EFFECT OF FIRM SPECIFIC ATTRIBUTES ON INTERNET FINANCIAL REPORTING IN LISTED DEPOSIT MONEY BANKS IN NIGERIA

By

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BEING A DISSERTATIOM SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY ZARIA, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE DEGREE (M.Sc.) IN ACCOUNTING AND FINANCE

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DECLARATION

I declare that the work in this Thesis entitled **"**Effect of Firm Specific Attributes on Internet Financial Reporting in Listed Deposit Money Banks in Nigeria**"** has been performed by me in the Department of Accounting. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this Dissertation was previously presented for another degree or diploma at this or any other institution.

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CERTIFICATION

This Thesis entitled “Effect of Firm Specific Attributes on Internet Financial Reporting in Listed Deposit Money Banks in Nigeria” by Kabiru UMAR meets the regulations governing the award of the Degree of Master of Science in Accounting and Finance of Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This research work is dedicated to my beloved Mother (Hajiya Aishatu Abubakar Dikko), my Father (Alh. Umar Muhammad Ja'oh Jega), my late elder Sister Aisha (Ruqayya), Muhammad Bello and younger brother (Abubakar), all my brothers and sisters.

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ABSTRACT

Internet financial reporting is gradually removing the paper-based report and increases the number of audience that could access the reports. Reporting over the internet has many benefit to the reporting entity and stakeholders. In Nigeria collecting annual reports from companies have not been easy; hard copies of annual reports were rarely timely made available and when available not everybody can get them. The internet as an unique information dissemination tool in recent time encourages flexible forms of presentation and permits communication with an unlimited number of potential and existing shareholders. This study examined the effect of firm financial attributes on internet financial reporting of deposit money banks in Nigeria. Secondary source of data was used, and checklist technique was employed to measure internet financial reporting index of the sample banks, for a period of 6 years (2011-2016). Correlation research design and the panel regression technique of data analysis were adopted using OLS technique. The study found after controlling the effect of listing status that firm size, profitability and dividend have a significant statistical positive effect on internet financial reporting in deposit money banks in Nigeria. The study also found that firm leverage, growth and liquidity have an insignificant positive effect on internet financial reporting in the Nigerian banking industry. The study concludes dividend, profitability and size of the banks are critical factors in promoting reporting on internet, which improve transparency of the reports and minimizes information asymmetry, as well as, the agency cost. The study recommended among others that the regulators of the Nigerian banking industry should make policies that could encourage reporting on internet. Similarly, managements of the deposit money banks in Nigeria should increase efforts towards creating a user friendly website for reporting financial and corporate activities for the wider audience.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Accounting as an information system is obliged to the dissemination of transparent, timely and relevant information to achieve its prime objective of serving as the basis for various decisions. Users of accounting information find it easy to evaluate corporate financial performance and position if the information disclosed by an entity is timely, transparent and relevant, as this enhances the stock market efficiency. For instance, adequate disclosures on firm's activities reduce information asymmetry between the stakeholders and the management on financial condition and results of operations in the corporate environment. Recently, financial reporting has been affected by the emergence of Information and Communication Technology (ICT), which necessitated the provision of the real time accounting information to financial statement users. In the ICT era, people tend to demand for timely and transparent information through the internet.

According to Howard and Kanya (2004) the rapid development of ICT through the internet increased the dynamism of the business world, and makes traditional paper-based corporate reporting less timely and thus less useful to decision makers. Internet in this regard has changed the method in which a company delivers information to shareholders, clients, suppliers and other customers (Bonson & Escobar, 2006). The use of internet as the platform for corporate communications began in the 1990's and its use kept growing; as currently corporate websites are an important medium for corporate reporting (Trabelsi, Labelle & Laurin, 2004). In addition, websites are used for numerous activities like promoting the corporate identity (Poon, Li & Yu,

2003; Topalian, 2003), delivering corporate information to inventors (Abdelsalam & Street, 2007; Aly, Simon & Hussainey, 2010), distributing information regarding an organization and its activities (Chan & Wickramasinghe, 2006; Sriram & Laksmana, 2006), and presenting financial information to shareholders, investors and other important stakeholders (Hodge & Pronk 2006; Abdelsalam & El-Masry, 2008). The internet therefore provides the management of firms with an incredible opportunity to engage in corporate reporting in ways previously unimaginable.

Internet Financial Reporting (IFR) or disclosure of significant information on internet, financial or non-financial, will add value to the information that is legally required for disclosure to the public. IFR has many advantages over the paper-based reporting. For instance, once information is disclosed through IFR, it will be available to all stakeholders, thereby reducing information asymmetry and shortening information accessibility delay. Khan and Ismail (2011) explained that the most crucial characteristic of the internet is that information can be accessed from everywhere and at any time. Thus, IFR is associated with higher information transparency, timeliness and coverage (no geographical and legal boundaries). Moreover, According to Ashbaugh, Johnstone and Warfield (1999), FASB (2000), Xiao, Jones and Lymer (2002) IFR democratizes corporate reporting because of the possibilities of extracting data from databases, tailoring content to match user needs, using multimedia communications to generate dynamic and responsive content, and using artificial intelligence applications to make possible interactive exchanges between preparers and users. According to Abdelsalam and Street (2007), internet is a vital tool to promote an appropriate operation of the financial market by improving companies' capability to offer investors with updated information.

On this strength, Silva and Alves, (2004) and Silva and Christensen, (2004) state that financial reporting on the Internet is seen to be a form of corporate transparency. Transparency by the

company through greater disclosure confirms that the company seeks to do business with good management or good corporate governance.

Following the wide acceptance and usage of the internet as a means of corporate communication to stakeholders, literature on accounting disclosure investigated a wide range of issues: such as corporate disclosure practice looking at either obligatory or voluntary items or both; determinants of voluntary disclosure or determinants of compliance with regulation; the economic consequences of disclosure (Marston & Polei, 2004). One of the major issues of concern and interest to corporate managers and investors as well as researchers are the factors that determine the adoption of IFR by firms.

For instance, studies present different factors prompting firms to report on the internet. A study by Ashbaugh, Johnstone and Warfield (1999) documented preliminary evidence on why some firms disseminate financial information on their corporate websites, and why others do not. They found firm size and profitability as main determinants of IFR. Firms engaging in IFR are larger and more profitable than those not engaging in IFR. Furthermore, they indicated that disseminating information to shareholders was an important reason for establishing an Internet presence. On the other hand, Ismail (2002) argues that disseminating information on the internet in also influenced by the interaction of industry type, size, leverage and profitability of a firm, rather than a single characteristic. Considering IFR as a form of corporate transparency, Deller, Stubenrath, and Weber, (1999) argue that the improved level of transparency by firms through greater disclosure showed that the firms seek to do business with good management or good corporate governance. This study, therefore, is prompted to examine whether a firm's specific characteristics will influence its adaption of IFR in Nigeria.

The Financial Accounting Standard Board (FASB, 2000) emphasized the need for improving the integrity of information disclosed using the electronic medium. Similarly, Lymer and Debreceny (2003) emphasized strengthening the adequacy of corporate governance with regard to IFR. However, there are only few studies focusing on corporate governance determinants of IFR. There is, thus, a dearth of literature on the determinants of IFR, as opined by Hanifa and Rashid (2005). Research on the levels of IFR and the determining factors need detailed evaluation and analysis. This is principally because of the fact that there has been limited research examining the factors influencing companies to practice IFR. Moreover, Celik, Ecer, and Karabacak (2006) revealed that future studies should explore the relationship between IFR and the specific characteristics of companies, which are very limited as compared to financial reporting using the hard copy.

Internet Financial Reporting is arguably related to firm's specific attributes. For instance, firm size has positive relationship with IFR. That is, large firms are usually the adopters of financial reporting on the internet, although Martson (2003) did not document any relationship between IFR and the extent of financial disclosure. In essence, companies with large assets size disclose information on the internet. Another common determinant of IFR is the firm's performance and profitability. That is, more profitable firms tend to disclose financial statements on their website, and vice-versa (Oyelere, Laswad & Fisher, 2003; Abdelsalam, Bryant & Street, 2007).Additionally, performance in terms of growth is related to financial reporting on internet. Growth in terms of revenue generation capabilities also motive IFR.

Elsayed, El-Masry, Elbelltagi (2010) and Oyelere et al., (2003) further argue that the firm's liquidity, internationalization, diffusion of ownership, industry type and leverage determine internet financial reporting. That is, firms with higher liquidity positions publish their financial

reports on the internet, both short-term and long-term liquidity motive reporting on the internet. On the same vein leverage and reporting on the internet are strongly related. Firms with huge external financing use internet for financial reporting purposes, and accountability.

This study is prompted by the dearth of empirical studies on the determinants of Internet Financial Reporting in the existing literature and in developing countries like Nigeria. The study is motivated by the substantial shift in corporate reporting from paper-based financial reporting to Internet Reporting. Most if not all listed companies in Nigeria have websites and are reporting their financials on their website. To the best of my knowledge there are no studies in the Nigerian banking industry that examine the firm characteristics determinants in relation to internet financial reporting. The study of IFR in Nigerian banks is necessary, because of the higher need of accountability and transparency in the corporate stewardship today. In addition, investors of nowadays require timely information for investments decisions. As such the study add IFR as a medium of dissemination of timely and increased transparency of information, by examining the determinants of IFR in the banking industry.

1.2 Statement of the Problem

The emergence of modern communication technology is eliminating barriers to effective communication and increasing the online, real-time information dissemination and accessibility at lower costs. In the context of financial reporting specifically, this means that investors from different jurisdictions would have access to the same information at the same time for economic-decisions, and this encouraging investment. Users of accounting information demand adequate disclosure, transparency and timely information dissemination. On their part, corporations started to pay more attention to improving their corporate governance structure through technology

(Mousa & Desoky, 2013). IFR is aimed at providing timely, transparent and relevant information, which minimizes the possibility of unethical financial reporting tendencies.

Initially, paper-based general-purpose reports were the most substantial and frequent means of direct corporate communications between management and stakeholders. Under this model, companies provide different users with standardized audited financial reports (Jensen & Xiao, 2001). However, in Nigeria collecting annual reports from companies was not easy; hard copies of annual reports were rarely made available on time, and when made available not everybody could get them. Moreover, paper-based financial reporting is mostly not accessible to a large number of the stakeholders, even when made available. And, it is bulky and requires some expertise to understand. This is definitely unlike internet-based financial reporting system in which each information has a link that requires only a "click".

However, despite the usefulness of IFR, there is little empirical evidence on the firm specific factors that determine the adoption of financial reporting on internet and multi-media technology, as IFR provides information needs beyond paper financial reports (Beattie & Pratt, 2003). Thus, the absence of empirical studies that examine IFR in terms of its company specific characteristics determinants constitutes the research gap that this study seeks to fill in the deposit money banks in Nigeria.

Another research gap for this study to fill, is the fact that, most previous empirical studies on IFR focused on developed countries. For example, The United States (Petravick& Gillett, 1996; Ashbaugh et al., 1999; Ettredge, Richardson &Scholz, 2001; Kelton & Yang, 2008); United Kingdom (Lymer 1997; Marston &Leow, 1998; Craven & Marston, 1999; Abdelsalam, Bryant & Street, 2007), Japan (Marston, 2003), Australia (Lodhia, Allam&Lymer, 2004; Chan &Wickramasinghe, 2006), New Zealand (McDonald &Lont, 2001; Oyelere et al., 2003; Fisher,

Oyelere&Laswad, 2004) and Ireland (Brennan & Hourigan, 1998; Abdelsalam& El-Masry, 2008). Although some studies like (Davey &Homkajohn, 2004; Khadaroo, 2005; Celik, Ecer&Karabacak, 2006; Barako, Rusmin& Tower, 2008; Al-Arussi, Selamat, &Mohd Hanefah, 2009) were carried out in developing countries, very few were conducted in Nigeria (these include Agboola& Salawu, 2012; Asogwa, 2016; Ikenna, 2016), specifically in (Banking Industry).

Moreover, this study has discovered a methodological gap in the literature. This is because in terms of measurement, previous studies (like Debreceny et al. 2002; Oyelere et al. 2003; Xiao, Yang & Chow 2004; Bonson& Escobar 2006; Chan &Wickramasinghe 2006; Celik et al. 2006; Abdelsalam et al. 2007; Kelton & Yang 2008; Al Arussi et al. 2009; Ali Khan 2010; Aly et al. 2010) used index disclosure as an instrument to examine the level of IFR within a specific company. Also, different studies use different dimensions such as content, timeliness, technology and customer support. Very few focus on the content and presentation in the measurement of the level of IFR disclosure. As such, there is a gap in the existing literature which is to filled by this study seeking to integrate the main dimensions (content and presentation) in the measurement of IFR.

In essence, existing literature also revealed that there are conflicting results as regards the determinants of internet financial reporting. Therefore, this study attempts to answer the question: what are the determinants of internet financial reporting in the deposit money banks listed on the floor of the Nigerian Stock Exchange Market (NSE)?

1.3 Objectives of the Study

The main objective of the study is to evaluate the effects of firm specific attributes on internet financial reporting in the deposit money banks in Nigeria. The specific objectives of the study are to:

i. Examine the effects of firm size on internet financial reporting by deposit money banks in Nigeria.
ii. Evaluate the effects of firm profitability on internet financial reporting by deposit money banks in Nigeria.
iii. Examine the effects of firm leverage on internet financial reporting by deposit money banks in Nigeria.
iv. Assess the effects of firm growth on internet financial reporting by deposit money banks in Nigeria
v. Assess the effects of liquidity on internet financial reporting by deposit money banks in Nigeria.
vi. Determine the effects of dividend on internet financial reporting by deposit money banks in Nigeria.

1.4 Hypotheses of the Study

In line with the research objectives, the following research hypotheses are formulated in null form to guide the study;

H_{01}: Firm size has no significant effect on the internet financial reporting of deposit money banks in Nigeria.

H_{02}: Firm profitability has no significant effect on the internet financial reporting of deposit money banks in Nigeria.

H_{03}: Leverage has no significant effect on the internet financial reporting of deposit money banks in Nigeria.

$H_{04:}$ Growth has no significant effect on the internet financial reporting of deposit money banks in Nigeria.

H_{05}: Liquidity has no significant effect on the internet financial reporting of deposit money banks in Nigeria.

H_{06}: Dividend has no significant effect on the internet financial reporting of deposit money banks in Nigeria.

1.5 Significance of the Study

This study is significant in investigating the effects of firm specific attributes on internet financial reporting of banks in Nigeria. The study seeks to contribute to the limited literature on disclosure practices in developing countries in general and in Nigeria in particular. The study is also significant since it examines several firm specific attributes in a single model assuming different mechanisms may offset or interact with each other. As corporate disclosures are considered necessary measures to protect shareholders, the study results will provide empirical evidence to policy makers and regulators in implementing new guideline and requirements in IFR for improved accountability and transparency.

The findings from the study are also expected to benefit a number of stakeholders including the Regulators, Companies, investors, financial analysts, auditors, management, researchers and students. The findings should be of interest to investors and international investors in particular, because they can easily access and obtain information required for their investment decisions anywhere in the world if the information is available on the company websites. The study

findings may also benefit the investor relations society, when it is formed so that the functions of Investor Relations will be developed. One of its activities would be to enhance internet financial reporting. The regulators in Nigeria can include in the rules and regulations communication of financial information through company websites and determine who is responsible for it, what should or should not be included.

Companies in Nigeria will benefit from the findings because they need to attract investors by disclosing timely, relevant information. Disclosure of such information on their websites could save them time and money. Thus, this study will appropriately recommend to them why they need to do so. The findings of this study will also benefit financial analysts. As they will save time and effort in collecting and analyzing the information their clients need by using company websites to collect such information. Thus, the recommendation for all companies to provide information on their websites will benefit such analysts.

Training courses should be given to the companies to enhance internet financial reporting with emphasis on various internet reporting languages. The findings will also be important to researchers and students as a basis for further studies in Nigeria on internet financial reporting.

1.6 Scope of the Study

This study is restricted to firm specific attributes in the deposit money banks listed on the floor of the NSE as at 31 December, 2016. The firm specific characteristics in the context of this study cover only the firm specifics such as (firm size, firm leverage, firm growth, firm liquidity position, dividend and firm profitability). On the other hand, the IFR is restricted to content, and

format of accounting information presentation. The study covers a period of 6 years (2011-2016).

The justification for the selection of the period covered by this study i.e. 2011/2016 is that, prior to the year 2011 most of the deposit money banks did not have active websites like AFRI Bank, Unity Bank, Skye Bank etc. But by the year 2016 most of the deposit money banks all had active websites through which their annual financial reporting is published. The websites are robust and can be accessible at anytime and anywhere. That is one of the motivating factors that prompted this research work.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter is dedicated to the review of relevant and related literature on the determinants of internet financial reporting. The chapter presents the reviewed literature on the concept of internet financial reporting and the determinants of internet financial reporting. Related empirical literature as well as the review of the theoretical framework of the determinants of internet financial reporting are reviewed in the chapter.

2.2 Concept of Internet Financial Reporting

The term 'Internet Financial Reporting' (IFR) is simply seen as the use of a company's website to publicize information on its financial performance. According to Poon et al (2003) IFR is effectually a modern method of marketing a company to shareholders and investors. Wagenhofer (2003) states that IFR is the major economic effect of altering information processing costs and with it the demand and supply of financial information in capital markets. Internet financial reporting is defined as the use of the company's website to disseminate information about the company's financial performance (Hunter & Smith, 2007).

Financial information provided by the company through its website include a set of comprehensive financial statements, including footnotes, partial financial statements and/or the subjects of financial information. Such information may include summary financial statements or anything resulting from such reports; the stock price data, analyst reports, discussions related to management operations, a database of companies' related news and other company specific information (Asbaugh et al., 1999; Deller et al. 1999; Lai et al. 2007; Kelton & Yang , 2008). From this definition, we can conclude that Internet financial reporting provides all information

about a company whether it is in form of financial information or non-financial information to enable the users of the information to make decisions.

According to IASC (1999), IFR can be characterized as solely another distribution channel for existing printed material; having the ability to interact with Internet technologies such as web browsers and search engines or providing enhanced or expanded information that could not be cost effectively (or even possibly) produced in paper form and which may be interrogated using interactive analysis tools. In the work of Asbaugh et al. (1999) who examined whether the use of the Internet by a company will improve the relevance of its topic financial reporting to the market, IFR was defined on the basis of 3 criteria: one, reporting that provides a comprehensive set of financial statements (including notes to the financial statements and audit reports); two, links to other annual reports on the Internet, and three a link to EDGAR, the electronic system of the SEC.

Financial reporting on the Internet is a form of management effort to reduce the information asymmetry, so that investors will appreciate the manager's effort. Craven and Marston (1999) state that the use of the Internet as a reporting medium by the company indicates its high quality when compared with conservative companies. Dutta and Bose (2007) stated that the use of the Internet to disseminate company information will minimize investor shocks due to negative news and it will be reflected in stock prices.

In the words of FASB (2000), IFR is described in terms of content and presentation. The financial content on a firm's web site usually contains voluntary disclosures, such as stock quotes, press releases, financial history, etc., in addition to traditional required filings, such as quarterly and annual financial reports. The presentation forms range from the equivalent format

of printed annual report to dynamic forms such as sound and video to enhance the display, readability, and understandability of financial information.

Oyelere, Laswad, & Fisher (2003) defined a company as using internet financial reporting when it provides on the web a comprehensive set of financial statements or some financial highlights from its financial statements or partial or summarized financial statements. Smith and Pierce (2005) noted that IFR describes one of the other existing printed information distribution channels and provides complementary and extended information, which are not economically worth printing. IFR points to the use of corporation's websites to print information related to their financial function. When corporations use IFR, there is a comprehensive set of financial statements on their websites, and a link created to their annual report everywhere on the internet. Experimental information shows that, corporations which use IFR, are generally larger and more profitable than other corporations (Pervan, 2005). This form of reporting can also be presented through video or audio files, too (Kelton & Yang, 2008). In their study in the US, Skaife et al., (1999) defined a firm practicing Internet Financial Reporting (IFR) when it provided on its website either a comprehensive set of financial statements, a link to its annual report elsewhere on the Internet, or a link to the US Security and Exchange Commission's Electronic Data Gathering, Analysis and Retrieval system.

Internet Financial Reporting in the context of this study refers to the publication of firms' financial statements and other related information on the internet for corporate stakeholders. This involves information published on the corporate website at a given period of time.

2.2.1 Measurement of Internet Financial Reporting

Previous studies classified IFR companies differently; for example, Oyelere et al. (2003), and Momany and Al-Shorman (2006), classified IFR companies as those that disclose overall

financial statement including footnotes, a part of financial statement and/or; important financial information such as summary of financial statement through the company's website. While Chan and Wickramasinghe (2006), classified an IFR practicing company as a company that discloses its comprehensive financial statement (including footnotes and annual report) or links to the company's annual report through the Internet.

However, the level of IFR usage could be measured using different disclosure indexes, according to Marston and Shrives (1991). The index could be used to evaluate the quantity of information offered by a company. The two main dimensions used are content and presentation. The content dimension measures the type of information reported through the company's website, whereas the presentation dimension measures the usage of the latest display criteria in disseminating corporate information and the company's web design. The index could be weighted or unweighted. A number of studies have supported the usage of the unweighted index based on the assumption that each item has the same importance (Cooke 1989; Chavent, Ding, Fu, Stolowy& Wang 2006). Use of the unweighted index was considered appropriate as this present research does not focus on the importance of a specific group of consumers (Cooke 1989; Hossain, Lin & Adams 1994: Hossain, Perera& Rahman 1995; Chau & Gray 2002). Similarly, Abdelsalam (1999) argued that assigning different weights for different items in the disclosure index might be misleading as the relative importance of each item varies from company to company, industry to industry and time to time.

Moreover, measurements based on unweighted index could avoid the element of subjectivity, as the measurement would not be biased towards any group that accesses the account information (Raffournier 1995). This solidified the findings of the empirical disclosure index, which used a weighted and unweighted index and led to almost the same result (Xiao et al. 2004).There have

been various approaches in constructing the scoring scheme to determine the standard index (Curuk 2008). Items in the checklist will be measured using dichotomous answers (yes/no) where a score of 0 is given for no index and a score of 1 is given if there is an index. A checklist is used to identify the scored amount by evaluating the content and presentation of the company's website.

Researchers have presupposed that investors were interested in knowing both how financial information and accounts were prepared (content variable) and in gathering the information as fast as possible, which is supported by surfing a company's user-friendly website (presentation variable). The content dimension's items present the information reported through the company's website, whereas the presentation dimension is on how the information is displayed (e.g. whether information is in the procession format) and how it facilitates use (e.g. the existence of surfing engine). For each company, the level of IFR is measured through the total score, which is counted as the total percentage of the ratio for the real score compared to the maximum score. The main measurement is the total score. This measurement is consistent with previous studies, such as Debreceny et al. (2002), Marston &Polei (2004), Xiao et al. (2004), Bonson& Escobar (2006), Abdelsalam et al. (2007), Kelton & Yang (2008) & Aly et al. (2010).

The score for the disclosure index is counted based on the exact total of the items reported compared to the total of maximum index items (Bonson& Escobar, 2006; MohdGhazali&Weetman, 2006; Abdelsalam et al., 2007; Jaffar, Jamaludin& Rahman, 2007; Lopes & Rodrigues, 2007; Curuk, 2008; Kelton & Yang, 2008; Al-Arussi, Selamat, &Mohd-Hanefah, 2009; Ali Khan, 2010; Aly, Simon, &Hussainey,2010). Each IFR item reported in a company's website is evaluated based on dichotomy, which was a score of 1 for a reported item and a 0 score for an unreported item.

2.3 Firm Specific Attributes

In this section, some of the firm specific attributes are discussed and presented. The discussion covers the firm size, firm financial performance and growth, firm leverage, and firm liquidity.

2.3.1 Firm Size

Firm size in this regard refers to the larger companies in terms of assets base, market share or production capacity to meet market demand. According to Alarussi et al., (2009) firm size can be measured in many ways, such as sales turnover, equity capital employed, number of employees, market value and assets size. In addition, no particular method is superior to other methods. Size is measured in various ways in different studies, including market capitalisation, total assets, number of employees, and sales (Abdelsalam et al., 2007) but there is no specific theoretical reason for choosing one rather than another (Marston, 2003). However, total assets and market capitalisation have been used in most previous studies. Jensen and Meckling (1976) stated that increased disclosures could reduce agency costs and information asymmetry; and as such larger companies seek to offer high-level, transparent, timely, and accurate disclosures to maintain their competitive advantage.

Many empirical studies at national and international levels examined the impact of firm size on internet financial reporting. For instance, studies from foreign countries like Oyelere et al. (2003), Pervan (2006), Alarussi et al. (2009), Sharma (2013), Pozniak (2013), and Dyczkowska (2014) found a significant statistically positive relationship between size and internet financial reporting. In contrast, Aly et al. (2010) could not find positive effects in Egypt, while Alkhalaileh et al. (2005) found that there was no effect at all.

2.3.2 Firm Liquidity

Liquidity connotes the availability of cash for operations and long-term financing of the firm. Oyelere et al., (2003) argued that highly liquid firms might be motivated to inform stakeholders about their status, in agreement with current concerns, and this information would be transmitted through the internet financial reporting, which would be an expression of management's confidence in the firm's solvency and future prospects. Oyelere et al. (2003) and Almtairi (2012) found a significant positive relationship between liquidity and internet financial reporting.

2.3.3 Firm Leverage

Leverage refers to the level of composition of debt used in financing assets of the firm. Leveraged firms have more financial costs, and creditors are interested in being informed. Firms with poor financial conditions should be unable to withstand the initial negative consequences that are needed to gain any benefits from more extensive disclosure (Damaso& Lourenco, 2011). Leverage can be measured by debt to equity ratio or debt to total assets; for instance, Oyelere et al. (2003) represent leverage by debt to equity ratio (total debt/ shareholder equity).

Therefore, firms perceive internet financial reporting as a potential means of facilitating monitoring by creditors (Laswad et al., 2005). According to this, findings have been interesting because most of the studies have found that leverage had no effect on internet financial reporting, except for the studies by Cormier et al. (2008) and Damaso and Lourenco (2011), which found a negative effect. However, studies that found a positive effect of leverage on IFR include Laswad et al., (2005), Mahdi(2009), Al-Sakarneh(2011)and Miniaoui and Oyelere(2013). These studies concluded that leverage could positively or negatively affect IFR.

2.3.4 Firm Profitability and Dividend

Firm financial performance as reflected in the level of profitability or returns generated has been an incentive that motivates management to disclose more information to stakeholders. Profitability is assessed using different measurements, such as Return on Equity (ROE), Return on Assets (ROA), Return on Investment (ROI), Dividend Per Share (DPS), and Earnings Per Share (EPS). According to Ahmed et al., (2002) there are two perspectives for interpreting the impact of profitability on IFR. First, more profitable firms tend to disclose more information because management likes to show off its achievements to others, to reflect a good reputation and to raise capital under the best terms. The second, it is argued that less profitable firms can disclose more information to explain the reasons for low performance and therefore maintain their integrity.

Firm profitability was investigated on a large scale, Oyelere et al. (2003), Pervan (2006), Alarussi et al. (2009), Damaso and Lourenco (2011), Sharma (2013), and Dyczkowska (2014) examined profitability as an IFR constraint, and their results were not statistically significant, except for those of Pervan (2006), who conducted his study in Croatia and Slovenia and found that profitability affected IFR only in Croatia but not in Slovenia, as in other studies. Dyczkowska (2014) found a negative effect of profitability on IFR in Poland. However, Aly et al. (2010), Al-Sakarneh (2011) and Miniaoui and Oyelere (2013) found a significant positive effect for profitability on IFR.

2.3.5 Firm Growth

Although growth is an aspect of firm performance, it is argued that the earnings number may not be indicative of firm's future prospects. As such information not only fails to convey the future growth potential of the company, but are also not timely enough for decision making due to their

periodic nature. The Internet can allow for multifaceted and frequent disclosures on the development of new technologies and the interaction of the firm with the environment. Growth prospects and intangibles are intertwined and the difference between market value and book value broadly represents these two variables (Myers, 1977; Ohlson, 1995). Firms with high growth prospects and high intangibles arising from factors such as technology, corporate strategy and human resources are likely to have a high ratio of market to book value (Lev and Sougiannis, 1999). These firms will have specific knowledge that is not effectively and efficiently transferable to investors through traditional accounting disclosures. Firms attempt to mitigate the information asymmetry of high growth firms by making disclosures through additional means such as IFR or conference calls (Frankel et al., 1999).

However, there is an opposing view that, as the proprietary cost associated with information disclosure increases, managers will be less willing to disclose proprietary information. This is especially of concern to high growth and high intangible companies since such information might place them at a competitive disadvantage should it be disclosed. Therefore, expect a two-stage situation for the association between growth-intangibles and IFR. First, expect a positive association between growth intangibles and IFR when associations are ascertained for low growth-intangible firms, and secondly expect to find a negative association for high growth-intangible firms.

2.4 Review of Empirical Studies on the Effect of Firm Specific Characteristics on Internet Financial Reporting

Following the importance of the internet in corporate communication, several studies have empirically tested the determinants of IFR in several countries and the results are conflicting. In

this sub-section, relevant empirical studies on the determinants of internet financial reporting are critically reviewed.

2.4.1 Firm Size and Internet Financial Reporting

There are a good number of studies that examined the impact of firm size on financial reporting on the internet. However, most of the studies were conducted abroad, and the findings mixed and inconclusive to inform policy decision. Thus, this provided a literature gap for this study to fill. For example, early empirical study by Asbaugh, Johnstone and Warfield (1999) documented Internet financial reporting practices and provide preliminary evidence on why some companies disseminate financial information on their websites, while others do not. The study showed that companies engaged in internet financial reporting are larger and more profitable than those not engaging in internet financial reporting. Still on firm size, Craven and Marston (1999) found that larger companies are more likely to disclose financial information on the in websites in the UK. From Australia, a study by Pirchegger and Wagenhofer (1999) showed that firm size and profitability are significant determinants of IFR.

Marston (2003) surveyed Internet reporting by the top 99 Japanese companies in 1998. It was found that the majority of these companies (78) had a Website in English and that of these, 68 reported some financial information while 57 provided detailed accounting information. Company size was significantly positively associated with the existence of a Website but the extent of financial disclosure did not appear to be related to size. There was no significant association between profitability, industry grouping and overseas listing status and Internet disclosure.

In New Zealand, Oyelere, Laswad and Fisher (2003) examined the voluntary adoption of the internet as a medium for transmitting financial reports and determinants of such voluntary

practices by New Zealand companies. The variables used are company size, company profitability and liquidity, internationalization, diffusion of ownership, industry type and leverage as the determinants of internet financial reporting. The result indicated 73% of companies with websites provide financial information on such websites. The study used univariate and multivariate analytical approaches to identify the determinants of internet financial reporting. The result of this study indicates that firm size, liquidity, industrial sector and the spread of ownership motivates the provision of IFR, while firm characteristics such as leverage, profitability and internationalization were insignificant determinants of IFR. Marston (2003) found that company size was significantly positively associated with the existence of a website but the extent of financial disclosure did not appear to be related to size. The study also found no significant association between profitability, industry grouping and overseas listing status and Internet disclosure.

Abdelsalam et al. (2007) examined the relationship between the comprehensive Control Internet Reporting disclosure by 110 London-listed companies in mid-2005 and corporate governance measures. The study utilized an un-weighted disclosure index derived from 143 checklist items that contain general content, credibility and usability items. After controlling for size, profitability, industry and high growth/intangibles, four ordinary least square regressions using rank transformation and normal score are estimated to test the study‘s hypotheses. Generally, only the number of analysts following the company is positively associated with the four measures of CIR disclosure. More specifically, many results related to governance factors are found according to the classification of CIR disclosure. Director independence is positively related to CIR comprehensive and general content. Moreover, director holding associates

negatively with CIR comprehensive, general content and usability. Similarly, role duality decreases the credibility of CIR.

Almilia (2009) noted that there was disparity in IFR practices among companies due to the voluntary nature of this practice as well as lack of specific regulations for IFR. The researcher thus sought to measure the quality of Internet Financial Reporting of public firms on the Jakarta Stock Exchange. The study identified financial variables that affect IFR among Indonesia Stock Exchange companies. Specifically, firm size and return on equity were identified as determining factors of internet financial reporting in Indonesia.

Desoky (2009) examined the IFR practice by listed companies in Egypt as one of the emerging markets and investigated empirically some company characteristics as determinants of such practice. Using a 39-item index, content analysis of websites was performed for 88 of the most active Egyptian listed companies on the Egyptian Stock Exchange (EGX). Further, the study employed statistical analysis to test the association between six company characteristics (independent variables) and the extent of the IFR (including three dependent variables). Among the sampled companies, only 57 had accessible websites and 45 provided financial information in their websites. The results of univariate analysis, which were verified by multivariate linear regression, showed that some company characteristics (e.g. size, profitability, foreign listing and ownership structure) were significantly positively associated with the IFR, while legal form was significantly negatively associated.

Al-Moghaiwli (2009) conducted a study to investigate the extent of internet disclosure practices of Qatar listed companies on the Doha Securities Market (DSM). The study also examined the main factors that affect the adopting of IFR. A total number of 43 companies were examined in the study. The researcher gathered electronic data, and analyzed four (4) independent variables

that affect the use of IFR; asset, return on assets, investors and directors. The results indicated that 90.6% (39 companies) had websites and a total of 28 (71.8%) of these companies provided complete form for financial reporting via internet. The results also concluded that the ownership, firm size, and profit ratio structure are the main factors influencing IFR adoption.

Ehab and Mohammed (2009) examined the determinants and characteristics of voluntary Internet disclosures by listed companies in three Gulf Cooperation Council countries. This paper uses archival data from 192 listed companies in Qatar Stock Exchange, Muscat Securities Market, and Bahrain Bourse. Binary Logistic Regression analysis is used to examine the determinants of Internet financial reporting. Kruskal-Wallis test is used to examine the differences in disclosure characteristics among the three countries. The results reveal that firm size is the major influencing factor that impacts Internet financial reporting in the GCC. A number of disclosure characteristics differ significantly between the three countries. The results are consistent with previous literature that corporate size is a major determinant of Internet financial reporting. In another study from Gulf by Almilia (2009), the level of internet financial disclosing was investigated. Sample of the study was the listed public companies on Jakarta Stock Exchange (JSE). The study stated that return on equity and the company size are the most effecting variables on IFR.

Elsayed et al., (2010) investigated the effect of corporate governance and firm characteristics on the IFR of the Egyptian listed companies. They developed a disclosure index to measure the three components of the IFR for the Egyptian listed corporations by using an unweighted checklist. The results found a significant relationship between the three components of IFR (Total, Content and Presentation) and firm size, ownership diffusion, type of business, profitability, audit type, institutional ownership and board size. The results indicate that large

non-financial companies that are audited by the big four auditing companies with high diffusion in their ownership and lower presentation of institutions in the ownership structure are more likely to be related to Total and Content. In addition, large profitable companies with high diffusion in their ownership are more likely to be related to Total and Presentation. Finally, companies with a large board size are associated only with Presentation.

Ujah and Okafor (2011) conducted a research to study the practice of disclosing corporate information on internet by African companies. Data about private and public companies in a sample of 47 countries was collected. The researchers investigated whether these companies possessed websites or not. Furthermore, several variables were examined to determine the significant factors of the disclosure on the internet. The findings showed that size and company efficiency were the most important factors. Maria and Isabel (2011) examined if the intensive pollution companies provide a higher level of internet financial reporting (IFR) and this fact is supported by the legitimacy theory. The empirical work relies on firms listed in the London Stock Exchange belonging to the FTSE 350. The findings show that those firms with a significant environmental impact are more likely to disclosure in their websites. However, the results also provide empirical evidence supporting the importance of the firm's size, leverage and ownership concentration as a determinant of internet financial reporting. This study is one of the first empirical studies to investigate the relationship between pollution companies and disclose of IFR and this fact could be supported by legitimacy theory.

Khaled (2011) investigated the extent of dissemination of financial information over the Internet by Jordanian companies in Amman Stock Exchange (ASE) stock exchanges. The main objective of this study is to examine the relationship between factors and adoption to internet for disclosure of financial reporting. To examine the extent of disclosure financial reporting on

internet. The results show that companies still partially behind those of other developed countries and other developing countries. The study also examined the effect of three factors, namely firm size, leverage and profitability at the Internet reporting (IFR). A linear regression analysis is applied for this purpose. The results show that profitability and leverage significant financial impact reports via the Internet. The result also shows that there is a significant positive relationship between the amount of financial communications through the Internet and company size.

In a study of Turkish firms by Bozcuk (2012), impact of six firm characteristics were examined: growth, profitability, size, ownership, corporate governance and industry. The study conducted a well performed system to score the use of IFR for listed companies and measure its level. The study, also applied several statistical tests such as the multivariate regression analysis. The results indicated that large firms had positive effect in the level of using financial reporting through the internet. In addition, the study noted that the main factors affecting the adoption of IFR are corporate governance, audit, and firm size.

In France, Pozniak (2013) investigated the determinants of IFR and the quality of the use of internet in disclosing corporate financial information. The researcher compared the results of 34 companies in Brussels and 34 companies in Paris. The study reported that market place, size, age, and IT sectors have an effective influence in disclosing financial reporting online. In addition, the study noted that Belgian had companies with higher qualifications than those in Paris. Miniaoui and Oyelere (2013) found that the firm's volume, the debt ratio, industry sector, and profit ratio as the most significant factors of IFR adoption by the firms in UAE. In contrast to the recent studies that emphasized on the liquidity, industry type, firm's size, leverage, and profitability because these have been frequently mentioned as important determinants.

Ali Khan and Ismail (2014a) investigated empirically factors influencing Malaysian companies to disseminate their financial reports through the Internet. This study examines relationship between level of IFR between contingency factor and firm specific characteristic. IFR represented by two main dimensions; the dimension of content and presentation. Two factors for contingency and ten firm specific characteristics were identified. Specific characters of this study were measured using the three main variables: the structure, performance and market. Data were collected from 182 companies listed on the main board of Bursa Malaysia for the purpose of multiple regression analysis. The results showed that the three main features of the size of the company, the age of the company and return on equity significantly affect the level of IFR. The study also showed a negative relationship between profitability ratios with dimensions of content and IFR overall index.

Najla and Adel (2016) examined the level of adoption of IFR among listed companies in Bahrain and the relationships among the companies of specific characteristics and IFR. The sample of the current study consists of all 47 listed companies in Bahrain Bourse (BB) in the financial year 2013.The results reveal that 42 companies (89.4%) own websites while 5 companies (10.6%) do not own websites. Moreover out of 42 company owned websites, 38 of them (90.5%) have adopted IFR while the other 4 (10.6%) did not. The findings also reveal that there is a direct relationship among reporting financial information online and the four variables: size, leverage, liquidity and industry type. However, an inverse relationship is noted among IFR and profitability. In addition, size and leverage are also found to be the most significant variables that affect the adoption of IFR in the listed companies in Bahrain followed by liquidity.

Priyadarshani and Regina (2016) established the level and the determinants of Internet Financial Reporting (IFR) done by listed companies in Sri Lanka. Consequently top twenty listed

companies in Sri Lanka were surveyed since they assist both local and international investors to gauge the performance of the equity market. The level of IFR is measured by IFR index composed of Disclosure Content and Presentation Format elements. The study disclosed that the level of IFR is above average and it is significantly and positively influenced by Company Size, Profitability, Leverage and Liquidity, whereas significantly and negatively influenced by Ownership Concentration.

Asogwa (2016) examined the impact of corporate governance on IFR among listed banks in Nigeria. The review of literature reveals that IFR is one of the most efficient means of communication with investors and the practices of corporate governance by firms also influence their level of disclosures made through the internet. A quantitative research was carried out where the relationship between corporate governance variables and IFR was empirically examined. The corporate governance variables used for analyzing the impact of corporate governance on IFR included shareholders' voting right, percentage of management ownership, percentage of block ownership and percentage of independent directors. The data on the top ten listed banks in Nigeria was collected from secondary sources from year 2010 to 2015. The findings suggest that the measures of corporate governance have significant influence on the level of IFR of banks in Nigeria. It also shows that shareholders' voting right, percentage of independent directors and bank size have significant positive impact on the IFR of banks. The result of the regression analysis shows that a negative relationship exists between managerial ownership and block ownership with IFR of Nigerian Banks.

Yassin (2017) investigated the determinants of internet financial reporting (IFR) of Jordanian listed companies in response to the cross-listing agreement among the Amman Stock Exchange (ASE), Abu Dhabi Securities Exchange (ADX) and Dubai Financial Market (DFM). An IFR

index was developed to measure the level of each firm's information content and format disclosures. The analysis determined that firms that are larger, profitable, and more leveraged, with a separation between chairperson and CEO positions, with larger board size numbers, and with fewer independent non-executive directors are more likely to engage in IFR. By extending the analysis using OLS and 2SLS regression, the findings suggest that IFR was predicted using size, liquidity, leverage, market-to-book ratio, chairperson/CEO separation, independent non-executive directors, board size, and shareholder number. The study concludes that corporate governance mechanisms can predict IFR and its components, content and format more accurately than firms' financial characteristics.

2.4.2 Firm Profitability and Internet Financial Reporting

The impact of firm financial performance on the financial reporting on the internet was also investigated in previous studies. However, most of the studies are foreign based, and the findings are mixed and inconclusive to inform policy decision. Thus, this provided a literature gap for this study to fill. Existing researches also refer to firm profitability as determinants of IFR. For instance, Singhvi and Desai (1997) examined 500 large listed US firms, and found a positive association between profitability and the quality of disclosure. Their results suggest that firm profitability can be regarded as an indicator of good management, as management tends to disclose more information when profitability is high. Based on this finding, it is argued that profitable companies have extra financial resources to disseminate financial information voluntarily or in compliance with additional regulations imposed. Alternatively they might have incentives to show stakeholders that they are more profitable than their competitors.

Ismail (2002) examined the extent of internet financial information by Gulf Co-operation Council (GCC) countries. In this research, forward stepwise logistic regression was used to

assess whether voluntary dissemination of financial information on the internet was related to firm size, leverage, and profitability. The results show that the likelihood of a firm using internet reporting depended not only on Individual characteristic, but also on a combination of interaction effects among firm characteristics.

A study from New Zealand by Oyelere et al., (2003) investigated the voluntary adoption of the internet financial reports and determinants of such voluntary practices by New Zealand companies. The study used univariate and multivariate analytical approaches to identify the determinants of internet financial reporting. And the study found that firm size, liquidity, industrial sector and the spread of ownership are significant determinants of IFR, while firm characteristics such as leverage, profitability and internationalization were insignificant determinants of IFR. In a similar study by Marston (2003), the study found that company size was significantly positively associated with the existence of a Web site but the extent of financial disclosure did not appear to be related to size. On the other hand, the study found no significant association between profitability, industry grouping, overseas listing status and Internet disclosure.

Xiao and Chow (2004) examined the determinants of IFR and the study found that company size is positively associated with IFR, and profitability is negatively associated with IFR in China. Moreover the findings indicate that the auditor and the industry were also significant. Pervan (2005 & 2006) investigated a sample of joint companies quoted on Croatian bourses, and concluded that the companies that use IFR are in general larger and more profitable, and that their shares are more active on the stock exchange than the shares of companies that have no such reporting practice.

Abdelsalam et al. (2007) examined the relationship between the comprehensive corporate internet reporting disclosure by 110 London-listed companies in mid-2005 and corporate governance measures. The study utilized an un-weighted disclosure index derived from 143 checklist items that contain general content, credibility and usability items. After controlling for size, profitability, industry and high growth/intangibles, four ordinary least square regressions using rank transformation and normal score were estimated to test the study‘s hypotheses. Generally, only the number of analysts following the company is positively associated with the four measures of Corporate Internet Reporting (CIR) disclosure, while profitability was found to be insignificant.

Amr and El-Masry (2008) examined the key factors that affect the timeliness of corporate internet reporting (CIR) by the Egyptian listed corporations on the Cairo and Alexandria Stock Exchange. The study used firm characteristics and corporate governance variables to investigate the influence on the timeliness of CIR. They also developed a disclosure index to measure the timeliness of CIR for the listed Egyptian corporations. Their primary analysis found a significant relationship between the timeliness of CIR and firm size, type of industry, liquidity, ownership structure, board composition and board size. The results indicated that firms typically in the service sector, that are large and have a high rate of liquidity, a high proportion of independent directors, a large number of board directors and a high free float disclose more timely information on their websites. Furthermore, a significant association between the entire independent variables and some items of timeliness of CIR was established.

Aly (2008) assessed the development of voluntary internet financial reporting and disclosure in Egypt. A disclosure index was constructed to determine the level of voluntary internet financial reporting of the 100 most active listed Egyptian companies for the year ended 2004. It was found

that 27 companies had no websites, the websites of 9 companies were under construction, 62 companies had websites and 35 companies disclosed their financial information on their websites. The average disclosure rates of financial information were 30% for the Egyptian companies which had websites and 44% for companies having websites and disclosing financial information. 100% of communication companies and 67% of financial services companies disclosed financial information on their websites and all communication companies had disclosure scores over 50%. Moreover, the results of univariate analysis revealed that firm size variables (total assets, total sales); leverage variables (Total Debt /Total Assets and Long term Debt/ Total Assets); foreign listing; industry type; and audit firm size were significantly associated with the extent of internet disclosure at least at the 5% level of significance. The results of multiple regressions indicated that profitability, foreign listing and industrial sector (communications and financial services) were important factors affecting the amount and presentation formatting of financial information disclosed on Egyptian companies websites.

Desoky (2009) examined the IFR practice by listed companies in Egypt as one of the emerging markets (EMs) and investigated empirically some company characteristics as determinants of such practice. Using a 39-item index, content analysis of websites was performed for 88 of the most active Egyptian listed companies on the Egyptian Stock Exchange (EGX). Further, the study employed statistical analysis to test the association between six company characteristics (independent variables) and the extent of the IFR (including three dependent variables). Among the sampled companies, only 57 had accessible websites and 45 provided financial information in their websites. The results of univariate analysis, which were verified by multivariate linear regression, showed that some company characteristics (e.g. size, profitability, foreign listing and

ownership structure) were significantly positively associated with the IFR, while the legal form was significantly negatively associated.

Doaa, Jon and Khaled (2009) examined the potential factors that may affect the level of corporate internet reporting by Egyptian listed companies. The content analysis approach was used to examine the information cited by the largest Egyptian companies on their websites. The paper modified and used the disclosure index of Xiao et al. Ordinary least square multiple regression analysis was used to examine the determinants of internet reporting. It was found that 56 per cent of Egyptian companies reported a significant portion of information on their websites. In addition, the paper found that some financial characteristics explained the variation in the degree of internet reporting between Egyptian listed companies. In particular, profitability, foreign listing and industrial type (communications and financial services) were the determinants of the amount and presentation formatting of information disclosed on Egyptian company websites. However, other firm characteristics, such as firm size, leverage, liquidity and auditor size, did not explain corporate internet reporting.

Al-Moghaiwli (2009) conducted a study to investigate the extent of internet disclosure practices of Qatar listed companies on the Doha Securities Market (DSM). The study also examined the main factors that affected the adoption of IFR. A total number of 43 companies were examined in the study. The researcher gathered electronic data, and analyzed four (4) independent variables that affected the use of IFR, these included; asset, return on assets, investors and directors. The results indicated that 90.6% (39 companies) had websites and a total of 28 (71.8%) of these companies provided complete form for financial reporting via internet. The study also concluded that the ownership, firm size, and profit ratio structure were the main factors influencing IFR adoption.

Almilia (2009) noted that there was disparity in IFR practices among companies due to the voluntary nature of this practice as well as lack of specific regulations for IFR. The researcher thus sought to measure the quality of Internet Financial Reporting of public firms on the Jakarta Stock Exchange. The study identified financial variables that affect IFR among Indonesia Stock Exchange companies. Specifically, firm size and return on equity were identified as determining factors of internet financial reporting in Indonesia.

Elsayed et al (2010) investigated the effect of corporate governance and firm characteristics on the IFR of the Egyptian listed companies. They developed a disclosure index to measure the three components of the IFR for the Egyptian listed corporations by using an unweighted checklist. The results found a significant relationship between the three components of IFR (Total, Content and Presentation) and firm size, ownership diffusion, type of business, profitability, audit type, institutional ownership and board size. The results indicated that large non-financial companies audited by the big four auditing companies with high diffusion in their ownership and lower presentation of institutions in the ownership structure were more likely to be related to Total and Content. In addition, large profitable companies with high diffusion in their ownership were more likely to be related to Total and Presentation. Finally, companies with a large board size are associated only with Presentation.

A similar study in Egypt was carried out by Aly, *et al*. (2010) who investigated the internet sites of Egyptian listed companies in order to verify the association between the disclosure of corporate information using the web and firm's value. Ordinary least square multiple regression analysis had been conducted to find out any significant association between the firm value and voluntary disclosure of corporate information. The results showed that 56% of the listed Egyptian companies provided relevant corporate information. In addition, the study reported that

disclosure of corporate information on the internet had a variation level in market, and the association was particularly influenced by profitability, the non-Egyptian companies' type and the industry type regardless of the volume of the firm, liquid ratio, debt ratio, and the size of auditor.

Al-Sakaneh, (2011) examined public listed companies in the Amman Stock Exchange (ASE) to investigate the extent of the dissemination of financial information over the internet. This study's main objective was to examine the relationship between some factors and adoption of internet for disclosure of financial reporting. To examine the extent of disclosure, this study performed content analysis on the website of 100 companies listed on ASE. The result showed that 84% of ASE public listed companies had websites. The result showed that companies in Jordan were still partially behind those of other developed countries and other developing countries. The study also examined the effect of three factors, namely firm size, leverage and profitability on the internet financial disclosure (IFD). A linear regression analysis result showed that there was a significant positive relationship between the amount of financial communication through the internet and company size.

A study of IFR determinants in UAE by Miniaoui and Oyelere (2013) found that the firm's volume, the debt ratio, industry sector, and profit ratio as the most significant factors of IFR adoption by the firms in UAE. In contrast to the recent studies that emphasized on the liquidity, industry type, firm's size, leverage, and profitability because these have been frequently mentioned as important determinants.

Mohamedand Ehab(2014) examined the determinants and characteristics of voluntary internet disclosures by listed companies in Oman. This paper used archival data from listed companies on Muscat Securities Market (MSM). Binary Logistic Regression analysis is used to examine the

determinants of internet financial reporting. The results of this study reveal that ROA is one of the factors that impact internet financial reporting. Also, the results reveal that ownership concentration has a negative effect on the internet financial disclosure. The paper provides insights into corporate internet disclosures in the GCC countries that will benefit all stakeholders with an interest in corporate reporting in this important region of the world.

Ali Khan and Ismail (2014a) examined the relationship between level of IFR between contingency factor and firm specific characteristic of the company. IFR represented by two main dimensions which were dimensions of content and presentation. Data were collected from 182 companies listed on the main board of Bursa Malaysia for the purpose of multiple regression analysis. The results showed that the three main features of the size of the company, the age of the company and return on equity significantly affected the level of IFR. The study also showed a negative relationship between profitability ratios with dimensions of contents and IFR overall index.

Najla and Adel (2016) examined the level of adoption of IFR among listed companies in Bahrain as well as the relationships among the companies of specific characteristics and IFR. The sample of the study consisted of all 47 listed companies in Bahrain Bourse (BB) in the financial year 2013. The findings also revealed that there was a direct relationship among reporting financial information online and the four variables: size, leverage, liquidity and industry type. However, an inverse relationship was noted among IFR and profitability. In addition, size and leverage were also found to be the most significant variables that affected the adopting of IFR in the listed companies in Bahrain followed by liquidity.

Priyadarshani and Regina (2016) established the level and the determinants of Internet Financial Reporting (IFR) done by listed companies in Sri Lanka. The level of IFR was measured by IFR

index composed with Disclosure Content and Presentation Format elements. The study disclosed that the level of IFR was above average and it was significantly and positively influenced by Company Size, Profitability, Leverage and Liquidity whereas significantly and negatively influenced by Ownership Concentration.

Yassin (2017) investigated the determinants of internet financial reporting (IFR) of Jordanian listed companies in response to the cross-listing agreement among the Amman Stock Exchange (ASE), Abu Dhabi Securities Exchange (ADX) and Dubai Financial Market (DFM). An IFR index was developed to measure the level of each firm's information content and format disclosures. The analysis determined that firms that were larger, profitable, and more leveraged, with a separation between chairperson and CEO positions, with larger board numbers, and with fewer independent non-executive directors were more likely to engage in IFR. By extending the analysis using OLS and 2SLS regression, the findings suggested that IFR was predicted using size, liquidity, leverage, market-to-book ratio, chairperson/CEO separation, independent non-executive directors, board size, and shareholder number. The study concluded that corporate governance mechanisms can predict IFR and its components, content and format more accurately than firms' financial characteristics.

Aboutera and Hussein(2017) examined the determinants of internet financial reporting by Egyptian companies through measuring the extent of internet financial reporting (IFR) practices in Egypt and the association between IFR and the Egyptian listed companies' characteristics. The research sample consisted of 133 Egyptian companies listed on the Egyptian stock exchange as well as Nile stock exchange. Moreover, a disclosure checklist of 56 voluntary items was adopted to measure the level of IFR. The findings of the multiple regression models revealed that three independent variables were found significantly associated with the level of Internet Financial

Reporting including; company's size, auditor type and the company's age. However, other company characteristics were found to be insignificant such as liquidity, leverage, profitability and ownership structure.

2.4.3 Leverage and Internet Financial Reporting

There are a substantial number of studies that examined the impact of leverage on the financial reporting on the internet. But most of the studies were conducted abroad, and the findings are mixed and inconclusive to inform policy decision. Thus, this provided a literature gap for this study to fill. Following the increasing importance of IFR to the corporate stakeholders, several empirical studies were conducted to establish the determinants. Leverage may also be related to disclosure choices. Agency theory could explain the possible link between leverage and voluntary disclosure. According to this theory, highly leveraged firms have an incentive to voluntary increase the level of corporate disclosure to stakeholders through traditional financial statement, and other media (Jensen and Meckling, 1976).

Aly (2008) assessed the development of voluntary internet financial reporting and disclosure in Egypt. Quantitative methods were used to identify the extent of internet corporate financial reporting in the Egyptian companies. A disclosure index was constructed to determine the level of voluntary internet financial reporting of the 100 most active listed Egyptian companies for the year ended 2004. It was found that 27 companies had no websites, the websites of 9 companies were under construction, 62 companies had websites and 35 companies disclosed their financial information on their websites. The average disclosure rates of financial information were 30% for the Egyptian companies which had websites and 44% for companies having websites and disclosing financial information. 100% of communication companies and 67% of financial

services companies disclosed financial information on their websites and all communication companies had disclosure scores over 50%. Moreover,

Aly (2008) results of univariate analysis revealed that firm size variables (total assets, total sales); leverage variables (Total Debt /Total Assets and Long term Debt/ Total Assets); foreign listing; industry type; and audit firm size were significantly associated with the extent of internet disclosure at least at the 5% level of significance. The results of multiple regressions indicated that profitability, foreign listing and industrial sector (communications and financial services) were important factors affecting the amount and presentation formatting of financial information disclosed on Egyptian companies websites.

Al-Arusi et al., (2009) investigated whether the voluntary financial and environmental disclosures through the internet can be explained by the same determinants as in conventional reporting. Specifically, the study examined the relationship between the extent of financial and environmental disclosures on the internet and six variables ethnicity of chief executive officer, leverage, level of technology, existence of dominant personalities, profitability, and firm size. Six hypotheses were tested using data collected from 201 Malaysian listed companies on the Bursa Malaysia's Main and Second Boards for the financial year 2005. A regression model was utilized to analyze the results of the study with the previous studies.

The results indicated that level of technology, ethnicity of CEO and firm size were determinants of both internet financial and environmental disclosures. However, the existence of a dominant personality was found to negatively affect the level of financial disclosures but not environmental disclosures. The other variables did not show any significant relationship with either financial or environmental disclosures. This study differs with the present one because it focused on Malaysia and also because it tested environmental disclosure.

Doaa et al., (2009) examined the factors that may affect the level of corporate internet reporting by Egyptian listed companies. The content analysis approach to examine the information cited by the largest Egyptian companies is used in their web sites. The paper modifies and uses the disclosure index of Xiao et al. Ordinary least square multiple regression analysis is used and the study found that 56 per cent of Egyptian companies report a significant portion of information on their web sites. The paper also found that profitability, foreign listing and industrial type, communications and financial services are the determinants of the amount and presentation formatting of information disclosed on Egyptian companies' web sites. However, other firm characteristics, such as firm size, leverage, liquidity and auditor size, do not explain corporate internet reporting.

In Egypt, Aly *et al*., (2010) investigated the internet sites of Egyptian listed companies in order to verify the association between the disclosures of corporate information using the web and firms value. Ordinary least square multiple regression analysis had been conducted to find out significant association between the firm value and voluntary disclosure of corporate information. The results showed that 56% of the listed Egyptian companies provided relevant corporate information. In addition, the study reported that disclosure of corporate information on the internet had a variation level in market, and the association was particularly influenced by profitability, the non-Egyptian companies' type and the industry type regardless of the volume of the firm, liquid ratio, debt ratio, and the size of auditor.

Al'arussi, et al. (2011) examined the relationship between internet financial disclosure (IFD) and internal determinants from the Malaysian perspective, by emulating Xiao, et al. (2004). Independent variables tested are internationality, leverage, foreign shareholders, IT experts,

firm's age, number of shareholders and corporate governance mechanism. For corporate governance mechanism, the study focuses on dominant personalities in audit committee, chairman of audit committee and nominations committee and dominant personalities in the audit and nomination committee. The result of multiple regression model showed that there is a significant positive relationship between the extent of IFD and IT experts, firm's age, number of shareholders and listing status. However there is a significant negative relationship between IFD and dominant personalities in the audit and the nomination committee.

Al Sakaneh, (2011) examined public listed companies in Amman Stock Exchange (ASE) to investigate the extent of dissemination of financial information over the internet. This study's main objective is to examine the relationship between some factors and the adoption of the internet for disclosure of financial reporting. To examine the extent of disclosure, this study performed content analysis on the website of 100 companies listed on ASE. The result showed that 84% of ASE public listed companies had websites. The result showed that companies in Jordan were still partially behind those of developed countries and other developing countries. The study also examined the effect of three factors, namely firm size, leverage and profitability on the internet financial disclosure (IFD). A linear regression analysis result showed that there is a significant positive relationship between the amount of financial communication through the internet and company size.

Aboutera and Hussein(2017) examined the determinants of internet financial reporting by Egyptian companies through measuring the extent of internet financial reporting (IFR) practices in Egypt and the association between IFR and the Egyptian listed companies' characteristics. The research sample consisted of 133 Egyptian companies listed on the Egyptian stock exchange. This research considered; company's size, profitability, liquidity, leverage, company's age,

auditor type and ownership structure as the independent variables that might impact the company's' corporate IFR practices. Moreover, a disclosure checklist of 56 voluntary items was adopted to measure the level of IFR. The findings of the multiple regression models revealed that three independent variables were found significantly associated with the level of Internet Financial Reporting including; company's size, auditor type and the company's age. However, other company characteristics were found insignificant such as liquidity, leverage, profitability and ownership structure.

2.4.4 Firm Growth and Internet Financial Reporting

There are studies that examined the impact of firm growth on the financial reporting on the internet. However, most of the studies were conducted abroad, and the findings are mixed and inconclusive to inform policy decision. Thus, this provided a literature gap for this study to fill. For example, Abdelsalam et al. (2007) examined the relationship between the comprehensive CIR disclosure by 110 London-listed companies in mid-2005 and corporate governance measures. The study utilized an un-weighted disclosure index derived from 143 checklist items that contain general content, credibility and usability items. After controlling for size, profitability, industry and high growth, four ordinary least square regressions using rank transformation and normal score are estimated to test the study's hypotheses. Generally, only the number of analysts following the company is positively associated with the four measures of CIR disclosure. More specifically, many results related to governance factors were found according to the classification of CIR disclosure. Director independence is positively related to CIR comprehensive and general content. Moreover, director holding associates negatively with CIR comprehensive, general content and usability. Similarly, role duality decreases the credibility of CIR. The study found that growth is not a significant determinants of IFR.

Kelton and Yang (2008) conducted a survey of 284 companies listed on NASDAQ national market in 2004. To measure the IFR, an un-weighted checklist of 36 items grouped into content (24 items) and presentation (12 items) is developed. Corporate governance is measured by shareholder rights, ownership structure, board composition and audit committee variables. Based on seven control variables (size, profitability, growth opportunities, need for new external equity capital, information asymmetry, auditor type and industry), a separate regression model was conducted, the study conclude that corporate governance and firm characteristics significantly influenced disclosure of information on internet.

Mohamad and Oyelere (2008) investigated the potential practices for the determinants of IFR. The current study is an in-depth study that examines the determinants of disclosing financial reports via internet practices of the listed companies in Bahrain. The recent study is different from other studies in that it sought to provide users with a clear insight about the extent of adopting IFR in Bahrain. In addition, the study documents evidence of the relationship between IFR practices and the firm's specific characteristics in Bahrain. The study examines the relationship between IFR and three specific characteristics of the listed firms in the Kingdom of Bahrain.

Aly (2008) assessed the development of voluntary internet financial reporting and disclosure in Egypt. Quantitative methods were used to identify the extent of internet corporate financial reporting in the Egyptian companies. A disclosure index was constructed to determine the level of voluntary internet financial reporting of the 100 most active listed Egyptian companies for the year ended 2004. It was found that 27 companies had no websites, the websites of 9 companies were under construction, 62 companies had websites and 35 companies disclosed their financial information on their websites. The average disclosure rates of financial information were 30%

for the Egyptian companies which had websites and 44% for companies having websites and disclosing financial information. 100% of communication companies and 67% of financial services companies disclosed financial information on their websites and all communication companies had disclosure scores over 50%. The results of univariate analysis revealed that firm size variables (total assets, total sales, growth; leverage variables (Total Debt /Total Assets and Long term Debt/ Total Assets); foreign listing; industry type; and audit firm size were significantly associated with the extent of internet disclosure at least at the 5% level of significance. The results of multiple regressions indicated that profitability, foreign listing and industrial sector (communications and financial services) were important factors affecting the amount and presentation formatting of financial information disclosed on Egyptian companies' websites.

In a study of Turkish firms by Bozcuk (2012), impact of six firm characteristics were examined: growth, profitability, size, ownership, corporate governance and industry. The study conducted a well performed system to score the use of IFR for listed companies and measure its level. The study, also applied several statistical tests such as the multivariate regression analysis. The results indicated that large firms had positive effect in the level of using financial reporting via internet. In addition, the study noted that the main factors affect the adopting of IFR is corporate governance, auditor, and firm size. While growth, profitability and industry are found to be insignificant in influencing IFR.

2.4.5 Liquidity and Internet Financial Reporting

Liquidity was also investigated as a determinants of IFR. However, most of the studies were conducted abroad, and the findings are mixed and inconclusive to inform policy decision. Thus, this provided a literature gap for this study to fill. For example, Amr and El-Masry (2008)

examine the key factors that affect the timeliness of corporate internet reporting (CIR) by the Egyptian listed corporations on the Cairo and Alexandria Stock Exchange. The study used firm characteristics and corporate governance variables to investigate the influence on the timeliness of CIR. They also developed a disclosure index to measure the timeliness of CIR for the listed Egyptian corporations. Their primary analysis found a significant relationship between the timeliness of CIR and firm size, type of industry, liquidity, ownership structure, board composition and board size. The results indicate that firms typically in the service sector, that are large and have a high rate of liquidity, a high proportion of independent directors, a large number of board directors and a high free float disclose more timely information on their web sites. Furthermore, a significant association between the entire independent variables and some items of timeliness of CIR is found.

Alanezi (2009) examined the significant variables that affect the adoption of IFR. A total number of 179 companies listed on Kuwait joint-stock (KSX) were investigated. The variables of company size, type of auditors, profitability, liquidity, and leverage were examined. The study reported that (100 companies) 56% of the listed companies disclosed financial information. In addition the study indicated that auditor type and company size were the only effective factors that were associated to IFR firms. While liquidity, leverage, and profitability were found to be insignificant with IFR.

Doa'a et al., (2009) examined the factors that may affect the level of corporate internet reporting by Egyptian listed companies. The content analysis approach to examine the information cited by the largest Egyptian companies is used in their websites. The paper modifies and uses the disclosure index of Xiao et al. Ordinary least square multiple regression analysis was used and the study found that 56 per cent of Egyptian companies report a significant portion of

information on their websites. The paper also found that profitability, foreign listing and industrial type (communications and financial services) are the determinants of the amount and presentation formatting of information disclosed on Egyptian companies' websites. However, other firm characteristics, such as firm size, leverage, liquidity and auditor size, do not explain corporate internet reporting.

In Egypt, Aly *et al*., (2010) investigated the internet sites of Egyptian listed companies in order to verify the association between the disclosures of corporate information using the web and firms value. Ordinary least square multiple regression analysis had been conducted to find out significant association between the firm value and voluntary disclosure of corporate information. The results showed that 56% of the listed Egyptian companies provided relevant corporate information. In addition, the study reported that disclosure of corporate information on the internet had a variation level in market, and the association was particularly influenced by profitability, the non-Egyptian companies' type and the industry type regardless of the volume of the firm, liquid ratio, debt ratio, and the size of auditor.

Najla and Adel (2016) examined the level of adoption of IFR among listed companies in Bahrain and examined the relationships among the companies of specific characteristics and IFR. The sample of the current study consisted of all 47 listed companies in Bahrain Bourse (BB) in the financial year 2013. The findings also reveal that there is direct relationship among reporting financial information online and the four variables: size, leverage, liquidity and industry type. However, an inverse relationship is noted among IFR and profitability. In addition, size and leverage are also found to be the most significant variables that affect adopting IFR in the listed companies in Bahrain followed by liquidity.

Priyadarshani and Regina (2016) established the level and the determinants of Internet Financial Reporting (IFR) done by listed companies in Sri Lanka. The level of IFR is measured by IFR index composed with Disclosure Content and Presentation Format elements. The study disclosed the level of IFR is above average and it is significantly and positively influenced by Company Size, Profitability, Leverage and Liquidity whereas significantly and negatively influenced by Ownership Concentration.

Yassin (2017) investigated the determinants of internet financial reporting (IFR) of Jordanian listed companies in response to the cross-listing agreement among the Amman Stock Exchange (ASE), Abu Dhabi Securities Exchange (ADX) and Dubai Financial Market (DFM). An IFR index was developed to measure the level of each firm's information content and format disclosures. The analysis determined that firms that are larger, profitable, and more leveraged, with a separation between chairperson and CEO positions, with larger board size numbers, and with fewer independent non-executive directors are more likely to engage in IFR. By extending the analysis using OLS regression, the findings suggest that IFR was predicted using size, liquidity, leverage, market-to-book ratio, chairperson/CEO separation, independent non-executive directors, board size, and shareholder number. The study concludes that corporate governance mechanisms can predict IFR and its components, content and format more accurately than firms' financial characteristics.

Aboutera and Hussein(2017) examined the determinants of internet financial reporting by Egyptian companies through measuring the extent of internet financial reporting (IFR) practices in Egypt and the association between IFR and the Egyptian listed companies' characteristics. The research sample consists of 133 Egyptian companies listed on the Egyptian stock exchange as well as Nile stock exchange. Moreover, a disclosure checklist of 56 voluntary items is adopted to

measure the level of IFR. The findings of the multiple regression models revealed that three independent variables were found significantly associated with the level of Internet Financial Reporting including; company's size, auditor type and the company's age. However, other company characteristics were found insignificant such as liquidity, leverage, profitability and ownership structure.

2.4.6 Dividend and Internet Financial Reporting

There are a few empirical studies that examined the impact of firm size on the financial reporting on the internet. However, most of the studies are conducted abroad, and the findings are mixed and inconclusive to inform policy decision. Hence, this provided a literature gap for this study to fill. For instance, Khan (2006) investigated the various elements of financial reporting frameworks and practice in the context of the Internet. The Internet has emerged as a recent medium of presentation of corporate information. Currently, the levels of disclosure vary widely between companies within countries and on an international level, in relation to financial reporting disclosure on websites. A sample of 177 companies was selected from four sub-groups: hotels, diversified companies, multinational companies listed on the New York Stock Exchange and multinational companies listed on the London Stock Exchange. The companies' websites were then investigated in relation to financial reporting disclosure on the Internet, 62 out of the 152 companies (40.7 percent) had some kind of dividend related data available on the Internet, either on the primary or secondary websites. The study concluded that dividend as determinants of IFR and dividends are an income stream for shareholders. Therefore dividend data are important for an informed decision making process by shareholders.

Veer (2009) investigated the state of internet financial reporting in a sample of middle-east firms using firm specific determinants. The study reported a statistically significant increase in the

number of firms providing financial disclosures on the internet. The study also showed that profitability, dividends and debt ratios were positively related to disclosure on internet. The study concluded that there was a low level of voluntary disclosures on the internet.

Jason and Smith (2014) conducted an empirical study to investigate the extent of voluntary IFR among EU firms. The study examined the effect of debt ratios, profitability, dividend, type of ownership and its concentration. The logistic regression analysis was applied to the data as an estimation method, and the study found that profitability and corporate governance were the significant factors that affect the disclosure on internet. The study also revealed that dividend, debt and type of ownership have not significantly affect IFR.

Reed and Paul (2015) investigated the determinants of Internet Financial Reporting (IFR) by listed companies in South-Africa. Using multiple regression technique and the level of IFR measured by IFR index composed with disclosure content the study found that IFR is significantly and positively influenced by firm dividend, firm size, profitability, leverage, and liquidity. The study also found that IFR is influenced by the ownership type and board monitoring.

Bradfield (2016) examined the influence of firm specific characteristics on IFR. The sample of the study consisted of all listed companies in FSTE100 in the financial year 2015. The findings revealed that there was a direct relationship among reporting financial information online and the size, liquidity and industry type. However, an inverse relationship was noted among IFR and profitability, and dividends. The study concluded that size and liquidity were the most significant determinants for disclosing information online among listed firms.

2.5 Theoretical Framework of the Study

Accounting information disclosure is regarded as the most critical aspect of the accounting profession, because of the consequential effects of the disclosure on the users and the economy as a whole. Disclosure is therefore a complex function of several factors proved by the empirical evidence. Both internal firm characteristics and external environmental factors influence the disclosure. The factors include regulatory framework, cultural and institutional background as well as several other theories.

2.5.1 Agency Theory

Agency theory provides an explanation for management incentives to disclose voluntarily. Watson et al., (2002) stated that managers have incentives to increase disclosure to convince shareholders that they are acting optimally because they know that shareholders seek to control their behaviour through bonding and monitoring activities. Therefore, one way of reducing agency costs was to increase the amount of information included in accounting reports (Marston, 1996). Many disclosure studies, such as Ruland et al. (1990), Cooke (1993), Bradbury (1992) and Hossain et al. (1994) have used agency theory to explain cross-sectional variation in voluntary disclosure practice.

Agency theory Jensen and Meckling (1976) provides a framework linking disclosure behavior to corporate governance. In theory, the impact of corporate governance on voluntary disclosures may be complementary or substitutive (Ho & Wong 2001). It is complementary when adoption of governance mechanisms strengthen the internal control of the firm and make it less likely for managers to withhold information for their own benefits, leading to improvements in disclosure comprehensiveness and in the quality of financial statements. On the other hand, it is substitutive

when governance mechanisms reduce information asymmetry and opportunistic behaviors in the firm, resulting in a decrease in the need for more monitoring and voluntary disclosure.

Based on the Agency Theory, Internet financial reporting provides an efficient means for companies to improve communications with investors, decrease costs associated with distributing hard copy information, and increase the frequency of information disclosures (Ashbaugh et al. 1999; FASB 2000).

2.5.2 Signaling Theory

Signaling theory suggests that higher quality firms will use the internet to disseminate "old" accounting information. Gray and Roberts (1989) considered the cost and benefits of voluntary disclosure and investigated perceptions of the costs and benefits empirically. They found that for British multinationals, the most important perceived voluntary disclosure benefits were: improved reputation of the company; better investment decisions by investors; improved accountability to shareholders; more accurate risk assessment by investors; fairer share prices. The most important cost factors constraining voluntary disclosure were; competitive disadvantage costs and data collection and processing costs.

Therefore, this study is underpined by the agency theory and signaling theory to guide the study. From agency, managers have incentives to increase disclosure to convince shareholders that they are acting optimally because they know that shareholders seek to control their behaviour through bonding and monitoring activities. Hence it is a way of reducing agency costs by increasing the amount of information included in accounting reports through internet, where the firm is growing, profitable, and liquid. On the other hand, the signaling theory here, disseminating information through the internet is a means by the managers to pass a message to the stakeholders that the company is performing well.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter deals with the research methods and technique adopted to achieve the research objectives. The chapter begins with the discussion of research design, and then the population and sample size of the study. The sources and method of data collection for the study and the technique of data analysis are discussed and presented. The empirical models of the study as well as the justification of the methods and techniques used in the study is also discussed and presented.

3.2 Research Design

Research designs are usually rooted in a particular paradigm, which Collis and Hussey (2009) defined as a philosophical assumption that guides how to conduct a scientific research based on peoples' philosophies and assumptions about the world and the nature of knowledge.

This study is rooted in the positivists' paradigm, and experimental research designs is adopted. In experimental- correlational research design, the aim is to investigate the relationships between variables and to observe the impact on the dependent variable, so as to establish the causal relationship or otherwise among the variables. The study adopts correlational research design to examine the effect of firm specific characteristics on internet financial reporting of deposit money banks in Nigeria.

3.3 Population and Sample of the Study

The population of this study comprises of all the 14 listed deposit money banks listed on the floor of the Nigerian Stock Exchange (NSE) as at 31st December, 2016. The study used the entire

population as sample size using Census Sampling Technique. Table 3.1 shows the population and sample size of the study.

Table 3.1: Population and Sample Size of the Study

S/N	Population
1	Access Bank Plc
2	Diamond Bank Plc
3	First Bank of Nigeria Plc
4	First City Monument Bank Plc
5	Guaranty Trust Bank Plc
6	Stanbic IBTC Bank Plc
7	Sterling Bank Plc
8	Sky Bank Plc
9	Unity Bank Plc
10	United Bank for Africa Plc
11	Union Bank of Nigeria Plc
12	Zenith Nigeria Plc
13	Fidelity Bank Plc
14	Wema Bank Nigeria Plc
15	Eco Bank Nigeria Plc

Source: NSE Factbook 2016

3.4 Sources and Method of Data Collection

The study used secondary source of data collection due to the fact that the estimation of the models of the study requires the use of quantitative data. Therefore, the method of data collection for the study involves the financial statements of the banks for all the period covered by the study (2011 to 2016), consistent with Abdelsalam et al. (2007), Kelton and Yang (2008), and Aly et al. (2010).

3.5 Technique of Data Analysis

This study adopted Panel Multiple regression technique for the analysis. The choice of regression technique as a tool of data analysis in this study is informed by the effectiveness of the technique in testing relationships among theoretically related variables and estimating the effects of one

variable on the other (Gujarati, 2004). However, to meet the classical regression assumptions of which do not usually hold in panel data, the study carried out some robustness tests to address the effects of multicollinearity and Heteroskedasticity. Specifically, fixed and random effects model be employed. The analysis is conducted using Statistics/Data Analysis Software (STATA 13.0).

3.6 Variables Measurement and Model Specification

The definitions and measurements of the variables used in this study are presented in Table 3.2 below;

Table 3.2: Variables Measurement

Variables	Definition/Measurements	Source
Dependent Variable		
Internet Financial Reporting	Defined as the contents and presentation of corporate financial reports and accounts on web. Measured by IFR index in line with previous studies (as appendix for the checklist items).	Khan and Ismail (2012), Oyelere et al., (2003), Xiao et al. (2004), Aly et al., (2010)
Independent Variables		
Firm Size	Is measured by the natural logarithm of total assets.	Priyadarshani and Regina (2016), Najla and Adel (2016), Pozniak (2013), Ehab and Mohammed (2009), Desoky (2009)
Firm Profitability	Is measured by the returns on assets (profit after tax over total assets)	Najla and Adel (2016), Miniaoui and Oyelere (2013), Al-Sakaneh, (2011), Al-Moghaiwli (2009) and Elsayed et al (2010)
Leverage	Is measured by the ratio of total liabilities to total assets.	Oyelere et al., (2003), Miniaoui and Oyelere (2013), Aly (2008), Doaa et al., (2009), and Alarussi, et al. (2011)
Growth	Total asset of bank i in the current year minus total asset of last year divided by total asset of last year	Abdelsalam et al. (2007), Kelton and Yang (2008), Aly (2008), and Bozcuk (2012)
Liquidity	Is measured by the ratio of loan out to total assets a bank.	Amr and El-Masry (2008), Alanezi (2009), Doaa et al., (2009), Aly *et al*., (2010)
Dividend	Is measured by the total dividend paid scaled by total shares in issue.	Khan (2006), and Veer (2009)
Control Variables		
Listing status	Is Measured by dichotomous variable (1	Oyelere et al., (2003), Aly

	and 0); 1 if a firm is listed in a foreign stock market, and 0 for otherwise.	(2008), Desoky (2009), Doaa, Jon and Khaled (2009),

Therefore IFR index is determined as follows;

$$IFR = \frac{\text{Total real score obtained by a bank}}{\text{Total Maximum Scores}}$$

The total maximum scores is 50, comprises of 32 internet contents items and 18 internet presentation items.

3.6.1 Models Specification

In order to test the hypotheses formulated in this study and to achieve the objectives of the research, the study adopted the following econometric model from Abdelsalam et al. (2007), Kelton and Yang (2008), Aly et al. (2010) and Yassin (2017);

$$\mathbf{ifr_{it} = \alpha + \beta_1 fsz_{it} + \beta_2 prf_{it} + \beta_3 lev_{it} + \beta_4 grw_{it} + \beta_5 lqt_{it} + \beta_6 dvd_{it} + \beta_7 lts_{it} + \varepsilon_{it}\ldots\ldots\ldots\ldots\ldots\ldots i}$$

Where;

IFR	=	is the internet financial reporting index of bank I in year t
FSZ	=	size of bank I in year t
PRF	=	firm profitability of bank I in year t
LEV	=	leverage of bank I in year t
GRW	=	growth of bank I in year t
LQT	=	liquidity position of bank I in year t
DVD	=	dividend of bank I in year t
LTS	=	listing status of bank I in year t

α = intercept, β = coefficients and ε = stochastic error term or residual

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATIONS

4.1 Introduction

In this chapter, both the descriptive and inferential results obtained from the data collected for the study are presented, analysed and interpreted. The chapter begins with the analysis of the descriptive statistics of the data collected, and then the correlation matrix of the variables of the study. This is followed by the interpretation of the regression results and test of hypotheses of the study. The chapter ends with the discussions of the major findings and the policy implications of the findings.

4.2 Descriptive Statistics

The descriptive statistics are presented and analyzed in this section, the results are presented in Table 4.1; it entails the minimum, maximum and the average values from the data. It also contain the standard deviation, Skewnessand kurtosis.

Table 4.1: Descriptive Statistics

Variables	Mean	SD	Min	Max	N
IFR	0.6662	0.1268	0.4000	0.8800	90
FSZ	20.726	0.8246	19.110	22.192	90
PRF	0.0162	0.0364	-0.2410	0.0682	90
LEV	0.8401	0.0818	0.3098	0.9526	90
GRW	0.0228	0.0696	-0.1383	0.3949	90
LQT	0.0770	0.0465	0.0101	0.2334	90
DVD	0.7046	0.6093	0.0000	1.9100	90
LTS	0.5889	0.4948	0.0000	1.0000	90

Source: Computed from the Data Generated 2011-2016, Using STATA

The results in Table 4.1 indicates that the measure of internet financial reporting (IFR) of the sampled deposit money banks in Nigeria during the period has an average value of 0.6662

(66.62%) with standard deviation of 0.1268, and minimum and maximum values of 0.4000 (40%) and 0.8800 (88%) respectively. The value of standard deviation signifies that the dispersion of the data from the mean value from both sides is wide, implying that the data is dispersed from the mean value by 12.68%.

Table 4.1 also shows that the average firm size (FSZ) of the sample banks during the period of the study is 20.726(natural log of total assets) with standard deviation of 0.8246. This implies that the data deviate from the mean from both sides by 0.8246, the standard deviation suggests that the data is not widely dispersed from the mean. The minimum and maximum values of FSZ are 19.1106 and 22.1918 respectively.

The Table also shows that, the average firm Profitability (PRF) of the sampled banks in Nigeria is 0.0162 (1.62% ROA) with standard deviation of 0.0364. The standard deviation of 0.0364 implies that the data is widely dispersed from the mean value by 3.64% from both sides; the minimum and maximum values of PRF are -0.2410(24.10%) and 0.0682 (6.82%) respectively.

Table 4.1 indicates that the sample deposit money banks during the period have an average leverage (LEV) of 84.01% during the period of the study, from the mean of 0.8401 with standard deviation of 0.0818, and the minimum and maximum values of 0.3098 and 0.9526 respectively. The standard deviation suggests that the data is dispersed from the mean from both sides by 8.18%.

The Table on the other hand indicates that the sample deposit money banks have an average growth (GRW) of 2.28% during the period of the study, from the mean of 0.0228 with standard deviation of 0.0696, and the minimum and maximum values of -0.1383 and 0.3949 respectively. The standard deviation suggests that the data is widely dispersed from the mean by 6.96%.

The results in Table 4.1 show that the measure of liquidity (LQT) of the sampled deposit money banks in Nigeria during the period has an average value of 0.0770 (7.70%) with standard deviation of 0.0465, and minimum and maximum values of 0.0101 (1.01%) and 0.2334 (23.34%) respectively. The value of standard deviation signifies that the dispersion of the data from the mean value from both sides is wide, implying that the data is dispersed from the mean value by 4.65%.

The Table also shows that, the average dividend payout (DVD) of the sampled banks in Nigeria is 0.7046 (70.46%) with standard deviation of 0.6093. The standard deviation of 0.6093 implies that the data is widely dispersed from the mean value by 60.93k from both sides; the minimum and maximum values of DVD are 0.00 and 1.91 respectively.

Lastly, the Table shows that, the average listing status (LTS) of the sampled banks in Nigeria is 0.5889 with standard deviation of 0.4948. The standard deviation of 0.4948 implies that the data is widely dispersed from the mean value by 0.4948 from both sides; the minimum and maximum values of LTS are 0 and 1 respectively.

In view of the descriptive statistics of the variables of the study which suggests that the data does not usually follow the normal distribution, the study employed Jacque Bera test for normal data to find statistical evidence as to whether the data of the variables of the study follow the normal curve or not. The results of the test are presented in Table 4.2 as follows:

Table 4.2: Normal Data Test

Variables	Pr (skewness)	Pr (kurtosis)	Adj Chi2	P-Values	N
IFR	0.6446	0.0022	8.44	0.0147	90
FSZ	0.5286	0.0014	9.28	0.0099	90
PRF	0.0303	0.0000	19.38	0.0001	90
LEV	0.0000	0.0000	67.38	0.0000	90
GRW	0.0000	0.0000	35.81	0.0000	90
LQT	0.0025	0.4023	8.66	0.0131	90
DVD	0.0383	0.0000	17.58	0.0002	90
LTS	0.0002	0.0064	16.91	0.0002	90

Source: Computed from the Data Generated 2011-2016, Using STATA

Under this technique, null hypothesis principle is used in the Jacque Bera test for normal data, under the principle; null hypothesis that 'the data is normally distributed' is tested.

The test relies upon the adjusted Chi2 values based on the combined coefficients of skewness and kurtosis. The results in Table 4.2 indicates that data from the variables (IFR, FSZ,PRF, LEV, GRW, LQT,DVD and LTS) are not normally distributed because the P-values are significant at either 1% or 5% level of significance. Therefore, the null hypothesis (that, the data is normally distributed) is rejected for all the variables. This may lead to some problems in OLS regression and, hence the need for a more generalized regression models.

4.3 Correlation Results

This section covers the analysis of the Pearson correlation Coefficients of the variables of the study as presented in Table 4.3 as follows. The correlation matrix from Table 4.3 shows the relationships among the determinants of internet financial reporting of the listed deposit money banks in Nigeria.

Table 4.3: Correlation Matrix

Var.	IFR	FSZ	PRF	LEV	GRW	LQT	DVD	LTS
IFR	1.0000							
FSZ	0.5209*	1.0000						
PRF	0.2362*	0.2813*	1.0000					
LEV	0.0917	0.0047	0.0478	1.0000				
GRW	-0.1414	-0.3635*	-0.1216	-0.0607	1.0000			
LQT	0.2943*	0.3152*	-0.0165	0.1910	-0.2954*	1.0000		
DVD	0.2441*	0.0844	-0.0920	0.1334	-0.1243	-0.2134*	1.0000	
LTS	0.2418*	0.3199*	-0.0022	-0.2325*	-0.2664*	-0.0170	0.2215*	1.0000

* Significant at 5% level

Source: Computed from the Data Generated 2011-2016, Using STATA

Table 4.3 shows a significant statistical positive relationship between internet financial reporting (IFR) and the firms size (FSZ) from the correlation coefficient of 0.5209 which is statistically significant at 5% level of significance. This suggests that larger banks or as the size of the banks increase, internet financial reporting in terms of contents and presentation increases during the period under review.

The Table also indicated asignificant statistical positive relationship between internet financial reporting (IFR) and firm profitability (PRF), from the correlation coefficient of 0.2362 which is statistically significantat at 5% level of significance. This result implied a direct correlation between IFR and performance of banks.

The Table on the other hand indicates a significant positive relationship between internet financial reporting (IFR) and level of leverage (LEV), from the correlation coefficient of 0.0917 which is not statistically significant at 5% level of significance. This implies that higher levels of debt increases reporting on internet by the sampled banks during the period.

An insignificant negative association between Internet Financial Reporting (IFR) and Firm Growth (GRW) was recorded, from the correlation coefficient of -0.1414 which is not

statistically significant at alpha level of significance. This implies that disclosure on internet decreases as firm grows in terms of revenue growth.

The correlation matrix indicates a significant statistical positive relationship between internet financial reporting (IFR) and liquidity (LQT), from the correlation coefficient of 0.2943 which is statistically significant at 5% level of significance. This result suggests that as liquidity position of banks increases, disclosure on internet increases accordingly.

Table 4.3 also indicate a significant statistical positive relationship between internet financial reporting (IFR) and the dividend payout (DVD) from the correlation coefficient of 0.2441 which is statistically significant at 5% level of significance. This suggests that increase in dividend payments affect reporting on the internet positively during the period under review.

Lastly, there is a significant positive relationship between internet financial reporting (IFR) and listing status (LTS), from the correlation coefficient of 0.2418 which is statistically significant at 5% level of significance. Consistent with the foreign listing proposition.

This result suggests that listing on other countries is positively associated with internet financial reporting among deposit money banks during the period.

4.4 Regression Results and Hypotheses Testing

4.4.1 Regression Results

This section presents and analyzes the regression results of the model of the study. The section begins with the analysis of the model as presented in Table 4.4;

Table 4.4: OLS Summary Regression Results

Variables	t-Statistics	P-Values
R Square	0.4013	
F-Statistics	16.44	0.0000
Hausman Chi2	7.33	0.3956
Hettest: Chi2	0.10	0.7542
Mean VIF	1.23	
Random Effect (LM) Test: Chi2	0.06	0.4047

Source: Computed from the Data Generated 2011-2016, Using STATA

The classical regression assumptions of OLS with regard panel data require the model to be fit and unbiased for a valid interpretations and conclusions. As such this study subjected the model to Fixed and Random Effects regression in addition to OLS and other robustness tests to achieve a reliable result.

Table 4.4 shows an absence of Heteroskedasticity in the panel as indicated by the Breuch Pagan/Cook-Weisberg test for HeteroskedasticityChi2 of 0.10 with p-value of 0.7542. This proved that the assumption of constant variance of the error term (Homocedasticity) is being met, and as a result OLS estimators may be best linear unbiased estimators (BLUE).

The results of Hausman Specification test indicated that the random effect regression model is the most appropriate for the study, from the HausmanChi2 of 7.33 with p-value of 0.3956.

However, Breusch and Pagan Lagrangian Multiplier Test for Random Effects indicated that there is no statistical significant variance among the units in the panel (Chibar2 of 0.00 with p-value of 1.0000), implying that OLS regression model is appropriate for the model of the study. The table

on the other hand, indicated the absence of the perfect multicolinearity among the explanatory variables, as shown by the mean Variance Inflation Factor (VIF) of 1.23. The decision criterion for the Variance Inflation Factor is that a value of 10 and above implies the presence of perfect multicollinearity.

Table 4.4 indicates that the independent variables of the study explained 40.13% of the total variations in the dependent variable (Internet Financial Reporting of the sample deposit money banks during the period), from the coefficient of multiple-determination (R^2 value of 0.4013).

The table also shows that the model is fit from the F-Statistic of 16.44 which is statistically significant at 1% level of significance (as indicated by the P-value of 0.0000). Therefore, the study examined the determinants of internet financial reporting of listed deposit money banks in Nigeria by the test of the hypotheses formulated in the following section.

4.4.2 Hypotheses Testing

In this section, the study tests the hypotheses formulated for the study, Table 4.5 presents the coefficients of the variables of the study from which the hypotheses are tested.

Table 4.5: Robust OLS Estimators

Variables	Coefficients	t-values	P-Values
FSZ	0.0681	4.54	0.000
PRF	0.6836	2.72	0.008
LEV	0.1826	1.65	0.102
GRW	0.2170	1.33	0.187
LQT	0.2589	0.87	0.386
DVD	0.0383	1.82	0.072
LTS	0.0279	1.09	0.278
CONSTANT	-0.9783	-3.71	0.000

Source: Computed from the Data Generated 2011-2016, Using STATA

Table 4.5 indicates after controlling the effect of bank listing status that firm size (FSZ) has a significant statistical positive effect on the internet reporting of sampled listed deposit money banks in Nigeria, from the coefficient of 0.0681 with t-value of 4.54, which is statistically significant at 1% level of significance (p-value of 0.000). This result suggests that, the higher the level of firm assets, the more banks disclose information on the internet. That is, when assets increase by N1, contents and presentation of information on the internet increases by 6.81%, and it is statistically significant at 1% level. Based on this, the study rejects the null hypothesis one (H_{01}) which states that, firm size has no significant effect on the internet financial reporting of listed deposit money banks in Nigeria.

The study therefore infers that, size of firms is a significant determinant of internet financial reporting in Nigerian banking industry. This finding is in line with the theory and most of the findings of previous studies like; Asbaugh, Johnstone and Warfield (1999), Craven and Marston (1999), Pirchegger and Wagenhofer (1999), Ismail (2002), Marston (2003), Oyelere, Laswad and Fisher (2003), Xiao and Chow (2004), Pervan (2005), Pervan (2006), Ragab (2005), Henchiri (2007), Abdelsalam, O.H. & Street, D.L. (2007), Aly (2008), Almilia (2009), Desoky (2009), Al-Moghaiwli (2009), Ehab and Mohammed (2009), Elsayed et al (2010), Ujah and Okafor (2011), Maria and Isabel (2011), Khaled (2011), Bozcuk (2012), Pozniak (2013), Miniaoui and Oyelere (2013), Ali Khan and Ismail (2014a), Najla and Adel (2016), Priyadarshani and Regina (2016), Asogwa (2017), Yassin (2017), and Aboutera and Hussein(2017).

The results from Table 4.5 indicated after controlling the effect of bank listing status that firm profitability (PRF) has a significant statistical positive effect on the internet reporting of listed deposit money banks in Nigeria, from the coefficient of 0.6836 with t-value of 2.72, which is

statistically significant at 1% level of significance (p-value of 0.008). This result suggests that, the disclosure of information on the internet increases with the increase in the profitability of banks during the period. That is, when firm profitability increases by N1, contents and presentation of information on the internet increases by 68.36%, and it is statistically significant at 1% level. Based on this, the study rejects the null hypothesis two (H_{02}) which states that, firm profitability has no significant effect on the internet financial reporting of listed deposit money banks in Nigeria. The study therefore infers that, firm profitability in terms of profitability is a significant determinant of internet financial reporting in the deposit money banks in Nigeria. This finding support the findings of Singhvi and Desai (1997), Amr and El-Masry (2008), Aly (2008), Desoky (2009), Doaa, Jon and Khaled (2009), Al-Moghaiwli (2009), Elsayed et al., (2010), Aly*et al*., (2010), Al-Sakaneh (2011), Miniaoui and Oyelere (2013), Mohammed and Ehab (2014), Ali Khan and Ismail (2014a), Najla and Adel (2016), and Priyadarshani and Regina (2016).

Table 4.5 indicated after controlling for bank listing status that firm leverage(LEV) has an insignificant statistical positive effect on the internet reporting of listed deposit money banks in Nigeria, from the coefficient of 0.1826 with t-value of 1.65, which is not statistically significant at 5% level of significance (p-value of 0.102). This result suggests that, the disclosure of information on the internet increases with the increase in the level of debts in the capital structure of banks during the period. That is, when firm leverage increases by N1, contents and presentation of information on the internet increases by 18.26%, but it is not statistically significant at all levels. Based on this, the study failed to reject the null hypothesis three (H_{03}) which states that, firm leverage has no significant effect on the internet financial reporting of listed deposit money banks in Nigeria. The study therefore infers that, firm leverage is not a

significant determinant of internet financial reporting in the deposit money banks in Nigeria. The finding is consistent with the findings of Oyelere, Laswad and Fisher (2003), Aly (2008), Doaa, Jon and Khaled (2009), Al-Arusi et al., (2009), Al Sakaneh, (2011) and Najla and Adel (2016).

Moreover, Table 4.5 indicated after controlling for bank listing status that firm growth (GRW) in terms of the revenue growth has an insignificant statistical positive effect on the internet reporting of listed deposit money banks in Nigeria, from the coefficient of 0.2170 with t-value of 1.33, which is not statistically significant at 5% level of significance (p-value of 0.187). This result implies that, the disclosure of information on the internet increases with the increase in the level of revenue of banks during the period. That is, when firm revenue grows by N1, contents and presentation of information on the internet increases by 21.70%, but it is not statistically significant at all levels. Based on this, the study failed to reject the null hypothesis four (H_{04}) which states that, firm growth has no significant effect on the internet financial reporting of listed deposit money banks in Nigeria. The study therefore infers that, firm growth in terms of sales growth is not a significant determinant of internet financial reporting in the deposit money banks in Nigeria. This finding does not support the findings of Abdelsalam et al., (2007), Al-Arusi et al., (2009), Kelton and Yang (2008), Mohamad and Oyelere (2008), Bozcuk (2012), and Alanezi (2009),

Table 4.5 also shows after controlling the effect of bank listing status that liquidity (LQT) has an insignificant statistical positive effect on the internet reporting of sampled listed deposit money banks in Nigeria, from the coefficient of 0.2589 with t-value of 0.87, which is not statistically significant at all levels of significance (p-value of 0.386). This result suggests that, the higher the level of firm liquidity, the more the banks disclose information on the internet, that is, when

liquidity increases by N1, contents and presentation of information on internet increases by 25.89%, but it is not statistically significant at all levels. Based on this evidence, the study failed to reject the null hypothesis five (H_{05}) which states that, firm liquidity position has no significant effect on the internet financial reporting of listed deposit money banks in Nigeria. The study therefore infers that the liquidity position of a firm is not a significant determinant of internet financial reporting in Nigerian banking industry. Although the finding confirms a positive association with IFR, it is inconsistent with most of the previous studies like; findings of Amr and El-Masry (2008), Aly (2008), Desoky (2009), Doaa, Jon and Khaled (2009), Al-Moghaiwli (2009), Elsayed et al (2010), Aly, *et al*. (2010), Al-Sakaneh, (2011), Miniaoui and Oyelere (2013), Mohammed and Ehab (2014), Ali Khan and Ismail (2014a), Najla and Adel (2016), and Priyadarshani and Regina (2016).

Table 4.5 indicates after controlling the effect of bank listing status that firm dividend payout (DVD) has a significant statistical positive effect on the internet reporting of sampled listed deposit money banks in Nigeria, from the coefficient of 0.0383 with t-value of 1.82, which is statistically significant at 10% level of significance (p-value of 0.072). This result suggests that, the higher the dividend payout, the more banks disclose information on the internet, that is, when dividend increases by N1, contents and presentation of information on the internet increases by 3.83%, and it is statistically significant at 10% level. Based on this evidence, the study rejects the null hypothesis six (H_{06}) which states that, firm dividend payout has no significant effect on the internet financial reporting of listed deposit money banks in Nigeria. The study therefore infers that, dividend payout of firms is a significant determinant of internet financial reporting in Nigerian banking industry. This finding is consistent with the signaling theory that releasing information on the internet is to send signal to the market.

The finding also supports the finding of Bradfield (2016), Reed and Paul (2015), Veer (2009) and Khan (2006), and it contradicts the findings of Jason and Smith (2014).

Lastly, the Table indicates that bank listing status (LTS) has an insignificant statistical positive effect on the internet financial reporting of sampled listed deposit money banks in Nigeria, from the coefficient of 0.0279 with t-value of 1.09, which is not statistically significant at 5% level of significance (p-value of 0.278). This result suggests that, the more a bank is listed in stock markets of other countries, the more the bank discloses information on the internet, but it is not statistically significant at alpha level.

4.5 Discussion of Major Findings

This study found evidence from the results obtained that the independent variables (firm size, profitability, leverage, growth, liquidity, dividend and listing status) explained 35.02% of the total variations in the dependent variable (internet financial reporting of the deposit money banks during the period).

The study also found that the data used in the study fits the model as indicated by the F-Statistic of 16.44 which is statistically significant at 99% confidence level (from the P-value of 0.0000).

The study on the other hand found after controlling the effect of bank listing status that firm size has a significant statistical positive effect on the internet reporting of sampled listed deposit money banks in Nigeria and therefore it is inferred, size of firms is a significant determinant of internet financial reporting in the Nigerian banking industry.

The study also found after controlling the effect of bank listing status that firm performance (profitability) has a significant statistically positive effect on the internet financial reporting of

listed deposit money banks in Nigeria, the study therefore infers that, firm profitability is a significant determinant of internet financial reporting in the deposit money banks in Nigeria.

Similarly, the study found evidence after controlling for bank listing status that firm leverage has an insignificant statistical positive effect on the internet financial reporting of listed deposit money banks in Nigeria. The study therefore infers that, firm leverage is not a significant determinant of internet financial reporting in the deposit money banks in Nigeria.

Moreover, the findings of the study indicated after controlling for bank listing status that firm growth in terms of the revenue growth has an insignificant statistically positive effect on the internet reporting of listed deposit money banks in Nigeria. Firm growth in terms of sales growth is also not a significant determinant of internet financial reporting in the deposit money banks in Nigeria.

The findings after controlling the effect of bank listing status show that liquidity has an insignificant statistically positive effect on the internet financial reporting of sampled listed deposit money banks in Nigeria. The study therefore infers that the liquidity position of a firm is not a significant determinant of internet financial reporting in Nigerian banking industry.

Moreover, the study established that dividend has a significant statistically positive effect on the internet reporting of sampled listed deposit money banks in Nigeria. The study, therefore, infers that dividend payout of firms is a significant determinant of internet financial reporting in the Nigerian banking industry.

4.6 Policy Implication of Findings

The findings from this study imply that for a firm to improve transparency and minimize information asymmetry it should adopt financial reporting on the internet. That is, the study implies that dividend, profitability and size of the firm are critical factors in promoting reporting on the internet, which improves transparency and minimizes information asymmetry as well as the agency cost. On the other hand, the findings imply that managers could gain low agency costs if they adequately disclose information relating to profitability, dividend and firms size on the internet.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The study focused on the relation between IFR and firm specific attributes. The chapter covered among others the background of the study, statements of the research problem and the significance of the study. The main objective of this study is to examine the firm specific characteristics on internet financial reporting of listed deposit money banks in Nigeria. Review of relevant and related literature on the effect of firm specific attributes on the IFR was presented and discussed in chapter two. The chapter covered the conceptual, empirical and theoretical literature on the relationship between firm specific attributes and internet financial reporting. The analysis and interpretation of the results found was presented and discussed in chapter four.

Research methodology was covered in chapter three; correlation research design using panel data was employed in the study in a sample of 14 banks listed on the floor of Nigerian Stock Exchange for the period 2011-2016. Panel regression technique of data analysis using OLS was used and the study found after controlling the effect of listing status that firm size, profitability and dividends have significant statistical positive effect on internet financial reporting in a sample of the deposit money banks during the period covered by the study.

The study on the other hand, found after controlling the effect of listing status that firm growth, leverage and liquidity position have an insignificant effect on internet financial reporting during the period under review.

5.2 Conclusions

Emanating from the findings, the study concludes that after controlling for the effect of listing status that there is a significant positive relationship between firm specific attributes and internet financial reporting in the listed deposit money banks in Nigeria. Specifically, the study concludes that firm size is a determinant of IFR of deposit money banks, with positive and significant effect on IFR during the period covered by the study. That is, larger banks in Nigeria are likely to have a web site and disseminate financial information via their websites. Larger banks have a great number of stakeholders who demand information in easy and quick way which can be provided by the internet.

The study also found that firm profitability has a significant positive effect on IFR of listed deposit money banks in Nigeria during the period under review. The study therefore concludes that performance is a determinant of IFR of deposit money banks. In addition, profitable banks in Nigeria disclose financial information via their websites. It also suggests that banks' stakeholders and potential investor inquiry puts banks under more pressure than non-profitable banks to disclose timely information via internet, on the other hand, profitable banks serve as models for other banks and hence, similar profitable banks may imitate other successful companies to be alike.

The study also concludes that dividend is a significant determinant of IFR of deposit money banks in Nigeria. The findings indicate that dividend pay-out has a significant positive effect on IFR of listed deposit money banks in Nigeria during the period under review. The study therefore concludes that dividend paying banks in Nigeria disclose financial information on their websites. However, the study also concludes that leverage is an insignificant determinant of IFR of deposit

money banks in Nigeria. The findings indicate that leverage has an insignificant positive effect on IFR of listed deposit money banks in Nigeria during the period under review. The study therefore concludes that leverage does not influence banks in Nigeria to disclose financial information on their websites.

The study concludes that liquidity is an insignificant determinant of IFR of deposit money banks in Nigeria. The findings indicate that liquidity has an insignificant positive effect on IFR of listed deposit money banks in Nigeria during the period under review. Thus, the study concludes that liquidity does not influence banks in Nigeria to disclose financial information on their websites. The study concludes that firm growth is an insignificant determinant of IFR of deposit money banks in Nigeria. The study found that growth has an insignificant positive effect on IFR of listed deposit money banks in Nigeria during the period under review. The study therefore concludes that growth opportunities do not influence banks in Nigeria to disclose financial information on their websites.

5.3 Recommendations

In line with its findings, the study recommends that the regulators of the Nigerian banking industry and the Financial Reporting Council of Nigeria (FRC) should make regulations and policies to encourage reporting on the internet. This could reduce the agency problems and information asymmetry that hamper the development of our capital markets in Africa. Specifically, the following recommendations are offered:

i. The study recommends that managements of the deposit money banks in Nigeria should increase efforts towards creating a user friendly website for reporting financial and corporate activities.

ii. The study recommends that managers of deposit money banks in Nigeria should improve their firm performances as it affects the financial reporting on the internet, which reduces agency problems and costs.

iii. Both small and large banks should provide adequate corporate information on their web site as it could improve the quality of the information as well as the market value of their banks.

iv. The regulators should make policies with regard to bank liquidity position, which could guide banks and improve their disclosure of corporate information.

v. The regulators should also encourage banks with high liability leverage to improve their disclosure on internet as stakeholders, especially creditors require timely information.

vi. Management of banks in Nigeria should emphasize IFR in relation to their growth opportunities, as internet information places little attention on revenue growth as indicated by the insignificant relation with the internet financial reporting.

5.4 Limitations of the Study

There are many firm specific factors that determine internet financial reporting by firms both in theory and practice. This study is limited to those factors of dividend, liquidity, firm size, firm leverage, firm profitability, and firm growth. The findings of the study are limited to banks listed on the floor of Nigerian stock exchange market during the period between 2011 and 2016. This

is because other firms have their own characteristics that may render the findings from the banking firms inconsistent.

5.5 Suggestions for Further Research

Future studies should focus on other firm specific characteristics not covered by this study like age, complexity, risk and type of ownership. Moreover, a future study should measure the level of disclosure of information in order to set ground for examining the determinants of internet financial reporting. Other sectors of the NSE other than banking sector should also be investigated.

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APPENDICES

Appendix i

Check List of Items Appearing in the IFR Index based on content

S/N	**CONTENTS**
1	Income statement of current year
2	Balance sheet of current year
3	Cash flow statement of current year
4	Auditor report of current year
5	Annual report of current year (full text)
6	Notes to financial statements of current year
7	Income statement of past years
8	Accounting policy
9	Notes to financial statements of past years
10	Dividend information
11	Quarterly report of current year
12	Segmental reporting by line of business in current year
13	Corporate information
14	Half-year report of current year
15	Management report/analysis in current year
16	Members of the Board of Directors
17	Changes in stockholders' equity in the current year
18	Chairman's report
19	Analyses of main business risks
20	Summary of financial data over a period of at least five years
21	Sales of key products
22	CEO signature in the report
23	Annual general meetings information
24	Summary of key ratios over a period of at least five years
25	Users quickly find the financial information
26	Shareholder information
27	Corporate social responsibility report
28	Directors shareholding information
39	Information on corporate strategy
30	Company address
31	Company's charter in the current year
32	Financial ratios

Source: NSE 2017

Appendix ii

S/N	**PRESENTATIONS**
1	Loading time of the website below 10 seconds
2	Internal search engine
3	Table of content/sitemap
4	Annual report in PDF format
5	Hyperlinks to financial analysts
6	Hyperlinks inside the annual report
7	Change to printing friendly format possible
8	Annual report in HTML format
9	Format of reports suitable for calculations
10	Menu pull-down
11	Ability to download reports
12	Use of multimedia technology (in general)
13	Financial data in processable format (such as Excel)
14	Direct e-mail contacts (feedback) available
15	Link to table of contents
16	Hyperlinks texts
17	Hyperlinks to data on a third-party's website
18	Clear boundaries for annual reports

Appendix iii: Result from the Regression

RESULTS

```
. xtset id year, yearly
       panel variable:  id (strongly balanced)
        time variable:  year, 2011 to 2016
                delta:  1 year
```

```
. xtsum ifr fsz prf lev grw lqt dvd lts
```

Variable		Mean	Std. Dev.	Min	Max	Observations
ifr	overall	.6662222	.1268333	.4	.88	N = 90
	between		.0566788	.5766667	.76	n = 15
	within		.1142571	.4495556	.8928889	T = 6
fsz	overall	20.72589	.8245611	19.11056	22.19175	N = 90
	between		.6501533	19.73211	21.78535	n = 15
	within		.5300462	19.35801	22.36222	T = 6
prf	overall	.0161635	.0363668	-.2410481	.0682185	N = 90
	between		.0201264	-.0435758	.0426508	n = 15
	within		.0306631	-.1813087	.0963184	T = 6
lev	overall	.8400956	.0818095	.3097538	.9526122	N = 90
	between		.0409994	.7366149	.8818629	n = 15
	within		.0714583	.4132346	1.030051	T = 6
grw	overall	.022773	.0695948	-.1382557	.3949661	N = 90
	between		.0380908	-.0283363	.1232818	n = 15
	within		.058941	-.1062697	.3324801	T = 6
lqt	overall	.0770086	.0465345	.0101037	.2333961	N = 90
	between		.0420146	.0282201	.1488908	n = 15
	within		.0223473	.0163767	.1615139	T = 6
dvd	overall	.7045556	.6092566	0	1.91	N = 90
	between		.3595431	.305	1.465	n = 15
	within		.4991842	-.4471111	2.154556	T = 6
lts	overall	.5888889	.4947919	0	1	N = 90
	between		.4219506	0	1	n = 15
	within		.2770903	-.2444444	1.422222	T = 6

```
. sktest ifr fsz prf lev grw lqt dvd lts
```

Skewness/Kurtosis tests for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	joint adj chi2(2)	joint Prob>chi2
ifr	90	0.6446	0.0022	8.44	0.0147
fsz	90	0.5286	0.0014	9.24	0.0099
prf	90	0.0303	0.0000	19.39	0.0001
lev	90	0.0000	0.0000	67.38	0.0000
grw	90	0.0000	0.0000	35.81	0.0000
lqt	90	0.0025	0.4023	8.66	0.0131
dvd	90	0.0383	0.0000	17.58	0.0002
lts	90	0.0002	0.0064	16.91	0.0002

```
. spearman ifr fsz prf lev grw lqt dvd lts, star (0.05)
(obs=90)
```

	ifr	fsz	prf	lev	grw	lqt	dvd	lts
ifr	1.0000							
fsz	0.5209*	1.0000						
prf	0.2362*	0.2813*	1.0000					
lev	0.0917	0.0047	0.0478	1.0000				
grw	-0.1414	-0.3635*	-0.1216	-0.0607	1.0000			
lqt	0.2943*	0.3152*	-0.0165	0.1910	-0.2954*	1.0000		
dvd	0.2441*	0.0844	-0.0920	0.1334	-0.1243	0.2134*	1.0000	
lts	0.2418*	0.3199*	-0.0022	-0.2325*	-0.2664*	0.0170	0.2215*	1.0000

```
. reg  ifr fsz prf lev grw lqt dvd lts
```

Source	SS	df	MS		
Model	.574512087	7	.082073155	Number of obs	= 90
Residual	.857203481	82	.010453701	F(7, 82)	= 7.85
				Prob > F	= 0.0000
Total	1.43171557	89	.016086692	R-squared	= 0.4013
				Adj R-squared	= 0.3502
				Root MSE	= .10224

ifr	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
fsz	.0681186	.015729	4.33	0.000	.0368285	.0994086
prf	.6835569	.3034569	2.25	0.027	.0798845	1.287229
lev	.1826057	.1437873	1.27	0.208	-.103433	.4686444
grw	.2170434	.171356	1.27	0.209	-.1238383	.557925
lqt	.2589511	.26563	0.97	0.332	-.2694717	.7873738
dvd	.0382701	.0192492	1.99	0.050	-.0000227	.0765628
lts	.0278852	.025071	1.11	0.269	-.021989	.0777595
_cons	-.9783196	.3205036	-3.05	0.003	-1.615903	-.3407359

```
. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of ifr

         chi2(1)      =     0.10
         Prob > chi2  =   0.7542
```

```
. vif
```

Variable	VIF	1/VIF
fsz	1.43	0.698281
lts	1.31	0.763292
lqt	1.30	0.768734
grw	1.21	0.825901
lev	1.18	0.848851
dvd	1.17	0.853995
prf	1.04	0.964443
Mean VIF	1.23	

```
. xtreg ifr fsz prf lev grw lqt dvd lts, fe

Fixed-effects (within) regression               Number of obs      =        90
Group variable: id                              Number of groups   =        15

R-sq:  within  = 0.4166                         Obs per group: min =         6
       between = 0.4957                                        avg =       6.0
       overall = 0.3688                                        max =         6

                                                F(7,68)            =      6.94
corr(u_i, Xb)  = -0.6026                        Prob > F           =    0.0000

------------------------------------------------------------------------------
         ifr |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         fsz |   .0917745   .0217797     4.21   0.000     .0483138    .1352352
         prf |   .5072615   .3563956     1.42   0.159    -.2039149    1.218438
         lev |   .1248054   .1566678     0.80   0.428    -.1878203    .4374311
         grw |    .259171   .1959586     1.32   0.190    -.1318584    .6502003
         lqt |   1.002845    .529187     1.90   0.062    -.0531307    2.058822
         dvd |   .0450603   .0242361     1.86   0.067    -.0033021    .0934226
         lts |   .0338509   .0431286     0.78   0.435    -.0522109    .1199127
       _cons |  -1.483746   .4482652    -3.31   0.001    -2.378245   -.5892464
-------------+----------------------------------------------------------------
     sigma_u |  .06498049
     sigma_e |  .09983818
         rho |  .29756354   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(14, 68) =     1.29                 Prob > F = 0.2393

. est store fixed


. xtreg ifr fsz prf lev grw lqt dvd lts, re

Random-effects GLS regression                   Number of obs      =        90
Group variable: id                              Number of groups   =        15

R-sq:  within  = 0.3956                         Obs per group: min =         6
       between = 0.5676                                        avg =       6.0
       overall = 0.4007                                        max =         6

                                                Wald chi2(7)       =     53.84
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.0000

------------------------------------------------------------------------------
         ifr |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         fsz |   .0707946   .0164685     4.30   0.000      .038517    .1030723
         prf |   .6578246   .3088635     2.13   0.033     .0524634    1.263186
         lev |   .1705904   .1442939     1.18   0.237    -.1122205    .4534014
         grw |   .2246801   .1733294     1.30   0.195    -.1150392    .5643994
         lqt |    .308447   .2879278     1.07   0.284    -.2558812    .8727751
         dvd |   .0410617   .0198216     2.07   0.038     .0022122    .0799113
         lts |   .0295079   .0267959     1.10   0.271    -.0230112     .082027
       _cons |  -1.030182   .3354412    -3.07   0.002    -1.687635   -.3727292
-------------+----------------------------------------------------------------
     sigma_u |  .02481487
     sigma_e |  .09983818
         rho |  .05818312   (fraction of variance due to u_i)
------------------------------------------------------------------------------

. est store random
```

```
. hausman fixed random
```

	Coefficients (b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
fsz	.0917745	.0707946	.0209799	.0142529
prf	.5072615	.6578246	-.1505631	.1778235
lev	.1248054	.1705904	-.0457851	.0610251
grw	.259171	.2246801	.0344909	.0914151
lqt	1.002845	.308447	.6943984	.4440005
dvd	.0450603	.0410617	.0039985	.0139461
lts	.0338509	.0295079	.004343	.0337943

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 7.33
Prob>chi2 = 0.3956

```
. xttest0
```

Breusch and Pagan Lagrangian multiplier test for random effects

ifr[id,t] = Xb + u[id] + e[id,t]

Estimated results:

	Var	sd = sqrt(Var)
ifr	.0160867	.1268333
e	.0099677	.0998382
u	.0006158	.0248149

Test: Var(u) = 0
chibar2(01) = 0.06
Prob > chibar2 = 0.4047

```
. reg ifr fsz prf lev grw lqt dvd lts, robust

Linear regression                               Number of obs =      90
                                                F(  7,    82) =   16.44
                                                Prob > F      =  0.0000
                                                R-squared     =  0.4013
                                                Root MSE      =  .10224

------------------------------------------------------------------------------
             |               Robust
         ifr |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         fsz |   .0681186       .015     4.54   0.000     .0382788    .0979584
         prf |   .6835568   .2514039     2.72   0.008     .1834345    1.183679
         lev |   .1826057   .1105687     1.65   0.102    -.0373507    .4025621
         grw |   .2170434   .1629978     1.33   0.187     -.107211    .5412979
         lqt |   .2589512   .2971272     0.87   0.386    -.3321295    .8500319
         dvd |   .0382701    .021029     1.82   0.072    -.0035633    .0801034
         lts |   .0278852   .0255501     1.09   0.278     -.022942    .0787125
       _cons |  -.9783197   .2635409    -3.71   0.000    -1.502586   -.4540529
------------------------------------------------------------------------------
```