EFFECT OF BOARD CHARACTERISTICS ON INTANGIBLE ASSETS DISCLOSURE OF LISTED FINANCIAL SERVICE FIRMS IN NIGERIA

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A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA
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DECLARATION

I declare that the work in this dissertation entitled EFFECT OF BOARD CHARACTERISTICS ON INTANGIBLE ASSETS DISCLOSURE OF LISTED FINANCIAL SERVICE FIRMS IN NIGERIA has been performed by me in the department of Accounting. The information derived from 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.

Jumai Asipita JIMOH _____ _____

Signature Date

CERTIFICATION

This is to certify that this dissertation entitledEFFECT OF BOARD CHARACTERISTICS ON INTANGIBLE ASSETS DISCLOSURE OF LISTED FINANCIAL SERVICE FIRMS IN NIGERIA by JUMAI ASIPITA JIMOH meets the regulations governing the award of the degree of Master of Science (M.Sc.) in Accounting and Finance of the Ahmadu Bello University, Zaria andisapproved for its contribution to knowledge and literary presentation.

Dr. M.M. Bagudo Chairman, Supervisory Committee	Signature	Date
Dr. M.S. Tijjani Member, Supervisory Committee	Signature	Date
Prof. M.H. Sabari Head of Department	Signature	Date
Prof. S.A. Abdullahi Dean, Postgraduate School	Signature	Date

DEDICATION

This work is dedicated to my parents Mr and Mrs A.O Jimoh for their love, prayer and support for my academic pursuit.

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ABSTRACT

The study examines the effect of board characteristics on intangible assets disclosure of listed financial service firms in Nigeria. Data for the study were collected from the annual reports and accounts of a sample of 30 firms for the period of six years from 2012-2017. The study used unweighted disclosure index in determining the extent of compliance with intangible assets disclosure and uses multiple regression to examine the effect of board characteristics on intangible assets disclosure. The study found that board size, board meeting and board accounting expertise have a significant effect on intangible assets disclosure based on IAS 38. However, board independence indicates an insignificant association with intangible assets disclosure. Based on the findings, the study recommends that board size should be made up of high number of directors to ensure that financial report are being scrutinized; board of director should also take attendance of the meeting and board of directors should consist of people that have financial and accounting expertise in order to enhance good monitoring capacity in terms of compliance with accounting regulation.

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LIST OF ABBREVIATIONS

CAMA	Companies and Allied Matters Act
COCG	Code of Corporate Governance
FRC	Financial Reporting Council
GIFT	Global Intangible Financial Tracker
IA	Intangible Assets
IAS	International Accounting Standard
IASB	International Accounting Standards Board
IC	Intellectual Capital
ICT	Information and Communication Technology
IFRS	International Financial Reporting Standard
I T	Information Technology
NAICOM	National Insurance Commission
NSE	Nigerian Stock Exchange
PwC	PricewaterCoopers
R &D	Research and Development
SAS	Statement of Accounting Standard

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CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

The growth and sustainability of companies in the modern economy largely depends on the knowledge and skills of their management and employees together with the use of Information and Communication Technology (ICT) system, Research and Development (R&D), product and service quality, customer satisfaction and innovation (Ibadin & Oladipupo, 2015). These attribute of growth and how a company can be sustained is called intangible assets and it also help in the growth and development of a company. Unlike the industrial era where tangible assets such as machines and other physical assets were the primary drivers of company value in ICT driving world. Companies derive and maintain their competitive advantage from intangible assets (Arrighetti, Landini, & Lasagni, 2014).

As such, the growth of knowledge based businesses such as software & IT, financial services, business outsourcing, media, healthcare and pharmaceutical industries among others have lead to increasing investments. Globally, intangible assets such as intellectual property, brands, customer relationship and talenthold much more value than tangible assets such as capital, land, buildings and machinery (Ibadin & Oladipupo, 2015). The Global Intangible Financial Tracker (GIFT 2017) identified in their recent survey that intangible value continues to soar, rising from $19.8 trillion in 2001 to $47.6 trillion in 2016. With this increase in intangible assets, there is need to examine intangible asset.

Also, in Nigeria, the knowledge based businesses such as the financial services industries, ICT, healthcare and pharmaceutical industries have accounted for over 33.16% of market capitalization (NSE, 2017), intangible asset reporting become of great importance in the financial service sectors. The GIFT (2017) ranked Nigeria as the 22nd in the world in terms of intangible asset reporting ahead of other African countries such as South Africa, Egypt

and Kenya with 33.6% disclosed intangibles as a proportion of total tangible value. As such, the report also identified a significant proportion of undisclosed intangible assets in Nigeria. Subsequently, the organization for Economic Cooperation and development reported that there is a huge investment in intangible assets and this has exceeded the investment of tangible assets in some countries like USA, Finland and UK. Nigeria was not mentioned among these countries that have invested so much on intangible assets even though it is mandatory for intangible assets to be disclosed by firm and intangible asset is considered to be the main sources of economic value (OECD, 2012).

Disclosure of intangible assets in the financial reports add value to the decision making of the users of financial reports as the financial reporting is the means through which the management of every firm communicates to the stakeholders on how it has utilized the resources entrusted with it. Similarly, it is through the financial reports that the performance of the management can be evaluated by both the existing and prospective investors (Omoye, 2013). Therefore, it is expected that the intangible assets in the annual reports communicated to these users will have impact on their investment decisions of the listed financial service firm. Furthermore, for a financial statement to meet its objectives, all item of importance should be disclosed. Intangible assets which is a vital aspect of a financial statement have most of the time been neglected (Omoye, 2013).

Again, accounting for intangible assets is guided by the International Accounting Standard (IAS) 38 issued by the International Accounting Standard Board (IASB) to address accounting for intangible assets, it only provided guidance on adoption of International Financial Reporting Standard (IFRS) in Nigeria in 2012, the original IAS 38 is issued by the IASB with all its modifications becomes mandatory for all listed companies in Nigeria commencing from January 1, 2012 (Bagudo, 2017). Accordingly, compliance with intangible assets disclosure

will in the long run have effect on the firm's value; this is because disclosure of intangible assets in financial reports will help the users of accounting information with relevant information that will aid their investment decisions. However, after the mandatory adoption of IFRS in Nigeria, earlier reports in 2013 shows low level compliance with IFRS disclosures including IAS 38 especially in the Nigerian Financial Sector (Nnorom, 2013). The Financial Reporting Council (FRC) also reveals widespread non-compliance with IFRS in 2013 (Nnorom, 2013).

As such, effective monitoring of the management depends on the size of the board, independence of the board (John &Senbet, 1998) and the meeting held by board members (Lipton &Lorsch, 1992). Chen and Razea (2012) posit that board size as a component of board effectiveness helps companies align with mandatory disclosure of IFRS. The size of the board of directors has been identified as a factor that influences the level of intellectual capital disclosure since information disclosed is a strategic decision usually made by the company's board. Mixed results have been recorded by prior literatures in respect to the relationship between board size and intangible disclosures. For instance, Alfraih & Almutawa (2017) found a negative relationship between board size and IAS 38. However, Gisbert and Navallas (2013) found a positive relationship.

Moreover, board that meets regularly is expected to have improved mandatory requirement (Kent & Stewart, 2008). This is because a board that meets will have enough time to scrutinize the financial reports prepared by the management and this will make them to ensure that these reports are prepared in conformity with IAS 38 (Intangible assets disclosure). It is expected that board meeting should have a positive relationship with IAS 38. However, mixed results have been showed by prior literatures. Kent and Stewart (2008) posit that board meeting will increase the amount of intangible asset disclosure while Mohamed (2015) recorded the reverse.

In addition, prior literature has documented that independence of the board of directors from management provides effective monitoring and control of firm activities (Fama and Jensen, 1983). Bueno, Salvador and Rodriguez(2004) consider that the number of independent members leads to greater supervision and the maximization of the value of the organization. A quality financial report also creates value for the organization, and this can be achieved when the financial reports contain all the necessary disclosures. Cheng and Courtenay (2006) provide further evidence that firms with a higher proportion of independent directors have significantly higher levels of disclosure than firms with balanced boards. This can be as a result of the fact that a board with large non executive directors is independent, and these directors have nothing to lose if they monitor the financial reporting process without any compromise.

In line with the agency theory, the presence of non-executive directors in the board reduces the conflict of interests existing between shareholders and directors of the firm (Khodadadi, Khazami and Aflatooni(2010). Chen and Jaggi (2000) found a positive relationship between a board with higher proportion of independent directors and comprehensive financial disclosure. However, a negative result was found in the study of Nelson, Gallery, and Percy (2010).

Also, prior literature have examined the relationship between accounting expertise and IFRS disclosure, the result shows that directors with accounting expertise tends to follow IFRS disclosure requirement. A board with accounting expertise will ensure that the requirements of the IFRS are complied with in preparing their financial reports of the firm. Therefore, this will make it possible for the intangible assets to be disclosed in the financial reports. This is because these directors know the implication of disclosing the information, and that their noncompliance can be detrimental. In the study of Zango, Kamardin, and Ishak (2016), the study found out that accounting and financial expertise have positively improved compliance with the disclosure requirement. In contrary to the above is the study of Nelson et al (2010) that showed that accounting expertise is negatively related to disclosure.

It is against this background and the importance of intangible assets in the service industry in Nigeria that this study intends to examine the effect of board characteristics and intangible assets disclosure.The study is motivated first by the mandatory adoption of IFRS in 2012 in Nigeria in which all Accounting standards issued by IASB became mandatory for which IAS 38 is inclusive. IAS 38 differs significantly from SAS 31 which provided guidance only for R&D and therefore the need to examined compliance with the new disclosures introduced by IAS 38. Secondly, the study is motivated by the importance of intangible asset in the information era especially in the financial service industry where knowledge and skills rather than the physical assets are the drivers of success. Lastly, the board characteristics are examined on how they affect compliance because board of directors has the primary responsibility of ensuring compliance with accounting regulations.

Extant literatures have recognized good corporate governance as a means of achieving higher compliance with IFRS disclosures (Mislioglu, Tucker &Yukselturk, 2013; Verriest, Gaeremynck&Thornyon 2013). Similarly, prior literatures argued that compliance with IFRS disclosure is affected by governance and enforcement mechanisms (Al-Akra, Eddie, & Ali, 2010; Al-Shammari, Brown, & Tarca, 2008). Board of directors is considered the highest governing mechanism in the management of companies and has the primary responsibility of ensuring compliance with all accounting regulations. A firm's board of director may be considered as the cornerstone of the governance system in a firm because the board of directors on behalf of the shareholders are expected to monitor the management and protect right of shareholders (Madhani, 2015).

1.2 Statements of the Problem

The recognition of intangible assets disclosure in the financial statements is of paramount importance; however, there is a problem due to the lack of recognition criteria outlined in

thefinancial report. This generated heated contest due to a perceived lack of disclosure in some financial report and as a result of these, financial statement remain incomplete and the users do not know the exact information of the intangibles assets managed by the firms and as such the importance attached to intangible asset is ignored (Dutz, Kannebley, Scarpelli & Sharma, 2012). To overcome the challenges of recognition of intangible assets, the International Accounting Standard Board (IASB) issued International Accounting Standard (IAS 38) toaccount for intangible assets and ensure adequate disclosure in the financial statements.

However, despite the moves towards accounting for intangible assets as advocated and provided for by IAS 38 standards, the disclosure of intangibles is still not encouraging as compliance with IFRS disclosure was low in the early stage due to non-familiarity with IFRS disclosure in an environment where IFRS was newly introduced (Bagudo, Yunusa, & Lawal, 2015).GIFT (2017) in its survey disclosed that goodwill as part of intangibles, continues to rise at around 8-10% of total enterprise value and other disclosed intangibles at 6-8% across the world. Between 2011 and 2016, the intangible assets disclosure has worsened although the values of disclosed intangibles on companies' financial position have increased by 5% annually, total enterprise value grew to 13% over the same period. More surprisingly, undisclosed intangible assets rose from $15tn in 2011 to $35tn in 2016 across the globe, an 18% annual increase, suggesting that, if intangible assets are properly accounted for, the disclosed intangible asset growth ought to have outstripped enterprise value rather than the reverse (GIFT, 2017).

Interestingly, in Nigeria the mandatory adoption of IFRS in 2012 and being the information era where the service sector is one of the major components of the stock exchange, intangible asset disclosure is still lagging behind other big economies. As at 2016, Nigeria's disclosed intangibles as a proportion of total intangible value stood at 33.6%, compared to 92.0 % in the

South Korea, 89.4% Cyprus, 75.4% in Mongolia, 64% in Italy, 42.5% in Germany and 36.0% in the UK (GIFT, 2017).

Although, prior literature examined how corporate governance mechanisms affect level of compliance with IFRS disclosure (Hla, Hassan, & Shaikh, 2013; Verriest, Gaeremynck, & Thornton, 2013). Very little is known on how corporate governance mechanism affects compliance with IAS 38 disclosure in Nigeria. Bagudo (2017) and Bagudo et al (2015) examines how governance mechanisms affect compliance with IFRS in Nigeria in 2012 and therefore the study is not all about intangible assets disclosure but on all IFRSs and again the study was just for a one year period and cannot be generalized. Intangible assets has a lot of importance to the service industry (Abubakar & Abubakar, 2015). With this importance of intangible asset to the service industry, there is need to examine board characteristics and IAS 38 disclosure in the Nigerian financial service sector.

In addition, other studies on intangible assets disclosure exist in Nigeria but they are on firm characteristics (Omoye, 2013; Kurawa & Kabara, 2014; Ibadin & Oladipupo, 2015) and value relevance (Abubakar & Abubakar, 2015). The data used for the studies were before the mandatory adoption of IFRS in Nigeria and therefore were based on the old version of Nigerian SAS 31 and concentrated on the Nigerian Manufacturing Sector (Oba, Ibikunle, & Damagum, 2013; Kurawa & Kabara, 2014; Ibadin & Oladipupo, 2015).

1.3 Research Questions

In the light of the foregoing, the following research questions are raised to guide the study:

i. To what extent does board size affects intangible assets disclosure of listed financial service companies in Nigeria?

ii. How does board independence affects intangible assets disclosure of listed financial service companies in Nigeria?

iii. Does board meeting affects intangible assets disclosure of listed financial service companies in Nigeria?

iv. What are the effects of expertise on intangible assets disclosure of listed financial service companies in Nigeria?

1.4 Research Objectives

The main objective of this study is to examine the effect of board characteristics on intangible assets disclosure of listed financial service companies in Nigeria. The specific objectives of the study are to:

i. examine the effect of board size on intangible assets disclosure of listed financial service companies in Nigeria.

ii. assess the effect of board independence on intangible assets disclosure of listed financial service companies in Nigeria.

iii. examine the effect of board meeting on intangible assets disclosure of listed financial service companies in Nigeria.

iv. determine the effect of board accounting expertise on intangible assets disclosure of listed financial service companies in Nigeria.

1.5 Research Hypotheses

Based on the above objectives, the following hypotheses were formulated in a null form:

$Ho_{1:}$ Board size has no significant effect on intangible assets disclosure of listed financial service companies in Nigeria.

$Ho_{2:}$ Board independent has no significant effect on intangible assets disclosure of listed financial service companies in Nigeria.

$Ho_{3:}$ Board meeting has no significant effect on intangible assets disclosure of listed financial service companies in Nigeria.

$Ho_{4:}$ Board accounting expertise has no significant effect on intangible assets disclosure of listed financial service companies in Nigeria.

1.6 Scope of the Study

The study looked at the effect of board characteristics on compliance with intangible assets disclosure for financial service firms listed on the Nigerian Stock Exchange as at 31st December 2017. The study cover a period of six (6) years from 2012 to 2017 because 2012 was the year when mandatory adoption of IFRS became compulsory for all firms listed on the Nigeria stock exchange and IAS 38 disclosure became mandatory for financial reporting in Nigeria. For board characteristics, the study is restricted to board size, board independence, board meetings, and board accounting expertise.

1.7 Significance of the Study

The study is beneficial to a wide range of users as it contributesand helps to grow academic literature by extending the effect of board characteristics and intangible assets disclosure of financial service sectors in contract to studies that have focused on single sector of the economy and this makes the findings more strong and suitable for generalization. Again, it is beneficial to a wide range of users, local investors, financial analysts and other foreign investors in knowing the usefulness of intangible asset disclosure introduced by IFRS as compared to Nigerian SAS and its effects on their decision-making process.

The study is also relevant to regulatory authorities in Nigeria practically as they will have an insight on the extent of compliance with IAS 38 disclosure requirements in order to strengthen their function to guide the shareholders and investors when making an informed decision especially in the composition of board of directors so that important qualities of board of directors are considered in the composition of the board.The study is also beneficial to the IASB, being the international regulatory body of IFRS and one of the objectives of IASB is to promote the use of the standards across the world. The finding of the study is a feedback to IASB on the compliance andthe quality of intangible asset in listed financial service sectors in Nigeria. The regulatory authorities in Nigeria would also have an insight on the effect of the regulatory change and the level of compliance with intangible asset disclosures to strengthen their function. The study also sheds light on the effectiveness of the regulatory bodies in enforcing compliance in Nigeria, as several bodies are responsible for reviewing compliance with IFRS.The theoretical contribution of this work is that it helps to reduce information asymmetry between the management and shareholders of the firm.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter discusses the concept of intangible assets, review ofempirical studies and the theories that underpins the study.

2.2 Conceptualization

This section presents the concepts of the dependent variables (intangible assets disclosure) and independent variables (board size, board independence, board meeting and board accounting expertise).

2.3 Concepts of Intangible Assets disclosure

Intangible assets have an important role to play in a lot of companies, and there are huge benefits in the assets (Ibadin & Oladipupo, 2015). Given a high importance of intangible assets in company's financials as to make sure there are more balanced and true reports on companies' activities (Lev &Daum 2004; Kang &Gray 2011; Ibadin&Omoye 2014). This section will contain the various concepts of intangible assets by various researchers.

Intangible assets can be interchangeably called intellectual capital, the concept of intangible assets have been described by various areas of research. For example in the law discipline, it is referred to as intellectual property, while in economics, it is knowledge assets and some researchers use intangibles when referring to intangible assets(Lev 2001).

GhamariSaeidinia, Hashemi and Aghaei (2012) in their study, described intangible assets as assets that are latent, non-monetary and do not have a physical nature while IAS 38 defines intangible assets as assets that are identifiable, non-monetary assets, and without physical substance. The Lev (2001) state that all these three terms are widely used and they refer to the

same thing which is a non-physical claim to future benefits. Kaufmann and Schneider (2004) ascertain that not only different terms are used to express the concept intangible assets but also different definitions are proposed for each of these terms by various researchers.

The focus on early researchers in the field of intangible assets was on definition and classification. However most of the research works were unable to come up with a consensus definition and classification. Hall (1992) divides intangible assets into assets and resources and Stewart (1997) look at intangible assets as the sum of an organisation's patent, employees' skills and technologies.

Sveiby (1997) in his own work categorises intangibles into three groups, Employee competent, internal structure patent, concepts models, computer and administrative system and external structure (relationship with customers, suppliers, brand names, trademarks and organizational image).

Davenport (1997) affirm that IC is related technology, technological changes and management of information technology; this is in line with the definition of Stewart (1997) that states that the management of information technology that can be put to use to create wealth. Intangible assets has been defined by Smith (1994) as all the elements of a business enterprise that exist in addition to working capital that makes the business work and are often the primary contributors to the earning power of the enterprise with their existence depending on the presence, or expectation of earnings.

Lev (2001) defines an intangible asset as a claim to future benefits that does not have a physical or financial (a stock or a bond) embodiment. The researcher further explains that a patent, a brand, and a unique organizational structure (for example, an internet-based supply chain) that generate cost savings are intangible assets. Intangible assets have been defined by Edvisson (1997) as the knowledge that can be converted into profit. This author further states

that firms depend on intangibles, such as reputation, customer loyalty, name recognition, leadership, and standard setting combined with human capital in order to generate value from the profit generated from the sale of goods and services.

Hall (1992) defines intangible assets as value drivers that transform productive resources into value added assets. In addition, this author explains that intangible assets can be divided into two major categories; these are intellectual property and knowledge assets. Itami (1991) states that intangible assets are invisible assets that include a wide range of activities such as technology, consumer trust, brand image, corporate culture and management skills. Mouritsen, Larsen and Bukh (2001) maintain that IA cannot stand by itself as it merely provides a mechanism that allows the various assets (employees, customers, Information Technology (IT), managerial work and knowledge) to be bonded together in the productive process of the firm.

GIFT (2017) defines intangible assets as a possession of knowledge and experience, professional knowledge and skill, good relationship, and technological capacities, which when applied will give organization competitive advantage. The intellectual capital is defined as intangible critical assets, which cannot precisely be disclosed in the financial statement of a company but reflect the real value of the company and are based on knowledge.

According to Ibadin (2013) disclosure of intangible assets refers to the disclosure that is an excess of legal requirement. This definition is however inconsistence with Abdul and Baxr (2010) who agreed that disclosure of intangible assets is an avenue in providing voluntary or additional information on assets recognized in financial statements. Such information, in excess of mandatory requirement provides explanation on unrecognized assets and help users and other stakeholders to assess business risks inherent in such report (Oliveria& Rodrigues 2006). However for the purpose of this research, the researcher will adopt the definition of Hall (1992)

who defines intangible assets as value drivers that transform productive resources into value added assets.

Various existing approaches were employed by prior literatures to analyze and measure disclosure in annual reports. However, the various approaches were evaluated to know the suitable approach for this research. The approach used is disclosure index, which is employed by many studies as regards disclosure of intangibles in annual reports (Nekhili 2015; La Rosa &Liberato, 2014). Beattie and Thomson (2007) argue that many of the content analysis research methods adopted in prior studies for intellectual capital disclosure measurement lack transparency, specificity, and uniformity and that these deficiencies may give rise to misleading evidence.

Beatie,Mclinnes and Fearnley (2004) documented in his study, scoring of the research instrument was performed manually covering the whole annual report. The dependent variable, intellectual capital disclosure is measured using three different metrics: disclosure index (ICDI) to indicate the variety; word count (ICWC) to represent the volume and word count as a percentage of annual report total word count (ICWC%) to indicate focus in the annual report. For the purpose of this research work, the approach used in scoring the items in the research instrument for the purpose of the disclosure index is essentially dichotomous such that an item scores one if disclosed and zero, if it is not disclosed. The intellectual capital disclosure index (ICDI) for each company can be calculated based on the disclosure index score formula used in (Haniffa and Cooke 2005). The use of a dichotomous procedure in scoring the instrument for the disclosure index will be used in the cause of this study because it treats items equally regardless of any form or content. Oba et al., (2013) in its work measured intangible assets quality as a dummy variable. The study uses the content analysis approach to develop an IA disclosure index. In the work, the content analysis has been successfully applied to investigate

reporting of IA. The method provides useful guidelines and content categories to IC in examining disclosure patterns. A dichotomous non weighted approach was employed. As such a value of one was assigned when an attribute appears in the report while a value of zero was used to indicate that the attribute did not appear in the annual report. Mohamed (2015) in its study uses binary measurement, so each of the items included in the disclosure index scores (1) if disclosed and (0) otherwise.

2.4 Board Characteristics

These features are very paramount to the effectiveness of the board in regards to the disclosure of intangibles assets. Prior literatures have examined various characteristics of the board; as such some selected characteristics are also examined in this study.

2.4.1 Board Size

The number of directors on the board is an important feature that can have much to do with board monitoring and control activity. With large board, directors would deliberate important corporate decisions broadly and would require that the managers disclose important issues to the stakeholders using a larger board, by forming various monitoring committees to supervise managerial activities (Klein, 2002).

Madhani (2005) defines board size as the total number of directors who sit on the board of a company. Zango et al. (2016) define board size as the total number of directors on board. Oba et al. (2013) defines board size as the absolute number of board members. According to Garkaz, Abdollahi, Niknam and Branch (2016), board size is defined as the total number of both the executive and non-directors that a board has.

In Nigeria, the code of corporate governance (COCG) provides that board of every listed firm should be of a sufficient size relative to the scale and complexity of the firm's operations and

should be composed in such a way to ensure diversity. However, the code provides that the number of directors should not go below five (5) members, and no limit is set for what the maximum number of directors present on the board should be. In a different vein, National Insurance commission (NAICOM) which is the regulator of the insurance sector in Nigeria provides that no insurance company shall have less than seven (7) members and not more than fifteen (15) members on its Board.

Mohamed (2015) also define board size as the total number of directors on the board, he however state that board size has a high influence on board effectiveness. According to Ahmad and Daoud (2015), board size is the total number of directors present on board. However, reasonable number of directors a board should have has been the topic of discussion in several works over the years (Ahmad & Daoud 2015). This is because of the divergent views on how effective the size of a board is. According to agency theory, a board with large members is expected to enhance the quality of financial reporting. Moreover, large boards were revealed to be more effective in overseeing and monitoring the activities of the firm when compared to smaller boards (Klein 2002).

According to Garkaz, Abdollahi, Niknam and Branch (2016), board size is the total number of both the executive and non- executive directors that a board has. In Nigeria, the code of corporate governance (COCG) provides that board of every listed firm should be of a sufficient size relative to the scale and complexity of the firm's operations and should be composed in such a way to ensure diversity. For the purpose of this study, board size is defined as the total number of directors on a firm's board as defined by (Zango et al., 2016). Similarly, board size is measured as the total number of directors on the board.

2.4.2 Board Independence

Prior literature has defined board independence in different ways, US defines board independence in the sense of payment or suggested fees received by the directors or the amount of control that the director have over the firm. The board is also said to be independent if it has a director that has no significant contractual relationship with the company and its free from any business.

Yanesari, Gerayli, Ma'atoofi, and Abadi (2012) defines board independence as percentage of independent non-executive directors on board, he states that board independence is one of the most important aspect of board effectiveness, it states that board independence will be more valuable because of their capabilities in checking and monitoring managers and thus reducing agency problem (Fama & Jensen, 1983). Ruth, Emma and Isabel (2011) define board independence as the proportion of independent directors. Fama and Jensen (1983) also speculate that the presence of independence on the board, the more effective it will be in monitoring managerial opportunism. In order to ensure this, the Nigerian code of corporate governance provides that the non-executive directors should be the majority, and that a non-executive director should specify audit roles, choice of audit firm in other to avoid delay in preparation of audit reports The Nigerian (COCG) provides that every listed firm must have a board dominated by the non-executive directors; and at least one of these directors must be independent.

Erkens, Hung and Matos (2012) state that board independence is the percentage of independent directors on the board. Muttakin, Khan, and Belal (2015) also define board independence as the proportion of independent directors to the total number of directors, as such, independent directors are needed on the board to monitor and control the opportunistic behaviour of executive director. Moghaddam, Shakeri, Amani and Kakhki (2014) define board

independence as the ratio of non-executive directors to the total directors on the board. Mohamed (2015) is the percentages of the number of non-executive directors to the total number of directors in the board. Board independence is also said to be the proportion of independent directors in the board (Kent & Stewart, 2008). For the purpose of the study, the definition of Yanesari et al. (2012) which state that board independent is measure as a ratio of non-executive independent director to the total number of directors on the board will be used.

2.4.3 Board Meetings

Board meeting frequency is the total number of meetings held by the directors within the financial period. Zango et al. (2016) defines board meeting as the of board meetings per annum as such, board meeting frequency is a positive pointer of the efficiency of board directors. In Nigeria, provisions have been made on what number of meetings should be held by the directors of every listed firm. Companies and Allied Maters Act (CAMA) provides that board of every listed firm shall meet at least once every quarter as this will make it possible to effectively perform its oversight function and monitor management's performance.

Mohamed (2015) define board meetings as the number of meetings held by the board members during the year and it could be an indicator of board effectiveness in implementing this monitoring role. Turley and Zaman (2007) also state that the number of board meetings can indicate the level of diligence exercised by the board of directors. Kent and Stewart (2008) define board meeting as the number of board meetings held each year. For the purpose of this study, board meeting will be in line with Mohamed (2015) which define board meetings as the number of meetings held by board members during the year. Likewise, board meeting is measured as the number of meetings held in a company within an accounting period.

2.4.4 Board Accounting Expertise

Zango, Kamardin, and Ishak (2016) define board expertise as number of trustees with accounting and financial expert. Kent and Stewart(2008) define expertise as the proportion of members with accounting and financial expertise. Ruth et al. (2011)conclude that, the large number of members on the board increase the range of expertise and the board's monitoring capacity. Mangena and Pike (2005)also define financial expertise as members who are knowledgeable of the business environment, at least one of whom must have accounting or related financial management expertise, defined as the ability to read and understand fundamental financial statements. This expertise may be demonstrated by previous or current employment in finance or accounting and or membership of a professional financial or accounting body. However, this study will go in line with the definition of (Zango et al., 2016) where board accounting expertise is defined as the ratio of board members with accounting expertise to the total number of members on the board.

2.5 Review of Empirical Studies

There are several literatures that are determinants of IFRS compliance and a lot of literatures on internal governance mechanisms in ensuring compliance with accounting disclosures. The variables concerned are board size, board independence, board meeting and board accounting expertise.

2.5.1 Board Size and Accounting Disclosure

Alfraih and Almutawa (2017) studied voluntary disclosure and corporate governance in Kuwait. The study observed 143 firms listed under Kuwait stock exchange between the periods of 2005-2008. The sample of data was 52 with complete data, the techniques of data analysis is regression analysis. The variables under study are non–executive directors, cross directorship, family members on the board, board size, government ownership. The study found out that

board size has a positive relationship between voluntary disclosures among firms listed in Kuwait between these periods. However, the study is not a Nigerian study and cannot be used for justification a Nigerian context, this brings about domain gap.

Ibadin and Oladipupo (2015) examined the determinant of intangible assets disclosure in quoted company in Nigeria within the period of 2005-2010, the sample size was 157 companies and it was drawn through the use of Yamani techniques, pooled and panel data regression was used. The dependent variable studies was disclosure while the independent variable were company size, Leverage , size of audit firm, National differences of company, age of company, profitability, type of industry, foreign activities of company and ratio of market value to book value. However, this study was prior to the mandatory adoption of IFRS in Nigeria and it does not capture the period after the adoption of IFRS and the study does reflects the current happening as the period covered in the study was overtaken by event.

Madhani (2015) examined the impact of board characteristics on corporate governance and disclosure practices of firms listed in Indian stock exchange. The sample for the study was 54 firms for the financial year between the periods of 2011 to 2012. Data were collected from the firms listed in Bombay Stock Exchange sectorial indices were used the variables studied were board size and board composition and the study found out that there is a significant difference between firms with larger board size and firm with lower board size. However, the study is not a Nigeria study and it is a cross sectional study, in that it covered a period of one year which renders it finding non-generalizable.

Allegrini and Greco (2013) investigate the interplay between governance and disclosure in an agency setting in Italy. The population of the study includes all the 186 non-financial firms listed on the Italian stock exchange in 2007, the sample consist of 177 companies. The independent variable were board independence, board size, CEO duality, board meeting and

audit committee meeting while the dependent variable is voluntary disclosure. The study employed OLS regression to test the relationship among the variables. The study found out that board size has a positive relationship among other variables. However, the study is only restricted to Italian companies and cannot be used for the purpose of generalization in a Nigerian context.

Htay, Salman, and Said (2013) studied the impact of corporate governance and disclosure quality of listed banks in Malaysia between the periods of 1996 to 2005. The sample of study were 12 listed banks in Malaysia The variables studied were board leadership structure, independent non-executive director, board size, ownership by the directors, institutional and block shareholders. The result reveal that better disclosure quality of the annual report in banking sector can be achieved by having higher board size. However, the above study was conducted in another country and since an economy is a significant gap in the literature, undergoing a similar research in Nigeria is an important contribution to the body of knowledge.

Jizi, Salama, Dixon, and Stratling (2013) studied corporate governance and corporate social disclosure in the US listed banks, using a large sample of US commercial banks for the period of 2006-2011. The sample of the study is the US commercial banks. The study used tobit regression, the independent variables studied were board size, board independence, CEO duality, board meeting while the dependent variable is CSR disclosure. The study found out that board size is positively related to disclosure. However the study brings about periodic gap and the domain is equally different.

Oba et al. (2013) studied the impact of board mechanisms on intellectual asset disclosure in Nigeria between the periods of 2006 and 2009. The population was the twenty five Nigerian companies that made the Forbes African top 25 companies in 2012 in West African and the sample of 10 companies were selected, the techniques of data analysis logistic regression. The

independent variables were board size, board independence, audit committee independence, board gender diversity and women nationality diversity while the dependent variable was intellectual capital disclosure. The study found out that board size has relevant contribution to intellectual capital disclosure. However banks were not included in the studied firms, the observation of the study was prior to the adoption of IFRS in Nigeria and also, the study of a larger sample size may bring more reliable results.

Bagudo et al (2015) examines how internal governance mechanism affects compliance with all applicable IFRS in Nigeria in 2012. The population of the study is all the 198 listed firms in Nigeria as at 31 December, 2012 and the sample of study was154. The variables under study were board size, board independence, board meeting and board accounting expertise. The study found out that board size among other variable is not statistically significant with IFRS compliance in Nigeria. However the study was just on one year period and cannot be found as a strong generalization when studying IFRS compliance.

Omoye (2013) investigate the possible factor that can influence companies in Nigeria. The population of the study relates to all companies quoted on the Nigerian stock exchange from 2006 to 2010 and the sample consists of 65 to disclosure intangible assets in their report to stakeholders. The study used randomly selected quoted companies over the period of five years from 2006 to 2010. The independent variables were auditor type, industry type, profitability, leverage, company with foreign activities, age of company while the dependent variable is intangible assets disclosure. However, the study has been overtaken by event because so many things have taken place taking into consideration the period covered in the study was before the adoption of IFRS in Nigeria.

Chen and Rezaee (2012) studied the role of corporate governance in convergence with IFRS compliance in China. The sample consists of all the companies that are required to adopt the

new accounting standards. The independent variables under study are audit quality and internal governance against IFRS convergence as the dependent variables. The study found out that board size, as a component of board effectiveness, helped companies align with the disclosure requirement of IFRS in China in 2006. However, the inconsistencies in the literature shows there is need for further study to be conducted in Nigeria.

Aryani and Prabowo (2011) examined the effect of corporate governance on the disclosure of intellectual capital in annual report of banks in Indonesia. The variables used are board size, independent directors and ownership structure and management ownership. The observation was 36 annual reports of banks listed on the Indonesia stock exchange from 2004 to 2008, multiple regression analysis was used to test the hypothesis. The study found out that board size does not affect intellectual capital disclosure. Though the study is on banks but cannot be used for justification in the Nigerian context and the study was also not conducted in Nigeria.

Rouf (2011) examined corporate characteristics, governance attributes and the extent of voluntary disclosure in Bangladesh, the study used 120 non-financial companies in the Dhaka stock exchange in 2007, the study used the ordinary least square regression model to examine the relationship between the independent variable and voluntary disclosure. The result found that there is a significant relationship between board size and voluntary disclosure. However the study was conducted in Dhaka and cannot be used for generalization in Nigeria.

Ruth et al. (2011) studied corporate governance and intellectual capital disclosure. The study used multi-variant technique. The independent variables used in the study were board size, board independence, audit size, CEO duality and the dependent variable is the study was between the periods of 2005 to 2007 among companies in Mexican. The study found out that the larger the board of directors, the greater its disclosure of intangibles. However, the study is for the period of two year and it is not a Nigeria study.

The study is also in line with the study of Abeysekera (2010) who examined the effect of board size on intellectual capital disclosure by Kenyan listed firm among firms listed in Nairobi Stock Exchange over the a two year period, the study uses logistic regression. The variables used are board size among other variables. The study found out that the larger the board size the higher the level of disclosure. However, the study was within the period of two year and this has limited the generalization of the study and the study is also not a Nigerian study.

Al-Akra et al., (2010) examined the influence of accounting disclosure regulation on mandatory disclosure compliance in Jordan, the sample of the study is 80 non financial Jordanian companies between the period of 1996 and 2004, and the study uses multiple regression models. The study found a negative association between board size and compliance with mandatory disclosure. However, the study was on non financial institution and the results cannot be compared with the result of the financial institution. The findings of the study is in line with Alfraih and Almutawa (2017) who examined voluntary disclosure and corporate governance among non-financial firms listed on the Kuwait Stock Exchange between the period of 2005 to 2005. The sample was 206 observations. The study examined board size among other variables and found out that board size is significantly negatively related to disclosure. However the study was for the period of four year and cannot be used for the basis of total justification.

Kent and Stewart (2008) examined the association between the level of disclosure and corporate governance quality and how board size affected the level of IFRS disclosure across 965 firms with the 30 June reporting date in 2005 in Australia. The study finds board size and mandatory disclosure requirement of IFRS are positively associated. However, the study was just within one year and the study is not a Nigerian study as such cannot be applied to the applied in the Nigeria economy context.

Cerbioni and Parbonetti (2007) studied the effect of exploring corporate governance on intellectual capital disclosure in European biotechnology firm. The study also find out that board size has no significant impact on intellectual capital disclosure of technology firms in Europe. However, the study was not a Nigerian study.

2.5.2 Board Independence and Accounting Disclosure

The board of director's independence is one of the important aspects of board effectiveness. From an agency perspective, it is argued that board independence will be more valuable because of their capabilities in checking and monitoring managers and thus reducing agency problem (Fama & Jensen, 1983). Board independence enhances intangible assets disclosure and other forms of disclosure and the various study found out mixed findings and a lot of inconsistency.

Muttakin et al. (2015) studied intellectual capital disclosures and corporate governance in Bangladeshi companies. The study used board independence alongside with other variables. The study consist of 135 non-financial listed on the Dhaka Stock Exchange (DSE). The study found out that board independence has a positive association with the extent of intellectual capital disclosure. However the study is not a Nigeria study and cannot be used in the Nigerian context for generalization

Yekini, Adelopo, Andrikopoulos, and Yekini (2015) examined the relationship between board independence and community disclosure among 373 firms. The study finds board independence to have influenced community disclosure. However, this study is on other forms of disclosure on not directly on intangible assets.

Rasmini, Wirakusuma, & Yuniasih (2014) studied the effects of board diversity on the extent of intellectual capital disclosure. The variables used in the study are board gender, board

nationality, education diversity, board independence and firm size, the study used financial companies listed on Indonesia stock exchange during the period of 2004 to 2009, and the study found out that board independence has no effect on intellectual capital disclosure. However, the study is on board diversity and cannot be majorly used as a reason for making decision..

Wang and Hussainey (2013) examined the impact of corporate governance on the level of voluntary disclosure of forward-looking statements in the narrative section of annual report. The study analyzed the non- financial years ending within the period of January 1996-December 2007 using cross-sectional techniques. The study found a positive relationship between board independence and voluntary disclosure across firms listed in the London Stock Exchange. However, the study is on listed firms in London while this present study is in Nigeria

Yanesari et al. (2012) studied board characteristics and corporate voluntary disclosure; the variables studied were board independence, CEO duality and board ownership. The study used 95 publicly traded Iranian firms between the periods of 2005 to 2010. The study found out that board independence is positively related to voluntary disclosure. However, the study is on voluntary disclosure and cannot be applied for a mandatory disclosure study.

Aryani and Prabowo (2011) examined the effect of corporate governance on the disclosure of intellectual capital in annual report of banks in Indonesia. The variables used are board size, independent directors, and ownership structure and management ownership. The observations were 36 annual reports of banks listed on the Indonesia stock exchange from 2004 to 2008; multiple regression analysis was used to test the hypothesis. The study found out that board independence does not affect intellectual capital disclosure. Though the study is on banks but cannot be used for justification in the Nigerian context.

Al-Shammari, Brown and Tarca (2008) investigated the relationship between corporate governance and voluntary disclosure in the annual report of 170 Kuwaiti companies on the Kuwait stock exchange in 2007. The variables studied are the proportion of non-executive director to the total number of directors on the board and found out that there is a positive relationship between the independent director and voluntary disclosure in Kuwait. However, the study is not a Nigeria context.

Bader and Waleed (2010) investigated the relationship between corporate governance and voluntary disclosure in the annual report of 170 Kuwait companies listed on the Kuwait stock exchange in 2007, the variable used in the study is proportion of non- executive director to total number of directors among other variables, the study used univariate and multivariate regression analysis to examine the relationship. However, the study used cross sectional data and the study is not a Nigeria study.

Barako (2007) studied the determinants of voluntary disclosures in Kenyan company's annual reports. The study provide longitudinal examination of voluntary disclosure practice between 1992to 2001, the study used pooled OLS for the basis of analysis. The variables studied are non-executive director among other variables, the study founds out a negative but significant relationship between non- executive director and disclosure. However the study is foreign and cannot be used in the Nigerian contest.

Cerbioni and Parbonetti (2007) examined the relationship between governance variables and voluntary intellectual capital disclosure in a sample of European biotechnology firm. The variables studied are proportion of independent directors, board dimension, CEO duality and board structure. The study finds a positive relationship between the proportion of independent directors and intellectual capital disclosure. However, the study is not in the Nigeria context and cannot be used for justification because the economy differs.

Gisbert and Navallas (2013) examined the association between voluntary disclosure and corporate governance in the presence of severe agency conflicts across 62 non-financial firms listed in the real Madrid stock exchange in 2005. Board independence was studied among other variables. The study finds board independence to have increased voluntary disclosure. However, this study is also a cross sectional study.

Htay et al. (2013) studied the impact of corporate governance and disclosure quality of listed banks in Malaysia. The variables studied were board leadership structure, independent non-executive director, board size, ownership by the directors, institutional and block shareholders. The result reveal that better disclosure quality of the annual report in banking sector can be achieved by having higher proportion of independent non-executive director. However, the findings of the above studies were inconsistence.

Verriest et al. (2013) investigated how board independence affected compliance with specific IFRS in 2005 across 223 listed firms in EU and find out that the greater the board independence, the higher the compliance with IFRS. However the study is for the period of one year.

Samaha, Dahawy, Hussainey, and Stapleton (2012) examined the extent of corporate governance disclosure and its determinants on the developing market in Egypt. The study found out that corporate governance disclosure is associated with board independence. However, the study is in Egypt.

Stefanescu (2012) studied the impact of board independence on total disclosure, mandatory disclosure and voluntary disclosure across 46 banking institution in London in 2010. The study found out that board independence affects all types of disclosure positively. However, the study is not a Nigerian study.

Nelson et al. (2010) also examined the role of corporate governance in mitigating the selective disclosure of executive stock option across 115 firms on standard and poor 300 for the period of 2001 to 2004. The study found out that board independence has negative impact on executive stock option disclosure. However, this study is inconsistency with the other study

Li, Mangena and Pike (2012) examined intellectual capital disclosure and corporate governance structure in the UK firms between the period of 2004 and 2005. The study finds out that board independence affects intellectual capital positively and significantly. However, the study is also a cross sectional study and it is not a Nigerian study.

2.5.3 Board Meetings and Accounting Disclosure

Prior literature have examined board meetings on a lot of disclosures, the findings from these studies provides mixed results. Zango et al. (2016) examined the impact of corporate governance characteristics and IFRS 7 financial instrument disclosure among 14 listed banks in Nigeria from 2008 to 2012. The study proxy corporate governance with board size, board expertise, board committee, board meetings, audit quality, board gender and found out that board meeting have a negative effect on the relationship with disclosure of IFRS 7. However, the study stopped its findings in 2012 which is just one year in which there was mandatory disclosure and this study intend to start from where the study stopped.

Mohamed (2015) studied corporate governance and disclosure of research and development disclosure in the annual reports of the UK non-financial firms. The study employs two techniques to examine the relationship between the R&D voluntary disclosure and the independent variables: OLS and Censored Regression. The study proxy board meetings alongside with other variables and found out that board meeting has no significant association with the level of research and development. However, the business environment has change

and as such there is need for more research and the inconsistent findings and since the study was conducted in UK the findings cannot be extended to Nigeria.

Allegrini and Greco (2013) investigated the interplay between governance and disclosure in an agency setting. Board meeting was a proxy for corporate board alongside other variables and found out that a positive relationship exist between board meeting and voluntary disclosure. However, the study was just within one year and the result of the findings cannot be generalized.

Chen and Rezaee(2012) examined how internal governance mechanisms helped companies align with the disclosure requirements of IFRS across 101 firms in China in 2006. The study finds board meetings, as one of the proxies of board effectiveness and is positively associated with IFRS convergence. However, the study was just within one year and the result of the findings cannot be generalized.

Li et al. (2012) studied the effect of audit committee characteristics on intellectual capital disclosure, the variables used in the study are board size, frequency of meeting, audit committee director, audit committee independence and financial expertise. The study observed UK intellectual capital intensive sector companies that were listed on the London stock exchange as at 30th December, 2005.The study found out that frequency of board meetings has a positive association with intellectual capital disclosure. However the study is just for the period of one year. In general the mixed findings in the above literature and the limited period of study give room for more study in the area.

Kent and Stewart (2008) examined the association between the level of disclosure and corporate governance quality and how board meetings affected the level of IFRS disclosure across 965 firms with the 30 June reporting date in 2005 in Australia. The study finds board

meetings and mandatory disclosure requirement of IFRS are positively associated. However, the study was just within one year and the result of the findings cannot be generalised.

Laksmana (2008) examined corporate board governance and voluntary disclosure and found frequency of board meetings had no impact on disclosures of compensation practices of listed firms on Standard & Poor 500 in 1993 and 2002.

Nelson et al. (2010) examined the role of corporate governance in mitigating the selective disclosure of executive also find board meetings frequency did not have any impact on executive stock option disclosure across 115 firms on Standard & Poor 300 between 2001 and 2004. The literature on financial disclosure quality and performance also shows that board meetings have a positive impact on financial disclosures and performance.

Vafeas (1999) studied board meetings and firm performance and found out that the performance of boards that meet regularly is greater than the performance of boards that meet less regularly.

Karamanou and Vafeas (2005)studied the association between corporate board, audit committees and management earnings forecast. The study also found out that frequency of board meetings is related to greater forecast accuracy across 275 firms from security prices database for the period 1995 and 2000.

2.5.4 Board Accounting Expertise and Accounting Disclosure

Accounting expertise are said to be members on the board of directors with accounting and financial experience. Zango et al (2016) examined the impact of corporate governance characteristics and IFRS 7 financial instrument disclosure among 14 listed banks in Nigeria from 2008 to 2012. The study proxy corporate governance with board size, board expertise, board committee, board meetings, audit quality, board gender and found out that board

expertise have a positive effect on the relationship with disclosure of IFRS 7. However, the study stopped its findings in 2012 which is just one year in which there was mandatory disclosure and this study intend to start from where the study stopped.

Li et al. (2012) studied the effect of audit committee characteristics on intellectual capital disclosure, the variables used in the study are board size, frequency of meeting, audit committee director, audit committee independence and financial expertise. The study observed UK intellectual capital intensive sector companies that were listed on the London stock exchange as at 30th December, 2005.The study found no significant relationship between intellectual capital disclosure and financial expertise. However the study is just for the period of one year. However, the scanty literatures in this study cause for more research in the variable again the disclosure of intangible assets.

Kent and Stewart (2008) examined the association between the level of disclosure and corporate governance quality and how board meetings affected the level of IFRS disclosure across 965 firms with the 30 June reporting date in 2005 in Australia. The study found out that audit committee with a fewer number of financial and accounting experts provided more disclosures with IFRS in the year of IFRS adoption in Australia. In contrast to IFRS disclosures, Nelson et al. (2010) also examined the role of corporate governance in mitigating the selective disclosure of executive stock option across 115 firms on standard and poor 300 for the period of 2001 to 2004 and found find accounting expertise members does not have any significant impact on executive stock options disclosure in Australia.

Cohen, Krishnamoorthy, and Wright (2002) examined the impact of various corporate governance factors. The findings from the study revealed that there is an increase in the ability to ensure compliance or detect non-compliance with accounting regulations. Karamanou and Vafeas (2005) studied the association between corporate board, audit committee and

management earnings forecast and found that there is a positive market reaction to the appointment of board expertise in the earnings forecast disclosure in an organization.

2.6 Theoretical Framework

The theory that underpins the study is agency theory. Agency theory was developed in the 1960 by Jensey and Meckling. Agency problem arises when cooperate parties have incompatible goals and interests (Eisenhardt, 1989). Agency theory explains the relationship that exist between the agent and the principal in which the principal employs the agent to perform services and take decisions on his behalf using powers vested on him (Fama& Jensen, 1983). Agency theory explains the link between disclosure and corporate governance where board mechanisms are employed to reduce agency problems arising from the separation between ownership and management. Agency problem exist when the principal and the agent have different interest of opinion. As such, the interest of managers can change the interest of the investors (Jensen & Meckling, 1976). Agency theory was also used in the work of (Mohamed, 2015, Aryani & Prabowo, 2011 and Ibadin & Oladipupo, 2015). However, the benefit of disclosure according to theoretical and empirical evidence is that it helps in reducing information asymmetry and irregularity of information between the principal and the agent. Sound financial disclosure lessens agency problem by bridging information asymmetry gap that exist between the managers and shareholders (Karamanou & Vafeas, 2005). The more information is disclosed, the easier it becomes for the investors to reduce doubt and take planned decisions (Li et al., 2012).

More so, this theory is relevant to the study because, the board is an intermediary between the management and the stakeholders. As such, the information asymmetry between the firm and the capital market and between informed and uninformed investors can be reduced by increasing disclosure and firm's transparency. In addition, the regulatory monitoring by the

FRC to ensure compliance, internal governance mechanisms are put in place to ensure effective monitoring of compliance with accounting regulations. Board characteristics are used as proxies for reducing agency cost because their monitoring role could limit opportunistic behaviour by management.

Similarly, Jensen and Meckling (1976) argue that if the opportunistic behaviour is reduced, management may be compelled to provide more information to meet the demand of users of information. Prior literature has also stressed the importance of the governance mechanism in enhancing the board's capability to reduce agency cost by providing more disclosure (Barako, 2007). To reduce agency cost resulting from information asymmetry, Barako (2007) argue that managers have access to private information on investment opportunities, and financing policies of a company, which if properly communicated, could optimize company value. In addition to regulatory monitoring of IFRS by regulatory bodies to ensure compliance, there are other internal governance mechanisms put in place to ensure effective monitoring of compliance with accounting regulations. These internal governance mechanisms can be used as proxies for reducing agency cost because their monitoring role could limit opportunistic behaviour by management.

Other quality derived from the agency theory is board independence from the management which helps to reduce problems between owners and management, the board is said to be a middle person and should be independent from the management so that the board could be able to monitor the management effectively which is in line with the interest of the shareholders (Madhani, 2016). The ability of the board to monitor a company's operations depends on its size, but the size. Moumen, Ben Othman, & Hussainey (2015) argue that large board is likely to increase member's expertise which wills likely guarantees high level compliance with accountability standard. Fama and Jensen (1983) argue that the higher the proportion of non-executive directors in the board, the higher the ability of the board to effectively monitor

management activities, thereby reducing information asymmetry. In line with the agency theory, Cerbioni and Parbonetti (2007) argue that a board with a higher proportion of non-executive directors mitigates agency conflict. Kent and Stewart (2008) also argue that the monitoring capacity of the board of directors depends on the directors' independence. Moumen et al., (2015) also argue that the higher the proportion of non-executive in the composition of the board of directors, the more likely to disclose information. Chen and Rezaee (2012) argue that for a board to fulfill its supervision function effectively, it must be active in monitoring management by meeting regularly to ensure reliable and credible financial statements. Lipton and Lorsch (1992) argue that the boards of directors that meet regularly are more likely to perform their duties in an effective and efficient way.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the research design, population and sample of the study, the sources and method of data collection, techniques of data, model specification and measurement of variables.

3.2 Research Design

The study used correlational and expost facto research design to address the objective of examining the effect of board characteristics on intangible assets disclosure of listed financial service firm in Nigeria. Correlatonal research design was chosen because it helps to measure the relationships that exist between variables while expost facto research design is used where the cause and effect of an event is examined. The study employed positivist approach which will require problem identification, literature review, hypothesis development and application of scientific methods to come up with the results (Ryan, Scapens, & Theobold, 2002).

3.3 Population and Sample Size of the Study

The population of the study comprises of all financial service firms listed on the Nigerian stock exchange as at 31st December 2017. Based on the information availablein the Nigerian Stock Exchange website, the total number of financial service firms was 57 as at 31st December 2017(Appendix II).The study used filters to arrive at a sample which includes firms with the required data available for the period of 2012-2017 and the firms that adopted IFRS requirement for the disclosure of intangible assets for the period of study.

Using these criteria, thirty (30) firms were arrived at as the sample of the study (see appendix III) and the whole sample size were used.

3.4 Source and Method of Data Collection

The study used secondary source of data because the study is on mandatory disclosure. Both the independent variables and dependent variable data is extracted from the auditedannual report of the financial statements of firms under study. In determining compliance with IAS 38 disclosure, we adopt the IAS 38 compliance checklist of PwC (2017). In all, 25disclosure required items were extracted based on the PwC IAS 38 compliance checklist (see appendix I). The disclosure index has been considered as the best method to measure the extent of disclosure to which a disclosure is required. Disclosure indexes are extensive lists of selected items which may be disclosed in corporate annual reports (Marston&Srieves, 1991).

3.4.1 Compliance Index

The index is measured as the ratio of the total items disclosed to the total applicable disclosure of that firm. This is in line with prior literature which suggests careful examination of each paragraph in the standard because some required disclosures are encouraged but not mandatory. In addition, some paragraphs make reference only to the disclosure requirement of other standards and therefore, are not mandatory disclosures in that standard but other standards (Alfraih & Almutawa, 2017; Tsalavoutas, 2009).

3.5 Technique of Data Analysis

Based on the study data type, the study employedpanel data regression technique. Panel data regression technique was used because the data is a panel data that consist of both time series and cross sectional. The data was analyzed with the aid of STATA statistical software. . Robustness tests of multicollinearity and heteroskedasticity are also conducted, to address the panel effect of the data, fixed effect and randon effect options were explored.

Hausmanspecification test was also used to provide direction as whether fixed effect or random will be used.

To determine the extent of compliance with IAS 38 disclosures, there are two types of disclosure index approach, the weighed and the unweighted disclosure index approach. The weighted disclosure is the index that attached different weight to each disclosure requirement and this is usually used when studying more than one standard, while the unweighted disclosure index is an index use when studying only one standard. The index is computed as ratio of total number of disclosure complied with to the total applicable disclosure. The scoring will be based on careful review of intangible assets disclosed in the financial statements (income statements, financial position and notes to the accounts) of the selected firm the unweighted compliance index which attached equal weight on each disclosure requirement was used (Al-Shammari et al., 2008; Tsalavoutas, 2011; Mısırlıoğlu et al., 2013). Each applicable item if disclosed by the firm is coded 1 and 0 if not disclosed. In all, 25disclosure required items were extracted based on the PwC IFRS compliance checklist. Hence, the disclosure checklist is considered error free, reliable and ensures consistent measurement across time (PwC, 2013).

The index is measured as the ratio of the total items disclosed to the total applicable disclosure of that firm. This is in line with prior literature which suggests careful examination of each paragraph in the standard because some required disclosures are encouraged but not mandatory. In addition, some paragraphs make reference only to the disclosure requirement of other standards and therefore, are not mandatory disclosures in that standard but other standards (Alfraih & Almutawa, 2017; Tsalavoutas, 2009).

The disclosure index is given as:

$$\textbf{INTANGIBLE}_i = \frac{T = \sum_{i=1}^{n} d\,i}{M = \sum_{i=1}^{m} d\,m} \qquad (1)$$

Where

$INTANGIBLE_i$= the extent of compliance with IAS 38 disclosure requirement by company i and $TADISCL_i \leq 1$ and≥ 0.

T = the total number of items disclosed by firm i,

M = the maximum number of disclosure applicable to firm i

di = the item disclosed and

dm= applicable disclosure.

The index is consistent with the disclosure index used by prior literature (Hodgdon,tondkar, Adhikari & Harless 2009; Tsalavoutas, 2011).

3.7 Variables Measurement

The definition of measurements of both the board characteristics variables and intangible asset disclosure used are given in Table 3.1

Table 3.1
Variables definition and measurements

Variables	Definition and Measurements	Prior Literature
Intangible Assets (INTANGIBLEASSET)	Weighted disclosure index (1 if disclosed and 0 if otherwise)	Yanesari et al., (2012)
Board Size (BDSIZE)	The number of directors on the board	Oba, Ibikunle, and Damagum, 2013; Kent and Stewart (2008);1 Al-Akra et al. (2010)
Board Independence (BDIND)	The ratio of non-executive directors to the number of directors on the board.	Yanesari et al. (2012)
Board meetings (BDMEETING)	Number of board meeting held within the financial year of the	Kent and Stewart(2008); Chen and Rezaee (2012)
Board Accounting Expertise (BDAEX)	The ratios of members of the board of directors with accounting expertise to the number of directors on the board	Zango et al. (2016)
Firm size	Total assets	Al-Akra et al. (2010);
IND	Industry Classification	Al-Shammari et al. (2008)

Source: Compiled by Author from Literature Review, 2018

3.7.1 Control Variables

Firm Size: The addition of firm size as a control variable is because the firm under study are expected to have equal size.However, there is variation in the size of the assets. Firm size of the sampled firm help in taking care of such variation among the firms under study.

Industry Classification: The inclusion of industry as a control variable is due to classification based on the category into which the firm under study fall based on common characteristics. The classification is based on insurance and non-insurance firms. It is measured as 1 if the firm is insurance and 0 if otherwise.

3.8 Model Specification

To examine how corporate governance mechanisms explain the differences in compliance across firms, both univariate and multivariate analysis will be conducted. The

univariateanalysis will involve correlation analysis in which the relationship between the compliance scores and the governance mechanism will be examined. The multivariate analysis will involve the use of multiple regressions (Bagudo et al. 2015) and the regression equation is specified below:

$$INTANGIBLEASSET_{it} = \beta_0 + \beta_1 BDSIZE_{it} + \beta_2 BDIND_{it} + \beta_3 BDMTG_{it} + \beta_4 BDEX_{it} + \beta_5 FSIZE_{it} + \beta_6 IND_{it} + \varepsilon_{it...} \quad \textbf{(2)}$$

Where:

INTANGIBLEASSET= Intangible Assets

BDSIZE = Board Size

BDIND=Board Independence

BDMEETING =Board Meeting

BDACEXP=Board Accounting Expertise

TASSET= Firm size

IND= Industry

$\beta_{0=}$ Intercept while $\beta_{1,}$ $\beta_{2,}$ $\beta_{3,}\beta_{4,}$ β_5 and β_6 = the coefficients of the variables.

ε=is the error term

i= Firm

t = time

CHAPTER FOUR
DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter contains analysis of descriptive statistics, correlation matrix, robustness test, hausman specification test and regression results. The results presented are analysed and the findings are discussed. The hypotheses of the study as formulated in chapter one are also tested in this chapter to determine the effect of board characteristics on intangible assets disclosure of listed financial service firms in Nigeria. Discussion of findings and policy implications are also contained in this chapter.

4.2 Descriptive Statistics

The descriptive statistics shows the picture of the data used, it includes the mean, standard deviation, maximum, minimum, skewness and kurtosis of the dependent and independent variables.

Table 4.1 contains the descriptive statistics of the dependent and independent variables.

Table 4.1: Descriptive statistics

Variables	No	Mean	SD	Min.	Max.	Skewness	Kurtosis
Intangible asset	180	0.729	0.150	0.460	0.960	0.197	0.000
Bdsize	180	13.650	2.547	7.000	17.00	0.104	0.000
Bdind	180	0.146	0.055	0.065	0.286	0.000	0.826
Bdmeeting	180	5.083	1.386	3.000	11.000	0.000	0.002
Bdacexp	180	0.286	0.0540	0.170	0.570	0.000	0.000
Tassets	180	509119.4	955886.7	5162.89	4833658	0.000	0.000
industry	180	0.6	0.491	0	1	0.025	

Source: Stata Output, 2019

Table 4.1 shows the mean of intangible assets disclosure of approximately 73% while the standard deviation of approximately 15% indicates that there is low variation in the level of intangible asset disclosure. The mean of intangible assets disclosure indicates that on average,

listed financial service firms in Nigeria had 73% of their intangible assets disclosed. Intangible asset disclosure shows a minimum of 46% and a maximum of 96% which indicate that intangible assets has a low disclosure of 46% and a high disclosure of 96% and it implies that after the mandatory adoption of IFRS in Nigeria in 2012, some companies have substantially complied with the disclosure requirements of IAS 38 which is above average even though some companies achieved low level compliance below 50%. This shows that though higher level of compliance is achieved; there is still a low compliance in the level of compliance with the studied firms. Intangible assets disclosure has a skewness and kurtosis value of 0.1967 and 0.0000 respectively.

Table 4.1 has an average board size of 14 members and the standard deviation is 2 which indicate that there is deviation among the board of directors in the company. The minimum board size is 7and maximum board size is 17 respectively. The minimum board size of 7 indicates that the firms with the lowest number of directors on its board had 7 directors; however, those firms with the highest directors present on their board had 17 directors within the period of the study. The skewness and kurtosis results are 0.1041 and 0.0000 respectively.

Additionally, board independence has a mean value of approximately 15% with a standard deviation of approximately 6%. The mean value of 15% shows that on average, 15% of the directors on the listed financial service firms in Nigeria were 15% independent directors. The standard deviation shows there is a low variability in the level of board independence among the studied firm over the period of time. The minimum and maximum values are approximately 6% and 27% respectively which indicate that the board of director that exercised the lowest level of independence had 6% of their board members to be non executive independent director while the board of the firms with the highest level of independence has approximately 27%. The skewness and kurtosis value are 0.0002 and 0.8260 respectively

Board meeting has a mean value of approximately five (5) while the standard deviation is approximately one (1). This standard deviation value indicates that there is low variability in the numbers of meeting held by the board of directors of firms under study and thus the board put into effect their responsibilities properly. Board meeting has a minimum of three (3) and a maximum of eleven (11). This minimum value of three (3) implies that within the period of study, the board members of the firms that had the lowest meeting held only 3 meetings within the accounting period; while the board of those firms with the highest meetings held eleven (11) meetings. The skewness and kurtosis value are 0.0000 and 0.0000.

Board accounting expertise has a mean of approximately 28% with a standard deviation of 5%. This indicates that on average 28% of members of the board are accounting expert. Board accounting expertise has a minimum of 17% and a maximum of 57%. This indicates that the board member with the lowest accounting expertise among the members of the board of sampled firm s are 17% while a board member with the highest accounting expertise among the sampled firms are 57%. As such, all the sampled firms have complied with the provisions of Security and Exchange Commission (SEC) code of corporate governance 2011 which requires at least one member of board of directors to be appointed should possess accounting and financial expertise. The skewness and kurtosis result were 0.0000 and 0.0000 respectively.

Firm size has a mean value of ₦5.09billion indicating that on average, all the listed financial service firms in Nigeria have total assets of ₦5.09billion, while the standard deviation of ₦9.56billion shows a high deviation of the total assets of listed insurance firms in Nigeria. Firm size has minimum and maximum values of ₦516billion and ₦4.833trillion respectively.

Industry has the mean value of 0.6 with a standard deviation of 0.49, this shows a low deviation of the total assets of listed insurance firms in Nigeria. Industry has minimum and maximum values of 0 and 1 respectively.

4.3 Correlation Analysis

The correlation matrix shows the relationship that exist between the dependent variable and independent variable as well as the relationship that exist among the independent variables themselves. The correlation test also helps in checking for the presence of multicolinerity.The correlation matrix and a VIF test is shown below:

Table 4.2: Correlation Matrix

Variables	Intangible asset	Bdsize	Bdind	Bdmeeting	Bdacexp	Tassets	industry
Intangible asset	1.0000						
Bdsize	0.5283* 0.0000	1.0000					
Bdind	-0.2966* 0.0001	-0.5470* 0.0000	1.0000				
Bdmeeting	-0.1874* 0.0118	-0.1136 0.1290	0.0447 0.5514	1.0000			
Bdacexp	0.3640* 0.0000	-0.1872* 0.0118	0.1038 0.1656	-0.1043 0.1633	1.0000		
Tassets	-0.0581 0.4385	-0.688 0.3591	0.0307 0.6823	0.2495* 0.0007	-0.0477 0.5245	1.0000	
industry	0.0280 0.7092	0.0482 0.5203	-0.338 0.6523	-0.2298* 0.0019	0.0202 0.7875	-0.7289* 0.0000	1.0000

Source: Stata Output, 2019

The result in Table 4.2 shows that the relationship between the dependent variable (Intangible Asset Disclosure) and the independent variables. The coefficient of boardsize and intangible asset disclosure is 0.5283 which is significant at 1%. This implies that board size has a positive relationship with intangible assets disclosure of listed financial service firms in Nigeria. This is expected because an increase in board size is supposed to increase intangible asset disclosure.

The results in table 4.2 show that the coefficient ofboard independence and intangible asset disclosure is -0.2966 though it is significant at 1%. This implies that board independence has a negative relationship with intangible assets disclosure of listed financial service firms in Nigeria and again an increase in board independence will lead to a decrease in intangible assets disclosure of listed financial service firms in Nigeria.

The result in table 4.2 show the coefficient ofboard meeting and intangible asset disclosure is -0.1874 which is significant at 5%. This implies that board meetings has a negative relationship with intangible assets disclosure of listed financial service firms in Nigeria and again an increase in board meeting will lead to a decrease in intangible assets disclosure of listed financial service firms in Nigeria.

The result in table 4.2 show the coefficient ofboard accounting expertise and intangible asset disclosure is 0.3640 which is significant at 1%. This implies that board accounting expertise has a positive relationship with intangible assets disclosure of listed financial service firms in Nigeria and an increase in board independence will lead to an increase in intangible assets disclosure of listed financial service firms in Nigeria.

The result in Table 4.2 also suggest likely absence of Multicollinearity among the independent variables. This is because the highest relationship among the independent variables is -0.7289 as non of the relationship reach the threshold of 0.8 as suggested by (Hair, Black. Babin& Anderson, 2010). As such, there is not likely going to be presence of multicolinearity among the independent variables.

4.4 Robustness Tests

Table 4.3 VIF Result

VARIABLE	VIF	1/VIF
Ltasset	1.53	0.652241
Indutry	1.51	0.660785
Bdsize	1.43	0.696922
Bdind	1.39	0.716969
Bdmeeting	1.10	0.908315
Bdacexp	1.03	0.969971
Mean VIF	1.33	

Source: Stata output, 2019

In table 4.3, VIF test for multicollinearity was conducted to check for presence of multicollinerity, as absence of multicollinearity is one of the assumption of the regression model. One way to detect the presence of multicollinearity is through the VIF test (Gujirati2004). It shows how the presence of multicollinearity increases the variance of an estimator. The rule of thumb states that a variable is considered to be high if the VIF is greater than 10 (Gujirati 2004) and the tolerance value or all variables is greater than 0.10. This rule is applied in this study. The mean VIF of 1.33 which is less than 10 it implies the absence of multicolinearity. The robustness test conducted also include hausman specification test and heteroskedasticity test.

4.4.1 Test for Heteroskedasticity

Heteroskedasticity arises when the error terms along the regression are not equal. The presence of heteroscedasticity violates the homoscedasticity assumption.In this study, heteroskedasticity was tested using Breusch Pagan's test. The result shows that there is presence of heteroskedasticity. This is becausethe result of the wald test for groupwiseheteroskedasticity show the chi square value of 947.36 and a p-value of 0.0000 which is significant.

4.4.2 Hausman Specification Test

The study conducted Hausman specification test after fixed effect and random effect test were carried out to choose the more preferred model between thefixed effect and random effect model. The hausman specification test suggested that fixed effect model should be interpreted because the hausman test has a chi square value of 40.99 and a p-value of 0.0000, the results are shown on the appendix.However, the presence of heteroskedasticity made us to subject the selected model to a further test so as to overcome the heteroskedaticity problem. A further test called panel corrected standard error regression test was conducted and the result was used for interpretation.

4. 5 Interpretation of Regression Result, Discussion of Findings and Hypotheses Testing

Table 4.4: Panel Corrected Standard Error Regression Result

DISCL	Coefficients	Z	P>|z|
BDSIZE	0.341	5.69	0.000
BDIND	-0.0103	-0.06	0.953
BDMTG	-0.1266	-2.48	0.013
BDAEXP	1.430	9.34	0.000
FSIZE	0.0270	4.27	0.000
INDUSTRY	0.01715	1.50	0.134
Constact	-0.297	-2.17	0.030
Number of observations			180
Number of groups			30
R-square			0.5397
Wald chi2(6)			149.55
Prob> chi2			0.0000
Hettest			0.0000

Source: Stata Output, 2019

The results from Table 4.4 show that the explanatory power of the panel corrected standard error regression model has an R-square of 53.97 and the model is statistically significant at 1%. This shows that the board characteristics variables (board size, board independence, board accounting expertise, and board meetings) jointly and significantly explain 53.97% with intangible asset

while 46.03% is explained by other factors outside the board characteristics variables captured in the study model. The F-statistics is significant at 1%, this shows that the model is fit.

4.6 Discussion of Findings

In table 4.4, board size has an approximate coefficient of 0.34. This indicates that the higher the board size, the higher the level of disclosure of intangible assets. This means than an increase in board size will lead to an increase in disclosure of intangible assets by 34%. This is possible because, when there are too many directors on the board, it gives them the opportunity to have many people to scrutinize the financial reports prepared by the management, as any items left undisclosed will be identified and disclosed due to the large number of the directors.

In table 4.4, board independence has a coefficient of -0.010.This suggests that board independence which is measured by proportion of non-executive independent directors to total number of directors on the board has a negative effect with intangible assets disclosure of listed financial service firms in Nigeria. This can be as a result of the fact that independent directors do not have substantial shareholdings in the firm; this can make them not to put much effort in ensuring the quality of the financial reports.

From table 4.4, board meeting has a coefficient of approximately -0.127. This suggest that board meetings which is measured by the number of times the board of directors attended meetings during the accounting period has a negative effect on intangible assets disclosure of listed financial service firms in Nigeria.

From table 4.4, board accounting expertise has a coefficient of approximately 1.43. This indicates that the higher the number of board accounting experts on the board the higher the level of intangible assets disclosed. This means than an increase in board accounting experts will lead to an increase in disclosure of intangible assets This is possible because, when there are too

many directors with accounting expertise on the board, it gives them the opportunity to have many people with financial reportingknowledge to scrutinize the financial reports, as any items left undisclosed will be identified and disclosed due to the large number of directors with accounting expertise.

4.7 Hypotheses Testing

From table 4.4, the p-value of board size is 0.000 which is significant at 1%. Therefore, the null hypothesis one which states that board size has no significant effect on intangible asset disclosure of listed financial service firms is rejected. The findings is in line with the arguments provided in the literature that has suggested that the larger the board size, the higher the board's effectiveness (Gisbert & Navallas, 2013; Jizi et al., 2013). The study is also in line with Alfraih and Almutawa (2017), Madhani (2015), Allegrini and Greco (2013) and Oba et al. (2013)who submitted that board size has a significant relationship with intangible assets disclosure but it contradict the relationship of Aryani and Prabowo (2011)and Al-Akra et al., (2010)who found board size to be insignificant.

From table 4.4, the p-value of board independence is 0.953 which is not significant. The study falls to reject the null hypothesis two which states that there is no significance between board independence and intangible assets disclosure of listed financial service firms in Nigeria. The findings is in line with Barako (2007), Aryani and Prabowo (2011) but contradicts the study ofGisbert and Navallas (2013), Htay et al. (2013) and Muttakin et al. (2015)who found a significant effect between board independence and intangible assets disclosure.

From table 4.4, the p-value of board meeting is 0.013 which is significant at 5%. The study will reject the null hypothesis which states that there is no significance effect between board meeting and intangible assets disclosure of listed financial service firms in Nigeria. The result is

consistent with the findings of Allegrini and Greco (2013) and Chen and Rezaee(2012) but not in line with Kent and Stewart (2008), Zango et al. (2016) and Mohamed (2015). However,

From table 4.4, the p-value of board accounting expertise is 0.000 which is significant at 1%. Therefore, the null hypothesis which statethat board accounting expertise has no significant effect with intangible asset disclosure of listed financial service firms in Nigeria will be rejected. The findings is in line with Kent and Stewart (2008)Zango et al (2016), but not in line with Li et al. (2012).

The summary of hypotheses testing is shown in table 4.5

Table 4.5: Summary of Hypotheses Testing

Independent Variables	Expected sign	Reported sign	Significant /Not Significant	Remarks
Board size	+	+	Sig(1%)	Hypothesis one is rejected
Board Independence	+	–	Not sig	Hypothesis two fail to be rejected
Board Meeting	+	–	Sig (5%)	Hypothesis three is rejected
Board Accounting Expertise	+	+	Sig (1%)	Hypothesis four is rejected

Sources: Author's compilation from stata result output

4.8 Policy Implications of the findings

From the regression results, the following policy implications were deduced

From the regression results, board size is positive and significant to the disclosure of intangible assets. This implies that if the board size is increased by one member, it will lead to an increase in intangible assets by 34%. The IAS 38 has provided for what firms should disclose as their intangible assets and how it should be disclosed; moreover, this standard expects every firm to ensure 100% compliance with intangible asset. The implication to the shareholders is that, if they ensure that their boards size does not go below the minimum level of board size as provide by the code of corporate governance, higher level of disclosure will be achieved.

In the above results, board independence has a negative and insignificant effect with intangible assets disclosure. The implication is that an increase in non-executive directors sitting on the board of listed financial service firms in Nigeria will lead to a decrease in the level of intangible assets that will be disclosed. Despite the provision of code of corporate governance that every listed financial service firm should be dominated by non-executive director to ensure independent of the board from the management and also to ensure that quality financial report are produced and this quality can be enhanced if there is high level of compliance to this disclosure. The implication to the regulatory bodies is to review the amount of shareholdings of the independent directors since it could be that their insignificant shareholdings could impair their interest in ensuring full compliance to disclosure of these assets; since they have nothing to lose if the value of the firm is affected

In the regression result, board meeting has a negative and significant effect with the level of disclosure. This implies that an increase in the frequency of meeting will lead to a decrease in the level of disclosure of intangible assets of listed financial service firms in Nigeria. Code of

corporate governance provides for every listed firm to hold a minimum of four meetings in an accounting year. However the result shows that any attempt of the board members to increase the number of meeting will reduce the level of disclosure of intangible assets. The implication to the regulators or law setters is that the meeting frequency should also be connected with the number of attendants. This could be that much meetings were held but those who attended were not enough to review well the reports.

Board accounting expertise from the regression result above can be seen to have a positive and significant effect with intangible assets disclosure. This implies that an increase in the number of qualified accountants in the board leads to an increase in the level of disclosure of intangible asset of listed financial service firms. The implication to the shareholders is that they should ensure their board members comprise accounting inclined members to ensure full intangible assets disclosure.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The sustainability of the global market depend largely on intangible assets through the board characteristics that happens to be the highest governing mechanism in an enterprise, the study examined the effect of how board characteristics through board size, board independence, board meetings and board accounting expertise affect intangible assets disclosure of listed financial service firms in Nigeria.

The chapter two of this work focused on the literature of this study. Here, the concepts of the independent variables, ranging from board size, board independence, board meeting and board accounting expertise were discussed. Also the concepts of the dependent variable, intangible assets disclosure were discussed. Moreover, the empirical studies related to the variables examined in this study were reviewed, to identify the areas of divergences and convergences. The agency theory was used to underpin the study convergence.

The third chapter of this work was on the methodology of the study. The correlational research design was used to examine the effect of board characteristics on intangible assets disclosure of listed financial service firms in Nigeria. The population of the study consisted of the fifty seven (57) listed financial service firms in Nigeria from 2012-2017. The sample size is thirty (30) listed financial service firms in Nigeria. Multiple regression analysis was used to analyze the data from 2012-2017.

In chapter four, the results of descriptive statistics, correlation and panel corrected standard error results were presented, analyzed and discussed. Further robustness tests were carried out.

The regression result suggested by Hausman test was said to be heteroskedastic, however, a panel corrected standard error regression was conducted to take care of the heteroskedasticity problem. Thereby, this regression result was used for analysis purpose. The result of the regression shows that hypotheses one, three and four should be rejected, while we failed to accept hypothesis two which stated that board independence does not have a significant effect on intangible assets disclosure of listed financial service firms in Nigeria.

5.2 Conclusions

From the findings of the study, the following conclusions were made;

Firstly, the study showed that board size has a key role to play in the disclosure of intangible assets disclosure of listed financial service firms in Nigeria. Thereby, the study concludes that board size is said to be a strong determinant in the disclosure of intangible assets.

Secondly, the study recorded that board independence does not play an important role in explaining the changes in the disclosure of intangible assets of listed financial service firms in Nigeria. It is on this basis that the study concludes that board independence is not a determinant of intangible assets disclosure in Nigeria financial service firms.

Thirdly, the study found that board meeting does not really have an important role to play in explaining intangible assets disclosure of listed financial service firms in Nigeria. Therefore, the study concludes that board meeting is a determinant of intangible assets disclosure in of listed financial service firms in Nigeria.

Finally, the study found evidence that board accounting expertise plays an important role in explaining the changes in intangible assets disclosure of listed financial service firms in Nigeria. Thus, the study concludes that board accounting expertise is a determinant of intangible assets disclosure.

5.3 Recommendation

In view of the findings and conclusions, thefollowing recommendations are made;

i. In composing the board of directors, listed financial service firms in Nigeria should ensure that the board is made up of reasonable number of directors so as to ensure high scrutiny of the financial reports prepared by the management, and this will make it easy for the necessary disclosures to be made.

ii. The members of the board should ensure that whenever they are recruiting their board of directors, they should make sure that the independent directors do not outweigh the non-executive directors, this is imperative as much independent directors might not put much interest on the financial reporting process of the firms.

iii. The board of directors should ensure strict attendance of meetings as directors might hold meetings frequently and members of the board that attended the meeting might be low. If few members attend the meeting, this will affect the level of discussions and the progress of the financial reporting. Hence, the disclosure of intangible assets will be impaired.

iv. Members of the board of directors in the listed financial service firm in Nigeria should consist of people that have financial and accounting qualification. This is because their inclusion in the board will make the quality of financial report to be ensured and it will also ensure strict compliance with regulations.

5.4 Limitation of the Study

The study is only on board mechanism, though it does not invalidate the findings of the study as board mechanism was selected because the board is the highest monitoring mechanism in a

firm. Again, there is a degree of excess in the scoring of the disclosure index, although necessary measures are followed in line with prior disclosure studies.

5.5 Suggestions for Further Research

This study examines the effect of board characteristics on intangible assets disclosure of listed financial service firms in Nigeria. However, further studies can investigate the Impact of other company characteristics against disclosure of intangible assets and also studies should be done on non financial service firms in Nigeria.

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Appendix I

s/no	Standard/ Source of Information	Disclosure Requirements (DR)	Applicability	Compliance
		This section of the checklist addresses the presentation and disclosure requirements of IAS 38 which prescribes the accounting treatment for intangible assets that are not specifically dealt with in another Standard. The principal issues are when an intangible asset may be recognised, as well as the determination of the subsequent carrying amount. The Standard prescribes certain criteria that should be met before an intangible asset may be recognised.		
		Disclosures - General		
	IAS 38:118	An entity shall disclose the following for each class of intangible assets, distinguishing between internally generated intangible assets and other intangible assets:		
1		a) whether the useful lives are indefinite or finite;		
2		b) the useful lives or the amortisation rates used for intangible assets with finite useful lives;		
3		c) the amortisation methods used for intangible assets with finite useful lives;		
4		d) the gross carrying amount and any accumulated amortisation (aggregated with accumulated impairment losses) at the beginning and end of the period;		
5		e) the line item(s) of the statement of comprehensive income in which any amortisation of intangible assets is included; and		
		f) a reconciliation of the carrying amount at the beginning and end of the period showing:		
6	-	i) additions, indicating separately those from internal development, those acquired separately, and those acquired through business combinations;		
7	-	ii) assets classified as held for sale or included in a disposal group classified as held for sale in accordance with IFRS 5 and other disposals;		
8	-	iii) increases or decreases during the period resulting from revaluations under paragraphs 75, 85 and 86 of IAS 38 and from impairment losses recognised or reversed in other comprehensive		

		income in accordance with IAS 36 (if any);		
9	-	iv) impairment losses recognised in profit or loss during the period in accordance with IAS 36 (if any);		
10	-	v) impairment losses reversed in profit or loss during the period in accordance with IAS 36 (if any);		
11	-	vi) any amortisation recognised during the period;		
12	-	vii) net exchange differences arising on the translation of the financial statements into the presentation currency and on the translation of a foreign operation into the presentation currency of the entity; and		
13	-	viii) other changes in the carrying amount during the period.		
	IAS 38:122	An entity shall also disclose:		
14		a) the carrying amount of that asset;		
15		b) for that asset : the reasons supporting the assessment of an indefinite useful life; and a description of the factor(s) that played a significant role in determining that the asset has an indefinite useful life.		
	-	An entity shall also disclose:		
16		c) a description, the carrying amount and remaining amortisation period of any individual intangible asset that is material to the financial statements of the entity;		
		(d) An entity shall also disclose:		
17	-	i) the fair value initially recognised for these assets;		
18	-	ii) their carrying amount; and		
19	-	iii) whether they are measured after recognition under the cost model or the revaluation model;		
	-	An entity shall also disclose:		
20		e) the existence and carrying amounts of intangible assets whose title is restricted and the carrying amounts of intangible assets pledged as security for liabilities; and		
21		f) the amount of contractual commitments for the acquisition of intangible assets.		

		Intangible assets measured after recognition using the revaluation model		
	-	If the entity account for any intangible assets at revalued amounts		
	IAS 38:124	An entity shall disclose the following:		
22		a) by class of intangible assets: the effective date of the revaluation; the carrying amount of revalued intangible assets; and the carrying amount that would have been recognised had the revalued class of intangible assets been measured after recognition using the cost model as described in paragraph 74 of IAS 38;		
23		b) in respect of the revaluation surplus relating to intangible assets: the amount of the surplus at the beginning and end of the period; the changes during the period; and any restrictions on the distribution of the balance to shareholders; and		
24		c) the methods and significant assumptions applied in estimating the assets' fair values.		
		Research and development expenditure		
	-	If the entity recognise any research and development expenditure as an expense		
25	IAS 38:126	An entity shall disclose the aggregate amount of research and development expenditure recognised as an expense during the period.		
	Total			

Appendix II

Listed financial service firms in Nigeria as at 31st December 2017 (study population)

S/No	Company	Ticker	Sector
1	ABBEY MORTGAGE BANK PLC	ABBEYBDS	FINANCIAL SERVICES
2	ACCESS BANK PLC.	ACCESS	FINANCIAL SERVICES
3	AFRICA PRUDENTIAL PLC	AFRIPRUD	FINANCIAL SERVICES
4	AFRICAN ALLIANCE INSURANCE COMPANY PLC	AFRINSURE	FINANCIAL SERVICES
5	AIICO INSURANCE PLC.	AIICO	FINANCIAL SERVICES
6	ASO SAVINGS AND LOANS PLC	ASOSAVINGS	FINANCIAL SERVICES
7	AXAMANSARD INSURANCE PLC	MANSARD	FINANCIAL SERVICES
8	CONSOLIDATED HALLMARK INSURANCE PLC	HMARKINS	FINANCIAL SERVICES
9	CONTINENTAL REINSURANCE PLC	CONTINSURE	FINANCIAL SERVICES
10	CORNERSTONE INSURANCE COMPANY PLC.	CORNERST	FINANCIAL SERVICES
11	CUSTODIAN AND ALLIED PLC	CUSTODIAN	FINANCIAL SERVICES
12	DEAP CAPITAL MANAGEMENT & TRUST PLC	DEAPCAP	FINANCIAL SERVICES
13	DIAMOND BANK PLC	DIAMONDBNK	FINANCIAL SERVICES

14	ECOBANK TRANSNATIONAL INCORPORATED	ETI	FINANCIAL SERVICES
15	EQUITY ASSURANCE PLC.	EQUITYASUR	FINANCIAL SERVICES
16	FBN HOLDINGS PLC	FBNH	FINANCIAL SERVICES
17	FCMB GROUP PLC.	FCMB	FINANCIAL SERVICES
18	FIDELITY BANK PLC	FIDELITYBK	FINANCIAL SERVICES
19	FORTIS MICROFINANCE BANK PLC	FORTISMFB	FINANCIAL SERVICES
20	GOLDLINK INSURANCE PLC	GOLDINSURE	FINANCIAL SERVICES
21	GREAT NIGERIAN INSURANCE PLC	GNI	FINANCIAL SERVICES
22	GUARANTY TRUST BANK PLC.	GUARANTY	FINANCIAL SERVICES
23	GUINEA INSURANCE PLC.	GUINEAINS	FINANCIAL SERVICES
24	INFINITY TRUST MORTGAGE BANK PLC	INFINITY	FINANCIAL SERVICES
25	INTERNATIONAL ENERGY INSURANCE COMPANY PLC	INTENEGINS	FINANCIAL SERVICES
26	JAIZ BANK PLC	JAIZBANK	FINANCIAL SERVICES
27	LASACO ASSURANCE PLC.	LASACO	FINANCIAL SERVICES
28	LAW UNION AND ROCK INS. PLC.	LAWUNION	FINANCIAL SERVICES
29	LINKAGE ASSURANCE PLC	LINKASSURE	FINANCIAL SERVICES
30	MUTUAL BENEFITS ASSURANCE PLC.	MBENEFIT	FINANCIAL SERVICES
31	N.E.M INSURANCE CO (NIG) PLC.	NEM	FINANCIAL SERVICES

32	NIGER INSURANCE CO. PLC.	NIGERINS	FINANCIAL SERVICES
33	NIGERIA ENERYGY SECTOR FUND	NESF	FINANCIAL SERVICES
34	NPF MICROFINANCE BANK PLC	NPFMCRFBK	FINANCIAL SERVICES
35	OMOLUABI MORTGAGE BANK PLC	OMOMORBNK	FINANCIAL SERVICES
36	PRESTIGE ASSURANCE CO. PLC.	PRESTIGE	FINANCIAL SERVICES
37	REGENCY ALLIANCE INSURANCE COMPANY PLC	REGALINS	FINANCIAL SERVICES
38	RESORT SAVINGS & LOANS PLC	RESORTSAL	FINANCIAL SERVICES
39	ROYAL EXCHANGE PLC.	ROYALEX	FINANCIAL SERVICES
40	SIM CAPITAL ALLIANCE VALUE FUND	SIMCAPVAL	FINANCIAL SERVICES
41	SKYE BANK PLC	SKYEBANK	FINANCIAL SERVICES
42	SOVEREIGN TRUST INSURANCE PLC	SOVRENINS	FINANCIAL SERVICES
43	STANBIC IBTC HOLDINGS PLC	STANBIC	FINANCIAL SERVICES
44	STANDARD ALLIANCE INSURANCE PLC.	STDINSURE	FINANCIAL SERVICES
45	STANDARD TRUST ASSURANCE PLC	STACO	FINANCIAL SERVICES
46	STERLING BANK PLC.	STERLNBANK	FINANCIAL SERVICES
47	UNIC DIVERSIFIED HOLDINGS PLC.	UNIC	FINANCIAL SERVICES
48	UNION BANK NIG.PLC.	UBN	FINANCIAL SERVICES
49	UNION HOMES SAVINGS AND LOANS PLC.	UNHOMES	FINANCIAL SERVICES

50	UNITED BANK FOR AFRICA PLC	UBA	FINANCIAL SERVICES
51	UNITED CAPITAL PLC	UCAP	FINANCIAL SERVICES
52	UNITY BANK PLC	UNITYBNK	FINANCIAL SERVICES
53	UNIVERSAL INSURANCE COMPANY PLC	UNIVINSURE	FINANCIAL SERVICES
54	VERITAS KAPITAL ASSURANCE PLC	VERITASKAP	FINANCIAL SERVICES
55	WAPIC INSURANCE PLC	WAPIC	FINANCIAL SERVICES
56	WEMA BANK PLC.	WEMABANK	FINANCIAL SERVICES
57	ZENITH INTERNATIONAL BANK PLC	ZENITHBANK	FINANCIAL SERVICES

Appendix III

Study sample

S/No	Company	Ticker	Sector
1	ABBEY MORTGAGE BANK PLC	ABBEYBDS	FINANCIAL SERVICES
2	ACCESS BANK PLC.	ACCESS	FINANCIAL SERVICES
3	AFRICAN ALLIANCE INSURANCE COMPANY PLC	AFRINSURE	FINANCIAL SERVICES
4	AIICO INSURANCE PLC.	AIICO	FINANCIAL SERVICES
5	CONSOLIDATED HALLMARK INSURANCE PLC	HMARKINS	FINANCIAL SERVICES
6	CONTINENTAL REINSURANCE PLC	CONTINSURE	FINANCIAL SERVICES
7	CORNERSTONE INSURANCE COMPANY PLC.	CORNERST	FINANCIAL SERVICES
8	CUSTODIAN AND ALLIED PLC	CUSTODIAN	FINANCIAL SERVICES
9	DIAMOND BANK PLC	DIAMONDBNK	FINANCIAL SERVICES
10	FBN HOLDINGS PLC	FBNH	FINANCIAL SERVICES
11	FCMB GROUP PLC.	FCMB	FINANCIAL SERVICES
12	FIDELITY BANK PLC	FIDELITYBK	FINANCIAL SERVICES
13	GUARANTY TRUST BANK PLC.	GUARANTY	FINANCIAL SERVICES
14	LASACO ASSURANCE PLC.	LASACO	FINANCIAL SERVICES
15	LAW UNION AND ROCK INS. PLC.	LAWUNION	FINANCIAL SERVICES
16	LINKAGE ASSURANCE PLC	LINKASSURE	FINANCIAL SERVICES

17	MUTUAL BENEFITS ASSURANCE PLC.	MBENEFIT	FINANCIAL SERVICES
18	N.E.M INSURANCE CO (NIG) PLC.	NEM	FINANCIAL SERVICES
19	NIGER INSURANCE CO. PLC.	NIGERINS	FINANCIAL SERVICES
20	REGENCY ALLIANCE INSURANCE COMPANY PLC	REGALINS	FINANCIAL SERVICES
21	ROYAL EXCHANGE PLC.	ROYALEX	FINANCIAL SERVICES
22	SOVEREIGN TRUST INSURANCE PLC	SOVRENINS	FINANCIAL SERVICES
23	STANBIC IBTC HOLDINGS PLC	STANBIC	FINANCIAL SERVICES
24	STERLING BANK PLC.	STERLNBANK	FINANCIAL SERVICES
25	UNITED BANK FOR AFRICA PLC	UBA	FINANCIAL SERVICES
26	UNITED CAPITAL PLC	UCAP	FINANCIAL SERVICES
27	UNIVERSAL INSURANCE COMPANY PLC	UNIVINSURE	FINANCIAL SERVICES
28	WAPIC INSURANCE PLC	WAPIC	FINANCIAL SERVICES
29	WEMA BANK PLC.	WEMABANK	FINANCIAL SERVICES
30	ZENITH INTERNATIONAL BANK PLC	ZENITHBANK	FINANCIAL SERVICES

Appendix IV

DESCRIPTIVE STATISTICS

```
. summarize intangibleasset bdsize bdind bdmeeting bdacexp tasset industry
```

Variable	Obs	Mean	Std. Dev.	Min	Max
intangible~t	180	.7287222	.149517	.46	.96
bdsize	180	13.65	2.546714	7	17
bdind	180	.1460415	.0554403	.0625	.2857143
bdmeeting	180	5.083333	1.385782	3	11
bdacexp	180	.2857778	.05396	.17	.57
tasset	180	509119.4	955886.7	5162.89	4833658
industry	180	.6	.4912645	0	1

```
. sktest intangibleasset bdsize bdind bdmeeting bdacexp tasset industry
```

Skewness/Kurtosis tests for Normality

				joint	
Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
intangible~t	180	0.1967	0.0000	40.90	0.0000
bdsize	180	0.1041	0.0000	.	0.0000
bdind	180	0.0002	0.8260	12.06	0.0024
bdmeeting	180	0.0000	0.0018	30.35	0.0000
bdacexp	180	0.0000	0.0000	31.08	0.0000
tasset	180	0.0000	0.0000	63.95	0.0000
industry	180	0.0249	.	.	.

CORRELATION

```
. pwcorr intangibleasset bdsize bdind bdmeeting bdacexp ltasset industry,star(0.05)sig
```

	intang~t	bdsize	bdind	bdmeet~g	bdacexp	ltasset	industry
intangible~t	1.0000						
bdsize	0.5283*	1.0000					
	0.0000						
bdind	-0.2966*	-0.5470*	1.0000				
	0.0001	0.0000					
bdmeeting	-0.1874*	-0.1136	0.0447	1.0000			
	0.0118	0.1290	0.5514				
bdacexp	0.3640*	-0.1872*	0.1038	-0.1043	1.0000		
	0.0000	0.0118	0.1656	0.1633			
ltasset	-0.0581	-0.0688	0.0307	0.2495*	-0.0477	1.0000	
	0.4385	0.3591	0.6823	0.0007	0.5245		
industry	0.0280	0.0482	-0.0338	-0.2298*	0.0202	-0.7287*	1.0000
	0.7092	0.5203	0.6523	0.0019	0.7875	0.0000	

```
Fixed-effects (within) regression               Number of obs      =       180
Group variable: id                              Number of groups   =        30

R-sq:  within  = 0.3659                         Obs per group: min =         6
       between = 0.5850                                        avg =       6.0
       overall = 0.4720                                        max =         6

                                                F(5,145)           =     16.73
corr(u_i, Xb)  = 0.2782                         Prob > F           =    0.0000
```

intangible~t	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
bdsize	.0164393	.0042071	3.91	0.000	.0081242	.0247545
bdind	-.1284312	.1728072	-0.74	0.459	-.4699776	.2131152
bdmeeting	-.0078939	.0064313	-1.23	0.222	-.0206052	.0048174
bdacexp	1.265368	.1800359	7.03	0.000	.9095343	1.621202
ltasset	.033615	.0274159	1.23	0.222	-.0205714	.0878014
industry	0	(omitted)				
_cons	-.0567409	.2327843	-0.24	0.808	-.5168298	.4033479
sigma_u	.08219749					
sigma_e	.08420578					
rho	.48793299	(fraction of variance due to u_i)				

```
F test that all u_i=0:     F(29, 145) =     4.00            Prob > F = 0.0000

. estimates store fe
```

```
. xtreg intangibleasset bdsize bdind bdmeeting bdacexp ltasset industry, re

Random-effects GLS regression                   Number of obs      =       180
Group variable: id                              Number of groups   =        30

R-sq:  within  = 0.3533                         Obs per group: min =         6
       between = 0.7703                                        avg =       6.0
       overall = 0.5362                                        max =         6

                                                Wald chi2(6)       =    148.14
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.0000
```

intangible~t	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
bdsize	.0271966	.0037738	7.21	0.000	.0198001	.0345931
bdind	-.0638151	.1633031	-0.39	0.696	-.3838832	.256253
bdmeeting	-.0112789	.0060978	-1.85	0.064	-.0232303	.0006725
bdacexp	1.323123	.1611642	8.21	0.000	1.007247	1.638999
ltasset	.0279599	.0125112	2.23	0.025	.0034384	.0524815
industry	.0206395	.0250864	0.82	0.411	-.028529	.069808
_cons	-.1811399	.1337832	-1.35	0.176	-.4433501	.0810704
sigma_u	.03819204					
sigma_e	.08420578					
rho	.17061531	(fraction of variance due to u_i)				

```
. estimates store re


. hausman fe re
```

	Coefficients (b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
bdsize	.0164393	.0271966	-.0107573	.0018597
bdind	-.1284312	-.0638151	-.0646161	.0565193
bdmeeting	-.0078939	-.0112789	.0033851	.0020444
bdacexp	1.265368	1.323123	-.0577549	.0802436
ltasset	.033615	.0279599	.0056551	.0243947

```
                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(5) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                      =       40.99
            Prob>chi2 =      0.0000
            (V_b-V_B is not positive definite)
```

```
. xttest3

Modified Wald test for groupwise heteroskedasticity
in fixed effect regression model

H0: sigma(i)^2 = sigma^2 for all i

chi2 (30)  =     947.36
Prob>chi2 =      0.0000


. xtpcse intangibleasset bdsize bdind bdmeeting bdacexp ltasset industry

Linear regression, correlated panels corrected standard errors (PCSEs)

Group variable:   id                          Number of obs      =       180
Time variable:    year                        Number of groups   =        30
Panels:           correlated (balanced)       Obs per group: min =         6
Autocorrelation:  no autocorrelation                         avg =         6
                                                             max =         6
Estimated covariances      =       465        R-squared          =    0.5397
Estimated autocorrelations =         0        Wald chi2(6)       =    149.55
Estimated coefficients     =         7        Prob > chi2        =    0.0000
```

intangible~t	Panel-corrected Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
bdsize	.0340891	.0059876	5.69	0.000	.0223536	.0458246
bdind	-.0102959	.1742115	-0.06	0.953	-.351744	.3311523
bdmeeting	-.0126605	.0050967	-2.48	0.013	-.0226498	-.0026713
bdacexp	1.429768	.1531538	9.34	0.000	1.129592	1.729944
ltasset	.0269612	.0063192	4.27	0.000	.0145758	.0393466
industry	.0171524	.011452	1.50	0.134	-.0052932	.039598
_cons	-.2966986	.1368829	-2.17	0.030	-.5649842	-.0284131

```
. vif
```

Variable	VIF	1/VIF
ltasset	1.53	0.652241
industry	1.51	0.660785
bdsize	1.43	0.696922
bdind	1.39	0.716969
bdmeeting	1.10	0.908315
bdacexp	1.03	0.969971
Mean VIF	1.33	