of IPSAS adoption and organisational characteristics on the Timeliness (TL) of financial reporting in public sector institutions in Nigeria. The dependent variable is Timeliness (TL). The explanatory variables are IPSAS Adoption (IA), Organisation size (OS), Liquidity (LQ), Organisation age (OA) and Organisation type Administration (OTAD), Organisation type Social (OTSV) and Organisation type Economic (OTE). Note: all the analysis was tested at 5% significance level

Source: Author's Work (2021)

The Hausman test result with the *p-value* of 0.5913 is more than the 5 percent level of significance chosen for the study. This indicates that the random effects model is the appropriate estimator according to its null hypothesis which states that there is no presence of systematic difference in the model coefficients. Thus, the study fails to reject the null hypothesis. Furthermore, the result of the LM test carried out, having *p-value* of 0.003 is consistent with the outcome of the Hausman test and proved that random effects model is the best estimating technique for Model 5. The result of the heteroskedasticity test carried out (p = 0.000) revealed that the model has heteroskedasticity and thus Random Effects model with Robust standard errors was used in estimating model 5.

$TL_{it} = \beta_0 + \beta_{51}IA_{it} + \beta_{52}OA_{it} + \beta_{53}OS_{it} + \beta_{54}LQ_{it} + + u_{51}OTAD_{it} + u_{52}OTSV_{it} + u_{53}OTE_{it} + \varepsilon_i$ ………… model 1

$TL_{it} = 1.43 + 0.28IA_{it} - 0.002OA_{it} - 0.05OS_{it} - 0.00003LQ_{it} + 0.08OTAD_{it} + 7.62e\text{-}14OTSV_{it} + 0.14OTE_{it} + \varepsilon_i$..........................Equation 1

The regression analysis results presented Table 3 showed that: IPSAS Adoption (IA) has a positive but insignificant effect on Timeliness of financial reporting (TL) (β = 0.28, *p = 0.553).* The positive value of its coefficient of 0.28 implies that a unit increase in the adoption of IPSAS increases the relevance of financial information by 0.28; organizational size has insignificant negative effect on TL (β = -0.05, *p = 0.100);* which means thata 1% change in the organization asset would result in a decrease of 0.0005 change in TL; ratio of current asset to current liabilities, that is liquidity (LQ) negatively and insignificantly impacted TL (β = -0.00003, *p = 0.228)* indicating that an increase in LQ would result in 0.00003 decrease in TL; also, organizational age (OA) has insignificant negative effect on TL (β = -0.002, *p = 0.528)* revealing that older organizations do not report timely and hence corporate age has no significant impact on the timeliness of financial reporting. Lastly, the result of the instrumental analysis (Mixed Effect REML modelling) examining the effect of organizational type showed that the nature of the organization has no significant impact on the timeliness of its financial reporting ($chi^2_{(6)}$ = 2.17; *p = 0.9030*). Summarily, IPSAS Adoption and organisational characteristics do not significantly influence the timeliness of financial reporting of public institutions in Nigeria. Consequently, $H_{01} – H_{05}$ failed to be rejected. The result of the Wald χ^2 statistics with probability value of 7.75 implies that all the measures of the independent variables (IP, OS, LQ, OA) did not jointly impact TL. The value of the coefficient of multiple determination of 0.0190 means that IP, OS, LQ and OA only jointly explained 1.90% of the variation in TL while the remaining change in TL (98.10%) is caused by other factors outside the scope of the specified model.

6. Discussion

This study focused on investigatingthe effect of IPSAS adoption and organisational characteristics on timeliness of financial reporting in the public sector based on secondary data. Previous studies on the effects of IPSAS adoption on financial reporting quality had been largely employed a survey method to measure practitioners' perception of the effects of IPSAS on financial reporting quality. Thus, the current study contributes to the literature in Nigeria and other emerging economies by providing quantitative data on the actual rather than 'perceived' effect of IPSAS adoption and organisational factors on timeliness of financial reporting.

The mean timeliness score reported in this study is considerably lower than 3.26 obtained by Opanyi (2016) and 3.37 by Abang'a (2017) both within the Kenyan public sector. This difference between the current study and Opanyi (2016) might have been on account of the scoring approach. While Opanyi (2016) did not adopt a reverse scoring technique in calculating timeliness, such was adopted in this study as well as Abang'a (2017). Nevertheless, the higher average timeliness rating observed in Kenyan institutions may be indicative of a higher level of compliance with statutory timelines for the submission of annual financial statements.

The level of IPSAS adoption in this study is substantially higher than 58% (formal harmonisation) and 38% (material harmonisation) reported by Ada &Christiaens (2018) in the Turkish public sector. This comparison is done with caution given that the disclosure instrument used in that study is not directly comparable with the one adopted for the current study with substantial variability in the number of items and standards indicated for disclosure. However, Sellami&Gafsi (2020), using a comparable disclosure checklist as utilized in the current study, reported an average level of IPSAS disclosure of 62.5% across six African countries thereby suggesting that the figure obtained in the current study is higher than the African average. Furthermore, only countries such as South Africa (80.4%) and Tanzania (71.7%) recorded higher disclosure levels than the current Nigerian figure. Others like Burundi (45.1%), Kenya (61.2%), Mauritius (65.9%) and Uganda (57.1%) reported markedly lower levels of disclosure.

While the mean log of total assets obtained in this study is considerably higher than the 5.91 obtained among Kenyan agencies by Abang'a (2017), the finding of a minimal level of variation among the institutions was similarly documented by Abang'a (2017). The mean liquidity observed in this study is sizably higher than 48.67 reported by Abang'a (2017) among semi-autonomous government agencies in Kenya perhaps suggesting greater liquidity among Nigerian public institutions. However, the marked dispersion of liquidity values was equally observed among the Kenyan entities studied with a range of 0.07 to 3951.14. These differences are likely to indicate variations across countries and functionalities of the government agencies studied. The average age of public institutions included in this study is noticeably higher than a mean age of 18.76 years among Kenyan semi-autonomous government agencies with a range of between 1 and 59 years (Abang'a, 2017).

From the a priori expectation of this study, IPSAS adoption and organisational characteristics should have significant effect on the timeliness of financial reporting in public sector institutions in Nigeria. However, the result showed that IPSAS and organisational characteristics did not significantly affect timeliness of financial reporting of public sector institutions in Nigeria. Timeliness was operationalized in this study as the number of days taken by the auditor a public sector organisation to sign the financial report after the book year end. This provides an insight into how timely financial data are made available to stakeholder to influence their decisions. IPSAS requires that the date for presentation of financial statements to stakeholders be disclosed. This invariably guides public institutions in complying with regulatory stipulations to deliver as mandated. Our findings show that IPSAS adoption as well as organisational characteristics had no influence on the timely reporting of public sector institutions in Nigeria.

Our findings contrast with the views of Galera and Bolivar (2012) in a study of governmental accountability in Spain. The authors found that the adoption of fair value accounting had the potential of increasing the timeliness of financial statements and hence enhance their usefulness for determining service costs. Similarly, Opanyi (2016) found an enhancement in the timeliness of financial reporting after the adoption of IPSAS among public sector entities in Kenya. Furthermore, Abang'a (2017) observed that timeliness of financial reporting improved significantly when accounting periods before IPSAS adoption were compared with the post-IPSAS period. The lack of association between timeliness and IPSAS adoption as well as organisational characteristics in this study perhaps suggests that there could be other explanations for the timely submission of financial statements peculiar to the Nigerian public sector such as regulatory enforcement (Iyoha, 2012) which was not captured in this study.

6.1. Conclusion and Recommendations

Overall, financial reports within the Nigerian public sector are not submitted in a timely fashion. Based on the results of the multivariate model, IPSAS adoption and organisational characteristics were found to have no significant explanatory power on the timeliness of financial reporting of public sector institutions in Nigeria. The following recommendations are made. Heads of public institutions, practitioners and regulatory bodies within the public sector as well as the Public Accounts Committees of the National Assembly should intensify efforts in ensuring the presentation of financial reports as and when stipulated. Erring institutions who fail to comply with statutory requirements regarding timely submission of annual financial statements should be sanctioned appropriately by the appropriate regulatory bodies. This should serve to ultimately improve the quality of timeliness of financial reporting in the Nigerian public sector space. Additionally, further studies could examine the role of other factors such as regulatory enforcement in promoting the timeliness of financial reporting in the public sector.

6.2. Limitations of the Study

A few limitations of the study are worthy of mention. First, annual financial statements for 2017 and 2018 were not available for all the relevant 766 public institutions, therefore, a purposive sampling technique was adopted for the selection of the 90 organisations in the study. Second, the relatively modest sample size could have led to the possibility of bias of the study towards a negative finding. However, this is unlikely because the panel data yielded 180 observations which appear adequate.

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