VOLUNTARY INTERNET FINANCIAL REPORTING IN THE NIGERIAN PUBLIC SECTOR

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ABSTRACT

The broad objective of the study was to empirically examine voluntary internet financial reporting in the Nigerian public sector. The data was obtained from the websites of the thirty six state governments in Nigeria and central bank statistical bulletin(2015). The data collected was analysed using descriptive statistics and regression analysis with the aid of a computer software E-Views 9. The study revealed that only Lagos state voluntarily reports its financial information on its website which shows the level of internet financial reporting in Nigeria in very low. The study also revealed that there exist positive significant relationship between the population of the state and wealth/GDP of the state with voluntary internet financial reporting. The study recommends that the government should improve on the accessibility of the public to their websites. This will make the government more assessable, transparent and accountable to their stakeholders especially their citizenry. The study also recommends that the state government should develop better knowledge management systems, increase the interactivity of their website and enrich the accounting information that they present in the websites in order to support the accountability of the government.

Keywords: Internet financial reporting, State government, Voluntary disclosure

1. Introduction

Information plays a very vital role in government activities. The production, preparation and presentation of information such as the annual report is only one part of the accountability equation. The access to the information by users is the other half of the accountability equation. Information therefore has to be first available then accessible to users for full accountability to take place. Dissemination and control of annual report of a state is the duty of the state government. In today's society, probably one of the most convenient and cost effective ways for government to disseminate information is through the internet. Styles & Tennyson (2007) observes that the internet provides benefit that helps to reduce printing and distribution costs. The internet can reach wider public stakeholders faster and within a limited time frame. Internet technologies in the form of e-government (government website) provide state government with an opportunity to improve their accountability, to promote exchange in the overall ideology of government's activities and to improve their responsiveness to the needs of the citizens for financial information, (Mussari, 2006).

The Financial Regulation in Nigeria requires the state government to prepare and disclose its information to the public especially those that relate to financial matters. In line with the mandatory requirement, two accounts must be prepared and disclosed by government and they are; the annual report which is the annual financial statement and the other is the annual plan which is the annual budget. However, the law does not mandate government to disclose these accounts through the internet though it is one medium used by government in developed nations. This research work is aimed at examining the relationship between the voluntary disclosures of internet financial reporting in e-government. It also compares the characteristics of state government that use the internet as a disclosure medium and those that do not (Laswad, Oyelere & Fisher 2005).

There have been several studies carried out on the determinants of voluntary disclosure of financial information on the internet all over the world, however there is paucity of research done on this area in the public sector as most of the research studies carried out in this area have been exhaustively addressed in the private sector. Laswad, Oyelere and Fisher (2005), Serreno, Rueda & Portillo (2008), Styles & Tennyson (2007) and Garcia & Garcia (2010) are among the few authors that have addressed the issue of the voluntary disclosure of internet financial reporting in the public sector. These studies were carried out in the developed countries such as; New Zealand, Spain, the United States (U.S.), Italy and so on.

In developing countries like Nigeria, little or nothing has been done as regard the voluntary use of the internet to disclose financial information by government to the best of the researchers knowledge. This research work examines the characteristics of state government activities that influence the voluntary disclosure of financial information on the internet, thus this examination will enhance the understanding of the motives to use the internet as a medium of voluntary disclosure in the public sector.

The broad objective of this study is to ascertain the determinants of voluntary Internet Financial Reporting in the Nigerian public sector. The rest of the paper is divided into four sections: Section II deals with the literature review/ theoretical framework, while Section III deals with methodology. Section IV deals with the analysis of the data, and Section V presents the conclusion and recommendations.

2. Literature Review

2.1 Conceptual Framework

The financial information reported through the internet is called the internet financial reporting (IFR) or Web financial reporting(WRP). Oyelere, Laswad &Fisher (2003) defined internet financial reporting as the combination capacity and capability of multi-media to intercommunicate interactively about financial information. The financial statements here are usually printed through the internet, (Lipunga & Munthopa, 2014). The financial information can be distributed more quickly (timeliness), and this timeliness factor facilitates the usefulness of the information in the financial statement by its users. Internet financial reporting can also be seen as the reporting and disclosure of public sector accounting by way of government website (Verawaty, 2012). According to Jones, Xiao & Lyner (2005), the internet has the power to revolutionise external reporting. Computer technology and the internet modify the flow of information as well as the corporate disclosure of financial data to the different users. Then it is possible to disseminate information to the stakeholders that are heterogeneous decision makers (Ashbaugh, Jonston & Warfield, 1999).

Internet financial reporting gives opportunity for the government to use the internet as a mechanism to disseminate the reports and disclosures provided to stakeholders.

Furthermore, Verawaty (2012) asserts that one of the most effective ways in terms of time efficiency, and cost effectiveness to the government agency authorized with the responsibility to disseminate this information is the internet.

2.2 Theoretical Framework

The Stakeholder's theory is the theory upon which the study is anchored. The traditional definition of a stakeholder is any group or an individual who can affect or is affected by the achievement of the organizations objectives (Freeman 1984). The general idea of stakeholder concept is a re-definition of the organization/entity. It's generally about what the entity should be and how it should be conceptualized. An entity itself can be thought of as a group of stakeholders and the purpose of the entity should be to manage their interest, needs and viewpoints. Freeman (2006) identifies groups of people that are considered to be stakeholders, they include; customers, employee, local communities, suppliers and distributors, shareholders, the general public, the media, business partners, future generation, past generations (Founder of organization), academics, competitors, stakeholder representatives, trade union or trade association of suppliers or distributor, financiers, the stockholders, bondholders, creditors, competitors, government, regulators, policy makers, etc. The managers/management of entities are treated differently either as part of the stakeholder, parts of the entities action and responsibilities or as referees between investors and employees. This management of stakeholders is thought to be fulfilled by the managers of the entity. The manager should on one hand manage its entity for the benefits of its stakeholders in order to ensure their rights and participation in decision making and on the other hand the management must act as the stockholders agents to ensure the survival of the entity to safeguard the long-term stakes of each group. Freeman (1984) identified that the purpose of stakeholder management is to create various methods to manage the different groups and relationships that resulted in a strategic fashion. The main challenge is to manage and integrate the relationship and interest of all the stakeholders in a manner that ensures the perpetual success of the entity.

In the public sector, the government and its officials are seen as the management while the citizens, businesses, agencies are some of the stakeholders (Ubiebor, Gardiner, KaraZaitri, & Lei,2012). Since management is meant to provide information to shareholders, based on stakeholder's theory this study examines how state government performs this through the internet.

2.4 Prior Empirical Studies

Studies that have examined the voluntary disclosure of financial information online in the public sector are very limited. The voluntary use of internet financial reporting by state government is still in its preliminary stage. However, some prior empirical studies carried out as regards the determinants of voluntary internet financial reporting in the public sector are discussed below: Laswad, Oyelere & Fisher (2005) developed a research paper on the determinants of voluntary internet financial reporting in the public sector. They empirically tested the hypothesis using a sample of 86 Local Government Authorities (LGA's) in New Zealand. Their literature examined the behaviour of managers in the public sector and suggested that agency relationship (agency theory) motivated such managers to provide information to enable the monitoring of their actions. The literature identified a number of characteristics and variables that act as a proxy for agency cost in the public sector. They proposed that the internet provides an opportunity for examining voluntary disclosure in the public sector and particularly in the local government environment. They stated that some New Zealand Local authorities elect to voluntarily provide financial information on their websites. Six variables that were examined by them include: political competition, size, leverage, municipal wealth, press visibility and type of local government authority. The multi-variate regression analysis was used in the study and they found that leverage, municipal wealth, press visibility and type of council are associated with voluntary ifr practices of local government authorities in New Zealand. While local government size and level of political competition are not important predictors of

IFR disclosure. Also, they found out that the city and regional councils are more likely to disclose internet financial reporting voluntarily than the district councils.

Sorreno, Rueda & Portillo (2008) embarked on a project study that was based on the determinants of voluntary internet financial reporting (e-disclosure) by local public administrations. The study presented hypotheses regarding the relationship between e-disclosure and city size, issuing of municipal bonds, financial features, internet visibility, level of e-governance and diverse political aspects, as well as the influence of external factors such as citizens income level, educational level and their social commitment. A sample of 92 Spanish local public administrations was used to empirically test the above hypotheses. Their findings showed that Spanish LGA's characterized with larger citizenry, higher income level and great media pressure measured as important factors that facilitated the disclosure of Financial Information online by the Spanish local public authorities. Also, it was found out that the LGA's size affects e-disclosure and that the LGA's effort to implement e-government influences the publication of data via the internat. The ANOVA and non-parametric test of means were the statistical tools employed.

Verawaty (2012), embarked on a research study on the accessibility of determinants of internet financial reporting of local government. The local government in Indonesia was used as the sample for this study. It looked at the Indonesian local government use of the internet and whether the government is more likely to be accountable as a result of their use of the internet. The aim of the research was to examine the accessibility index value and the determinant variables such as size, income per capita and debt level using the uni-variate regression analyses model. The result showed that the association between the accessibility index value and the determinant variables indicated no significant in the statistical test.

Garcia & Garcia (2010) used two regression models to test the hypothesis regarding the relationship between voluntary financial e-disclosure and some determinants. These determinants they used included, size, investment, political competition, media visibility. They found out that the size, investment and political competition significantly influence the likelihood of reporting financial information through websites. A negative relationship was discovered to exist between press visibility and the degree of online reporting. This negative result they claim was gotten because media prefer to publish only negative news like scandals, corruption, budget deficits that increase their circulation because they have their own financial objectives to pursue and the media does not act on behalf of the citizens. From these it was observed that the media plays a moderately role in the agency relationship between voters and local government, influencing the degree of online reporting on one hand but also they agree on the other hand the monitoring provided by the media does not insure that the elected official will operate in the best interest of their constituency.

Lepore & Pisano (2010), carried out a study that examine the determinants of municipalities internet-based performance reporting using the agency theory frame work. The study was conducted using a sample of 167 Italian cities in 2010. Their study showed that voluntary disclosures provided through traditional channels and voluntary performance data released the previous year as well as media interest are significantly associated with internet reporting.

Styles & Tennyson (2007) investigated a research on the internet financial reporting of government using 300 local government authorities in the U.S. as its sample to test the hypothesis. The determinants used include size, per resident income, ratio of debt financial condition. Their findings showed that size, per resident income, financial condition and debt ratio are the determinants of accessibility of financial data on the internet. The uni-variate regression analyses model was used for the study.

Groff & Pitman (2004) investigated government financial information on websites. They made used of a sample of 100 cities in the U.S in order to test if the size, debt and financial condition using the uni-variate regression analyses model. They discovered that debt, financial condition and size are determinats of e-disclosure by government.

Yu (2010) investigated the content accessibility of e-disclosure of financial information of local government authorities in china. The determinants used to test his hypothesis include: size, wealth, type of LGA, country, income. He found out that size, wealth and type of LGA's are significantly associated to the extent of internet financial reporting.

3. Methodology

The research design used for this study is the case research design in order to have an indepth understanding of the voluntary internet financial reporting in the Nigerian public sector using the State government as a case study. For the purpose of this work, the population of interest are the 36 states in Nigeria and the Federal Capital Territory. The sample involves all the 36 states in Nigeria including the Federal Capital Territory. This is due to the smallness of the population of interest. The secondary source of data was used which was gathered from the Central bank annual statistical bulletin (2013); The Nigeria Bureau of Statistics Reports (2012); The National Population Commission (2012); Renaissance Capital Estimates (2012); The websites of all the 36 states and that of the F.C.T. The data gathered was from the year 2012. The method of data analysis used for this study include: descriptive statistics, correlation analysis and regression analysis.

Styles & Tennyson (2007) carried out a study on the determinants of voluntary internet financial reporting in the public sector. A critical examination of their model showed that they focused on some important variables that measures internet financial reporting. In order to improve on the model for this study, We adopted the model by Styles & Tennyson (2007) and improved on this by incorporating two new variables and neglecting two variables used by them.

Thus the model specification of this study is stated below:

$$WRP = \alpha_0 + \alpha_1 POP + \alpha_2 AGE + \alpha_3 GDP + \alpha_4 INTL + \varepsilon$$

Table 1: Operationalization and Measurement of Data

	Variables	Measurements	Sources	Apriori Sign
1	Internet financial reporting (IFR)	It was operationalized by the availability of websites by each state	http://en.m.wikipedia.org/wiki/state-of-Nigeria	
2	Population of the state (POP)	This was measured using the population estimates of the year 2012	National Population Commission (2012), Nigeria Bureau of State (2012), Renaissance Capital Estimates (2012)	+
3	Age of the state(AGE)	This was measured using the age of the state as at the year	http://en.m.wikipedia.org/wiki/state-	+

		2012	*of-Nigeria*	
4	Wealth of the state(GDP)	The GDP and GDP per capita income to measure the wealth of the state	Central Bank of Nigeria (2012), Renaissance Capital Estimates (2012)	+
5	International transportation (INTL)	The availability of international airports and seaports in each state was used to measure this	*http://en.m.wikipedia.org/wiki/state-of-Nigeria*	+

Source: Researchers Compilation (2015)

4. The Data Analysis

The data obtained was analysed using descriptive statistics and regression analysis, the results are presented below:

4.1. Descriptive Analyses

Table 2: Descriptive Statistics

	IFR	POP	AGE	INTL	GDP
Mean	0.027027	4451351	31.05405	0.189189	2.7
Maximum	1	11000000	47	1	11.4
Minimum	0	1600000	18	0	1.1
Std. Dev.	0.164399	2019574	10.6117	0.397061	1.895316
Skewness	5.833333	1.672064	0.23794	1.587151	2.907713
Kurtosis	35.02778	6.28515	1.479294	3.519048	13.25028
Jarque-Bera	1791.247	33.87875	3.914307	15.94947	214.1181
Probability	0	0	0.14126	0.000344	0

Source: E-views Output (2016)

Table 2 shows the descriptive statistics for the variables used in this analysis. Internet financial reporting (IFR) with an average of 0.027 indicates that about 3% of the state governments in Nigeria voluntarily reports their financial information on their website. The study observed that only Lagos State that reports some of its financial information on their website. This implies that the level of voluntarily reporting financial information on the website is very low. The average population of the state was about 4.4million, while the average age of the state was about 31 years. On average it was observed that the availability of international airports and seaports (INTL) was about 19%. The average GDP of the state was about N2.7billion for the year 2012. All the variables were positively skewed. The Jacque-Bera probabilities with $p<0.05$ is an indication that most of the variables were normally distributed.

4.2. Regression Analyses

Table 3: Regression Analyses

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.007575	0.055307	0.136972	0.8919
POP	4.20E-08	1.63E-08	2.576554	0.0148**
AGE	0.002742	0.001974	1.389408	0.1743
INTL	0.045110	0.047802	0.943684	0.3524
GDP	0.110361	0.017191	6.419799	0.0000**

R-squared	0.710024	Mean dependent var	0.027027
Adjusted R-squared	0.673777	S.D. dependent var	0.164399
S.E. of regression	0.093898	Akaike info criterion	-1.768126
Sum squared resid	0.282139	Schwarz criterion	-1.550435
Log likelihood	37.71034	Hannan-Quinn criter.	-1.691380
F-statistic	19.58848	Durbin-Watson stat	1.664570
Prob(F-statistic)	0.000000		

Source: E-views Output (2016)

From the regression result it was observed that size of the state (population), age of the state, international mode of transportation and wealth of the state were able to explain only about 71% of the changes in voluntary internet financial reporting while about 29% of the systematic variations in voluntary internet financial reporting was left unexplained by the model. This means that other factors apart from size of the state (population), age of the state, international mode of transportation, and wealth of the state are responsible for voluntary internet financial reporting in the state. On the basis of the overall statistical significance of the model as shown by F-statistics it was observed that the model was statistically significant since the calculated F-value of 19.58 is greater than the critical F-value at 5% level of significance. This means that the overall model is statistically significant.

The result revealed that POP and GDP had a significant relationship with voluntary internet financial reporting in Nigeria since their absolute calculated t-values of 2.57 and 6.41 respectively were greater than the absolute critical t-values at 5% level of significance. This finding is consistent with those of Serrano et al (2008), Garcia et al (2010), Styles & Tennyson (2007), Groff & Pitman (2004), Yu (2010) and Jorge et al (2011). While AGE and INTL had no significant relationship with voluntary internet financial reporting in Nigeria. It was also observed that size of the state (population), age of the state, international mode of transportation, and wealth of the state have a positive relationship with voluntary internet financial reporting in Nigeria agrees with the *a priori* expectation. There is a significant relationship between the international mode of transportation in the state and voluntary internet financial reporting. Also, it was observed that there exists a significant relationship between the wealth (GDP) of the state and voluntary internet financial reporting. Laswad et al (2005), Serrano et al (2008), Styles & Tennyson (2007), Groff & Pitman (2004) and Yu (2010). The Durbin Watson with a value of 1.66 indicates the absence of first order autocorrelation in the model.

5.0 **Conclusion and Recommendations**

The objective of this study was to empirically examine the factors that determine state government voluntary financial reporting on their website. With the advancement in technology one of the most convenient and cost effective ways for government to share information is through the internet. As the internet helps to reduce printing and distribution costs. The internet can reach wider public stakeholders faster and within a limited time frame. Generally, the evidence regarding determinants of voluntary disclosure in the public sector is less conclusive in comparison with such evidence in the private sector. This is possibly the outcome of the limited research in the public sector as compared with the private sector. The result of the study shows that there exists significant positive relationship between the population, wealth and international affiliations through air and sea transport of the state with voluntary internet financial reporting. It was discovered that only Lagos state government in Nigeria voluntarily discloses their financial information online while other states do not disclose their financial information on their website. Based on the empirical analysis we can conclude the voluntary disclosure of financial information on the internet is very low in Nigeria.

Thus, the study recommends that the state government should developed their websites to become more user friendly and enrich the accounting information that they present in the websites in order to support the accountability of the government.

This study also recommends that the state governments should increase the interactivity on their websites. This will facilitate the participation of the users of state government financial information especially their citizenry in the government dispensation. Also, it will encourage the democratic form of leadership.

The government should improve on the accessibility of the public to their websites. This will make the government more assessable, transparent and accountable to their stakeholders especially their citizenry.

The government should enrich the information, especially the financial information they report on their website. This will enable them develop policies which will be easily implementable by them.

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