



**UNIVERSITY OF GHANA
COLLEGE OF HUMANITIES**

**BANK GOVERNANCE, DISCLOSURE AND STABILITY: EVIDENCE FROM
AFRICA**

By

**SARAH SERWAH BOATENG
(10161507)**


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DECLARATION

I hereby declare that this thesis is my own work produced from research commenced under supervision. This thesis has not been produced or presented to this or other academic institution by anyone for any academic award. All references of work done by others in the work have been duly acknowledged. I solely declare my full responsibility for any lapses in this thesis.



Sarah Serwah Boateng
(Student)

06/11/2020

Date

CERTIFICATION

We hereby certify that this work was supervised in accordance with the laid down regulations of the University of Ghana.



.....
Professor Godfred Alufar Bokpin
(Lead Supervisor)

9/11/2020

.....
Date



.....
Professor Joshua Yindenaba Abor
(Co-Supervisor)

10/11/2020

.....
Date



.....
Dr. Lord Mensah
(Co-Supervisor)

09/11/2020

.....
Date

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DEDICATION

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ABSTRACT

The Stability of the financial system specifically, the banking sector is of a primary concern for economic management. The features of the financial sector are such that an entity's failure could easily spill over to endanger the health of an entire economy. This explains the contagion effect of the sector. The weakness in the operations of the banking sector if not checked and controlled, can undermine the effective process of financial intermediation. The destructive macroeconomic externalities as a result of bank fragility underscores the need for financial sector, operating to maximize stakeholders' interest and not solely for the shareholders. The corporate governance framework of this sector is unique from the non-financial sector hence, making it imperative to examine its uniqueness for banks stability. Further, corporate transparency through information disclosure is deemed relevant for market efficiency yet the banking sector regardless of the high supervision is classified opaque. The financial sector thrives on market trust and confidence since the business of banking is highly risky. Among the factors to influence trust and confidence of the market is the bank's governance structures and information disclosure policies.

This study investigates the effect of bank governance and financial disclosure on stability, and employs bank-level data from 29 African countries over the period 2006-2012. The motivations for the study are; 1- The ramifications of global financial crisis (banking crisis), particular on African economies spurs the debate on bank stability; 2- The aftermath investigations of the banking crisis revealed weak corporate governance and poor disclosure policies yet existing literature offer inconclusive results whereas literature on Africa is dearth hence the study bridges the gap; 3- the study draws attention to the stakeholder theory in bank governance given that the dominated agency theory appears deficient in addressing the governance challenges in the banking sector; and 4- to contribute to knowledge in the area of the bank

governance, information disclosure, and stability. To appreciate the Africa financial sector dynamics and to advance knowledge, the study splits the sample into Non-Islamic and Islamic populated and developed and less developed credit market economies. The rationale is to enable comprehensive understanding of bank stability in Africa and its sub-divisions. The objectives for this study are; 1- to empirically examine the effect of internal governance structures on bank stability; 2- to examine the nexus on disclosure- stability; 3 – to investigate the relation between internal governance structures and financial disclosure; and 4- to examine the interactive effect of bank governance and disclosure on stability.

This study employs the panel data framework which entails both cross-sectional and time series data to ensure that both time and entity observations are captured. The use of this method certifies reliability in results. For the purpose of the study, annual data is obtained from Bank Scope and World Development Indicators (WDI) databases. Specifically, corporate governance variables as well as bank-specific variables were captured based on data from Bank Scope, while data on macroeconomic conditions were obtained from WDI. The study period captures the unique events in the Africa economies. For instance, the shrink in GDP growths from average of 5% in 2007 to 2.8% in 2009, Nigeria banking crisis in 2009, credit contractions witnessed in the 2008-2009, the external shocks from the global financial crisis and also accounts for the effects of the second-generation reforms required for the institutional and structural defects.

The empirical results show significant association between internal governance structures and bank stability. The study found a significant positive relation between CEO duality and bank stability as well as board size and bank stability. On the other hand, a significant negative

association was established between non-executive board and bank stability as well as board gender and bank stability. The results show that the effect of internal governance structures on stability is not straight forward and had contextual influence. Also, the study found positive and significant relation for bank size, capital and stability. Further, findings show positive support for financial disclosure on bank stability given non-Islamic populated economy and that of developed credit market economies. The results suggest that the effect of financial disclosure on bank stability varies across the different forms of economies employed, making the effect of information disclosure on stability strongly contextual. The third empirical work found non-executive board, female board membership and audit independence supporting financial disclosure significantly. The fourth empirics found a complementary effect between bank governance and disclosure on stability. Whiles, other variables such as management quality, profitability, diversity, sale growth, inflation had adverse effect on bank stability.

From the findings, we recommend that, policies be contextualized in line with bank governance and disclosure in relation to stability as the Africa settings is heterogeneous in nature. We further recommend that, in line with the complimentary effect between governance and disclosure, the market can leverage on both internal bank governance structures together with greater disclosure for transparency to promote market discipline and stability. We strongly advocate for punitive sanctions for banks' board members for going against their fiduciary duties since their performance has influence on bank stability. We also propose strengthen of female board membership to boast their influence on corporate boards. Finally, we recommend that to strengthen bank stability, we need to augment the capital base and increase the size of the banks.

CHAPTER ONE

Introduction

1.0 Background to the Study

The relevance of finance and financial stability to economic growth and development is not in doubt. Studies show the implications of the banking sector for human welfare, economic growth, poverty, entrepreneurship, labor market conditions, and accessible economic opportunities (Demirgüç-Kunt et al., 2010). Existing literature suggests that inefficient banking systems can inhibit economic growth, worsen poverty, and destabilized economies, while well-functioning banking systems boost long-term economic growth (Barth, Beaver, & Landsman, 2001; Levine, 2004). The banking sector serves as a major conduit through which stability as well as instability can be transmitted to other sectors of the economy. The significant role of the banking sector in most developing economies cannot be exaggerated, as it is the primary source of business finance.

Most Africa economies highly depend on the banking sector as their main source for almost all financial intermediation services as a result of the underdevelopment of the financial sector, for instance, the illiquid capital markets. As Bangura (2011) claims, the financial sector provides an essential channel for the effective transmission of monetary policy, and the banking sector serves as a channel for most developing economies. In this regard, financial reforms in developing economies are designed to modernize and stabilize the banking sector in order to facilitate effective resource allocation by selecting the most productive sectors from potential investments. Bank stability is critical to the soundness of the financial sector and to economic development.

The banking business is rapidly emerging more complex and opaque because of financial liberalization, globalization, and technological advancement leading to innovative financial products. The modern banking business has become sophisticated and thus contributes to the banks' excessive risk-taking. The aftermath of the global financial crisis reveals that the vulnerability of the banking sector was in part caused by a build-up of undue risk by some banks (Brunnermeier, 2009; DeYoung, Peng & Yan, 2013). In this regard, corporate transparency and inclusiveness are the core and essence of governance strategy. The rationale is that corporations with weak governance foundations cannot position well in a dynamic market-driven business environment. Where banks efficiently mobilize and allocate funds, it reduces the cost of capital to firms, stimulates capital formation, boosts productivity, and growth. Thus, weak governance of banks reverberates throughout the economy with negative ramifications for economic growth and development. The role of bank governance transcends the classic governance objective of aligning the behavior of executives with the interests of shareholders. The business of banking offers distinctive governance challenges owing to tensions that require the balancing of being value-maximizing entities that serve the stakeholders' interest (Mehran & Mollineaux, 2012; Mehran, Morrison & Shapiro, 2011).

The primary business of bank regulators is to protect investors (shareholders and debt holders) and stabilize the financial sector. The complexity of bank business coupled with the huge cost of the financial crisis and numerous accounting scandals drive the wave for better bank governance including disclosure requirements. The Financial Soundness Indicators (FSI, 2008) of the new bank regulatory framework enforces more strict disclosure requirements to empower bank stakeholders to assess the riskiness of the institutions in which they belong. This is to aid informed decision making by stakeholders and to prevent banks from excessive risk-taking. Theoretically, as Akerlof (1978) argues, disclosure aids investors to identify 'good' from

'bad' firms. Broadening corporate disclosure is expected not solely to lower information irregularities but to minimize agency problems specifically among bank managers and outsider stakeholders. This allows outsider investors as well as supervisory bodies to better monitor the financial institutions.

The governance structure of a firm has a relation to its transparency and market disclosure (Hermalin & Weisbach, 2012). Disclosure of information is a necessary condition for corporate transparency. Transparency plays a fundamental corporate governance role in all industries. Corporate disclosure supports monitoring by boards of directors, outside investors and regulators, and the exercise of investor rights granted by existing laws. Morgan (2012) pronounce banks' financial statements as a global, integrated image of the financial position and performance of the entity that offers a frame of reference for inferring information signals from diverse sources. In line with corporate governance mechanisms, transparency can stimulate bank stability via enhancing market discipline of banks' risk-taking decisions (Blum, 2012; Cordella & Yeyati, 1998; Rochet, 2004). Market discipline is defined as a process in which market participants use available information to monitor and discipline excessive risk-taking by the banks' management.

The fundamental premise of the corporate governance literature in the field of financial economics suggests that improved corporate governance ultimately leads to improved firm financial performance and value created for shareholders and the reduction of agency costs (Gompers et al., 2003). The contractual nature of the agency relationship in the case of banking is incomplete in the sense that, the relationship goes beyond shareholders versus management and shareholders versus debt holders. According to Hart (1995), the agency relationship is

incomplete in that, it does not exhaust all future contingencies making the enforcement of contract costly. Good governance structures can perform an effective role in resolving agency conflicts. Kirkpatrick (2009) establishes that weak corporate governance in banks led to inadequate risk management, especially insufficient risk monitoring through the board, a factor that contributed greatly to the bank instabilities during the crisis. The role of governance is argued to aid banks pursue an optimal level of risk that guarantees managers the ability to maximize shareholders' value while considering the social costs of bank failures (Stulz, 2015). The social costs of bank failure add to the significant difference between bank governance and non-bank governance.

The opacity and complexity of bank assets contribute immensely to the relevance of bank governance. Literature posits that banks have special elements that intensify governance problems and might decrease the effectiveness of standard governance mechanisms (Levine, 2004). The distinctiveness of the sector influences and interacts with corporate governance mechanisms. The key features of banks' uniqueness from non-financial companies are observing from the conflicts of interest between shareholders and debt holders, bank regulations, opacity, and complexity of bank activities.

The Organization for Economic Co-operation and Development (OECD, 2004) explains corporate governance to involve a set of relationships between a company's management, board, shareholders, and other stakeholders. The governance structure of a firm is to offer the structure via which the company's objectives are set, the means to attain objectives, and to monitor performance. Corporate governance has not got generally accepted theory (Larcker, Richardson, & Tuna, 2007), but good bank governance can be observed as aligning the interest

of the managers to shareholders and other stakeholders to create firm value. Following the various financial crises, the phrase corporate governance is pronounced among researchers, the corporate world, and policymakers admitting its potential role to macroeconomic stability. The ramifications of the financial crises justify a number of structural reasons why corporate governance underpins economic development and its well-being. Good corporate governance serves as a support system that underpins the private, market-based investment for economies' growth and development. Furthermore, as firms grow in size and the role of financial intermediaries and institutional investors increasing, the mobilization of capital is steadily one step removed from the principal-owner.

Several financial crises have highlighted the need to enhance sound corporate governance principles. This has put a lot of emphasis on improving transparency for firms in general and specifically for financial institutions. With support from the new bank regulatory framework (FSI, 2008). The repeated banking crisis on the globe, and in particular Africa countries in recent years have heightened the discussions on bank fragility in Africa. This banking crisis is regularly led by the wave of commodity and oil import dependence by most African countries combined with volatility of exchange rate, structural and institutional failures weakening the effectiveness of bank risk management tactics (Beck & Cull, 2013).

Although banks in Africa may have risk models in line with bank stability, examining the specific effect of internal corporate governance structures and financial disclosure on bank stability is imperative in an unpredictable environment such as Africa. Additionally, the claims from various stakeholders point to a failure in bank corporate governance on bank fragility that offers relevance to the study. Again, an attempt to answer the question of bank governance and

stability has produced mixed results with reference to the models of estimation, data size, time, and origin (develop and developing markets). In view of this, the study is positioned to advance knowledge of how bank governance characteristics interact with stability. The motivation is that, improving the knowledge of how financial institutions, specifically bank governance play a role in its operations is imperative.

Additionally, it is relevant to understand how corporate disclosure of banks affects their stability. On the backdrop of both theory and empirical evidence on corporate disclosure remain inconclusive. The question of how disclosure relates to bank risk-taking has mixed results. Some scholars argue the increase in information can exacerbate the concerns of creditors and result in more instability (Hyytinen & Takalo, 2002; Nier, 2005; Tadesse, 2006). Hence, one of the concerns of this study is to examine the relationship between financial disclosure and bank stability. Research has again expanded less into emerging markets and even less so to developing countries, and much work still refers to situations in developed countries, in particular, the United States. The purpose of this paper is to fill these gaps.

1.0.1 Definition of Bank Stability

The banking literature has not agreed to a common definition of bank stability (Segoviano & Goodhart, 2009). Hitherto, bank failure which is contrary to bank stability has been defined by Gonzalez-Hermosillo & Billings (1996) to encompass the following;

1. Recapitalization of a financial institution by the central bank or a strategic investor (i.e., liquidity injection),
2. Acquisition of distress bank by another financial institution,

3. Conceding of operation license by the financial institution,
4. Temporarily suspension of financial institution's operations by its regulatory authority or
5. The shutting down of financial institutions by the regulator.

However, some policymakers describe bank stability to mean the absence of no banking crises. Thus, bank fragility is the presence of the banking crisis (Beck, Demirguc-Kunt & Levine 2003),

With the absence of no particular definition of bank stability, each central bank determines its own definition of bank stability. This may include only traditional banks or the non-bank financial institutions, as well as shadow banks, operate outside the formal financial sector. Brunnermeier et al. (2009), describe bank stability as the absence of no banking crises where there is safety in all banks operating within the sector. In view of interdependence, Segoviano and Goodhart (2009), defined bank stability from three complementary perspectives: common distress in the system, distress between specific banks, and cascading effects associated with a specific bank. They followed the work of Bordo et al. (2001), and measured stability as the presence or absence of crisis.

Bank risk management is not a new concept (Cade, 1999) given that the business of banking is to accept and manage risk for the economic good. The aftermath of the global financial crisis has led to a heightened debate on bank risk-taking and its effective management for financial stability. According to Crouhy et al. (2006), the process of risk management and the best practices of corporate governance are inseparable given that the business of risk management is fundamental to corporate governance activities. The essence of effective risk management

in today's banking operations is to stimulate financial stability. Risk management is a disciplinary tool critical to banking operations and involves all dealings that influence the bank's risk profile. Also, the main aspect of risk management as affirmed by (Greuning & Bratanovic, 2003) includes strategic and capital planning, asset-liability control, and bank business and financial risk management.

The enormous economic cost after the 2007/2008 global financial crisis, is documented as the most substantial economic crisis and projected as the lead cause of the steepest post-war global economic recession (O'Connell, 2010). Additionally, given the huge adverse impact of the banking crisis, the International Monetary Fund (IMF) referred to the global financial crisis as "the Great Recession" (Moshirian, 2011). Furthermore, the losses of the financial crisis are measured as forty-five percent of global wealth (Pirson & Turnbull, 2011). This substantial financial loss witnessed by most economies as a result of the global financial crisis had a lot of lessons for most financial regulators, policymakers, financial managers, investors, and other stakeholders to learn. From the horrific encounter of the banking crisis, it is obvious that most financial institutions had inadequate comprehension of the issues banking business and the risks involve (BCBS, 2009). As confirmed by Watson and Holland (2010), weakness in the role of monitoring, poor basic knowledge of banking risks, as well as unsuitable value drivers by bank executives and boards led to the banks' failure resulting in the substantially economic crisis.

The existing literature empirically shows that the weakness of corporate governance structures in the banking sector when addressed could prevent the economic damage and the financial system from collapsing (BCBS 2010a; Grove et al., 2011). The financial institutions are

currently faced with the challenge of ensuring bank stability to forestall bank trust and confidence in the financial market. Accordingly, the Basel committee in 2010 had issued a new risk management framework as part of the measures on sound corporate governance structures.

1.0.2 Definition of Corporate Governance

The concept of corporate governance originates from various dynamic interdisciplinary areas of study that mainly ensued from the seminal publication by Berle and Means (1932), and has substantially evolved. Corporate governance has no particular definition in view of the multidisciplinary adoption of the concept. Yet one of the broader definitions of corporate governance is one offered by Solomon and Solomon (2004, p. 14) as " a system of checks and balances, both internal and external to companies, which ensures that companies discharge their accountability to all stakeholders and act in a socially responsible way in all areas of their business activities". Accordingly, Sharman and Copnell (2002), define corporate governance as a system and process through which entities are directed and controlled to enhance performance and sustain shareholders' value through an effective management structure, adequate and reliable corporate reporting, and effective risk management systems. There has been a various financial crisis and business failures, resulting to a number of relevant reports and recommendations to address the problems and to possibly forestall future occurrences (Cadbury, 1992; Greenbury, 1995; Hampel, 1998).

Ensuing from the Cadbury Report (1992), corporate governance is termed as "the system by which companies are directed and controlled". However, the OECD (2004, p.11) definition captures a wider scope and is an extensively accepted view which states: corporate governance

as a set of relationships between a company's management, board, shareholders, and other stakeholders. Similarly, corporate governance is described as the actions, structures to ensure that management behaves responsibly to genuine stakeholders of the firm (Bell, Filatotchey & Aguilera, 2014). The study definition of corporate governance is the structure that monitors and control management behaviour to create long term value for all stakeholders. Clearly, these set of relationships in the company is to monitor and direct executives to utilize the resource efficiently to enhance value creation for all relevant stakeholders.

Additionally, corporate governance offers the structure via which the company's objectives are set, the means to achieve those objectives, and ensure monitoring of performance. Effective corporate governance ensures appropriate incentives for the board and management to pursue objectives in the interest of the company and its stakeholders and facilitates effective monitoring. The deductions from the OECD descriptions to corporate governance goes beyond firm control but includes how to supervise so as to achieve the needs of all stakeholders. This broader scope to corporate governance explains corporate governance as a form of rigorous supervision impose on management to ensure competent adjudication of business, with a sense of integrity and due regard for the interest of stakeholders. Corporate governance comprises a mixture of legislation, non-legislative codes, self-regulation, and best practice, structure, culture, and board proficiency. After the recent global crisis, Walker Report (2009) meant to examine corporate governance of UK banks claims that: corporate governance's role is to protect and advance the interest of shareholders by establishing the strategic direction and to appoint and monitor capable management to attain the company's goal.

Emerging from the varied descriptions to corporate governance points to either implicitly or explicitly the significant role of the company's board. Certainly, most studies on corporate governance are focused on the board with the sole responsibility to ensure a well-governed organization. But as probable, most of these studies exploring the corporate board structure relied mainly on the agency theory (Jensen & Meckling, 1976). Indeed, the monitoring role of the board is central to the entire corporate governance structure and the boards of directors are referred to as the apex of the internal control system (Jensen, 1993). As the corporate governance is supervised by the board then the role and behaviour of the board could be explained by the company's corporate governance structure. In view of this, the aim of the board to either pursue the interest of shareholders or the interests of various stakeholders is influenced by the governance structure. The difference in corporate governance structure as seen in different theoretical models namely the shareholder capitalism and stakeholder capitalism explain the board behaviour.

Traditional corporate governance is structured towards shareholder capitalism which aims at the shareholders' interest. The shareholders' theories of corporate governance (Jensen & Meckling, 1976) claim the firm exists to maximize profit to ensure higher shareholder value. This theory originates from the neoclassical theory of the firm with the aim to enhance economic efficiency thereby increasing the shareholders' wealth. The theory is referred to as the Anglo-American perspective emphasizes that shareholders provide capital and as the owners who bear the risk of failure ought to control the company (Nwanji & Howell, 2007). The held view forms the neo-classical theory on corporate governance, in this modern and complex era of business ought to change for the broader perspective to the corporate governance structure. But the critiques of the agency theory claim that the theory is under-contextualized and narrow hence untenable to precisely considering the diverse nature of

corporate governance across various institutional settings (Aguilera & Jackson, 2003; Filatotchev, Stephan & Jindra, 2008). In the same line, emerging policy dictates enshrined in the codes of "good" corporate governance considering the universal notions of "best practice" define governance from the broader scope (Kings 1994, 2002, 2009).

1.0.3 Definition of Information Disclosure

The concept of information disclosure is linked to the seminal work produce by Akerlof (1970) argues that managers as the agents possess superior information on the financial position of the firms than the principal investors leading to asymmetric information between the parties. The gap between the level of information held by the parties in the exchange process results in the problems of adverse selection and moral hazard. This problem of adverse selection can affect both market makers (Kyle, 1985) whiles in the case of an orderly driven market, it can inflate the cost of the transaction (Dedek, 1995). The inefficiencies of the market as a result of information asymmetry enhances market makers to achieve huge spread to reduce possible losses as a result of informed trading and likewise to enhance possible gains as a result of uninformed trading. According to Zhang (2001) corporation information disclosure works to decrease the market opacity existing among the firm and investors resulting in declining in the information asymmetry, and in particular to reduce the cost of capital. The corporate decision to stimulate the level of information disclosure serves as a means to ameliorate the level of information asymmetry between management and investors or better still among buyers and sellers of the corporate securities (Bailey et al., 2006).

The Economic theory of corporate disclosure argues that greater information disclosure reduces the level of information asymmetry (Diamond & Verricchia, 1991). As established by Diamond

(1985), corporate disclosure is critical to improving market conditions in terms of homogenizing investors' views and decreasing market speculations as a result of lowering information asymmetry, and thus to promote market liquidity and decrease the cost of capital. Information asymmetry is faulted for market inefficiencies and the mispricing of firms' securities (Kim & Verrecchia, 1994). Furthermore, Bushman and Smith (2001) approve that accounting disclosure of corporation ensures less information asymmetry among informed and uninformed investors in the market. Hassan et al. (2010) posits that corporate disclosure serves as an important means of communication between the firm as represented by management and outside investors.

1.1 Stylizes Facts on Bank stability

The study compares bank stability using the z- score measure among Africa and other regions to assess the position of bank stability in Africa. The z-score measures the distance from insolvency (probability of default), the higher the score the lower the probability of default (stability), and the lower the score higher the probability of default. The ten (10) years period evaluation starts from 2004 – 2013. The trend of z-scores of Africa, Middle East, Europe, and Central Asia, East Asia and Pacific, North America and Latin America, and Caribbean Countries. The graphs in figure 1 depict that the annual stability in the Middle East as the highest among the regions. The Middle East region is populated by Islamic countries and their banking system is in contrast to the conventional banking practices. The Islamic bank operates with the principles of Islamic law (The Shari'ah) which frowns on the payment or receipt of interest (riba) but supports risk sharing. This is intriguing to note, regarding the high performance of their banking stability score.

The region that competes closely with the Middle East is North America. There was another interesting performance of bank stability in view of the global financial crisis witnessed in 2007-2008. This crisis originated from the North America region and exhibiting such a high performance next to the Middle East in terms of bank stability may probably support that claim of strong institutional structures working for their banking sector. The next region that follows is East Asia and Pacific countries but its performance dipped in 2013 for South Asia to outperform the region. Most countries in East Asia and the Pacific are developed and operate robust financial systems to ensure better banking stability.

The South Asia region shows stimulating results given stability performance. The region is next to East Asia and the Pacific and the region begins with a lower performance in 2004. Africa had better performance but maintained steady growth in performance though in 2007 – 2008 had low scores and from 2010-2013 continue the growth pattern. Africa's lowest score is 9.4 in 2006 and the highest score of 11.8 in 2012. The performance of the region compared to other regions as discussed earlier is not inspiring. As the region has the banking sector operating most of the financial services, its stability ought to be keen to drive economic growth. Yet, the scores are not strong enough and it becomes imperative to examine the issues pertaining to bank stability in Africa.

The last among the regions in terms of performance in Europe and Central Asia. The regions' lowest score is 7.5 in 2008 and the highest score is 10.0 in 2004. Their stability performance is also not inspiring.

Figure 1 : Graphs on Bank Stability

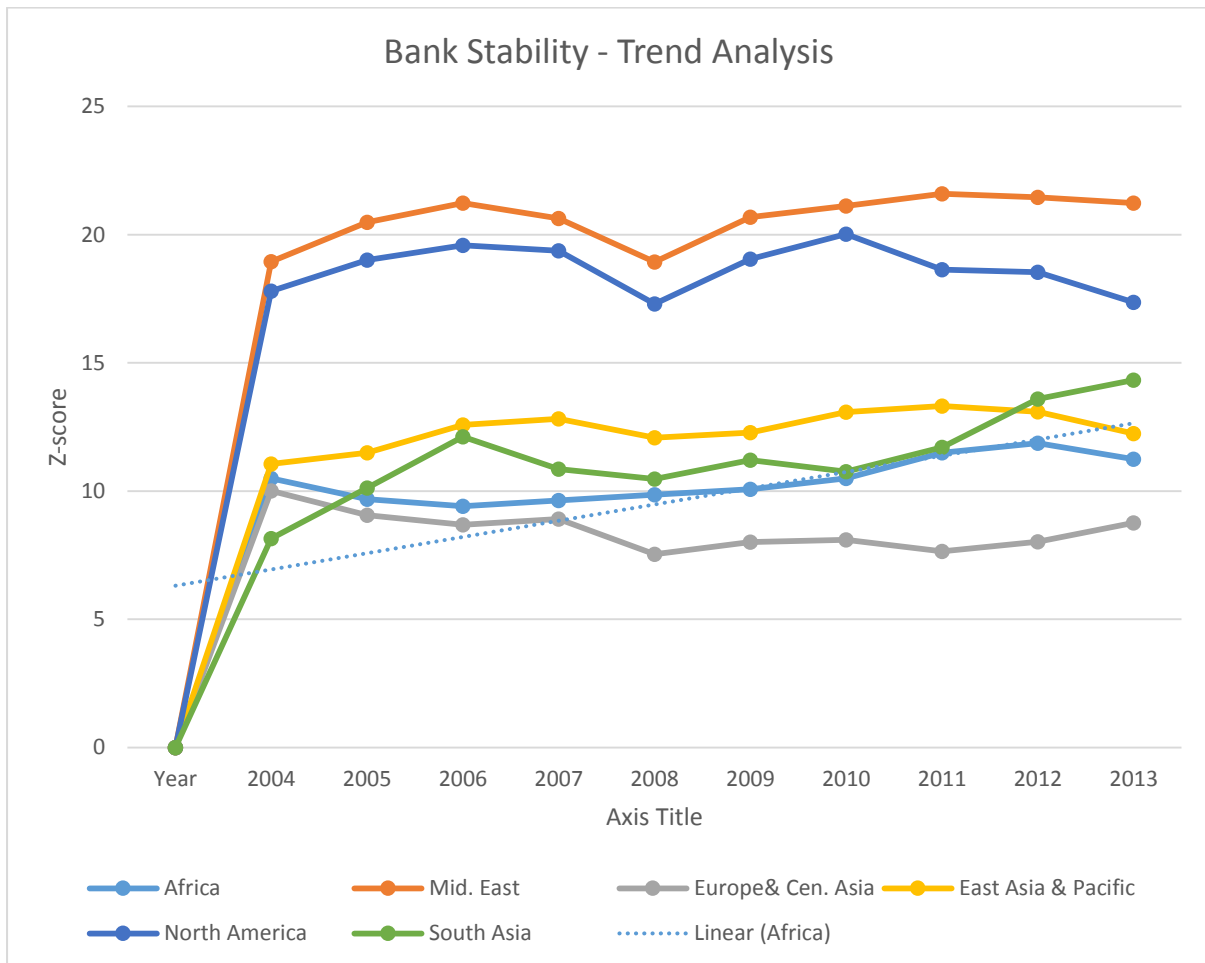


Figure 1: Bank stability trend of Africa compare with bank stability of other regions in the world. Source: Authors (2019); Using - Global Financial Development Database

1.2 Problem Statement

The banking sector has come under severe scrutiny given its role in the global financial crisis. The remarkable issue emanating is a weak bank governance structure constantly identified as a substantial cause of the crisis (Kirkpatrick, 2009). The weakness in the corporate governance structures is linked to the sudden collapse of prominent corporations (e.g., Lehman Brother; Citigroup; Northern Rock; Parmalat; Ahold; Enron and WorldCom; Bank of Credit and Commerce International, Maxwell Communication) in the United States of America, United Kingdom, Germany, France, Italy as well as other developed economies in the world are

estimated to have the best governance structures. Unfortunately, it turned out to be good governance structures on paper but in practice had weak board oversight, inept and fraudulent individuals as board members (Nordberg, 2011; Nuhu & Ahmed, 2016). This connotes that, it is not about the best governance codes with understanding to 'comply or explain' principle like the United Kingdom Cadbury report (1992), but to institute effective compliance order to forestall corporate trust and confidence for safety and progressive market.

The failures of corporations did not only happen in the developed market but the developing economies had their share. The crisis of the banking sector in Nigeria in 2000 and in late 2015 had weak governance structures faulted (Adetula, 2015). The economy of Ghana has not been spared from the corporate governance failure, as the banking sector experience some turbulence first in early 2000 where two banks Ghana Co-operative Bank and Bank for Housing and Construction collapse costing the government of Ghana a huge sum in liquidation (Addo & Marshall, 2000). Furthermore, recently in 2017 and 2018 has witnessed the collapse of seven (7) banks of two were consumed by Ghana Commercial Bank (GCB) and the other five put together to form the Consolidated Bank of Ghana (CBG.)

In view of this, most economies have resulted in corporate governance reform agenda. The United Kingdom has the recommendations of Sir David Walker's report representing the basis for the 2012 U.K Governance Code. Also, the Netherlands Banker's Association made a decision on a Banking Code which had an effective date January 1, 2010. The King Report (1994, 2002, 2009) establish the code of corporate governance practices in South Africa. Kenya has the Capital Markets Authority (CMA) setting the corporate governance regulations (CMA, 2002). In the case of Ghana, the Securities and Exchange Commission (SEC) issued the 2010

code of best practices for corporate governance which models the best practices across the globe. This code embraces the stakeholders' perspective on governance as other codes in the world (Agyeman & Castellini, 2013). Also, for Nigeria, the corporate governance structure is determined by the Companies and Allied Matters Act (1990) and the Securities and Exchange Commission (2003) corporate governance code. This code embraces the stakeholder approach to governance ensuring the actions of the board and management lead to the benefit of key stakeholders.

The banking sector serves as a conduit via which instability permeates to other sectors of the economy. The critical role of the banking sector as financial intermediation over years now is considered one of the key pillars of economic wellbeing (Sharma & Sharma, 2009). The authors went on to explain that, the strength of any economy fundamentally hinges on the health of the financial sector, and in particular the banking sector. This demonstrates the sector's ability to make and unmake any economy hence, serving as the lifeline to the modern economic system (Sharma & Sharma, 2009).

The financial sector functions as an engine to promote economic growth through effective resource allocation to productive sectors. The banks exist to function in such a way as to promote a stable and efficient financial system given their intermediation process mandate for economic growth and development. Mohanty (2012), argues that a vulnerable financial sector creates challenges for the monetary policy transmission process but the failure of the financial system led by the banking sector witnessed of the global financial crisis suggests that banks are inadequate to perform their mandate to the economy (Blundell-Wignall & Atkinson, 2012). This suggests that the banking sector needs to be resourced to facilitate its economic mandate.

The aftermath of the global financial crisis suggested weak governance structures and poor disclosure measures as the cause of the crisis.

The aftermath of the global financial crisis has brought the debate on the governance of financial institutions into the spotlight (Wang & Hussainey, 2013). In view of the destructive role of corporate governance regarding the weak performance of the banks resulting in the crisis (Kirkpartrick, 2009). Corporate governance has several definitions as a result of its multifaceted role in several studies hence appears quite difficult in producing a concrete definition. However, corporate governance is defined by the OECD deals with the relationships between a company's management, board, shareholders, and other stakeholders (OECD, 2004; Mulbert, 2010). The role of governance is to facilitated effective direction and monitoring of the corporate resources to reward various stakeholders.

Bank governance is relevant for their valuation, cost of capital performance, and risk-taking. The extant literature on bank governance shows a significant relation to bank risk-taking (e.g., Saunders et al, 1990; Anderson & Fraser, 2000; Caprio; Laeven & Levine, 2009; Pathan, 2009; DeYoung, Peng & Yan, 2013). As shown by Levine (1998, 2004), the role of banks on economic development is highly influential. The critical role of banks inefficient mobilization and resource allocation, reducing the cost of capital to firms, enhancing capital formation, and accelerating economic productivity to stimulate economic growth (Levine, 2004). Furthermore, banks ensure best practices of corporate governance on firms, per the role of creditors of firm and in some cases as equity financiers, their corporate governance structures become imperative for economic growth and development.

Nevertheless, the bank's governance structures are peculiarly complex as compared to the non-financial institutions. This can be attributed to its unique role in the sector's economic growth agenda. The distinctiveness of the banking sector is classified into three main attributes of the sector and justifying the rationale to separate the examination of corporate governance in the financial sector. The banking literature outlines several features that make the banks different from the non-financial sector (Merton, 1977; Diamond & Dybvig, 1983, Bhattacharya & Thakor, 1993). The fundamental role of the bank involves accepting short-term liquid deposits and converting them into long-term illiquid loans. This intermediation process allows the banks to gather information to enable them to privately monitor and confirm the quality of the loan portfolio. The bank loans (assets) are classified as informational opaque making it difficult for an outside stakeholder to monitor and determine the actual value (Morgan, 2002). The nature of the bank assets may render self-seeking managers engaging excessive risk-taking behaviours that with no records in the balance sheets (Becht et al., 2011; Mehran et al., 2011).

Also, the banking sector is unique as a result of protection and support they benefit from both explicit deposit insurance guarantees and implicit guarantees like liquidity and capital support period of financial distress (Bhattacharya & Thakor, 1993). These government assurances to the sector have been explained as the form of a put option on the bank assets with its value appreciate in high bank risk (Merton, 1977). With these guarantees, the managers end up pursuing high risky investment defeating for the purpose for which those guarantees exist. In line with the interpretation, most literature concludes that government guarantees promote excessive risk-taking (Dam & Koetter, 2012).

Lastly, the banking sector is highly leveraged as compared to other non-financial institutions. For the sector, leverage is a factor of production. The high leverage inspires the excessive risk-taking route since the option value of government guarantees to shareholder's growth with firm leverage hence, the high risk for most highly leveraged banks (John et al., 2010).

1.3 Justification for the Study

The most recent global financial crisis witnessed its share of corporate governance failures in the financial market specifically the banking sector, resulting in systemic complications. The huge financial cost and economic impediments have triggered the debate on the role of corporate governance structures with regard to the stability of the banking sector. Beginning with the academia presenting scholarly work on the role of corporate governance and financial crisis (see the review by Mehran, Morrison & Shapiro, 2011), the politicians (The Financial Crisis Inquiry Report, 2011), the Civil Society Organization –think tanks (The Squam Lake Working Group on Financial Regulation, 2010) and the non-profit organization (the OECD report on Corporate Governance and the Financial Crisis, 2009). The various reports admit to the influential role of corporate governance for bank stability. Weak corporate governance is projected as one of the key causes of the financial crisis (Haspeslagh, 2010). Hence corporate governance becomes central to the discussion of bank stability. In view of this, a huge burden is placed on the board and management to ensure the best practices of corporate governance and risk management in an effective manner. Apparently, there is a particular challenge of corporate governance for most complex risk-taking financial institutions and the banking sector is without exception.

Consequently, the crisis has heightened the phrase bank governance among researchers, the corporate world, and policymakers given the potential macroeconomic, distributional, and long-term effects of poor corporate governance systems. The financial crisis is linked to failures and weaknesses in the corporate governance structures (Kirkpatrick, 2009). Thus, the breaches in corporate governance structures particularly in the banking sector can adversely impact entire economies. The banking sector enjoys important specific features that justify the need for special interest in its operations and risk-taking venture (Crespí, García-Cestona, & Salas, 2004; Esty, 1997).

In view of this, regulatory authorities have stressed on the need to reform corporate governance structures to ensure control of bank risk-taking (FSI, 2008; La Fond & You, 2010; Liikanen, 2012). This ritual of governance reforms tends to follow pre-crisis in the financial markets and are mostly narrow on the specific governance deficiencies failing to address a more comprehensive fundamental governance defect (Kashyap, Rajan, & Stein, 2008). The pre-crisis reforms end with the phrase never again yet the financial market crisis keeps revisiting. Though, the failure in the governance reforms that follow pre-crisis has to be linked to the governance structures placing the shareholders strictly in control (Becht, Bolton, & Röell, 2011). There has been considerable academic interest in identifying alternative approaches to reforming bank governance. The argument from economic theory on imperfect markets Aebi et al. (2012) suggests that corporate governance of financial institutions stresses an approach originated by stakeholder theory. This is because, apart from the usual information asymmetry market failures for which all business is prone to, the financial sector has both public and a private purpose.

Additionally, the sector can display both positive and negative externalities given that a well-developed and stable system of financial intermediation constructs positive externalities (that is the public good) and financial instability generates negative spillovers. These externalities are potentially very huge, affecting all households and firms that engage with the banking system. In the case of banking business with several key stakeholders, it is important to apply the stakeholder theory to ascertain its implications for corporate governance as far as the financial institutions are concern. Corporate governance literature draws mainly from agency theory supported by the Anglo-American view hence little is known from the stakeholder theory and the aim is to advance knowledge in bank governance using the stakeholder theory.

The market-based economic system provides two main corporate governance models; namely the Anglo-American (Shareholder) and the Franco-German (Stakeholder) view of the firm (Macey & O'Hara, 2003; Ungureanu, 2008). The Anglo-American model views corporate governance primarily aims to satisfy the shareholder (owner) interest hence the application of structures (like board structures, executive compensations) to mitigate agency problems. This traditional governance structures solely focus on the bilateral relationship between the principal (shareholders) and the agent (management). Thus, the arrangement ignores other stakeholders of the firm making the complex relationship of the firm simplified (Aguilera & Jackson, 2003). In contrast, the Franco-German model considers corporations' 'industrial partnerships' which serve the interests of all stakeholders (Habisch, Patelli, Pedrini, & Schwartz, 2011; Van Buren III & Greenwood, 2011). Corporate governance as defined by the Organization for Economic Co-operation and Development (OECD, 2004) as a set of relationships between a company's management, board, shareholders, and all other stakeholders.

The two views on corporate governance, in particular, the Anglo-America, shareholder-focused with the aim of maximizing shareholders' interest renders the agency contract incomplete and need to consider other stakeholders' interests (e.g., depositors, creditors, government, and the public). Completing the agency contract in the organization appeals to the stakeholder theory. The key role of the banking sector in the money creation process, the payment system, allocation of funds to productive investment areas aid the economic growth process. The stability of the banking system assures the central bank's vision of preserving monetary and financial market stability. Some other empirical works on the effects of board composition on financial performance failed to produce a consistent result (Dalton, Daily, Certo, & Roengpitya, 2003; Dalton, Daily, Johnson, & Ellstrand, 1999).

The majority of the literature focused on the impact of corporate governance on shareholders, thus addressing the conflict between management and shareholders using the agency model of Jensen and Meckling (1976). Conversely, the operations of the banking sector go beyond the management and shareholders but the majority of stakeholders. For a paradigm shift, bank governance ought to address the conflict of interest between creditors, shareholders', managers, and other stakeholders by applying the stakeholders' model. The bank governance literature perceives the traditional agency theory of corporate governance structure as a closed system or a narrow system which basically aligns interest between shareholders and managers without recourse to other stakeholders. The agency theory under-contextualized the complex nature of the financial sector hence, the deficiencies in addressing the governance challenges (Aguilera & Jackson, 2003; Filatotchev & Boyd, 2009).

To correct the defect in the bank governance structure Aguilera, Filatotchev, Gospel, and Jackson (2008), suggest an open-system or a broader approach to a governance structure that can address the complex nature of the financial environment. They end up proposing the stakeholder's approach to governance which objects the short-term goal to the long-term goal of value creation. This thesis examines the governance model from the stakeholders' perspective rather than the shareholders' perspective. Specifically, the study addresses the effect of bank governance structures on disclosure and stability exploring the stakeholder model. Information disclosure is one of the key aspects of financial sector regulation as supported by Pillar 3, Basel II. Information disclosure in literature produces mixed results given that, disclosure can be beneficial and be destructive, particularly in a banking sector where information (e.g., bad one) can trigger a negative contagion effect. An important unresolved issue is whether bank disclosure promotes or undermines bank stability.

Banks take on risks that are opaque and difficult to verify. Of particular concern to both, regulators are excessive risk-taking by individual banks and systemic risk, which requires a focus not on the risk of individual banks, but on an individual bank's contribution to the risk of the financial system as a whole (Brunnermeier, 2009; Hanson, Kashyap, & Stein, 2011). Whereas information disclosure leads to correct financial assets pricing Jones, Lee, and Yeager (2013), they show that opacity limits the ability of market participants to accurately value bank assets and weakens market discipline, thus, arguing for improving disclosure of the banking business. The literature on economic theory presents contradictory expectations regarding disclosure since it has both beneficial and destructive externalities on bank stability. Better disclosure and transparency influence sensible bank risk-taking through market discipline (Barth, Schumacher, & Herrmann-Lingen, 2004). In contrast, better disclosure can destabilize the sector by transmitting depressing informational spillovers throughout a banking system

(Tadesse, 2006). While empirics remains inconclusive on the effect of information disclosure on bank stability, this study aims to contribute to the knowledge gap. The study contributes to the surging debate to offer clarity.

The business of banking is about trust and confidence, the absence of these can result in panic withdrawals that can cause liquidity crisis and then trigger an economic crisis and eventually systemic risk (Cebenoyan & Strahan, 2001; FSI, 2008). The concept of corporate governance over the past decades has gained burgeoning interest (Filatotchev & Boyd, 2009). The well-known cases of the major corporate scandals and failure in both developed and developing countries like the Asian economic crisis (1997/1998), global financial crisis 2007/2008, of which were blamed on weak corporate governance structures (Kirkpatrick, 2009). These cases project the relevance of corporate governance in relation to macro-economic performance.

Corporations from developing countries are largely characterized by weak corporate governance structures which results in difficulty in raising capital and attracting investors particularly foreign investors (Okpara, 2011). The desire for economic reforms among most African countries has been linked to economic globalization (Asiedu, 2004; Berry, 2013; Reed, 2002). In view of this position, there is a market pressure on institutions in developing countries to adopt corporate governance codes to regulate their corporate engagements (Garay & González, 2008). Corporate governance in Africa is now progressively assuming form to support the economic reform agenda and sustainable growth. Thus, for the continent to integrate on the global stage and attracts foreign direct investment corporate governance needs to work. In view of this, the study examines the effect of corporate governance mechanisms in

the banking sector. The stability of the banking space serves as the basis of balancing the whole financial system in most economies.

Notwithstanding the vast and growing research efforts, the empirical findings on the governance structures specifically the board compositions, CEO Power as well as the audit committee in relation to bank stability (conversely risk-taking) and information disclosure have been mixed and inconclusive. A study by John, Litov, and Yeung (2008), show that poor governance results in executives taking less risk to protect their private benefits from control. As the information disclosure is considered one of the best practices of good governance, the empirical result offers mixed results (Wang & Hussainey, 2013). Considering the capital structure of the banks, debt holders are the majority holder and tend to be highly conservative and most probably constrain risk-taking activities (Levine, 2004) yet, banks engage in excessive risk which has been alluded to the control shareholders possess on the governance structure (Wang & Hussainey, 2013).

The weakness in the corporate governance structures as exposed by the market crises resulted in governance reforms which emerge as codes of good corporate governance with the aim to improve the means by which corporations are governed, thus, promoting greater transparency, accountability, and responsibility towards relevant stakeholders (Aguilera et al., 2008). Perhaps, in developing countries with different institutional settings and corporate governance structures, bank governance and its disclosure may be expected to vary from what has been accounted for by developed countries. Hence, it is imperative for an investigation into how bank governance and disclosures influence stability in developing countries, where empirical evidence appear limited, for a better understanding of bank governance and disclosure

behaviour. In line with the flaws as revealed by the crises, the study focused on investigating two issues that border on banks' governance and disclosures in relation to stability. The study examines internal bank governance structures in relation to the stability of their operations. The nature of the banking business positions the sector exceptional to the non-financial institutions.

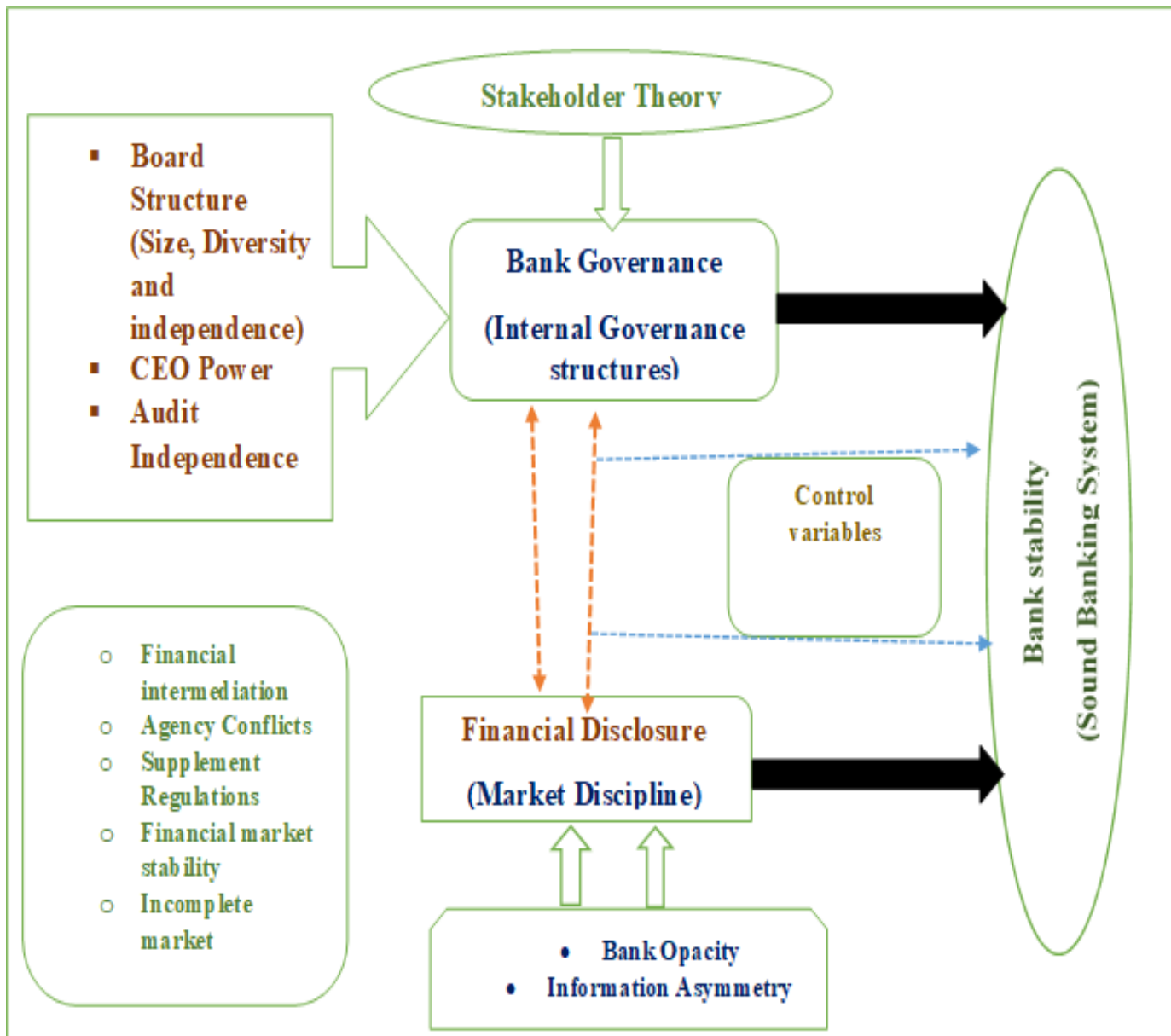
The banking literature has identified three main features supporting the isolation of corporate governance in banking. Firstly, according to the banking theory, the nature of financial intermediation makes banks opaquer compared to other institutions alluding to the difficulty of outsiders in monitoring the banks' assets (Diamond & Rajan, 2001; Levine, 2004). Secondly, the high leverage of the bank also results in a shareholder-creditor conflict which requires the appropriate governance measures to solve (Hagendorff, 2014). Considering the capital structure of the banks, some studies reveal ninety percent (90%) leverage as against forty percent (40%) of the non-financial institution. In view of this capital structure between the financial institution and the non-financial institution, the use of the traditional corporate governance structure cannot be considered appropriate.

1.4 Thesis Conceptual Framework

Figure 2 project an outlook of what the thesis is centered on. The discussions point to the challenges of the banking sector in terms of numerous crises leading fragility of the financial sector. A number of reforms to correct the weakness in the financial sector led to strengthen governance structures and to increase information disclosure to enhance transparency and to promote market discipline. In view of this, the study takes a keen interest in internal bank governance structures and financial disclosures to examine their influence on bank stability. From both theoretical and empirical evidence on bank governance and disclosure on bank

stability, the results are mixed and inconclusive. This study aims to contribute to bank governance, disclosure, and stability literature. The study empirically tests these variables using data from Africa. To better understand the nexus, the study splits the sample into Non-Islamic and Islamic populated and developed and less developed credit market economies. The motivation is to offer a number of dimensions within which bank governance and disclosure influence stability and the various context to apply the knowledge.

Figure 2 : Conceptual Framework



Source: Author, 2019

1.5 Objectives of the Study

The rationale beneath this study of bank stability in the African banks emanates from the corporate governance weakness and poor information disclosure which have both been faulted for bank instability, specifically, the global financial crisis mid-2007. In view of this banking crisis, the Basel Committee with the responsibility of banking sector regulations has sanctioned

for good corporate governance, risk management, information disclosure, and transparency as essential elements for the safe and sound functioning of the banking sector. Consequently, bank transparency of risk disclosure is considered fundamental to both corporate governance and risk management structures.

Therefore, this thesis aims to empirically examine the relationship that exists between bank governance, financial disclosures, and bank stability. Also, the study investigates the relationship between corporate governance and disclosure from the context of complementary, substitutionary by interacting with the variables on bank stability. Explicitly, the study seeks to investigate the following;

1. To establish the relationship between bank governance and stability.
2. To examine the relationship between financial disclosure and stability.
3. To examine the relationship between bank governance and financial disclosure.
4. To examine the interaction of bank governance and disclosure on stability.

1.6 Research Questions

The study investigates the following four main research questions:

Question 1: Is there a relationship between bank corporate governance and stability? Which of the governance characteristics relate to bank stability? What is the effect of bank governance on stability?

Question 2: What is the relation between financial disclosure and bank stability? Which of the disclosure index ((1) Assets; (2) Other earning assets; (3) Liabilities (4) other funding; (5) Memo lines; and (6) Incomes statement) influences bank stability?

Question 3: What is the relation between financial disclosure and bank governance? Which of the governance characteristics link financial disclosure? Is bank disclosure and governance a substitute for complimentary?

Question 4: What is the interaction effect of governance and disclosure on bank stability? Is bank disclosure and governance a substitute of complementary in case of bank stability?

1.7 Significance of the study

The relevance of bank governance is attributed to the opacity and complexity of their operations and assets (Becht et al., 2011). The literature points out that the opacity of the banking sector's information asymmetries appears more prevalent than the non- financial sector (Dell'Ariccia, Igan, & Laeven, 2012; Levine, 2004; Morgan, 2002). The complexity of the banking operations as reports of the financial crisis reveals in many of the financial innovation products such as the securitized products in the form of existing loans and other off-balance sheet activities exercised through special-purpose vehicles augmented the financial risks. As reported, these risks were misunderstood or mismanaged (Carlin, Kogan, & Lowery, 2013; Dell'Ariccia et al., 2012). The risk associated with banks' assets alters more quickly than non-financial institutions. The speed to which the risk of the assets varies can be difficult for directors or other stakeholders to detect immediately. In view of the issues raised, gives bank governance important implications for its operations (Levine, 2004).

The issue of information asymmetry in the case of banks increases the challenge for diffused equity holders as well as the numerous depositors and creditors to monitor and control managers from excessive risk-taking. The difficulty in monitoring worsens the agency costs along with the opacity increases the challenge to formulate effective incentive contracts. As pointed by (Levine, 2004), where the results appear difficult to measure but easy to influence in the short run, managers will find it attractive to manipulate pay off from compensation packages. Thus, managers of opaque banks often facilitate compensational packages that are skewed towards their benefits to the detriment of the long- term goal of the bank. In spite of the stringent disclosure requirements and balancing regimes, banks are subjected to more transparency as compared to the non-financial sectors. The failure of the financial market was linked to poor disclosure (Flannery, Kwan, & Nimalendran, 2004; Hopt & Leyens, 2004; John, Mehran, & Qian, 2010).

Moreover, the specificity of the level of bank disclosure as against the non-financial institution given greater transparency is a result of more complicated and ambiguous leading to greater information asymmetry associated with bank assets. Considering the effect of market discipline, studies have shown that higher transparency promotes social welfare and promote market discipline on banks (Baumann & Nier, 2004; Boot & Schmeits, 2000; Hyytinen & Takalo, 2002) whiles enhancing financial stability (Nier, 2005) and ameliorating lending irregularities. However, boosting transparency in the banking system has a possibility of increasing bank runs (Chen & Hasan, 2006). Increasing transparency in the case of negative information has the tendency for creditors to avoid rollover of their investments and that can cause managers to increase risk as a form of compensation. Theoretically, the increased transparency can lead to overreaction to possible noisy public signal (Chen & Hasan, 2006; Morris & Shin, 2002).

Also, Moreno and Takalo (2012) explained an optimal level of transparency beyond which the total welfare (i.e. The creditors' ex- ante expected to pay off in their model) begins a nosedive. An increase in transparency results in a decrease in social welfare since complex financial information requires certain advance literacy to be comprehended by agents. In view of the inconclusive result of information disclosure on bank risk-taking (converse stability), the research question on the implication of bank disclosure on stability becomes relevant. The study provides empirical evidence between bank disclosure and stability using Africa's data.

The conflict of interest among shareholders and creditors in the midst of highly leverage firms like banks interacts with the equity governance mechanism. The governance literature has a significant portion discussing the conflict of interest between shareholders and managers but for the banking system, the deviation of interest between shareholders and debt holders is protrusive. The high leverage of the bank results in a shareholder-creditor conflict which requires the appropriate governance measures to solve (Hagendorff, 2014). With a capital structure of the banks showing ninety percent (90%) leverage as against forty percent (40%) of the non-financial institution. The capital structure of the banks begs a proper governance structure that does not only satisfy the interest of shareholders' but on deviating from the agency theory to a broader governance structure which is the stakeholder theory of governance.

Accordingly, corporate governance mechanisms that align managers' interest to shareholders end up stimulating the costs of conflict between equity holders and debt holders whereas the governance mechanism that aims to pursue the interest of deposits and debt holders at the expense of shareholders will not work for effective governance. In the case of banks, debt holders (depositors) are the primary claim holders with separate interests hugely from the

equity holders (John & Qian, 2003) hence applying the shareholder perspective governance will not address the interest of the debt holders. To address the bank governance challenges, we support those scholars claiming for stakeholders' theory as the appropriate bank governance structure in view of the nature of the banking system. Again, this study makes use of the stakeholder theory in explaining bank governance, disclosure, and stability.

Possibly the unique nature of the African market might offer unique results. Developing countries with different institutional settings and corporate governance structures (Aguilera & Cuervo-Cazurra, 2009; West, 2009), the research on bank governance, disclosure, and stability stand to offers policy direction for relevant stakeholders to promote the bank governance and financial sector development. The study makes a few important contributions to the literature. It advances knowledge in the existing bank governance literature by focusing on the internal governance structures, financial disclosure, and stability in the developing market context. This study makes a contribution to the existing banking literature in a number of ways. Firstly, the study examines the effect of corporate governance on bank stability using Africa's data. Also, we employ a comprehensive set of internal corporate governance measures that comprise board structure (size, diversity, and independence), CEO duality, and audit committee to assess their influence on bank stability and disclosure. The study further interacts with bank governance and disclosure on stability. This is to examine the complementary or substitution nature of governance and disclosure in relation to stability. In conclusion, this study makes the following literature contributions; bank corporate governance, information disclosure, and financial stability using the African data and adopting the stakeholder theory. This study has addressed the relevance and effect of bank governance and disclosure on stability. However, it has also expanded the literature in the Africa market.

1.8 Scope and Limitation of the Study

The study focuses on bank governance, financial disclosure, and stability from the stakeholder perspective using data from Africa. This research further examines the religious context from Islamic banking and the level of credit finance development perspective. The rationale for the area of research is mainly influenced by the scanty empirics in the bank governance in relation to disclosure and stability from the African markets and also to explore the stakeholder model.

The study used the panel data (Unbalanced) framework which captures both time and cross-sectional dimensions of the dataset. The study made use of 352 banks from 29 African countries with 1,194 observations. We used annual data obtained from Bank Scope and World Development Indicators (WDI) spanning the period of 2006 to 2012. Bank specific variables were computed based on data from Bank Scope, while data on macroeconomic conditions were obtained from WDI. The selection of the data span, the number of banks and countries included were largely based on the availability of data.

The study is limited to internal bank governance structure made up of; Board structure (board size, Non-Executive board member, female representation on the board), CEO Power, and Audit committee based on data available on internal corporate governance structure. Also, the stability of the banking is proxy by the z-score which has been widely used in most bank soundness related studies (Roy, 1952) proposed the index as a measure of distance from insolvency. Thus, it inversely proxies the possibility of a bank's failure whereas the financial disclosure was based on the index used by Baumann and Nier (2006). The implication is that external corporate governance, other forms of financial disclosures, and bank stability are not considered in the study.

In view of the above, the conclusions drawn from the thesis will not be applicable to cases of external bank governance structures and from the context of the African market using the stakeholders' model. The result of the study, from academic and policy direction, will have managerial implications for banks in terms of the internal governance structures on financial disclosures and stability for the Africa market. Also, in terms of the global nature of the banking sector, findings of the study will aid investors and relevant stakeholders to contextualize bank governance structures in the area of financial disclosures and stability of the sector.

1.9 Organization of the Study

This study is structured into seven chapters. Chapter 1 introduces the thesis by providing the background to the study, the problem statement, research questions, research objectives, scope and limitation of the study, and the significance of the study. Chapter 2, presents the literature review, constructs a theoretical case for the bank sector, and reviews relevant theoretical and empirical literature on bank governance and disclosures resulting in financial stability. Chapter 3 presents the first analytical paper, which examines the relationship between internal corporate governance structures and bank stability. The second analytical chapter investigates the link between financial disclosure and bank stability in chapter 4. The third analytical paper examines the relationship between internal corporate governance structures and financial disclosure in chapter 5. Chapter 6 which presents the last empirical chapter, examines the interaction effect of bank governance and disclosure on stability. Chapter 7 presents the summary of findings, conclusions, contributions of the study, policy recommendations as well as limitations, and suggestions for future research.

10.0 Chapter Summary

This chapter presented an introduction to the study. It provided a background to the thesis, identified the problem, stated the research questions and objectives, and explained the significance of the thesis. It also presented the scope and limitations of the thesis. Finally, it provided the chapter disposition of the thesis.

CHAPTER TWO

Literature Review

2.0 Introduction

In this chapter, the study presents a detailed review of literature both theoretical and empirical on bank governance, information disclosure, and stability in line with the broad study's objectives. Concerning the thesis objectives, the study focuses on reviewing the theoretical aspects of banking, corporate governance, and corporate disclosure with their respective effect on financial stability. Following the above literature is the empirical reviews on existing relations between bank governance and stability; financial disclosure and bank governance; bank stability and financial disclosure; determinants of banks' financial disclosure and the interactions among the following bank Governance, Disclosure, and Stability.

This section begins with the relevant theoretical positions advanced for the operation of the banking sector as argued by Diamond, (1984); Stulz, (1990); Demirguc-Kunt and Detragiache, (2002) and Barth et al. (2004). The aim adopted for each sector is to appraise theoretically and empirically recent reviews in the literature search as found in the electronic resources.

Section 2.2 presents the historical antecedents of the banking sector and its activities in the African economies. Section 2.3 offers the theories on the study's objectives, while section 2.4 presents on bank governance, information disclosure in line with financial stability. In section 2.5, we consider variables in the banking literature that influence stability. Section 2.6 considers the interaction of bank governance and financial disclosure on stability. Finally,

section 2.7 presents the conclusion of the evidence gathered from empirics and research gaps identified.

2.1 History of Banking in Africa

Most African countries at the time of independence had their banking system highly dominated by foreign-owned banks to the extent, most countries had these foreign banks operating as the only commercial banks with other banks providing an insignificant share of the total lending. The facts remain that, the activities of these foreign banks in providing trade finance and short-term working capital were skewed towards foreign companies and non- African resident communities. The operations of these banks were such that British colonies had British banks dominating whereas French colonies had French banks and Portuguese banks dominating in Portuguese colonies. The rationale was to preserve their market share and to avoid competition to extract rents and for political expediency. As documented by Austin and Ugochukwu Uche (2007) in West Africa, the Bank of British West Africa (BBWA) had an agreement with Banque de l'Afrique Occidentale (BOA) in (1913) restricting each other's presence to their colonies.

The first financial sector reform started in 1960 and 1970 among the governments of the newly independent countries. These governments believed that to accelerate developmental goals, avoid the discriminations against Africans and African-Owned businesses, there was a need for financial sector interventions. This was necessary as the new countries (Independent states) realized that, their expectations from the financial sector were invariances from what the foreign banks were offering. Although the extent of the intervention varied from country to country, the overall goal to bridge the financing gap was pursued by issuing a directive to

reduce the cost of credit and established institutions to supply long-term finance. Given this, most governments instituted state-owned banks to provide financial services to those parts of the economy denied support by the foreign banks. This era, also paved way for locally-owned private banks to enter the market. Despite the regime change, most foreign banks maintained their presence creating the opportunity for governments to take minority stake (e.g., Uganda and Ghana) whereas in someplace, majority stake were taken (e.g., Nigeria and Malawi). These interventions by the various governments subverted the relative importance of these foreign banks as a result of the emergence of the new state-owned and private local banks.

Several African economies in the 1980s experienced economic crises as a result of both external shocks and failure in domestic policies. The financial crises reveal that the policies' intervention brought considerable cost and with incommensurate benefit. Apart from Ethiopia, Kenya, and Zimbabwe where government intervention was low, they had relatively less distortion in their credit market while state-owned banks remained operational. This was attributed to private sector participation or management provided by a foreign bank. Countries whose government took huge interventions had to suffer a great cost. The crises emerged as the most state-owned banks were made insolvent due to political interference to maintain unsustainable loans as well as inadequate technical expertise and bad management. Though not all state-owned banks failed, several of them had to suffer non-performing loans amounting to 80 percent of their total loan portfolio.

The structural adjustment program introduced in the 1990s and early 2000 as part of the general economic liberalization agenda resulted in the banking sector in most African countries experiencing financial liberalization. This agenda aimed to restore credit allocation founded on

commercial criteria, relying on the credit risk assessment skills of the private sector and allowing the forces of the market to determine interest rates. Furthermore, the financial liberalization of the banking sector created the possibilities for entry and expansion of banking across the continent. The story of many African countries witnessing a substantial increase in foreign bank participation during this era was not the same for countries like Kenya, Nigeria, and South Africa. Kenya, the dominant role of Kenya Commercial Bank with its prudent management and strong market position with majority private-owned yet state-controlled, coupled with vibrancy in the private sector and urged innovation to offer credence to their operations. In 2000, Kenya Commercial Bank presented the platform for product development and ventured into cross-border banking in East African.

The minimum capital hike in 2005 in the case of Nigeria initially discourages investment by foreign banks followed by restructuring in 2009 made the sector unattractive for foreign banks making limited investments. Also, South Africa in the late 1980s witnessed a decrease in the presence of a foreign bank due to an upsurge pressure on the foreign bank to disinvest in a country governed under apartheid. In the early 1990s, sector volatility created a scope for consolidation where several banks came together to form ABSA. The Banks Act (1990) was introduced which resulted in an industry growth spout, having several new banking licenses issued, and at the end of 2001, the total number of banks registered was 43. Most banks in early 2002, were placed under curatorship, which led to a run on several smaller banks. Given this, South Africa until today has a highly concentrated banking system. (Sourced from Brown Bridge et al., 1998; Beck et al., 2014).

2.2 The Uniqueness of the Period under Study (2006 -2012)

Certainly, trade and financial openness promote the spread of business cycle dynamics among involved economies, making them highly vulnerable to contagion. Despite the potential risks linked to globalization, the majority of African economies have already embarked on policies in line with trade and financial liberalization introduced by the International Monetary Fund (IMF) and World Bank as a stabilization program (Zagha & NanKani, 2005). Given this, most economies in Africa are integrated into the global economic system now than it was a few decades ago. Although this global integration among Africa economies varies depending on the economy's speed to the financial sector reforms as introduced by the Bretton Woods institutions. However, similar to other developing countries in other markets, economies in Africa have experienced their share of economic and financial crises (Laeven & Valencia, 2008). The aftermath of the global financial crisis projected the distressing effects on economic activity on economies with weak as well as those with strong macroeconomic fundamentals.

There exists a divergent view on the debate of trade and financial openness about crises. There are some authors with the view that openness to trade exposes one to risk while others maintain the trade openness aid economic growth and distant one from default. According to Cavallo and Frankel (2008), openness to trade can trigger or propagate crises. Specifically, highly integrated economies of the global economy are mostly exposed to external shocks mainly from their trade partners. Consequently, such economies are subject to export collapses and/or shrinking trade credits which can trigger a complete collapse and other types of crises (e.g., currency). Similarly, other studies show that openness to trade has a positive link to output volatility and a higher possibility of external crises (Ferretti & Razin, 2000; Easterly et al., 2001). Again, economist Stiglitz concerning capital account openness, argues that it exacerbates pre-existing market distortions as a result of information asymmetries, credit

market imperfection, weak institutions, and moral hazards, aggravating the possible crises (Stiglitz, 2000). A majority of economists including Stieglitz stay in support of long-term private capital inflows (e.g., foreign direct investment), others project the destabilizing effect of volatile and pro-cyclical surges in inflows. This flow of capital as a result of account openness can result in an upsurge of inflows in the short –term capital and a greater risk of sudden reversals (Agenor, 2004). Hence, others assert that capital movement's stemming from financial openness, can stimulate macroeconomic instability (e.g., trigger currency depreciation, asset price bubbles, credit booms, increase inflation, consumption growth volatility) and result in the occurrence of more short- term, high-risk speculative capital in the economy (Arestis, 2005).

The other view on trade openness promotes the idea the openness to trade may lower the probability of crises or lessen the negative effects of external crises. Several studies assert that there is a negative link between trade openness and default probabilities (Borensztein & Panizza, 2009). Furthermore, countries with greater trade activities are found to be less probability to default on their international obligations, because there are harsh sanctions their trading partners can impose in the event of a default (Rose, 2005).

Notwithstanding the extensive financial sector reforms that have taken place in Africa for the last two decades, the financial sector remains less developed compared to the standards of other advanced economies. The statistics indicate African financial sectors liquid liabilities and private credit had an average of below 40 and 25% of gross domestic product (GDP), respectively in the year 2011 (Allen et al., 2014). The uniqueness of the Africa financial market in terms of conservatism to regulations, weak institutional environment, less inclusive financial

settings and likes, Beck et al. (2013) suggested that economies in Africa should adopt a different approach given regulation based on "best fit" instead of "best practices". This is intended to aid the Africa context to reap off the growth stemming from well –functioning banking systems.

The chosen period for the study is informed by the global financial crisis in the years 2007-2008. The study period was chosen to observe the effect of variables before and after the crisis to inform policy direction. Furthermore, the unique features of African economies make their study interesting. For instance, the peculiar cultural dynamics, weak institutional settings, poor transparency measures, weak access to finance, poor financial literacy just to mention a few. These attributes render the Africa economy less developed with the financial system at an embryonic stage. Given this, a lot of financial sector reform policies are being adopted from developed economies and most often does not suit the context and pose difficulty for the system development. For example, amidst the harsh repercussion experience from the global financial crisis, one key lesson Africa economies can learn is to exercise restraint not to import any form of economic or financial policies that appear to work those developed economies. Another lesson for Africa economies is to create a system that connects effectively to avoid perverse incentives among various stakeholders in the financial sector.

2.2.1 Features of Africa Financial System

The African financial system has a banking sector dominating, thus serving as the core of development in the financial sector. The level of financial sector development varies among economies, for instance, economies like South Africa and Mauritius are better developed than

economies of the Central Africa Republic and Chad. The size of most African economies banks is small relative to other developed economies. According to Beck et al. (2013), show the total assets of an average African bank to USD 220 million compared to a range of USD 1 billion for other non-African banks. The small size of the banking system is attributed to the high level of concentration with limited competition. Again, Beck et al. (2013) find that 50% of countries that score more than 2000 base on the Herfindahl index were located in Africa. This high concentration contributes partly to the high spreads (Beck & Cull, 2013) leading to the non-competitiveness of business as well as the fragility of the financial sector. Besides the shallow depth of the African banking systems, there is less outreach justifying 23% of Africans operating accounts with formal financial institutions. However, there are existing gaps in terms of expertise and technology prohibiting the capacity of banks in Africa to offer adequate financial services both at the households and businesses level. Additionally, the financing offered by these banks is mostly short-term with regards to maturity, as reported in the survey of African banks by AFDB/ MFW4A (2009), the majority share (60%) of these banks credit had the maturity of a maximum 1 year in the bank portfolios.

Notwithstanding the weak financial sector development indicators, the regulation of the banks in Africa appears stringent. For instance, the policy on the minimum capital requirement which often is higher than 8% normally used and also large restrictions placed on the compositions of the banks' assets and liabilities and the business, for example, the limitations on exchange exposures and minimum liquid assets (World Bank, 2013). This stringent regulatory environment created though to ensure the stability of the banking sector, if not controlled can limit financial innovations and reduce performance. Despite the restricted regulatory environment, the implementation of the Basel accord is proving difficult. Although most countries have implemented the Basel I, there are few countries (South Africa, Mauritius, and

Morocco) that have implemented Basel II or III. With the backlash from the global economic crises in most African economies, the lesson is that economies do not rash to adopt and implement some of these global banking regulatory policies.

2.2.2 What is Special about the Period?

In the absence of the bank crisis is the stability of the financial sector. The argument of bank stability with regards to the thesis period (2006 -2012) includes the dreaded period of 2007 - 2008 global financial crisis. The crisis was triggered via the bursting of the United States housing bubble and the reverberations resulting in both direct and indirect world economic impact. Certainly, the behaviour of banks in terms of risk management contributed largely to the crisis, which has to heighten discussions of bank risk management among academics and policymakers. Again, the crisis projected the key role of the financial to economic growth. Before the global financial crisis, Africa recorded an impressive average GDP growth of 5.2 (2002 -2007) which was far above the growth of developed markets. Also, integration of the African economies has been slow, hence one could conclude insulation from the crisis. Yet that was an inaccurate analysis given that Africa as a resource dependent trade these commodities to the global markets. Given the global financial and economic crisis, the entire region was exposed to economic downturns, and estimated growth figures began a nosedive 5 percent in 2008 to 1.7 percent in April 2009 (IMF, 2009).

This drop-in growth is as a result of African economies highly dependent on foreign finance inflows as well as commodity-based export growth (Naude, 2009). Most economies were experienced external shocks and in particular, the period of 2008 -2009 had credit contraction

with adverse growth consequences (Price & Elu, 2014). Furthermore, the World Bank estimated remittances to Africa, which has surged at about \$20 billion as of 2008, reduced by 4.4% in 2009 (Ratha, 2009). World Bank economists warned that despite Africa less global integration, the region might be the worst hit (Devarajan, 2009a), possibly because of the region's developmental challenges. Again, the fear was that Africa as the most conflict-prone region in the world, might not be able to handle resource scarcity which could stimulate conflict across the region. The fragile African economies were exposed to financial shocks as a result of their strong dependence on foreign remittances, concessional financing, primary commodity exports, and foreign aid all of which have adversely hit by the financial crises (World Bank, 2009 b). Because of the economic performance downturn, the projection was that economies in Africa will find it difficult if not impossible to reverse human development and economic growth back to pre-crisis levels unless the effects of the crises are moderated (Conceicao & Kim, 2009). This signifies the huge economic cost of financial crises.

The economies of the region considered emerging markets (e.g., South Africa, Nigeria, Ghana, and Kenya) had the first hit through their stock exchanges and financial relations with the regions of the globe. However, these were not the only economies affected but the lower-income economies of the Africa region via indirect channels and high dependence of commodity trading and remittances. Consequent to the financial shocks, most of the economies in the region are reeling from food and fuel price shocks of the crisis. Again, performance with regards to the Millennium Development Goals (MDGs) was unsatisfactory among most countries in the region (World Bank, 2009). The effects of the crisis were apparent across countries but the degree varies based on a country's levels of openness, aid and remittance dependency, financial integration, economic and trade structures, and institutions (Velde et al., 2009). As suggested in the literature, the deeper financially integrated a market is to the global

financial system the higher the instability (Mottelle and Biekpe, 2015). Whereas no economies exist with any form of interaction with other markets, it suggests that we are all at risk and require the appropriate remedy.

After the harsh economic externalities of the global financial crises, the World Bank persuaded developed economies to pledge 0.7 percent out of their stimulus packages, or offer as much as will in addition to the pledge money. The monies were to create a global vulnerability fund to aid developing economies with limited fiscal space. This fund was aimed at lower-income countries (LICs) and the poor, specifically for the vulnerable. The act by the World Bank gained the support of G-20 donors. This underscores the severity of the harsh economic externalities experience in most Africa economies.

2.2.3 Lessons from the Period of Study

The implementation of the financial reforms in most African economies is largely credited with the performance of financial markets in those economies (Asongu, 2013). The introduction of financial liberalization works to promote free trade, deregulation, price controls, and rationing, removal of subsidies, and privatization or downsizing of public services (Woodward, 1992; Asongu, 2014). The reforms have led to the financial sector speedily becoming synchronized with technology as the driving force. Despite the benefit from the financial reforms, the financial sector has been exposed to several market shocks resulting in some banking crisis. As suggested in the literature, the deeper financially integrated a market is to the global financial system the higher the instability (Mottelle & Biekpe, 2015). The aftermath of the global financial crisis has led to the scrutiny of the liberalization policies and their implications to economic fortune, specifically developing countries. The weaknesses of the liberalization

economic strategies were exposed through the financial crisis (Agloyor et al., 2013; Asongu, 2014; Kose et al., 2011).

The aftermath of the external shocks has triggered the discussion among policies makers and academia to reconsider the Africa settings critically and implement the policies that "best fits" the environment and not "best practices" Beck et al. (2013). This suggests that Africa economies ought to adopt policies in context to the unique environment present for effective results. Further, existing financial policies are being requested to be updated base on experience. Thus, reviewing financial policies for modification where necessary in line with the "best fit" approached as professed. Also, in line with the second-generation reforms agenda which aims at policies to strengthen institutions' growth and continuity, focus on corporate governance structures, disclosure for corporate transparency ought to be activated for effective financial integration. The first - generation economic reforms focused on the liberalization and deregulation of the market. The second-generation ensues in parallel with the first- generation. This second-generation economic reform is meant to strengthen institutions for efficiency to enhance social welfare from the globalized economy, and contribute to robust international financial architecture (North, 1994; IMF, 1999). From existing literature in development economies points to the progressive impacts of the transparent financial system as a result of the institutional reform policies implemented (Ariss, 2010; Beck, Demirguc-Kunt, & Levine, 2009; Claessens & Laeven, 2004). For instance, studies done in the East Africa economies established that the financial sector reforms have transformed the banking industry in terms of competition (Mugume, 2008).

Definitely, most literature focuses on advanced economies (Barrell et al., 2010; Babecky et al., 2013), although these economies occupied the epicenter stage of the global financial crisis, yet the external shock on Africa economies was dire. There remains scanty empirical literature on Africa with developing and fewer income economies. Interestingly, a number of these economies have experienced costly banking crises, particularly in the 1980s and 1990s, which solution lasted longer than other economies. Besides these experiences from the 1989s and 1990s, most economies in the Africa market have faced one form of the banking crisis and or other economic challenges that threaten financial sector distress. This makes the study imperative for the development of the banking sector in Africa.

2.2.4 The Nature of Banking Business in Africa

In Africa, the banks remain the primary source of finance to the private sector since the financial markets are underdeveloped. Mishra and Bisht (2013), describe the market to be hosting non-well-functioning bond markets, low international integration, and a heavy intervention of the central bank on the exchange markets.

The Basel Capital Accords have been designed primarily for internationally active banks from advanced (high-income) economies. Banking systems in Africa, however, differ in terms of important characteristics from those in advanced economies and also from developing economies in other regions of the world. Table 2.1 provides some comparative data, using averages across high-income economies and three regional groups of developing economies. Compared to banking systems in high-income economies, African banking systems are very shallower, they intermediate a smaller share of their deposits, and (the corollary of this) they hold more liquid assets as a percentage of their liabilities.

African banks earn much larger net interest margins than those in high-income economies but incur more non-performing loans and much higher overhead costs. After-tax, returns on banks' assets and equity are both much higher in Africa than in high-income countries. African banking systems hold more regulatory capital as a share of their risk-weighted assets (RWA) than those in high-income economies. The higher share of non-performing loans in African banking systems than in those of high-income economies and in other developing regions reflects weaknesses in governance and the institutional environment (for example, deficiencies in the informational and contractual frameworks) in Africa, the generally less diversified and more volatile characteristics of African economies.

In terms of managing risk, African banks have mitigated the greater risk in their lending portfolios, compared to banks in both high-income economies and other developing regions, by intermediating a smaller share of their deposits as loans and by holding more regulatory capital as a share of RWA. Beck and Cull provide a broader discussion of these issues Beck et al. (2013). In most African countries, bank supervision is conducted by the applicable national central bank. The exceptions are the eight member states of the West African Economic and Monetary Union (WAEMU) and the six-member states of the Central African Economic and Monetary Community (CEMAC). In both monetary unions, bank supervision is conducted by a regional banking commission.

Table 2.1 illustrates the level of bank development in various market segments showing the differences in the statistics base on a segment's level of development.

Table 2.1: Features of banking systems in high-income countries, sub-Saharan Africa, East Asia and the Pacific, and Latin America and the Caribbean, average 2009 – 2011 (%)

Factors	High – Income Economies	Sub- Saharan Africa	East-Asia & Pacific developing	Latin America & Caribbean
Bank deposits to GDP	79	24	43	37
Bank credit to deposits	104	70	83	85
Assets share of largest five	88	88	67	77
Banks in Total bank assets				
Net Interest Margin	2.2	5.8	4.2	5.7
Non –Performing Loans to Total Loans	3.8	6.2	3.2	2.6
Overheads to Assets	1.5	5.4	2.4	4.3
Return on Asset (After Tax)	0.7	1.9	1.4	1.6
Return on Equity (After Tax)	8.0	17.7	14.4	15.8
Regulatory Capital/RWA	14.8	18.5	16.3	16.1
Liquid Assets to Deposit and short-term funding	30	39	33	29

Source: World Bank global financial development databank, available at:

<https://data.worldbank.org/data-catalog/global-financial-development>; RWA: risk-weighted assets

2.3 Economic Reform Agenda and Corporate Governance

The notion to ensure economic reforms that engender economic growth and development is eminent on the agenda for most African countries. As postulated by some scholars, the driving force pushing the major economic reforms in most African countries is economic globalization (Reed, 2002; Asiedu, 2004; Berry, 2009). Also, the positive implication of good corporate governance practices on country –level economic development is relevant (Classens, 2006). The reforms include financial markets and non-financial sectors. Given these reforms require the application of systems and practices of 'good corporate governance'. There is a widely held view that good corporate governance structures are to promote best practices and support the long-term performance of corporate entities (Klapper & Love, 2004).

Based on this view as well as market pressures, institutions in developing countries are adopting corporate governance codes to regulate their corporate engagements (Garay & Gonzalez, 2008). From the legal perspective, the governance structures commonly imply the protection of shareholders' rights (investors' protection), promoting corporate transparency and ensuring greater disclosure of financial as well as non-financial information. The advancement of 'good corporate governance' structures mostly defined in the codes or other soft laws, largely includes a measure to enhance board recruitment, ensuing board effectiveness including top management and executive remunerations.

The recommended corporate governance practices or codes used in most developing countries are adopted from developed countries (Hearn, 2011). This is largely due to the developed countries haven acquired long-term experience in the implementation of the systems of laws and regulations governing the financial market and other economic activities (La Porta et al.,

2008). Also, to attract capital from the developed countries, corporations from the developing countries find it expedient to mirror their corporate governance practices in line with the developed markets (Reed, 2002). Again, Bokpin and Isshaq (2009) using data from Ghana explains that for the prospect of accessing investment, firms subject to accepting globally acknowledged rules and structures of corporate conduct. Most developing countries operate relatively weak systems of laws and regulations (Rossouw, 2005).

Furthermore, a corporation from developing countries is largely characterized by weak corporate governance structure which results in difficulty in raising capital and attracting investors and in particular foreign investors (Okpara, 2011). He continues to argue the point that even in countries with good laws and regulations, enforcement is most poorly done. To strengthen weak corporate governance structures, enforcement of laws and regulations is considered vital (Berglof & Classenes, 2006; La Porta et al., 2000). As found by Hillier et al. (2011), an environment, where laws are strongly enforced, minimizes the gap in quality information disclosure among company insiders and outsiders resulting in cost reduction of external funding.

2.3.1 The Governance System in Africa

The effectiveness of corporate governance systems in different countries has been linked to the underlying regulatory mechanisms (Shrives & Brennan, 2015). The structure of governance is evaluated on the view of either the principle-based or rule-based (Arjoon, 2006). The difference between these views is such that the principle-based corporate governance structures are linked to codes that are a voluntary (non-binding) set of recommendations, standards, and best practices given by a collective body with expert knowledge on corporate governance within a

country (Chizema 2008; Osemeke & Adegbite, 2016). Moreover, the rule-based system of corporate governance creates an opportunity for government intervention by formulating stringent laws that must be adhered to by businesses (Adegbite et al., 2011). Between the two views on corporate governance, literature seeks to apprehend which among the views will be appropriate given several conditions (Arjoon 2006; Benston et al., 2006).

Excessive reliance on the rule-based regulatory approach to governance has been projected by Arjoon (2006), whereas the global economic crisis of 2008 reveals the weakness of the principle-based regulatory governance approach (Black, 2008). The kind of governance approach a country adopts is informed mainly by the characteristics surrounding the institutional environment. Aguilera (2005) argue that corporate governance regulation of a country originates from their accounting traditions and institutional conditions. Based on these discussions, it becomes imperative to examine which regulatory approach is governance in Africa implementing, specifically, the banking sector. Corporate governance literature in Africa reveals weak corporate governance structures, poor disclosure, and transparency, as well as disjointed associations between shareholders and stakeholders (Okeahalam & Akinboade, 2003; Okpara, 2010). These attributes on corporate governance in Africa harms the market as investors, as well as other stakeholders, operate in low confidence as far as governance quality is a concern. There is a need to set the appropriate governance measures to regulate the market.

The governance model being practice in developing economies is inspired by developed economies. These economies have the market-centric governance system (i.e., shareholder approach) largely associated with the United States of America and the United Kingdom's economies. Whiles economies like Germany, France, and Japan have the relationship-based

governance system (Stakeholders approach). For developing economies, Bhasa (2004) proposes emerging governance (hybrid governance) as a system of governance model being practices by developing economies. The system of governance combines both the market-centric and the relationship-based governance models. While the market-centric model is explained by the agency theory, the relationship-based model stressed the stakeholder theory. As argued in the literature, corporate governance in a country is influenced by its institutional arrangement (Aguilera & Jackson, 2003).

The agency theory has dominated the corporate governance literature and is deemed as the supranational lens for assessing corporate governance (Lubatkin et al., 2007). However, Guiso et al. (2009) argue the agency relationship explained by the agency theory omits cultural and institutional details, these question the effectiveness of the theory in addressing corporate challenges. The institutional structures and their efficacy are often rooted in the cultures of the people. Also, Tabellini (2008) demonstrated that the functioning of institutions is largely influenced by the individual values and convictions which explains the outcomes of the dominant culture in an institutional environment. The institutions largely reflect the primary cultural disposition in an environment (see Guiso et al., 2006; Tabellini, 2010; Alesina & Giuliano, 2015)

The failure witnessed in the corporate environment emerges a new corporate governance code to correct certain errors deemed to have caused the infractions. The corporate governance code practice in Mauritius explicitly projects the stakeholder's approach (Mahadeo, Oogarah-Hanuman & Sooborayen, 2011a). The governance code from South Africa also pursues the stakeholder agenda (Ntim et al., 2012). Further, the South African's governance ensures that

the board renders account to a wider range of economic and non-economic interests contrary to just the shareholders (Soobaroyen & Mahadeo, 2012). The King Report (1994, 2002, 2009) establish the code of corporate governance practices in South Africa. Kenya has the Capital Markets Authority (CMA) setting the corporate governance regulations (CMA, 2002; 2014). In the case of Ghana, the Securities and Exchange Commission (SEC) issued the 2010 code of best practices for corporate governance which models the best practices across the globe. This code embraces the stakeholders' perspective on governance as other codes in the world (Agyeman & Castellini, 2013). Also, for Nigeria, the corporate governance structure is determined by the Companies and Allied Matters Act (1990) and the Securities and Exchange Commission (2003) corporate governance code. This code embraces the stakeholder approach to governance ensuring the actions of the board and management lead to the benefit of key stakeholders

2.3.2 The Diversity of African Banking Sector

The continent Africa comprises 54 countries and these countries are diverse in terms of religious belief, financial sector development, culture setting, political environment, currency, and the likes. To account for the level of diversity following literature, the study controlled for Islamic populated countries from non-Islamic populated countries and the level of financial development among the countries. This study examines bank stability in Africa from the perspective of internal corporate governance structures and financial disclosure. Consequent of the global financial crisis accuse failures of corporate governance using poor board oversight and inaccurate executive compensation practices to induce undue risk-taking (Erkens et al., 2012; Kirkpatrick, 2009; Sharfman, 2009) whereas other studies posit poor disclosure practices resulting in the opaqueness of the banking sector (Morgan, 2002; Haggard & Howe, 2007;

Flannery et al., 2004; 2013) while bank disclosure is stressed as an effective tool for addressing banking crises (Financial stability Board, 2012).

Lately, researchers have focused attention on the diverse attributes of conventional banks and Islamic banks. According to Wilson et al. (2010), the possible contributions of Islamic banks and governance reforms were significant in restoring reliability and stability in the international financial market. On the contrary, the conventional banking sector recorded high instability during the financial crises whereas the Islamic banks had no substantial announcement of write-offs and remain resilient (Verbeet, 2013). Thus, the significant difference between Islamic banks and conventional banks is that the former offer shariah compliant finance and works under Shariah Supervision Boards which is a prominent governance structure and consider as 'Supra Authority' (Choudhury, 2006). This Shariah Supervision Board in addition to the regular board of directors as well as executive committees provides the Islamic banks' multi-layer governance structures compared to the single-layer governance practice by the conventional banks. Again, the Islamic banks do not charge interest (riba) payments, prohibit the act of speculation, and focused on profit and loss which is a risk-sharing model (Beck et al., 2013).

Studies also project peculiar challenges as a result of the differences of Islamic banks with regard to corporate governance and disclosure. For instance, there are some Islamic banking products such as "mudarabah"(profit-sharing), "murabaha" (cost plus), "Musharakah" (joint venture), "bai-muajjal" (deferred payment sale), "ijarah" (leasing), and "istisna" (processing and manufacturing contracts) which are not only prone to conventional agency conflicts like moral hazards and adverse selection problem but create avenues for managerial expropriation of bank assets (Sarhan & Ntim, 2018). With some of these differences between conventional

banks and Islamic banks, the study controlled for Islamic populated economies with the notion that the probability of these countries practicing Islamic banking will be high to test the difference in terms of bank governance and financial disclosure is given stability.

Furthermore, the level of financial development using the mean of private credit supply by the banks as a benchmark to separate the highly developed financial market from the less developed financial market (Rajan & Zingales 1998; Beck et al., 2000; Kroszner et al., 2007). Following the endogenous growth theory as pronounced by Greenwood and Jovanovic (1990) and Bencivenga and Smith (1991) as well as other financial development is substantial to foster long-term economic growth with regards to the role of finance to facilitate growth by aiding efficient resource allocation, capital accumulation and technological innovation (Levine, 2005). According to Fung (2009), the level of development in the financial sector determines a country's economic performance, hence poor countries with weak financial systems get entangled in a vicious cycle. Also, economies with better-developed financial system fast track growth, and as such, one can conclude that finance is not solely pro-growth but also pro-poor indicating that financial development supports the poor to catch up with growth (Demirguc-Kunt & Levine, 2009; Baltagi et al., 2009). Consequent to this literature, we controlled for the level of bank development among Africa countries to access the effect on bank stability.

2.3.3 Finance –growth Nexus and Banking role

The relevant contributions made by banks to achieve industrialization and innovation by providing long-term funding in the investment projects have been documented (Schumpeter, 1911; Gerschenkron, 1962, Patrick, 1966; Hicks, 1969). Though, the importance of the financial sector's impact on economic performance has not gained consensus. Lucas (1988) blames economists for an overemphasis on the role of the financial sector whiles Robinson

(1979) argues that the financial systems passively follow economic growth. But in contrast, other authors project the leading role the financial sector contributes to economic development (Goldsmith, 1969; McKinnon, 1973; Shaw, 1973). These are the literature on the traditional strand of the finance –growth nexus base on the neoclassical perspective.

The theoretical papers on finance and growth (Lucas, 1988; Romer, 1999, Grossman & Helpman, 1991) based their argument on the endogenous growth model. This growth model establishes the association of the financial sector along the economic growth process (Greenwood & Jovanovic, 1990; Bencivenga & Smith, 1991; Saint-Paul, 1992). Further, the model establishes three main transmission channels via which financial development could influence growth (Pagano, 1993). These are, promoting private savings, advancing the efficiency of the financial intermediation process, and enhancing the social productivity of capital. In line with the literature, the conclusion is that financial markets may influence growth in the long term as realizing the following roles: liquidity provision and the swiftness in mobilizing funds from the surplus units to deficit units, effective monitoring, and screening of firms and managers, enhancing risk management and exchange and emphasizing corporate control by aligning interest among stakeholders and managers.

The role of banks in monitoring and screening of firms and managers positions them above other financial market players. Theoretically, King and Levine (1993b) modeled the financial intermediaries' process providing support to the improved efficiency of investment and effectively obtaining and processing information regarding the entrepreneurs' innovative ventures. Additionally, the banks' role in the capital allocation has significantly improved. Ensuing from technology, they gather and process information in an efficient manner

(Greenwood & Jovanovic, 1990). Also, the study by Bushman and Smith (2001) find a positive relation between "high-quality financial accounting information" and economic performance offering three key channels: 1. identifying new investment avenues based on profit reporting by other firms, 2. the influence to efficient price formation and 3. decreasing the problem of adverse selection, liquidity risk, and transaction costs.

Moreover, information disclosure in the sector reduces the problems of information asymmetry, therefore, boosting investors' confidence and their participation in the market, reducing illiquidity challenges (Diamond & Verrecchia, 1991; Kim & Verrecchia, 1994). Increasing liquidity in the financial market which is positively linked to information disclosure, allows savers to leave their savings for long-term high yielding investments projects. Banks are argued to be more efficient in controlling information friction than the financial markets (Boyd & Prescott, 1986). Their model shows that banks achieve this by reducing the cost associated with information processing regarding plausible investment projects other than conducting this process individually. This provides the banks' savings on research cost as compared to individual agents having to assess and monitor managers. Thus, allowing banks to locate and fund innovative firms resulting in greater economic development. In line with economic growth, the effectiveness of banks relative to the financial markets aid them to supply external funding for new innovative ideas (Stulz, 2002).

As was explained by Bencivenga and Smith (1991), the presence of banks as a financial intermediary promotes long-term economic growth since banks can optimize deposits' funds for long-term savings and investment. But in contrast, other scholars argue from the presence of threshold effects. They contest a positive association between financial intermediation and

development as not exactly (Cecchetti & Kharroubi 2015; Bose & Cothren, 1996). The issue of information asymmetry appears as one of the factors that marred the relation between finance and development. The intermediation role of banks shows their loans as opaque resulting in a cost to monitor and to reduce the asymmetric information that may affect the financial intermediation through the lending rate (Diamond, 1984).

The development of the financial environment (e.g., banks and capital markets) is documented to associate positively to real investment and growth (King & Levine, 1993). Empirically, Rajan and Zingales, (1998) show the industries suffering from capital inflow appear to do better in countries with advanced financial systems. The work by Barth et al. (2004) postulate that regulatory bodies ought to press on banks to disclose accurate information to the public as this will 1. Promote growth in the banking system using an increase in the private credit to GDP ratio and 2. Increase the efficiency of the financial intermediation explained by the low-interest margins and overhead costs. These arguments demonstrate that promoting financial disclosure which advances transparency will allow private investors and depositors to exercise control in a form of external corporate governance over the banks. This action from the private investors and depositors empowered by information disclosure is referred to as market discipline. Thus, disciplining bank managers over bad investment decisions create a better monitor for bank investments (Bushman & Smith, 2001).

Furthermore, the Basel Capital Accord (Basel II) is founded on three pillars: the first two pillars focus on the relevance and the need to improve policies on capital and supervision guidelines whereas the third pillar stresses the relevance implications of better information disclosure and financial transparency to reinforce market discipline. Information disclosure by the banks will

enhance the market participants to sanction bank managers to support value creation investments.

2.3.4 Theoretical foundation of Banking

Arguing from the perspective of complete market assumption of the Arrow-Debreu general equilibrium model, where information is costless and unrestricted access to perfect financial markets then banks will have no economic role important to households and firms. As argued by Freixas and Rochet (2008), there was no microeconomic theory of banking before 1980, thus, the economic important could not be explained. As the model extended to include the banking sector, the result was that if firms and households have unrestricted access to perfect financial markets, then in a competitive equilibrium: banks make zero profit; the size and composition of bank's balance sheets have no effect on other economic agents." Given this, the model renders households completely indifferent between deposits and securities as well as firm also completely indifferent between bank loans and securities. Santos (2001), explains that investors and borrowers could achieve efficient risk allocation without the bank's support. The model is then known as the banking analog of the Modigliani-Miller theorem for firm financial policy (Beatty & Liao, 2014). Holthausen and Watts (2001) also raise the issue of eliminating the role of accounting in the model of the perfect and complete market since the models assume costless information.

The Arrow-Debreu model demonstrates a frictionless space with a perfect and complete market providing a Pareto efficient case of resource allocation. That set-up may be in a different world for what we have, the financial markets and institutions encounter numerous frictions resulting in substantial limitations on business strategies, welfare, and efficiency. In banking, space

exists two closely related financial frictions namely; information and market structure imperfections. Most concentration is on the informational frictions in the financial sector specifically the information asymmetry problems, for instance, adverse selection, moral hazard, and agency problems. The adverse selection is also known as the 'lemons' problem (Akerlof, 1970) which end in banks selecting the riskiest customers for loan offers. The moral hazard problem occurs when the bank contract facilitates one side of the parties (say the borrower) to act contrary in the interest of others (say, the bank). Moreover, financial transactions normally lead to agency costs simply because the agent (manager) position grants superior information and expert knowledge than the principal (investor). Given this, the theoretical literature proposes information asymmetries, and agency costs may not solely decrease managers' motivation to act efficiently (Jensen & Meckling, 1976). But rather induce managers to significantly take more risk to increase the cost of capital (Jensen, 1986; Berger et al., 2008).

Additionally, financial frictions have a direct impact on banks' asset quality. That is, in the case of moral hazard (for instance, deposit insurance), both agency problems and market power may induce managers to engage in excessive risky ventures resulting in huge riskiness of the bank's portfolio (Stulz, 1990; Demirguc-Kunt & Detragiache, 2002). Again, on the other hand, financial frictions affect lending quality was the manager of poor banks shows poor credit scoring skills, weakness in asset underwriting, monitoring, and control leading to relatively high loans with low or negative present value (Berger & DeYoung, 1997).

The issue of asymmetric information is explicated to have revolutionized both the usefulness of accounting information and the role of banks in the economy (Holthausen & Watts, 2001).

Asymmetric information between borrowers and depositors is crucial in appreciating both banks' delegated monitoring and deposit-taking role (Freixas & Rochet, 2008). Undeniably, the issue of information asymmetry is fundamental to agency problems among managers and shareholders leading to agency costs such as an increase of equity issue and regulatory capital. Hence, addressing the agency problem, financial reporting will provide the potential mechanism in dealing with this asymmetric information causing the problem.

2.3.5 Incomplete Market theory

Information imperfection in the market can lead to inefficiencies that could generate a high level of market power, both within an institution (like a household or a firm, see, e.g., Stiglitz & Edlin, 1992) or across institutions (monopoly and monopsony power; see Diamond, 1984; Stiglitz, 2017). The absence of good information provides opportunities for one group to exploit others. Most fundamentally, as we have already noted, with even slight imperfections and asymmetries of information, there is a presumption that the market economy even if it were competitive is not efficient.

2.3.6 Bank Intermediation and Opacity

The theoretical literature shows that bank loans are associated with informational opacity (Flannery, 2004; Jones et al., 2013). The role of the banking sector is to financially intermediate between the surplus and deficit units. The level of information available on the financial market plays a key role in the market participant, particularly in transaction pricing base on risk. Bank opacity given their intermediation process results in uncertainty among investors with regards to the inherent risks of bank operation (Diamond, 1989). Although the activities on the market

can generate information to participants, which can signal the real value of a firm's assets, Campbell and Kracaw (1980) show a model which proposes that opacity concerning risks associated with the intermediation process led to inefficiency and/ or high cost of information production.

The empirical work by Morgan (2002) shows that's bond ratings for banks exhibit higher heterogeneity as compared to non-banks. The work possibly refers to the opaqueness of the banking sector and alludes to the difficulty faced by rating agencies to comprehend the risks linked to the financial intermediation process. Also, Flannery et al. (2004, 2013) posit the difficulty faced by outside investors in valuing banks. The authors argue from the market microstructure theory which proposes varied trading features of bank shares for instance the greater bid-ask spread and less trading volume. Again, they show empirical evidence that there is less market liquidity for bank stocks as compared to non- banks with specific reference to the global financial crisis. Furthermore, the work of Jones et al. (2013) reveal that information of bank mergers does not only affect the target banks stock price but result in re-pricing of other banks- in particular banks with a higher degree of opacity.

2.3.7 Information Asymmetry Theory

The theory as postulated by Akerlof (1970) explains information or "lemons" problem emerges from information differences as well as conflict incentives between the entrepreneurs (managers) and savers (investors). For instance, a business idea can be considered bad or good. Having the two parties in the form of rational investor and rational entrepreneurs who are value-driven as far as investment is a concern then there is the need for appropriate information to avoid a bad economic decision. This is because where it happens that the entrepreneur's

business idea is bad but the investor has no information to correct the entrepreneur, then the bad idea will be misrepresented as the good one which will not create value for the investor. This scenario portrays the lemon problem for a market where good ideas will be undervalued and bad ideas overvalued depending on the level of information available to the entrepreneurs. Also, Akerlof (1970) advances that information asymmetry problems lead to agency conflicts between managers and outside investors.

According to Jensen and Meckling (1976) shareholders have an incentive to undertake riskier projects, because they have unbounded upside potential for future cash flows but face only bounded downside potential due to limited liability. Similarly, Galai and Masulis (1976) illustrated a levered firm's equity as a call option on the firm's underlying assets. By substituting riskier assets for assets of lower risk, shareholders can increase the volatility of the firm's assets thereby increasing the value of their shares. Hence, debtholders who are unable to monitor the firm's activities will demand a higher yield as compensation for this risk. The existing body of literature professes some solutions in addressing the lemons problem (Healy & Palepu, 2001). Namely; optimal contracts that require incentive for full disclosure of private information between entrepreneurs and investors thus addressing the miscalculation problem. Also, the regulation that compels managers to fully disclose private information can probably deal with the issue. Finally, the solution to the lemon problem is promoting the publications of private information by information intermediaries, such as financial analysts, rating agencies, to expose managers' superior information.

2.3.8 Signaling Theory

This theory as proposed by Spence (1973) seminal work contributes mainly to mitigate information asymmetry existing between managers and investors. The paper demonstrated in the labour market how applicant behaviours decrease information asymmetry to distort the selection process towards the prospective employers. The study further explains how prospective applicants create a distinction by their costly signal of rigorous higher education among the high –quality employees and low- quality employees. Following the Spence labour market scenario, Kirmani and Rao (2000) demonstrate a simple signaling model using two entities. The firms are categories into the high-quality firm and low-quality firms. These firms knew their true value (quality) yet outsiders (e.g., investors, customers) did not know and that is a case of information asymmetry.

Given this, the firms had a choice to either signal their true quality to the outsiders or not. The actions of these firms had a certain payoff give the decision. Given that high-quality firms choose to signal and receive A as a payoff and receive B as a payoff for not signaling whereas low-quality firms signal with a payoff C and payoff D for not signaling. The paper argues that signaling will be considered a viable strategy for high-quality firms when $A > B$ and when $D > C$. Given these circumstances, high-quality firms are motivated to signal and low-quality firms are not, which results in a separating equilibrium. In such cases, outsiders can accurately distinguish between high- and low-quality firms. In contrast, when both types of firms benefit from signaling (i.e., $A > B$ and $C > D$), a pooling equilibrium results, and outsiders are not able to distinguish between the two types of firms (Cadsby, Frank, & Maksimovic, 1990). Smith and Bird (2005) demonstrate the application of the theory in selection scenarios across disciplines.

Financial economists have argued most initial core concepts and constructs of signaling theory grew out of the finance and economics literature (Riley, 2001). For instance, firm debt (Ross, 1973) and dividends (Bhattacharya, 1979) represent signals of firm quality. Arguing from their models, only high-quality firms have the ability to make interest and dividend payments over the long term. In other words, low-quality firms will not be able to sustain such payments. Consequently, such signals influence outside observers' (e.g., lenders, investors) perceptions of firm quality. Among management scholars, the signaling theory has contributed to clarifying the influence of information asymmetry in the context of corporate governance research. Zhang and Wiersema (2009) advanced how CEOs signal firms' quality to investors using their quality financial statements. Also, the use of heterogeneous boards has been shown in research using signaling theory to communicate adherence to social values to a wide range of corporate stakeholders (Miller & Triana, 2009).

2.3.9 Bank Corporate Governance

Corporate governance as explained by Schleifer and Vishny (1997) ensures that finance providers are guaranteed returns to their investment made to the firm. Also, corporate governance as defined by the OECD deals with the relationships between a company's management, board, shareholders, and other stakeholders (OECD, 2004; Mulbert, 2009). The role of governance is to facilitate effective direction and monitoring of the corporate resources to reward various stakeholders. Corporate governance as defined in the earlier literature appears to address the interest of the shareholders, the owners and the risk bearers hence the dominance of the agency theory in the governance literature but recent literature attempts to broaden the scope of corporate governance to address the interest of both shareholders and other stakeholders. Therefore, corporate governance is about managing corporate stakeholders' interests.

According to Dermine (2013), bank corporate governance has been classified into two; namely, a shareholder –based view and a stakeholder-based view. Arguing from the first, corporate governance should serve the interest of the shareholder, thus, the owners of the organization whereas the stakeholder view stresses the need for governance to address the interest of all stakeholders (e.g., Depositors, employees, clients, debt holders, taxpayers and society including the shareholders)

2.4.0 Shareholder Perspective on Corporate Governance

The shareholders' view of corporate governance which is explained with agency theory is the dominant theoretical perspective applied in corporate governance studies (Dalton, Daily, Ell-Strand, & Johnson, 1998; Shleifer & Vishny, 1997). As propounded by Jensen and Meckling (1976), agency theory expresses how the public corporation could exist, with the hypothesis; managers are self-interested and do not bear the full wealth effect of their allocation decisions. This is linked to Berle and Means (1932) first satisfactory explanation of the separation of ownership and control inherent in public corporations. What the theory does is to align the interests of owners and managers (Jensen & Meckling, 1976; Stano, 1976; Fama, 1980; Fama & Jensen, 1983) base on the premise of an inherent conflict between the interests of a firm's owners and its management (Fama & Jensen, 1983). Given the position of managers, they controlled superior knowledge and expertise which can enable their self –interest pursuit against shareholders. This action of the managers (agent) to shareholders (principal) emanates agency costs which Jensen and Meckling (1976), argued as an inevitable part of the management/ownership relationship. The issue of agency dilemma is well pronounced in the literature (see. Fama, 1980; Fama & Jensen, 1983; Eisenhardt, 1989a) point to management

self-interest as the tangible benefits as such perquisites and unclear motivations as the pursuit of growth at the expense of profit (Stano, 1976).

The governance implication as per the theory is to adequately monitor management behavior to ensure the protection of shareholders from the conflict of management self-interest leading to the agency cost (Fama & Jensen, 1983). Also, the effect of this theory on governance research can be clearly viewed in dominated studies investigating two main issues, namely, board composition and firm performance (Barnhart & Rosenstein, 1998; Wagner et al., 1998) whereas the other considers corporate leadership structure and firm performance (Dalton et al., 1999). In shaping governance from the board composition perspective, the issue of outsider/independent ratio on the board and firm performance has been considered and has produced mixed results. For example, Pearce and Zahra (1992) had positive correlations, Beatty and Zajac, (1994) had a negative correlation, and no significant correlation was found by Buchholtz and Ribbens, (1994). There have a lot of research in the area of board composition and /or leadership structure and performance as the relationship yet results are found to be inconsistent and conflicting (Korac-Kakabadse et al., 2001; Rhoades et al., 2000).

Although, the dominance of agency theory in governance research has been challenged by Roberts (2005) and suggested exploring other theoretical approaches in studying the dynamic processes of financial reporting. Beasley et al. (2009) propose agency as well as institutional theories in expanding the understanding of governance role in the audit process such as financial reporting and internal controls. The agency model in shaping corporate governance mechanism is trending in the corporate setting as a result of the emphasis place on monitoring to mitigate managers' desire to satisfy their self-interest, thus, reducing agency cost.

2.4.1 The Stakeholder Perspective to Corporate Governance

The proponents of the stakeholder approach to corporate governance argue the corporation's obligations go beyond the shareholders but to other interested parties who are affected by the activities of the corporation, therefore the activities of the corporations are to be managed to address the interest of all affected parties. The model of governing the corporation is classified as stakeholder theory (Donaldson & Preston, 1995), stakeholder capitalism (Freeman et al., 2007), Stakeholder management (Boatright, 1999), and the social entity view (Allen, 1992). The concept stems from the work done by Berle and Means (1932) and Adam Smith, the modern stakeholder theory is broadly identified with the seminal publication of business ethicist Freeman (1984) work *Strategic Management: A Stakeholder Approach*. The work professes that adopting a stakeholder approach to business is not only ethical but strategic.

The theory demonstrates that the firm represents a multilateral set of relationships among stakeholders (Aguilera & Jackson, 2003) who weigh a lot of power to influence the firm's objective successfully or otherwise (Freeman, 1984). The theory then requires organizations to integrate stakeholders' interest in their strategic plans and decision making (Donaldson & Preston, 1995; Jones, 1995). Given this, firms are required to enhance stakeholder relations, include stakeholders' interest in operations, and vary their emphasis, orientation, and scope. The emphasis is to promote ethical corporate behavior irrespective of the firm's performance. Donaldson & Preston, (1995) arguing from a normative stakeholder approach contend that to be internally focused, looking at people as either moral, amoral, or immoral agents, and treating sensitivity to stakeholders as an indirect or intrinsic benefit for the players involved (Cameron, Dutton, & Quinn, 2003). The existing body of research highlight the economic benefits that stakeholder engagement offers organizations' (Hillman & Keim, 2001; Surroca, Tribó, & Waddock, 2010). There are reputation gains and other critical intangible assets (Aragón-Correa

& Sharma, 2003; Sharma & Vredenburg, 1998), or gaining legitimacy to operate in a given context by building trustworthy relationships with stakeholders (Cennamo et al., 2009; Jones, 1995; Laplume et al., 2008).

In order to appreciate this theory, it's important to define the stakeholders. The classical definition proposed by Freeman (1984) is a corporation's stakeholders comprise any group or individual who can be affected by the activities of the corporate objectives. By this definition, the stakeholder of the corporation can be the view from two dimensions; namely the narrow view (primary stakeholders) and the broader view. The narrow view, stakeholders includes those group or individuals without whose support, the operation of the business will collapse. These stakeholders have direct engagement with the business (for instance; shareholders, creditors, customers, employees, suppliers, community, and in the case of banks deposits). In contrast, the broader view (Secondary stakeholder) of stakeholders comprises individuals or groups outside the primary stakeholders whose action can impact the corporation (for example, media, government, competitors, consumer advocacy groups, special interest groups i.e., environmentalists and the likes). These secondary stakeholders may not transact directly with the corporation, but their actions can impact significant harm if their needs are not addressed. Given this, the management of the corporation should consider these secondary stakeholders couching the model for value creation.

According to Clarkson (1994), stakeholders can be defined as groups or individuals who bear the risk for the corporation either voluntarily or involuntarily. Thus, an entity's stakeholder status grants legitimate moral or legal claim on the corporation as opposed to their ability to influence the corporate behaviour. This explanation on stakeholders from the risk-bearing

position seems to widen the stakeholder field to individuals with legitimate claims irrespective of their ability to influence the corporation or legitimacy of their association to the corporation (Mitchell et al., 1997). They further caution that the use of legitimacy is ambiguous concerning who really owns power and influence.

The stakeholder theory is posited as managerial in that it reveals and guides managers to operate. Freeman (1994) argues that stakeholder theory points to two main questions the firm has as its mandate. The first is what the purpose (vision) of the firm is. With this question, the manager has the mandate to operate in a way that impacts the interest of the core stakeholders. This propels the manager create firm value inspired by the vision and market place financial metrics. The second question of this theory is what role the manager has towards the various stakeholders. The question draws managers' attention to the kind of relationship necessary with the stakeholders about the delivery mandate of the firm. Modern economic certainly demand the stakeholder theory as the necessary approach to addressing challenges. Thus, creating an economic value of inclusiveness is where individuals voluntarily cooperate to work together to solve economic challenges and enhancing everyone's situation. Adopting this theory stimulate managers to cultivate a motivating relationship with stakeholders and inspire communities where individual strives to offer their best in creating the firms' value. Whereas the shareholder theory has profit as the motivating force for the manager's process in value creation, the stakeholder theory has profit as the end product in the process of value creation.

2.4.2 The Theoretical Justification for Disclosure

The motive for corporate disclosure is to inform investors and other stakeholders the exposure of risk being taking to enable the assessment and proper pricing of risks. Information disclosure

of bank risk is relevant for market discipline leading to financial market stability. Several studies have been conducted on risk disclosure using different theories. For instance, Amran et al. (2009) used stakeholder theory to investigate risk reporting of risk management whereas Taylor et al. (2010) examining financial risk management disclosure on annual reports of the Australian quoted firms made use of agency theory. Other authors think that a combination of more than one theory (e.g., stakeholder theory, agency theory, signaling theory, media agenda-setting theory, legitimacy theory among others) could aid a superior argument on corporate disclosures (Brown & Deegan, 1998; Oliveira et al., 2011b). According to Junior et al. (2014), there are different users of information and so disclosures are directed to different users hence strategic and financial information can be directed at the investor's whereas non-financial information can be directed at other stakeholders and investors. Given this, the appropriate theory depends on the type of information disclosure required and the purpose of the disclosure. This study is addressing corporate disclosure concerning bank stability. The banking sector is a public good therefore its stability impacts the public positively while its fragility impact negatively on the public. In this study, stakeholder theory alone is considered appropriate to examine the relationship between corporate disclosure and bank stability.

A short discussion on the reason for not using other theories (e.g., agency theory, signaling theory, media agenda-setting theory, and legitimacy theory) is set out below.

To begin with, the agency theory as argued by Jensen and Meckling (1976), expects managers of the firm to operate the firm to the maximization of shareholders' interest (the principal) having the board of directors as mediators to monitor and control managers behaviour. Solomon (2010) defining the role of managers as the agents of the firm and the shareholders as the principal. The position of managers affords them control of superior knowledge and

expertise which can enable their self-interest pursuit against shareholders' interest hence the agency problems. This action of the managers (agent) to shareholders (principal) emanates agency costs which Jensen and Meckling (1976), argued as an inevitable part of the management/ownership relationship. The issue of agency dilemma is well pronounced in corporate governance literature (see. Fama, 1980; Fama & Jensen, 1983; Eisenhardt, 1989a). This points to management self-interest as the tangible benefits as such perquisites and unclear motivations as the pursuit of growth at the expense of profit (Stano, 1976).

The peculiarity of the banking sector in terms of corporate disclosure for market discipline makes the appeals of agency theory inferior to stakeholder theory. The reason being that the stakeholder theory demonstrates that the firm represents a multilateral set of relationships among stakeholders including the shareholders (Aguilera & Jackson, 2003). With regards to the agency theory of narrow perspective of ensuring shareholders' interest, the stakeholders' theory weighs a lot of power to influence the firm's objective successfully or otherwise (Freeman, 1984). The theory then requires organizations to integrate stakeholders' interest in their strategic plans and decision making (Donaldson & Preston, 1995; Jones, 1995). In view of this, firms are required to enhance stakeholder relations through corporate disclosure and to include stakeholders' interest in operations and vary their emphasis, orientation, and scope.

Secondly, the signaling theory as espoused by Spence (1973) seminal work aims to ameliorate the problems of information asymmetry existing between managers and investors. Using the labour market, the paper demonstrated how applicant actions decrease information asymmetry to influence the selection process towards the prospective employer. The study further explains how prospective applicants create a distinction by their costly signal of rigorous higher

education among the high –quality employees and low- quality employees. Following the Spence labour market scenario, Kirmani and Rao (2000) demonstrate a simple signaling model using two entities. The firms are categories into the high-quality firm and low-quality firms. These firms knew their true value (quality) yet outsiders (e.g., investors, customers) did not know and that is a case of information asymmetry. Given this, the firms had a choice to either signal their true quality to the outsiders or not. The actions of these firms had a certain payoff to give the decision.

Additionally, the theory is explained by Connelly et al. (2011) as a communication express in the relation among the sender (who intentionally conveys signal information) and the receiver (who decides the interpretations to the signal). Because of this, the theory appears to create information asymmetry as certain relevant information is held by some parties (i.e., management) while the other parties may not be privy to (i.e., investors) which defeats that problem to which corporate disclosure aims to address (Welker, 1995). Consequent to the discussions, in as much as the signaling theory, is perceived to a, provide disclosure for the market to infer corporate direction, it is not considered the appropriate theory to underpin the corporate disclosure with bank stability and so the stakeholder theory is preferred.

The next theory in the corporate disclosure literature is the media setting agenda theory. This theory as espoused by McCombs (1977) emphasizes the relative importance associated with various topics in the new media to generate a certain degree of public interest. The advent of high media attention has resulted in high community concern to certain issues as promoted by the media (Brown & Deegan, 1998). The focus of the media coverage on corporations has led to the actions that advance corporate governance (Dyck et al., 2008). Moreover, Dahlstrom et

al. (2011) found that a positive correlation is given an increase in the level of risk information in the media and public risk perception. Undoubtedly, the media agenda setting theory has the potential influence corporate disclosure with bank stability, yet the theory is limited to mass media (e.g., television news, new paper, and the like) instead of corporation's annual reports of the study relies upon information disclosure. Given this, the study opts to the stakeholder theory meaning the theory of media agenda setting is rejected as the theoretical background in this study.

Last but not least is the legitimacy theory which is explained by the perceived "social contract" existing between the firm and the society in which it operates (Omran & Ramdhony, 2015). This social contract represents the myriad of social expectations of the firm as it conducts business (Deegan, 2002). Because of this social contract, corporate takes steps to legitimize corporate actions in terms of corporate disclosures to obtain society endorsement (societal approach) and to safeguard continuous existence. According to O'Donovan (2002), the legitimacy theory espouses the idea that for the successful operation of a corporation, there is the need to act within the confines and accepted norms of the society to be identified as a socially responsible entity. For the maintenance of corporate legitimacy, Maignan and Ralston (2002) argue of the reciprocal relationship between the firm and its stakeholders.

The theory explains the firm's obligations comprising of moral obligations to a vast range of stakeholders including the shareholder (Adams et al., 1998). Although legitimate theory supports corporate disclosure as part of the responsible behaviours of an entity in the society, it is more of a corporation appropriate behaviour for society endorsement and less of firm value maximization for its stakeholders. Given this, the study opts for the stakeholder theory with its

broad perspective promoting the interest of all stakeholders including the society in which the firm operates.

Subsequently to all the relevant theories discussed, the study opts for stakeholder theory as the theoretical assumption to examine the issues of corporate disclosure employing annual financial reports of Africa banks concerning bank governance and stability. Given the decision, the next subsection reviews stakeholder theory in the context of corporate disclosure.

2.4.3 Corporate Disclosure and the Stakeholder's theory

The stakeholder's theory as postulates that organizations accountability is not only to be directed toward shareholders but other stakeholders since the activities of the organization in obtaining aims and objectives transcend the shareholders' (Freeman, 1984). The theory is adopted to examine the various stakeholders to whom the corporation owns responsibility and ought to be accountable to. Thus, the business of the corporation ought to benefit all entities with an interest in the firm. According to Graves et al. (2001), as shareholders and other investors invest their funds in the firm, the employees invest their time and intellectual capabilities, the customers invest their trust and loyalty to the firm whereas the communities ensure infrastructure and knowledge for future employees. The theory asserts that the firm should be considerate in their actions and consequences upon entities of interest in the corporation (Wicks et al., 2009).

The stakeholder theory emphasizes the relevance of all parties affected either directly or indirectly of the firm's actions (Wearing & Wearing, 2005). As claim by Deegan (2013), the theory expounded from the managerial and ethical branches. With managerial branch O'Dwyer

(2003) confirms that the theory mandates the firm to respond to all stakeholders with economic impact given the firm's operations and also stakeholders with no direct influence of the firm's economic activities yet possess an interest in the actions of the firm and with an influence on the firm (Savage et al., 1991). Again, the ethical branch of the theory suggests that stakeholders possess the right to all relevant information concerning the firm operations (Deegan, 2013).

2.4.4 Theoretical Literature on Bank Disclosure

The financial market transmits signals that hold significant information that may not be available in a synthesized assessment like asset returns. The literature posits that the price of security allows efficient allocation of investments (Grossman, 1976; Grossman & Stiglitz, 1980). Also, the price of the security projects real improvement on decisions considered (Allen, 1992). In a similar argument, the feedback emerging from the financial market signal information on management performance (Thakor, 1996) and influence decision considered by managers (Ramakrishnan & Thakor, 1984). Ensuing from the works of Berger (1991), Hamalainen et al. (2005) validate the role various parties involved in the market discipline given the level of risk aversion by the regulator. They show that theoretically, depositor is well placed to enforce market discipline on bank management (e.g., bank run). Moreover, Diamond and Dybvig (1983) suggest the power of market discipline is distorted by the moral hazard associated with deposit insurance. Again, the protection offered to depositors in regulatory provisions (Basle Committee regulation) hinders the market discipline stakeholders can enforce on the banks.

From a theoretical perspective, the proposition is that where banks do not disclose adequate financial information, it can suggest that banks are suppressing several bad information against the market. Over time the repercussion of such accrued bad information will be costly for the banks to afford and eventually release the accrued bad information. This could crash their stocks and have an ominous effect on the entire financial market (Jin & Myers, 2006). Similar to the proposition of Haggard et al. (2008) advanced that the stock of firms with a higher degree of voluntary disclosure has lower stock return synchronicity, and the risk of a stock crash is reduced. Whereas Hutton et al. (2009) show that firms with advanced accounting quality are less connected to the entire market and to crash is less likely. Additionally, Jin and Myer (2006) find that countries with a more transparent information environment have firms with stock less synchronized with the market and are a low crash risk.

Notwithstanding the cost of disclosure, such as misinterpretation of information resulting bank run and eventual crisis (Calomiris & Mason, 1997; Gilbert & Vaughan, 1998; Kaufman, 1994); information possible to aid competitors (Verrecchia, 1983; Darrough & Stoughton, 1990); bank vulnerability to deposit withdrawals, disturbing the effective intermediation of banks (Dang et al., 2017; Morris & Shin, 2002; Diamond & Dybvig, 1983).

Other literature projects the benefits of the disclosure; such as the positive reaction of most shareholders to the information disclosure environment (Villiers & Staden, 2012), companies with better accounting quality receive favourable loan contracts from banks Du et al. (2016), again in New Zealand Anderson et al. (2011) show disclosure reform has decreased the problems of information disclosure. Russell (2015), demonstrates that firms with continuous disclosure exhibit positive effect on stock price adjustment to information. The two accounts

on information disclosure present a dilemma on information disclosure and bank safety, therefore the implication of information disclosure on bank stability necessitates further examination.

2.4.5 Disclosure and Bank Opacity

The financial markets over the years have grown rapidly in structure and complexity which require market discipline augmented regulatory functions to ensure reliability, stability, and economic growth. The expansion in the financial market is seen from the dramatic development in the functions performed by the financial institutions and the kind of products offered to market participants. The conflicts of interests between managers, shareholders, and other stakeholders have been widely documented since the seminal work of Jensen and Meckling (1976). Further studies suggest that when owners' control on management is weak due to lack of market discipline, managers are inclined to pursue their own interests instead of those of shareholders (Fama, 1980; Fama & Jensen, 1983; Shleifer & Vishny, 1997). In the banking sector, such issues are further complicated because more parties are involved in the so-called multi-relationship-based transactions (Wilson et al., 2010). Apart from shareholders, debt holders and managers, deposit insurers, and regulators are also involved in the process with their own interests which in many cases possibly conflict with each other. Various factors such as bank balance sheet opacity (Diamond, 1984; Morgan, 2002), low level of depositor education, limited protection of minority shareholders particularly in emerging markets (King & Levine, 1993; Wilson et al., 2010) also play an important role.

Given this, there is a surging debate concerning bank disclosure measures to enhance corporate transparency and financial stability. Banks are found to be more opaque than other firms even in a period of no crisis (Morgan, 2002; Iannotta, 2006). Opacity as described by Flannery et al. (2004), is a function of the bank's asset composition which is particularly driven by uncertainty about the credit quality of the bank's portfolio. Empirical evidence shows that bank opacity creates a challenge for even the most sophisticated investor to perform accurate fundamental value analysis which frustrates the efficacy of the market disciplinary measures on the banking sector (Morgan & Stiroh, 2001; Bliss & Flannery, 2002; Goyal, 2005). Banks during the financial crisis were found to adopt accounting discretion as a means to embellish the book value of their capital (Huizinga & Leaven, 2012). As an approach to boost transparency in the financial sector, Tadesse (2005) argued in support of extensive bank disclosure when he found that crises hardly occur in countries of the regulatory regime that demand extensive bank disclosure. Arguing in favour of extensive bank disclosure in which most banks are uncomfortable especially in their bad times, Prescott (2008), examines the need for financial supervisory authorities to disclose the banks' information as a result of their regulatory power but concluded that more supervisory disclosure will stifle information collection by regulators.

2.4.6 Market Discipline and Bank Stability

The concept of market discipline in the banking sector has gained greater attention following the recent financial crisis. The market discipline is explained as a market-based incentive mechanism targeted at investors of bank liability products, for instance, subordinated debt or uninsured deposits to 'punish' banks for undue risk-taking through higher charges on liabilities (Nier & Baumann, 2003). According to Greenspan (2001), market discipline in the banking

sector is referred to as 'private counterparty supervision'. The possible advantages of market discipline in the banking sector include placing a check on excessive risk-taking, enhancing efficiency, provide signals on the creditworthiness of a firm, and supplement traditional supervision (Berger,1991; Flannery, 2001). Market discipline operates where depositors both have access to information on bank risk and anticipate bearing a cost in the event of bank insolvency. The banking literature advances that informational transparency of banks is critical in promoting market discipline and augment prudential bank regulation.

Stephanou (2010) posits that publicly available timely, consistent, and reliable information on banks' financial performance and risk exposures are fundamental to building market discipline. Market discipline is hypothesized to empower market participants to monitor and sanction excessive risk-taking banks (Basel Committee on Banking Supervision, 2006). The aim of financial reporting is to providing information to those outside the firm to support a wide range of economic decision making with contractual arrangements while prudential bank regulation seeks to limit the frequency and cost of bank failures to protect the financial system as a whole by limiting the frequency and cost of systemic crises (Rochet, 2004). According to Bushman and Smith (2001), financial accounting information plays a fundamental corporate governance role, by aiding monitoring by boards of directors, outside investors and regulators, and the exercise of investor rights granted by existing laws.

In contrast to the above, market inefficiency with regards to the publicly available information. Some scholars argue of behavioural biases and investors irrationally explaining transaction costs and limits to arbitrage and market prices (Barberis & Thaler, 2003; Shleifer, 2000). Also, the argument is that the objectives of bank regulation differ from the objective of financial

reporting Barth and Landsman (2010). Thus, changes in financial reporting requirements to enhance the transparency of information offered to the financial market will not necessarily be identical to the changes needed to regulate the banking sector to circumvent financial crises. As bank regulators have the power to demand whatever information necessary to achieve prudential supervision the same cannot be said of the regulators of accounting reporting standards. Ibid. concluded that it makes sense for the standpoint of the efficiency for accounting standard setters and bank regulators to find some common grounds to operate. Nevertheless, the stability of the financial sector rests with the bank regulators and not accounting standard setters.

2.4.7 The Banking Governance and Risk Control

The nature of the banking business revolves around risk-taking making the role of governance crucial for monitoring and controlling management for the benefit of all stakeholders. The essential role of the banking sector to economic performance position governance central to its operations. Weak corporate governance of the banks can drive the entire market to lose confidence in the ability of a bank to properly manage its assets and liabilities, including deposits, which could in turn result in a liquidity crisis and then it might lead to an economic crisis and cause systemic risk to the society at large (Basel Committee on banking supervision, 2005; Alexander & Baptista, 2006; Garcia-Marco & Robles-Fernandez, 2008). The unique challenges presented by their nature of business requires appropriate governance structures in addressing those challenges. Examining the banking sector presents some of the peculiarities of the financial intermediation and its effects on corporate governance.

The key functional role of banking is increasingly becoming complex in the advent of innovative banking. Thus, the maturity transformation activity where banks exchange liquid short-term demand deposits and other funds to invest in risky, illiquid projects with long-time pay-off horizon. By this process, the banks are seen to (i) mitigating risk by combining diversified loan and investment portfolios and (ii) containing the cost of generating the information required to select and monitor the projects in which funds have been invested. The seminal work by Diamond and Dybvig (1983), argued that the maturity mismatch opens the banks to liquidity risk leading to bank runs; thus, in the event where the bank's underlying operation is fundamentally sound, in the event of a mass withdrawal of short-term funding will necessitate premature liquidation of long-term investments. Given this, the most regulator of the banking sector has incorporated or in the process of incorporating deposit insurance mechanisms to mitigate/avoid concerted withdrawals to sanitize the banking sector but this has not eliminated liquidity risk as compared to other non-financial institutions.

The nature of the banking business taking risks hence using long-term funding to address the liquidity risk as a result of the maturity mismatch problem will not hold. As explain by Becht et al. (2011), this problem of banking operation emanates from the highly progressive, risky, and opaqueness of the assets. This makes it difficult to control and monitor bond covenants or other means of monitoring creditors' funds to avoid undue risk-taking. Banks assume risk quickly and easily; this theses risk can be a disguise and it can be difficult to ascertain the quantum of risk taken. The business has portfolios of illiquid and hard to value, rapidly shifting positions, with assets and liabilities mostly complex. This renders their available long-term funding, both debt and equity are compromised.

Besides, the banking business inter-depend on each other in addressing liquidity challenges. This interbank borrowing/lending can be substantial, with this the problems at one bank can spread to the other banks and the whole economy quickly which is considered the contagion effect in the banking system (Mulbert, 2010). For these reasons, financial sector risk control has become a special focus on corporate governance. The report from De Larosiere et al. (2009) on the financial supervision of European banks concludes that corporate governance was "one of the most important failures of the recent crisis" since the governance systems could not incentivize appropriate risk-taking hence failed to sustain long-term investment policies and other long-term banking business. Besides, other legal reviews (Hopt 2011, 2015; Schwarcz 2009; Tan 2014) as well as policy-oriented papers (Basel Committee on Banking Supervision 2010) affirms this view.

Another concern of governance issues in banking other than the non-financial institutions is the shareholder-creditor conflicts which are critical to addressing the risk-shifting nexus with the possibility of determining the operational stability. This is evident in Landier et al. (2010), whose study indicate that in bad times when the going-concern value of the firm is deteriorating, management engages in risky investment which exposes. Following this account, the shareholder view of corporate governance operates with the view that appropriate risk-taking move with best practices in board composition and managerial compensation. In contrast with the view, research using these traditional means of corporate governance on risk-taking produce mixed results. Laeven and Levine (2009) show that banks with block owners tend to operate with more risk. But Yeh et al. (2011) using G8 countries find results showing that having independent directors on certain board committees mitigate risk-taking for the largest financial institutions. Probably, the same cannot be said for small financial institutions. Muller-Kahle and Lewellyn (2011) show that the longer the tenure of board members on the board and

the busier the directors, the higher the firm's risk-taking. Tung and Wang (2011) found deferred compensation correlates with lower risk-taking.

2.5 The interaction of bank governance and financial disclosure on stability

The banking sector is classified as risk-oriented making it imperative to separate its disclosure from other non-financial institutions (Linsley & Shrivs, 2005; 2006). Moreover, the banking literature posits that with greater information disclosure on banks risk create capital buffer and promote stability (Boot & Schmeirs, 2000; Cordella & Yeyati, 1998; Nier & Baumann, 2006). Bank risk disclosure can be an effective tool to promote bank stability (Financial Stability Board, 2012). Information disclosure and corporate transparency are key props of a corporate governance structures since they ensure that all stakeholders are offered information relevant to evaluate whether their interest are being considered (Katrodia, 2012). In similar argument Onakoya et al. (2012) postulate that, corporate governance is about building credibility, ensuring transparency and accountability as well maintaining an effective channel of information disclosure that nurtures good corporate performance. As argued by Hambrick et al. (2008), the effect of bank corporate governance does not only affect the constituents of the banking sector, but its effect can propel or stymied an entire economic system.

2.6 Control Variables

To ascertain bank stability, beside the internal corporate governance structures, we controlled for bank size using the natural logarithm of real total assets. This is because banks at any point in time are conscious of their relative size when taking risk decisions. The study follows, similar set of bank-level controls in risk equations (Laeven & Levine, 2009; Demirguc-Kunt et al., 2008). The next control variable is bank capital which influence on risk taking as well as

stability score is inconclusive. However, bank regulatory reforms mostly target the capital base with the aim to improve banks risk shocks and to enhance stability. The banks share of non-interest income to total income show the level of bank diversification. On one hand, greater diversification is to improve banks stability in terms of making the bank less dependent on interest income and promote risk diversification (Boyd et al.,1988). However, De Young and Roland (2001) argued that greater diversification of banks operations in the area on non-interest income will destabilize the bank. Moreover, we controlled for sales growth as measure of the growth in bank business. To measure the effect of sale growth on bank risk. According to Foos et al. (2010), the growth in loans does not imply excessive risk- taking, that is in an environment where other banks have similar growth in loans. This suggest that, where other banks are not experiencing similar growth in sales, this could be risky for that bank with high growth in loans. The shareholders ambition to increase bank profitability can influence risk taking by management and undermine stability. Furthermore, it is clear that bank risk is driven by the regulatory, macroeconomic and structural conditions prevailing in each country examined (Laeven & Levine, 2009; Barrell et al., 2010). Hence, we controlled for level of inflation and gross domestic product per capita.

The empirical literature identifies a number of firm characteristics that influence disclosure. Among some of these characteristics are firm size, profitability, industry classification, ownership structure, country of origin, firm age. These firms' attributes on disclosure have produce mixed results. For instance, firm size has been repeatedly identified in the corporate disclosure literature, with the findings that big firms produce greater information disclosure than the small firms (Hackston & Milne, 1996; Mahadeo et al., 2011). Yet, Roberts (1992) found no relation between firm and the level of disclosure. Again, the empirical findings on firm profitability and the level of disclosure appears inconclusive. Some studies found no

relation between firm profitability and disclosure (Hackston & Milne, 1996; Patten, 1991), yet Neu et al. (1998) found negative relationship where as other studies found positive relation (Cormier & Magnan, 2003; Roberts, 1992). However, the adoption of IAS/ IFRS is shown to increase the level of risk disclosures in bank (Bischof, 2009). According to Oliveira et al. (2011b) using sample banks from Portuguese found that stakeholder monitoring and corporate reputation are key drivers to voluntary risk reporting.

2.7 The Conclusion and Research Gap

The literature review has projected bases for internal corporate governance, as well as corporate financial disclosure may support bank stability. From the literature presents diverse views on the impact of corporate governance on bank stability as well as financial disclosure on stability. Accordingly, to confirm the exact effect is not straightforward since it could be positive or negative with regards to works advancing varied conclusions.

The inconclusive results from the relationships make it imperative for further studies to be conducted on bank governance, information disclosure and stability, particularly from the African market context. This is because the existing literature sways more towards studies from the developed markets making difficulty to apply to the developing markets context. Additionally, from the literature search on this study, we did not find a study on bank governance and disclosure on stability, the studies that appear close were (Bourgain et al., 2012; Beekes et al., 2016; Aman & Moriyasu, 2017).

Bank governance which plays a functional role in financial institutions operations and performance have the literature skewed towards the developed and transitional economies leaving the developing economies with few or no evidence. In view of the dearth of empirical evidence on bank governance in African financial sector, this study seeks to provide some empirical evidence regarding the interplay internal governance structures, financial disclosure for corporate transparency on bank stability. The close study in an emerging economy is Bourgain et al. (2012), they analyze 258 banks from the MENA region and Turkey on risk behaviour using financial market openness and depositors exercising pressure (market discipline) to control bank risk-taking.

CHAPTER THREE

Bank Governance and Stability in Africa

3.0 Abstract

This study examines the relationship between bank internal corporate governance structures and stability from the context of the African banks. The purpose of this study is to make contributions to the bank corporate governance and stability literature. To begin with, the study adds to the heating debate on modern bank corporate governance amidst the shareholder interest versus the stakeholder interest. Also, from our copious search, our study is the first to highlight the nexus between bank governance and stability using firm level data and highlights the endorsement of the governance from the stakeholder view. The third contribution is that, the study adds to scanty but growing evidence of cross-national studies specifically from Africa on the effect of bank governance on stability. In spite of the identified contributions to the academic literature, its empirical evidence offer support to policy makers in the area of selecting the appropriate bank internal corporate governance given stability in the Africa market.

We explored annual bank-level accounting information for 304 banks from 29 Africa countries from the year 2006 -2012. Specifically, corporate governance variables as well as bank-specific variables were sourced from Bank Scope data base, while data on macroeconomic conditions were obtained from World Development Indicators. The study using the unbalance panel data employed ordinary least square (OLS) and panel corrected standard error (PCSE) estimation models reveal an instructive result.

The findings of the result show positive statistically significant relation between CEO duality and board size on stability. Whereas board diversity in terms of non-executive board and female representation had negative significant association with stability. Also, at the firm level shows a positive and significant relation for bank size and capital on stability. The findings remain robust to alternate specification. The policy implication for the study is that, Africa as a continent is unique from other markets hence bank governance can be contextualize to consider what works for the financial sector.

Bank Governance and Stability in Africa

3.1 Introduction

Several reports following the global financial crisis offer roadmap to improve banks' corporate governance and in a particular risk governance (Basel Committee, 2010 - Bank for international settlements, 2010; Walker, 2009). Excessive risk-taking by banks jeopardizes the soundness of individual banks. This continuous to adversely affect the sanity of the entire financial sector given contagion effect leading to risks spilling over to the entire sector. The negative result of banks' failure is huge as compared to other sectors and a case of reference is the financial crisis in 2008. Some studies have identified that undue risk by banks led to the crisis, subjecting the entire financial sector to a state of vulnerability (DeYoung, Peng, & Yan, 2013; Kirkpatrick, 2009).

Effective risk management has relevance implications for the individual banks and the economy as a whole. In the case of the banks, excessive risk taking can result in financial distress which can undermine the stability of the sector. Though the business of banking is risk management, when effectively done, it aids in the long-term value creation by ameliorating the direct and indirect cost of financial distress. The literature shows that banks with value-maximizing objective ensure a well-grounded risk management process (Battaglia & Gallo, 2015). Especially in the case of banks, the argument is that of negative repercussion of instability leading to systemic failure. Indeed, the financial health of the banks promote their ability to issue short term claims for funding economic activities. The relevance of a strong bank lies in the effective risk management process functional to its business model (Stulz, 2014).

Unfortunately, the objectives of risk management in the literature are not clear (Ellul, 2015). The consequence of the global financial crisis and other corporate failures draws attention to excessive risk takings of managers whose actions were poorly monitor and control. One of the roles of corporate governance mechanism is to limit banks from undue risk taking and enhance value creation. The process of risk management is to set minimum load cost and avoid distortions in investment policy. The aim is to prevent management from undertaking wrong investments that will destroy the firm's value. The effective risk management process works to ensure that, the bank's projects do not change the risk profile beyond the assigned optimal. Realistically, the dynamics of the bank risk can be difficult to determine making the function of the risk management one of the uneasy tasks. Yet, very critical to the sustainability of the banking operations and the financial sector. The key questions which remain unanswered are, which aspect of the governance board structure failed to effectively monitor excessive risk – taking behaviours of bank managers, whether the effectiveness of bank risk management was inadequate to ensure soundness in the financial system, and whether the governance structure promotes risk taking. In view of these questions, the study examines the literature on relation between bank internal corporate governance and stability to offer empirically evidence on the nexus using data from Africa.

3.2 Stylize facts of Financial Sector Performance in Africa

The performance of the financial sector varies across the various regions. Table 4.1 describes some characteristics of the Africa's financial performance against other markets. Considering the level of credit market development measured as the financial resources provided to the private sector by domestic money banks as a share of total deposits, Africa has the least percentage of 68.95 as to Europe and Central Asia with the highest figure of 127.19. A high

percentage of credit extended to the private sector is to boost the economic development in the region.

In terms of market liquidity, the ratio is made up of liquid asset to short term funding and deposits. Africa scores the highest at 44.33% against the least market -North America with the average figure of 11.34%. This high rate plausibly suggests the problems of high information asymmetry of which management is avoiding to prevent any bank run. But with this high liquid asset, there will be loss on interest returns which could result in high interest spread on loans and possibly low performance. Again, it signals the level of development in financial market as information available is less for management to do business with.

With regards to the provision for non-performing loans, Africa's banks are almost at par with the other regions at 61.24% except Middle East with the highest provision of 72.69% yet, its non-performing loans is at 6.02%. But North America's market with the provision of doubtful debt which is slightly higher than Africa at 63.84% ends up with non-performing loan as low as 1.45. For the non-performing loan to gross loss represent the ratio of default in the banking sector. Africa scored the highest at 9.65 with least region scoring 1.45 in the name of North America with the country that suffered the global financial crises. Again, the development on financial market can explain the difference in the figures. Africa markets less developed and is characterized with high informal sector, weak institutional environment with volatile macroeconomic indicators.

The capital ratio which represents the bank capital to total asset shows the highest percentage of 10.81 of Middle East market followed by Africa with 10.21 and the region with the least

owner's capital is North America with the score of 7.87%. The capital ratio demonstrates the high leverage of the banking sector across the regions. These ratios make a case for why the need to reconsider the bank governance structure from the stakeholder perspective and not the shareholder approach since the other stakeholders particularly the creditors / deposits have huge stake to loss when the bank fail.

Now considering the stability statistics of the banks measured by the z-score. The z-score measures the distance from insolvency (probability of default), the higher the score the lower the probability of default (stability) and the lower the score higher probability of default. On the average, the Middle East regional banks have the highest z-score of 20.63 followed by the North American markets with 18.67. Africa had a z-score of 10.43 and least stable region had 8.47 in the name of Europe and Central Asia. On the whole, performance of Africa is not good enough and could be better when certain fundamental factors such as strengthening institutional quality, boasting efficiency in operations, increasing bank size and the likes are put in place. In spite of these short falls, Africa's market has been quite stable and pushing the wheels of economic growth.

Table 3.1 – Banking Sector Performance Indicators in Africa - Average 2004 – 2015

Banking Sector Performance	Africa	Middle East	Europe & Central Asia	North America	East Asia & Pacific
Z- Score	10.43	20.63	8.47	18.67	12.39
Liquid Asset	44.33	38.81	38.39	11.34	32.71
NPL	9.65	6.02	5.98	1.45	3.45
Prov. NPL	61.24	72.69	63.78	63.82	60.83
Capital Ratio	10.21	10.81	9.77	7.87	8.7
Credit to Private sector	68.95	78.89	127.19	78.83	109.02

Source: Author using 2015 Global Financial Development Database

3.3 Data and Sample Selection

We used annual bank-level accounting information for 304 banks from 29 African countries obtained from the Bank- Scope database. The Bank-Scope database has comprehensive coverage in most countries, accounting for over 90% of all banking assets in each country. The bank report contains a detailed balance sheet and income statement totaling up to 200 data items and 36 pre-calculated financial ratios. In this study, we employed the period 2006–2012.

3.3.1 Bank stability Variable

The concept of companies’ insolvency and for that matter their stability in business has a long-term history. Meaning it is not a new subject of study. The dire economic effects of banks

insolvencies leading to financial crises has huge economic and social cost to shareholders and other relevant stakeholders. In addressing this phenomenon arises the need for appropriate quantification technique to aid policy direction. There have been several models for predicting corporate insolvencies. For instance, Beaver et al. (2005) made use of ratio analysis models whereas Altman (1968) employed discriminant analysis models and Ohlson (1980) used regression models. These model techniques with the effort to predict insolvency use financial statements and stock market data as variables in their model. None of these models has 100% accuracy in predicting firm insolvency.

Bank stability is a highly debated concept and so is it with the quantification approaches to address any form of insolvency. Insolvency risk is core to bank fragility and curbing instability in the banking sector, requires a model that deals with insolvency risk. The Altman's z-score model functions to predict insolvency risk. Although the model was initially made for the manufacturing firms, it has gone through a series of repeated adjustment to several range of object of activity, including the financial firms, making the model strong to quantify financial instability of firms across the sectors.

Even though the banking literature has other approaches to measure financial stability; for instance, the financial soundness indicators as proposed by the International Monetary Fund (IMF), the conditional value at risk measure (CoVar) is to evaluate the risk posed by individual bank to an entire banking system (Adrian & Brunnermeier, 2010). Albulescu (2010) proposed an aggregate indicator of financial stability based on micro and macroeconomics indicators, stock return volatility as a measure of standalone risk of an individual bank and z-score as an insolvency measure (Anginer et al., 2012).

One of the oldest, commonly and most successful models for predicting insolvency is Altman (1968) model. The model is a multivariate which combines financial statement and market value measure to quantify a “z-score” for a firm. The z-score model may be employed as a tool for quantifying financial stability or instability, for early warning signals (EWS) or to predict insolvency of firms. The z-score model captures variables such as working capital, total assets, retained earnings, earnings before interest and taxes, market value of equity and sales.

Altman’s empirical study sampled companies that had gone bankrupt and tested his model with their financial statements prior to bankruptcy to assess whether the model could have predicted their bankruptcy. Consequently, several researchers have employed Altman’s z-score model, given its high prediction accuracy level shown in the studies (Altman, Danovi, & Falini, 2013) using Italian banking sector; the French banking sector (Bouvatier et al., 2014), the Islamic banking system (Cihak & Hesse, 2008), international banks (Laeven & Levine, 2009).

The z-score model as formulated by Edward Altman (1968) is presented below;

$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 0.999X_5$$

$$X_1 = \frac{\text{Current Assets} - \text{Current Liability}}{\text{Total Assets}}$$

$$X_4 = \frac{\text{Market Value of Equity}}{\text{Total Liabilities}}$$

$$X_2 = \frac{\text{Retained Earnings}}{\text{Total Assets}}$$

$$X_5 = \frac{\text{Sales}}{\text{Total Assets}}$$

$$X_3 = \frac{\text{Earnings before Interest and Tax}}{\text{Total Assets}}$$

Z = Overall index or score

From the above financial ratios captured in the z-score, we have the following relevant information such as X_1 on liquidity, X_2 on the use of debt or leverage, X_3 on asset efficiency X_4

on capital ratio and X_5 on profitability. The model takes in account Zones of Discrimination which categorize whether a firm is in danger of being insolvent or otherwise. This categorization of firms in the “Safe” zone will normally imply a minimal chance of insolvency. Whereas a firm categorize in the “Distress” zone is the one in danger of falling into insolvency and the “Grey” zone represent a firm with a moderate chance of going insolvent. Here is the Zones of Discrimination for the Z-Score model as originated by Altman (1968)

$$Z > 2.99 = \text{“Safe” Zone}$$

$$1.8 < Z < 2.99 = \text{“Grey” Zone}$$

$$< 1.80 = \text{“Distress” Zone}$$

Like most models, the z-score has limitations. The models combine financial ratios which may not be entirely accurate as a result of financial statement manipulation. Also, the model has a time horizon up to five years for predicting an incident of financial instability which is quite inadequate for making changes on firm strategy. Additionally, Grice et al. (2001) reviewed Altman’s model and questioned how the results could be general outside the test period and to sectors outside the original sample. The issues of economic conditions like inflation, interest rates and credit availability may change in a given time and could render the model less efficient in predicting firms’ insolvency.

Nonetheless, the validity of the Altman’s z-score for predicting firm insolvency has been reported by Salimi (2015) and affirms that, the model among others appears effective in forecasting a firms’ bankruptcy. The study obtained an average of 79.4% prediction accuracy for the period of three years prior to insolvency which is similar to the conclusion of made by Hanson (2003). The model employs financial ratios which offers relevant information

concerning the solvency of a firm and possibility of being insolvent. The Altman z-score model appears to be robust although does not predict 100% accuracy to firms' bankruptcy.

For this study, we measured bank stability using the z-score as the dependent variable. The study use of z-score is to measure returns per units of exposure. The study measured z-score following the work of Beck et al. (2013) as they followed scholars such as Demirguc-Kunt and Huiziga (2010); Laeven and Levine (2009). The z-score as a measure of bank stability has been widely used in most bank soundness related studies (Boyd & Graham, 1988; Laeven & Levine, 2009; Agoraki, Delis & Pasiouras, 2011; Beck et al., 2013; Fernandez et al., 2016), among others as a proxy for bank insolvency while measuring bank stability. Laeven and Levine (2009) proposed the index as a measure of distance from insolvency. Thus, it inversely proxies the possibility of the bank's failure. The z-score as a measure bank stability compare with other market-based risk measures such as standard deviation of the stock returns or the market beta, z –score has a direct measure of the bank's distance from insolvency (probability of default), which is the main concern of depositors and deposit insurers. The index is a relativity measure determined by accounting information and is linked to firm profitability, solvability, and volatility. Accordingly, it provides information on the number of standard deviation units by which profitability can fall to render the bank insolvent. We took the natural logarithm of the z-score for normalization because the index is highly skewed as the stability measure. It is given by the ratio as;

$$Z = \frac{\overline{ROA} + \overline{E/TA}}{\sigma_{ROA}}$$

As specified above, \overline{ROA} and $\overline{E/TA}$ represent the average return on assets and equity to total assets, accordingly over the sample period, whereas σ_{ROA} is the standard deviation of return on

assets. From the ratio, the stability of the bank increases as high profitability and capitalization while high standard deviation of profitability decreases bank stability. In other words, an increase (decrease) in the z -index indicates a decrease (increase) in overall bank risk exposure and more (less) bank stability. Computed by using annual data for the period 2006-2012.

3.3.2 Descriptive of Countries Bank stability

The Table 3.2 presents the countries and the average value stability score given the number of banks used. The table is presented according to descending order with respect to countries with the highest average score of the stability index (z -score). The overall average stability score for the study is 49.34. The country with highest score is Swaziland recording 112.09 while Zambia recorded 14.97 as the lowest stability score. From the table, we observed wider variations in the countries' stability score. For instance, the variation between Swaziland and Zambia. Further from the table, it is clear that a country's stability score is not dependent on the number of banks considered. For example, countries like Mauritania, Namibia and Rwanda had 8 banks each yet their stability scores are 90.60, 90.41, and 19.04 respectively. The country Kenya had more banks of 43 and had 62.82 as the stability score whereas countries like United Republic of Tanzania, and South Africa had 34 banks each yet recorded 23.92, and 68.19 respectively.

The differences in the countries' stability score can be deduce from the z -score formulae ($\overline{ROA} + \overline{E/TA} / \sigma_{ROA}$). Accordingly, a country stability's score is mainly driven by the level of volatility of returns σ_{ROA} rather than the difference in the profitability (\overline{ROA}) and capitalization ($\overline{E/TA}$). Thus, a country with a significantly lower standard deviation in returns (σ_{ROA}) will

generate a higher stability score whereas a country with higher standard deviation in return will, generate a lower stability score.

Table 3.2: Country Stability Score

Country Name	Number of Banks	Average Z-score
SWAZILAND	6	112.0908
MAURITANIA	8	99.60482
TUNISIA	21	90.6758
NAMIBIA	8	90.40658
ALGERIA	17	73.13329
MOROCCO	20	69.02409
SOUTH AFRICA	34	68.19221
EGYPT	33	63.36545
ETHIOPIA	24	63.33376
KENYA	43	62.82396
CAMEROON	12	59.96293
SUDAN	15	47.3904
MAURITIUS	18	44.73311
BOTSWANA	13	43.87313
BENIN	10	42.26163
SENEGAL	12	40.25444
MALAWI	14	40.11198
COTE D'IVOIRE	19	40.01496

UGANDA	17	38.69274
NIGERIA	31	35.65209
MALI	10	35.406
MOZAMBIQUE	13	30.90948
UNITED REPUBLIC OF TANZANIA	34	23.91869
GHANA	23	23.83459
BURKINA FASO	9	22.70917
SIERRA LEONE	13	20.30295
RWANDA	8	19.03813
ZIMBABWE	23	15.28076
ZAMBIA	24	14.97516

3.3.3 The Internal Governance Measure

Following the various financial crises, the phrase; bank governance has gained prominence among researchers, corporate world and policymakers. The evidence emerging empirically suggests that weak bank governance structures have dire consequences at the firm and the macro level (Hau & Thum, 2009). There are several explanations of corporate governance but one of the broader definitions by Grundmann and Mülbart (2000), explains corporate governance to include the standards for decision making within a company, duties of board members and officers, the internal structure of the company and the relations existing between the company and its shareholders and other stakeholders. In line with the definition, the Basel Committee on Banking Supervisions guidance with the title “Enhancing corporate governance for banking organizations” states that from “a banking industry perspective, corporate

governance involves the manner in which the business and affairs of banks are governed by the board of directors and senior management which, eventually, affects how they:- set corporate objectives,- operate the bank's business on a day-to-day basis;- meet the obligation of accountability to their shareholders and take into account the interest of other recognized stakeholders [including, inter alia, supervisors, governments and depositors]; - align corporate activities and behaviours with the expectation that banks will operate in a safe and sound manner, and in compliance with applicable laws and regulations; and – protect the interest of depositors” (Basel: BIS, February, 2006).

Corporate governance as a system of checks and control is classified into two dimensions; i.e., internal governance and external governance structures. This study made use of the internal governance structures. The internal governance structure entails activities of the board structure and top management interactions to create value for shareholders and other recognized stakeholders whereas the external governance broadly defined to involve any form of substantial change to ownership or control.

For this study, five internal corporate governance structures were employed. First, CEO duality which measures the concentration of corporate power in CEO is captured as a dummy when the CEO doubles as the board chair and CEO. The general expectation of prior literature is that CEO duality which is view as weak bank governance structure should derail stability. Second, the size of the board measured as the number of board members is expected to have a positive effect on stability. Thus, increased board size reflects increased experience, skill, competence, and the ability of the board to perform its monitoring and supervision functions; hence, should improve the stability of banks. Third, the number of non-executive members in relation to total

board size represents the ability of external members to scrutinize and challenge the opinions and ideas of executive members in order to reinforce stability.

However, following the diversity literature huge and wide diversity and differences may induce boardroom conflicts and quarrels which may slow down the performance and eventually destabilize the banks. Hence, the effect of non-executive members is not straight forward. Similarly, board gender captured a number of female board members to total board size is employed as the fourth bank governance structure. However, its effect though argued to improve performance has less empirical backings (Adams & Gramlich, 2016). Finally, audit committee independence which captured as a dummy assumes a value of one when the audit committee is chaired by a non-executive director and 0 otherwise is expected to promote stability. It is argued that once a non-executive director chairs the audit committee, there is pressure mounted on executive directors to implement and report on sound financial practices which will propel stability as failure to do so will be exposed by the audit committee.

Table 3.3 : The Internal Governance Measure

Bank Governance Variables and Measurement				
ceoduo	Dummy of 1 when CEO doubles as board chairman and 0 otherwise	Chief Executive Officer Duality	Computed by author based on data from Bank Scope	+
bodsize	Natural log of number of board members	Number of Board members	Computed by author based on data from Bank Scope	+
nonexec	Ratio of non-executive members to total board size	Non-executive members	Computed by author based on data from Bank Scope	+/-
bodgen	Ratio of female board members to total of board size	Female board members	Computed by author based on data from Bank Scope	+/-
auditind	Dummy of 1 when audit committee is chaired by a non-executive member and 0 otherwise	Audit Committee Independence	Computed by author based on data from Bank Scope	+

Source: Computed by author based on data from Bank Scope

3.3.4 Other Control Variables

For the other explanatory variables at the bank level, we consider six variables to control bank specific factor influencing bank stability: management efficiency, bank size, capitalization, income diversification, sale growth, and Profitability. The bank size as one of the control variables follows the axiom in literature as too big to fail. Hence, we text determine the effect of bank size on stability. Size is measured as total asset of the banks. The capital ratio demonstrates the level of risks the bank can take. From the theory, higher capital requirement guarantees the sufficiency of capital to absorb losses when incur (Diamond & Rajan, 2000) as such increase in capital requirement led to greater safety, it enables banks to absorb losses and enhance bank stability (Demirguc-Kunt et al., 2013). In view of this, we expect positive relation between capital ratio and bank stability. Bank diversification represent fee-based and non-interest source of fund contrary to the tradition interest income (Smith et al., 2003; Ozili, 2017a). Some literature suggests that increase in non-interest income results in bank stability

given that interest income is unstable due to the competition. Hence greater support from the non-interest income can lead banking sector stability. Management efficiency variable is captured as cost to income generation. Normally, improved management efficiency will mean low cost to income generation leading to banking stability. Berger and DeYoung (1997) argue that efficient banks are able to manage their credit risk. But other studies confirm that lower cost to income ratio produce higher profitability where profitability relates with high stability (Olson & Zoubi, 2011, Pasiouras & Kosmidou, 2007).

3.4 Methodology

This study employs the panel data framework which capture both cross-sectional and time series data to ensure both time and entity observations are captured. According to Wooldridge (2018), the use of panel data has the ability to control for omitted variable biases and also captures both time and cross sectional dimensions of the dataset. For the purpose of the study, annual data is obtained from Bank Scope and World Development Indicators (WDI) databases. Specifically, bank specific variables are computed based on data from Bank Scope, while data on macroeconomic conditions are obtained from WDI. The data for this study spans from 2006 to 2012. In all banks from 29 African countries are employed (see Appendix 4 for number of banks per country). Although the data appears old, it captures unique events in the Africa economies. For instance, the shrink in GDP growths from average of 5% in 2007 to 2.8% in 2009, Nigeria banking crisis in 2009, credit contractions witnessed in the 2008-2009, the external shocks from the global financial crisis and also accounts for the effects of the second-generation reforms required for the institutional and structural defects. To specify the model, the study specifies the panel model as:

$$Y_{it} = \alpha_i + \beta X_{it} + \varepsilon_{it} \quad \dots\dots\dots \quad (Eq. 3a),$$

Subscript “i” denotes a cross sectional dimension of a bank for “i” = 1, ..., N while Subscript “t” denotes a time series dimension for “t” 2006 -2012. Y_{it} represents the dependent variable, α_i is the constant term of all periods and specific to a bank fixed effect, β is a vector of parameters ($1 \times k$) to be estimated on the input or independent variables, X_{it} is a vector of observations on the input variables ($1 \times k$) for the model ε_{it} which signifies *iid* is the error term.

3.4.1 Estimation Technique

This study employs the Prais-Winsten estimation technique after the fixed effect model which was selected by the Hausman test (Appendix 3) was tested heteroscedastic (Appendix 1) and autocorrelated (Appendix 2). The Prais-Winsten technique is a generalized least square model and controls for both autocorrelated and heteroscedastic errors. Thus, the Prais-Winsten estimation technique estimates linear regressions that are corrected for panel specific serially correlated residuals and heteroskedastic (see Prais-Winsten, 1954). The estimation model is obtained from the AR (1) model from the error. Also, the Prais-Winsten technique is employed ahead of Cochrane-Orcutt (1949) estimation technique which is also a GLS technique and controls for both serially correlated residuals and heteroskedastic for a number of reasons. First, while the Cochrane-Orcutt estimation employs lags definitions and losses the first observations, the Prais-Winsten preserves the first observations and make more reliable estimates given the increased number of observations compared to the Cochrane-Orcutt estimation. Again, the Cochrane-Orcutt lacks the ability to deal with serial correlation closer to one while Prais-Winsten does so with much ease (Judge et al., 1985). Furthermore, the asymptotic results suggest that the feasible Prais-Winsten estimator is best for most applied circumstances. Hence, the Prais-Winsten estimation is deem best for the estimations for this study.

Full Model

The full model considers the whole independent variables to predict the dependent variables. This regression estimation represents the full model to predict bank stability given the whole explanatory variables.

$$\begin{aligned} \text{LnZScore}_{it} = & \beta_0 + \beta_1 \text{ceoduo}_{it} + \beta_2 \text{bodsize}_{it} + \beta_3 \text{nonexec}_{it} + \beta_4 \text{bodgen}_{it} + \beta_5 \text{auditind}_{it} + \beta_6 \\ & \text{manqua}_{it} + \beta_7 \text{capital}_{it} + \beta_8 \text{bsize}_{it} + \beta_9 \text{sgrowth}_{it} + \beta_{10} \text{div}_{it} + \beta_{11} \text{profit}_{it} + \beta_{12} \text{infl}_{it} + \beta_{13} \text{lngdppc}_{it} \\ & + \beta_{14} \text{trend}_t + \varepsilon_{it} \dots\dots\dots \end{aligned} \quad (\text{Eq. 3b})$$

LnZScore denotes bank stability, *ceoduo* denotes chief executive duality, *bodsize* denote size of board, *nonexec* denotes the number of non-executive members, *bodgen* denotes number of female board members, *auditind* denote independence of the audit committee, *manqua* denotes management quality, *capital* denote capital adequacy, *bsize* denotes size of bank, *sgrowth* denote growth in sales, *div* denotes income diversification, *profit* denotes profit maximization, *infl* denotes inflation rate, *lngdppc* denotes citizenry welfare, and *trend* is an econometric technique used to capture the effect of technological change, and time effects. ε_{it} which signifies *iid* is the error term.

The full model is estimated in Islamic and Non-Islamic oriented economies and high and low developed credit markets in Africa.

3.4.2 Summary Statistics

Table 3.4i presents the summary statistics of the variables employed in this study. The summary statistics are present in the context of the sample, Islamic and Non-Islamic oriented economies and high and low developed credit markets in Africa. The sample period spans between 2006 and 2012.

Table 3.4i: Summary of Variables

Variable	Measurement	Definition	Source	Expected Sign
Dependent Variable				
LnZScore	[ROA +capital Adequacy]/ σROA	Bank Stability	Computed by author based on data from Bank Scope	
Independent Variables of Interest: Bank Governance Indicators				
ceoduo	Dummy of 1 when CEO doubles as board chairman and 0 otherwise	Chief Executive Officer Duality	Computed by author based on data from Bank Scope	+
bodsize	Natural log of number of board members	Number of Board members	Computed by author based on data from Bank Scope	+
Nonexec	Ratio of non-executive members to total board size	Non-executive members	Computed by author based on data from Bank Scope	+/-
Bodgen	Ratio of female board members to total of board size	Female board members	Computed by author based on data from Bank Scope	+/-
Auditind	Dummy of 1 when audit committee is chaired by a non-executive member and 0 otherwise	Audit Committee Independence	Computed by author based on data from Bank Scope	+
Independent Variables: Control Variables				
Div	non-interest income/total assets	diversification	Computed by author based on data from Bank Scope	+/-
Sgrowth	[current year sales-previous year sales]/previous year sales	Growth and investible potentials	Computed by author based on data from Bank Scope	+
Profit	Net income/ total equity	Bank profitability	Computed by author based on data from Bank Scope	+
capital	total equity/ total assets	capitalization	Computed by author based on data from Bank Scope	+
Bsize	Log of total asset	Bank Size	Computed by author based on data from Bank Scope	+
Manqua	operating expenses/operating income	management quality	Computed by author based on data from Bank Scope	-
Lngdppc	Natural log of gross domestic product per capital	Citizenry welfare macroeconomic	World Development Indicators database	+
Infl	consumer price index	stability	World Development Indicators database	-/+

An economy is classified as an Islamic economic when 50% or more of the population are Muslims. The classification is based on data from Research on Islam and Muslims in Africa (RIMA) (<http://muslimsinfrica.wordpress.com>).

To determine low and high developed credit markets, economies that have their credit to private sector by banks below and above the average credit to private sector by banks (21.97%) for the period are considered as low and high developed financial sector respectively

3.4.3 Discussion of Descriptive Statistics

From the Table 3.4.ii it is observed that bank stability which is computed as the log of z-score (lnz-score) shows an average growth of 3.13% over the period understudy. Furthermore, it is observed that average bank stability grew by the highest percentage of 3.44% and 3.39% in high developed credit markets and Islamic oriented economies in Africa respectively. This is an indication that the stability of banks in high developed credit markets and Islamic oriented economies in Africa is better than their counterparts in low developed credit markets and Non-Islamic oriented economies in Africa respectively.

CEO duality (ceoduo) which measure concentration of corporate power and continuity and consistency in decision making and implementation is on the average 5.6% in the full sample. This implies that about 5.6% of the bank board chairpersons doubled as chief executive officers (CEOs). Interesting, it is further observed that 11.7% and 8.1% of CEOs doubled as board chairpersons in Islamic and High developed credit markets indicating that concentration of corporate power and continuity and consistency in decision making and implementation is stronger in these settings compared to their counterparts.

The number of persons that constitute a board on the average is 9 in the full sample. However, it is observed that the average board size is 10 and 9 persons in High developed credit markets and Islamic settings while the average board size is 8 and 9 persons in low developed credit markets and Non-Islamic settings. This implies that board sizes in high developed credit markets are relatively larger.

However, in terms of presence of non-executive board members, Non-Islamic oriented economies appear to have the highest average non-executive ratio of 15.1% followed by low developed credit markets that recorded an average non-executive ratio of 12.9%. This observation is indicative of the fact that non-executive board membership is higher in Non-Islamic and low developed credit markets in Africa.

Female representation on bank corporate boards in Africa is average 10% implying that women made up only 10% of the boards in Africa. However, female board representation appears to be slightly higher in Non-Islamic oriented economies and low developed credit markets in Africa. However, it is strange to observe that inclusion of female on corporate boards is higher in low developed credit markets compared to their counterparts in high developed credit markets.

Audit independence show that about 13.4% of audit committees are chaired by non-executive directors in the full sample. This imply that only 13.4% of boards over the period can ensure that financial reports reflect the true and fair state of affairs of the firm and also suppresses the opportunistic attitude of corporate managers. However, in Non-Islamic oriented economies and high developed credit markets the average audit independence is about 16.8% and 15.8%

respectively implying that about 16.7% and 15.8% of audit committees are chaired by non-executive members. On the other hand, Islamic and low developed credit market reports audit independence of 4.5% and 11.8%. Although these suggest that the ability of boards to ensure and supervise financial reports to reflect the true and fair state of affairs of the firm and also suppresses the opportunistic attitude of corporate managers is weak in Africa but weaker in Islamic oriented economies in Africa.

On the average, bank sized (bsize) which is the log of total assets presents a growth of 6.13% for the period under study using the full sample. However, it is observed that bank size grew by 7.2% and 6.74% in Islamic and high developed credit markets while their counterparts (Non-Islamic and low developed credit market) record a growth in size of 5.63% and 5.65% respectively. From these, it is evident that growth in size is the highest for Islamic oriented economies for the given sample period.

Capital adequacy is on the average 16% of total assets for the full sample in the given sample period. Additionally, compared to their counterparts it is observed that Non-Islamic oriented economies and high developed credit markets reports higher average capital adequacy of 17.3% and 16.7% which are above the average for the full sample while their counterparts (Islamic oriented economies and low developed credit markets) report a lower capital adequacy of 13.6% and 15.5% respectively. This show that capital adequacy is highest and lowest in Non-Islamic oriented economies and Islamic oriented economies in Africa respectively.

On the average, profitability (roe) which is return on equity presents a return of 12% for the period under study using the full sample. However, it is observed that profitability to

shareholder is higher in high developed credit markets (14.47%) and Islamic (13.44%) compared to their counterparts in low developed credit market and Non-Islamic that recorded a profitability of 10.1% and 9.3% respectively. From these, it is evident that profitability is higher in highly developed credit markets for the given sample period.

Management quality is on the average 67.5% of total assets for the full sample in the given sample period indicating that operating expenses constitutes nearly 67.5% of total assets. Additionally, compared to their counterparts, it is observed that, low developed credit markets and Non-Islamic oriented economies reports higher average management quality of 74% and 70.9% respectively implying that management quality is low in these regions. However, it is observed that high developed credit markets and Islamic oriented economies reports lower average management quality of 59.5% and 60.9% respectively implying that management quality is high in these regions.

On the average, income diversification (div) presents a 29.6% of total income for the full sample implying that other income outside the interest income constitutes 29.6% of total income for banks in the given period. However, it is observed that income diversification is higher in low developed credit markets (32%) and Non-Islamic (30.7%) and lower in high developed credit market (26.7%) and Islamic oriented economies (27.2%) for the given period. From these, it is evident that income diversification is high for low developed credit markets for the given sample period.

Inflation measured with consumer price index is on the average 1.5% indicating that changes in prices in consumer goods is relatively stable given the average 1.5% inflation rate for full

sample. Additionally, compared to their counterparts, it is observed that low developed credit markets and Non-Islamic oriented economies report higher inflationary rates of 2.6% and 2.3% respectively implying weaker price stability in consumer good in these regions. However, it is observed that high developed credit markets and Islamic oriented economies report lower average inflationary rates of management quality of 0.9% and 0.8% respectively implying stability in consumer prices in these regions.

On the average, gross domestic product per capital which is a logged variable (lngdppc) presents a sample period growth of 6.88% for the full sample. However, it is observed that high developed credit markets and Islamic oriented economies reports higher growth in gross domestic product per capital of 7.35% and 7.2% which are all above the full sample average while low developed credit markets and Non-Islamic oriented economies reports lower growth in gross domestic product per capital of 6.55% and 6.73% which are all below the full sample average for the given sample period. Thus, high developed credit markets and Islamic oriented economies outperformed their counterparts in the welfare of their citizenry for the given period under study.

Table 3.4ii: Summary of Statistics of Variables

Variable	Full Sample					Islamic Sample			Non-Islamic Sample			High Developed Credit Market Sample			Low Developed Credit Market Sample		
	Obs	Mean	Std. Dev	Min	Max	Obs	Mean	Std. Dev	Obs	Mean	Std.	Obs	Mean	Std. Dev	Obs	Mean	Std.
Lnzscore	2185	3.131	1.265	-2.813	8.102	745	3.386	1.235	1440	2.999	1.260	1015	3.441	1.193	1170	2.862	1.264
Ceoduo	3161	0.056	0.229	0.000	1.000	888	0.117	0.322	2273	0.032	0.175	1257	0.081	0.273	1904	0.039	0.193
Bodsize	3168	8.919	6.892	0.000	46.000	888	9.279	7.530	2280	8.779	6.624	1257	9.991	8.448	1911	8.214	5.530
Nonexec	3168	0.129	0.233	0.000	0.900	888	0.072	0.169	2280	0.151	0.250	1257	0.128	0.222	1911	0.129	0.240
Bodgen	3168	0.100	0.126	0.000	1.000	888	0.090	0.144	2280	0.103	0.118	1257	0.097	0.124	1911	0.101	0.127
Auditind	3167	0.134	0.341	0.000	1.000	888	0.045	0.208	2279	0.168	0.374	1256	0.158	0.365	1911	0.118	0.323
Bsize	2585	6.134	1.785	0.000	11.750	898	7.063	1.649	1687	5.639	1.653	1152	6.739	1.849	1433	5.647	1.572
Capital	2585	0.160	0.151	-0.962	1.000	898	0.136	0.123	1687	0.173	0.163	1152	0.167	0.168	1433	0.155	0.136
Roe	2573	0.120	4.553	-9.0173	9.657	886	0.093	4.376	1687	0.1344	4.639	1150	0.1447	3.493	1423	0.101	5.249
Manqua	2496	0.675	0.573	0.000	9.333	850	0.609	0.424	1646	0.709	0.634	1117	0.595	0.468	1379	0.740	0.639
Div	1799	0.296	0.188	-2.500	2.000	551	0.272	0.204	1248	0.307	0.179	809	0.267	0.187	990	0.320	0.186
Infl	4156	0.015	1.812	-0.011	2.441	1408	0.008	0.006	2748	0.023	2.225	1778	0.009	0.006	2378	0.026	2.390
Lngdppc	4248	6.884	0.989	5.168	8.858	1408	7.198	0.664	2840	6.728	1.082	1778	7.350	1.034	2470	6.547	0.802

number of female board members, *auditind* - independence of the audit committee, *mangua* - management quality, *capital* - capital adequacy, *bsize* - size of bank, *sgrowth* - growth in sales, *div* - income diversification, *profit* - profit maximization, *infl* - inflation rate, *lngdppc* - citizenry welfare

3.4.4 Discussion of Pearson Correlation Matrix

Table 3.4.iii presents the Pearson's correlation as mechanism for checking and monitoring multicollinearity. Following Kennedy (2008) who set multicollinearity threshold to 0.7, no evidence of multicollinearity is observed within the dataset. Additionally, the Variance Inflation Factor (VIF) for each variable is computed in Appendix 5. With the rule of thumb that the VIF value of variables acceptable in the model should not exceed 10 (Brooks, 2005), none of the variable have their VIF value exceeding 10; hence all the variables are acceptable in the model. Furthermore, the normal of each variable is present in Appendix 4 and indicates that all the variables are normally distributed around their means; hence results can be relied upon. Given that all the basic assumptions for regressions have been observed, the results and findings are deemed to be reliable, efficient, consistent and representative enough.

Table 3.4 iii: Pearson’s Correlation Matrix

	lnzscore	Ceoduo	bodsize	sqbodsize	nonexec	bodgen	auditind	bsize	capital	roe	manqua	div	infl	lngdppc
Lnzscore	1													
Ceoduo	0.0587	1												
Bodsize	0.1156	-0.1061	1											
sqbodsize	0.1289	-0.0761	0.9196	1										
nonexec	-0.08	-0.0733	0.2109	0.1109	1									
bodgen	-0.0161	-0.0867	0.2585	0.1753	0.212	1								
auditind	-0.0087	-0.0308	0.2478	0.1908	0.5657	0.1699	1							
bsize	0.2573	0.1381	0.1655	0.1872	0.0663	0.0833	0.0128	1						
capital	0.1182	-0.054	0.0717	0.049	0.0859	0.0454	0.0943	-0.3175	1					
roe	0.2219	-0.0018	0.0343	0.0329	-0.0609	0.0126	0.0026	0.132	-0.0672	1				
manqua	-0.2969	-0.0274	-0.061	-0.066	0.1472	-0.0305	0.0219	-0.3106	0.0591	-0.3661	1			
div	-0.1802	-0.0246	0.0127	-0.013	0.0017	0.0202	0.0316	-0.1429	0.0747	-0.031	0.0409	1		
infl	0.0041	-0.0205	-0.0075	-0.0208	0.0198	0.0296	0.0041	-0.1099	0.0266	0.0401	-0.0332	-0.0206	1	
lngdppc	0.1338	0.0198	0.0646	0.0981	0.1478	-0.0209	0.1317	0.4177	0.1144	-0.0009	-0.1034	-0.1733	-0.0689	1

LnZScore - bank stability, *ceoduo* - chief executive duality, *bodsize* - size of board, *nonexec* - the number of non-executive members, *bodgen* - number of female board members, *auditind* - independence of the audit committee, *mangua* - management quality, *capital* - capital adequacy, *bsize* - size of bank, *sgrowth* - growth in sales, *div* - income diversification, *profit* - profit maximization, *infl* - inflation rate, *lngdppc* - citizenry welfare

3.5 Empirical Model Diagnosis tests

We present the empirical results for the internal governance structures association to bank stability as specified in the equation 3. The model diagnostics test shows the R-squared values for both the Ordinary Least Square (OLS) and the Panel Corrected Standard Error (PCSE) estimations in the table 3.5.i and 3.5.ii accordingly.

Tables 3.5.i and 3.5.ii present the results on the effect of bank governance structures on the stability of banks in Africa. To better understand the effect of bank governance structures on stability, the results are presented and reported on Islamic and Non-Islamic and developed and less developed credit market economies in Africa. Tables 3.5.i presents the results on ordinary least square and Table 3.5.ii presents the preferred Panel corrected standard error results

The results on bank governance in the preferred Models show that CEO duality which is generally seen as a weak bank governance structure where corporate power is concentrated if only one person is positively related to stability only when the study is viewed from a Non-Islamic populated and less developed credit market economies. However, the study fails to find such evidence when the results are run for the whole Africa, Islamic populated and developed credit economies in Africa. Thus, CEO duality reinforces stability of banks in Non-Islamic populated and less developed credit market economies. Following Yang and Zhao (2014), CEO duality which is indicative of concentration of power similarly presents the better of continuity, coherence and consistency in decision making and implementation of boardroom decisions by ensuring, aligning and translating boardroom decisions into daily operations ensuring reduction resistance to change informed by board decisions. That is to say, when the CEO doubles as the

board chairman, there is smooth, prompt and consistency in implementation of decision on risk which assists in risk avoidance and reduction.

Similarly, the study provide evidence that bank governance in the form of board size measured as the number of board members is positively related to stability viewing from the whole sample. Furthermore, similar findings are reported for Non-Islamic and Developed credit economies in Africa. The literature suggests that large size boards appear with diverse personnel, with competences, abilities and experiences to manage, direct, supervise and monitor the strategic affairs of corporate entity and therefore improves the performance of that corporate entity (Abor, 2007). Hence, this study argues following Belkhir (2009) that increase in board size improves the experience, knowledge and skills of the board and thereby improves the stability through improved supervision and monitoring. Consequently, board size as a bank governance structure improves stability of banks.

On the contrary, increase in non-executive members of the board which is generally interpreted as board independence and a strong bank governance structure has a negative and significant relation with bank stability given the full sample and also in Developed credit markets in Africa. While existent literature shows that non-executive membership challenges, scrutinize and constructively guide the affairs and activities of executive or management members to ensuring improved performance (Tulung & Ramdani, 2018). On the contrary, literature on non-executive board has been argued to possibly undermine performance due to prolonged discussions, boardroom quarrels, lack of tolerance and trust which delays decision making. Following the boardroom irregularities as a result of the non-executive membership presence which may bring prolonged discussions and quarrels which slow down performance, the study

argues that quarrels are prolonged and decision-making processes hinder stability of banks in Africa and its developed credit market economies.

Bank governance in the form of board gender diversity is reported to be significantly and negatively related to stability of banks in Non-Islamic populated economies in Africa. Following prior literature that show that board gender diversity may promote or derail performance (Campbell & Mínguez-Vera, 2008), the study reports and argues that in the context of Africa the traditional and social settings discriminates against females in terms of access to education and inclusion; hence they tend to lack the requisite abilities and skills to make meaningful contributions when they ascend onto boards. Thus, female ascension on boards is based on public cry for fair representation but not based on competencies; hence leading to decline in stability by increase in female board representation in Non-Islamic populated economies.

On the control variables, it is reported that management quality in managing operating expenses reduces stability implying that lower management quality in managing operational cost derails stability of banks in Africa, Non-Islamic and Islamic and developed and less developed credit economies in Africa. This is consistent with prior studies (see Athanasoglou et al., 2008).

Moreover, capital adequacy is found to be positively and significantly related to stability of banks in Africa, Non-Islamic and Islamic and developed and less developed credit economies in Africa. This finding supports the theories of financial distress that argues that capital serves as a basis for improving the financial stability of banks. This is evident in the regulation of

banks as regulators tend to increase capital requirements to improve the financial strength of the banking sector.

Similarly, a positive and significant relation is observed between bank size and stability indicating that bank size has some economic gains that promote the stability of banks and evident from the economies of scale and scope concept.

Sale growth is reported to be negatively and significantly related to stability of banks in Non-Islamic and Less developed credit economies in Africa. Thus, as the sales of banks increases, it contacts the banks to credit risk losses which increases the financial stress on banks and hence reduced bank stability in Non-Islamic and Less developed credit economies in Africa.

Following concentration- stability and concentration-fragility hypothesis, the study reports evidence in support of concentration-stability as diversification reduces stability in the whole of Africa, Non-Islamic, Islamic and Less developed credit market economies. This implies that as banks concentrate their operations on few activities given their core competence, fragility is reduced.

Surprisingly, profitability which is expected to have improved stability of banks (Margaritis & Psillika, 2010) rather reduces stability of banks in the whole of Africa, Non-Islamic, Islamic and less developed credit market economies. However, it is argued that the pursuit of profitability increases the risk-taking behaviour of banks and hence reduce the stability of banks.

The study shows a negative and significant effect of inflation on stability of banks in Islamic populated and less developed credit market economies in Africa as expected. These findings support the findings of Molyneux and Thornton (1992), and Demirguc_Kunt and Huizinga (1998) who argues that inflation weakens the financial power of banks hence leading to low stability in banks.

Gross domestic product per capital is negatively and significantly related to stability of banks. It is argued that increase in gross domestic product per capital is an evidence of improved welfare of citizenry. Hence following the loan growth theory, when welfare of citizenry increases demand for loans declines and forces banks to redesign credit and loans products with lower stringent processes, procedures and conditions surrounding lending in order to attract more clients which leads to high non-performing loan and subsequently reducing stability in the operations of banks.

Table 3.5.i: Bank governance and Stability: Empirics from Africa – OLS Results

VARIABLES	Full Sample	Non-Islamic Sample	Islamic Sample	Less Developed Credit Market Sample	Developed Credit Market Sample
Ceoduo	0.125 (0.128)	0.646*** (0.180)	-0.140 (0.166)	0.362* (0.210)	-0.0898 (0.160)
Bodsize	0.0158*** (0.00410)	0.0225*** (0.00522)	0.00226 (0.00714)	0.00352 (0.00826)	0.0127** (0.00506)
nonexec	-0.468** (0.195)	-0.268 (0.202)	-0.694 (0.737)	-0.132 (0.250)	-0.407 (0.307)
Bodgen	-0.451** (0.199)	-0.715*** (0.269)	-0.191 (0.295)	-0.427* (0.234)	0.388 (0.401)
auditind	0.0486 (0.116)	-0.0678 (0.122)	0.528 (0.436)	-0.0545 (0.160)	0.0865 (0.167)
manqua	-0.800** (0.327)	-0.808** (0.375)	-0.335** (0.165)	-1.537*** (0.193)	-0.433** (0.203)
Capital	2.160*** (0.317)	2.009*** (0.318)	5.298*** (0.915)	3.539*** (0.590)	1.199*** (0.301)
Bsize	0.158*** (0.0276)	0.195*** (0.0367)	0.203*** (0.0496)	0.0965** (0.0415)	0.133*** (0.0303)
sgrwoth	-0.0879 (0.0619)	-0.281*** (0.0909)	0.00453 (0.0287)	-0.269*** (0.104)	0.00446 (0.0312)
Div	-1.155*** (0.210)	-1.709*** (0.239)	-0.502 (0.404)	-0.994*** (0.352)	-0.938*** (0.265)
Profit	-5.488*** (1.098)	-4.573*** (1.197)	-14.58*** (4.808)	-6.026*** (1.390)	-1.754 (1.770)
Infl	-0.566 (0.511)	0.255 (0.571)	-4.549*** (1.345)	-2.139*** (0.800)	-0.269 (0.669)
lngdppc	-0.0940** (0.0368)	-0.123*** (0.0407)	-0.128 (0.0983)	-0.136** (0.0668)	-0.194*** (0.0535)
Trend	-0.0184 (0.0195)	-0.00766 (0.0241)	-0.0509 (0.0321)	-0.0260 (0.0257)	0.00566 (0.0306)
Constant	3.745*** (0.451)	3.718*** (0.493)	3.646*** (0.850)	4.797*** (0.512)	4.359*** (0.534)
Observations	1,194	905	289	666	528
R-squared	0.223	0.259	0.237	0.268	0.160

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 3.5.ii: Bank governance and Stability; Empirics from Africa – PCSE Results

VARIABLES	(1) Full Sample	(2) Non-Islamic Sample	(3) Islamic Sample	(4) Less Developed Credit Market Sample	(5) Developed Credit Market Sample
Ceoduo	0.0542 (0.159)	0.715*** (0.202)	-0.124 (0.190)	0.433** (0.204)	-0.248 (0.204)
Bodsize	0.0120** (0.00474)	0.0235*** (0.00599)	-0.00169 (0.00854)	-0.00321 (0.00875)	0.0122** (0.00543)
Nonexec	-0.576** (0.260)	-0.358 (0.257)	-0.906 (0.846)	-0.124 (0.276)	-0.614* (0.330)
Bodgen	-0.318 (0.235)	-0.550* (0.314)	0.0563 (0.281)	-0.177 (0.316)	0.354 (0.484)
Auditind	0.106 (0.147)	-0.100 (0.151)	0.640 (0.418)	-0.0535 (0.166)	0.0430 (0.184)
Manqua	-0.631*** (0.172)	-0.617*** (0.195)	-0.508** (0.203)	-1.596*** (0.169)	-0.332** (0.137)
Capital	2.980*** (0.356)	2.608*** (0.365)	6.490*** (0.943)	4.297*** (0.557)	1.646*** (0.313)
Bsize	0.197*** (0.0299)	0.267*** (0.0387)	0.203*** (0.0543)	0.130*** (0.0442)	0.153*** (0.0345)
Sgrwoth	-0.0516 (0.0330)	-0.191*** (0.0732)	-0.00647 (0.0287)	-0.207*** (0.0791)	0.0107 (0.0274)
Div	-0.840*** (0.220)	-1.419*** (0.264)	-0.978** (0.396)	-0.676** (0.307)	-0.501 (0.310)
Profit	-3.973*** (1.350)	-2.785* (1.497)	-13.89*** (5.124)	-5.239*** (1.392)	-1.078 (2.064)
Infl	-0.548 (0.451)	-0.160 (0.500)	-4.424*** (1.387)	-1.030 (0.628)	-0.631 (0.646)
Lngdppc	-0.0461 (0.0429)	-0.116** (0.0464)	-0.0346 (0.111)	-0.131* (0.0694)	-0.134** (0.0605)
Trend	-0.0343* (0.0191)	-0.0278 (0.0225)	-0.0587* (0.0338)	-0.0407* (0.0236)	-0.0113 (0.0278)
Constant	2.893*** (0.410)	3.002*** (0.448)	2.997*** (1.004)	4.302*** (0.529)	3.756*** (0.587)
Observations	1,194	905	289	666	528
R-squared	0.562	0.578	0.625	0.588	0.608
Number of bankcode	304	220	84	185	126

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

3.6 Chapter Summary

In the essential role of banks for the well-functioning of the financial sector as well as the economic growth, major attention is focused on the sector to ensure stability of the financial sector. The central operational framework of the bank

s is defined by the governance structure being implemented. The European Banking Authority (EBA, 2011, p.3) confirms that internal corporate governance's weakness contributed significantly to the global financial crisis witnessed in the 2007/2008. Also, the Basel Committee on Banking Supervision (BCBS, 2010, p.5) supports the weak bank governance as a major contributor to the banking insolvency. Consequently, the objective sort to examine the effect of internal governance structures on bank stability from the context of African market.

The results show that the effect of internal governance structures on bank stability varies across the different forms of economies employed. This implies that the effect of bank governance on stability is strongly dependent on context in which the nexus is examined. Beginning with the CEO duality, interestingly the result shows a significant support for stability using the non-Islamic populated and less developed credit market economies. CEO duality lacks clarity in theoretical predictions and inconclusive empirics on the firm's performance (Hermalin & Weisbach, 2003; Adams et al., 2010). The main proposition against CEO duality (also known as dual leadership) is based on the agency theory. The theory argues that the CEO as an agent of the shareholders (the principal), is inclined to act against the interest of the shareholder hence, there is the need for an apex body called the board of directors to ensure monitoring and control of management behaviours to align the interest of the firm to the shareholders. In view of this, the CEO duality poses a situation known as conflict of interest that may not promote

the shareholder's interest. On the contrary, dual leadership provides an unparalleled firm-specific information of CEOs and firms are able to speedily respond to the dynamic environments due to unified leadership (Brickley et al., 1997; Larcker & Tayan, 2011). Furthermore, Yang and Zhao (2014) argued that CEO duality is an indicative of concentrated power, yet presents the better continuity, coherence and consistency in decision making and implementation of boardroom decisions by ensuring, aligning and translating boardroom decisions into daily operations ensuring reduction resistance to change informed by the board's decisions. That is to say, when the CEO doubles as the board chairman, there is smooth, prompt and consistency in implementation of decision on risk which promotes stability as found in this study.

Viewing the results from the full sample, non-Islamic populated and developed credit markets economies; the results show positive significant support between board size and stability. As argued by Cole et al. (2008), the nature of banks in terms of complexities, opaqueness, high leveraged, and being highly regulated, yet there are certain features of non-financial institution that may not guarantee better performance for the financial institutions like the bank. The banks require greater monitoring and advisory services from their boards and the greater numbers of the board offers diverse knowledge, information and experience to direct the bank to maintain stability as shown by this current study.

The next internal governance structure of interest is board independence which is represented as the non-executive board membership. Surprisingly, the results show a significant negative relation to bank stability using the whole of Africa's sample in both estimations but the same relation was found in the highly developed credit market viewing from the PSCE results. The

effect of non-executive board is projected in the relevance of moral hazard in multi-agent settings (Bolton & Dewatripont, 2005). Thus, the effort by an individual in a group is likely to be informed by the character of group and that determines the level of mutual monitoring. This can either be positive or negative in terms of influence strategic decisions like risk management.

The relevance of outside directors on firm performance (Hermalin & Weisbach, 1991; Dahya & McConnell, 2007). Studies claim that majority of independent outsider directors are more efficient in monitoring management and mitigate the CEO power (Beatty & Zajac, 1994; Westphal & Zajac, 1995). In this study the result could not affirm the positive link of bank stability to non-executive board.

Alternatively, one of the board structure elements is board diversity in terms of female representation on the board. The risk-taking attitude with regard to investment decisions and gender differences has been well examined (Barsky et al., 1997; Sunden & Surette, 1998; Agnew et al., 2003). The consent in the literature shows that women are more risk averse in financial decision making and that may support bank stability plan. The studies by Barber and Odean (2001) as well as Niederle and Vesterlund (2005) attributed the risk aversion of the female as being less overconfident as compare to their male counterpart. The results of this study report a negative relation between board gender and stability in the non-Islamic populated sample. This study affirms the results of Ahern and Dittmar (2012), who found that female directors in Norway adversely influence firm value as a result of less job experience on women. From the results, we argue that in the context of Africa the traditional and social settings discriminates against females in terms of access to education and inclusion; hence they tend to

lack the requisite abilities and skills to make meaningful contributions when they ascend onto boards. Thus, female inclusion to board is based on public cry for fair representation but may not be based on competencies; hence leading to decline in stability by increase in female board representation in Non-Islamic populated economies.

Finally, on the governance structure is independent audit committee to guarantee high quality audit committee to regulate management excessive risk taking and to enhance stability. Sun et al. (2014) confirm that high quality of audit committee can reduce excess risk taking by management in the short run against value-maximisation in the long run. Similarly, Rajan (2006) affirms that there is high opportunistic behaviour among managements particularly in the banking industry since their performance is assessed base on earnings relative to their peers. An independent audit committee can restrain management from their opportunistic behaviours against the firm value maximization and reduce excessive risk taking for bank stability. Interestingly, none of the results show a significant relation between audit independence and bank stability. But from the descriptive statistics, we observe weak ratios of audit committees chaired by non-executive members and with the weak representation, it becomes difficult to influence corporate managers' behaviours in line with excessive risk taking and to maintain stability.

Appendix

Appendix 1: Wooldridge test for autocorrelation in panel data

H0: no first order autocorrelation

F(1, 221) = 175.132

Prob > F = 0.0000

Appendix 2: Modified Wald test for groupwise heteroskedasticity in fixed effect regression model

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

chi2 (304) = 2.3e+30

Prob>chi2 = 0.0000

Appendix 3: Hausman Test

	Coefficients			sqrt(diag(V_b-V_B))
	(b)	(B)	(b-B)	
	zscore1fe	zscore1re	Difference	S.E.
manqua	-0.2790	-0.4802	0.2012	0.0420
capital	4.4233	2.9814	1.4418	0.7198
bsize	0.2189	0.2060	0.0129	0.1523
sgrwoth	0.0082	-0.0206	0.0288	0.0090
div	-0.5597	-0.7822	0.2225	0.2439
profit	0.9542	-2.8778	3.8321	2.1212
infl	-0.7307	-0.5833	-0.1474	0.2294
lngdppc	0.6772	-0.0718	0.7491	0.7792
trend	-0.0391	-0.0231	-0.0160	0.0262

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(9) = (b-B)'[(V_b-V_B)^(-1)](b-B)

= 51.49

Prob>chi2 = 0.0000

Appendix 4: Number of Banks per country (Islamic country -*)

Code	Country	Number of Banks	Code	Country	Number of Banks
1	Algeria*	17	16	Mozambique	13
2	Benin	10	17	Namibia	8
3	Botswana	13	18	Nigeria*	31
4	Burkina*	9	19	Rwanda	8
5	Cameroon	12	20	Senegal*	12
6	Cote D'Ivoire	19	21	Sierra Leone*	13
7	Egypt*	33	22	South Africa	34
8	Ethiopia	24	23	Sudan*	15

9	Ghana		23	24	Swaziland		6
10	Kenya		53	25	Tunisia*		21
11	Malawi		14	26	Uganda		17
12	Mali*		10	27	Tanzania		34
13	Mauritania*		8	28	Zambia		24
14	Mauritius		18	29	Zimbabwe		23
15	Morocco*		20				

Appendix 4: Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
lnzscore	2185	0.988	15.789	7.042	0.000
ceoduo	3161	0.989	19.664	7.701	0.000
bodsize	3168	0.903	173.960	13.337	0.000
nonexec	3168	0.953	83.948	11.453	0.000
bodgen	3168	0.928	129.149	12.567	0.000
auditind	3167	0.996	6.934	5.006	0.000
manqua	2496	0.482	751.850	16.981	0.000
capital	2585	0.681	477.596	15.837	0.000
bsize	2585	0.992	12.720	6.529	0.000
sgrwoth	1953	0.302	809.691	17.020	0.000
div	1799	0.865	145.199	12.614	0.000
profit	2531	0.441	820.689	17.214	0.000
infl	4156	0.048	2186.852	20.060	0.000
lngdppc	4248	0.922	182.576	13.593	0.000

Appendix 5: Variance Inflation Factor

Variable	VIF	1/VIF
auditind	1.84	0.543328
nonexec	1.82	0.548269
lngdppc	1.76	0.567209
bsize	1.68	0.597
profit	1.34	0.747891
capital	1.28	0.778422
bodsize	1.26	0.794942
infl	1.16	0.858593
bodgen	1.14	0.876351
manqua	1.12	0.891795
div	1.12	0.892354
ceoduo	1.11	0.900722
sgrwoth	1.03	0.969471
Mean		
VIF	1.36	

CHAPTER FOUR

Effect of Financial Disclosure on stability; Evidence from Africa

4.0 Abstract

This study seeks to examine the relationship between information disclosure and bank stability in Africa base on the disclosure/fragility ambiguity. The aim is to empirically answer the question – role of information disclosure to the market on bank stability? The study used annual data source from Bank scope spanning the period 2006 – 2012. The estimation technique used is Prais-Winsten estimation. This was used to control autocorrelation and heteroscedasticity in our panel data set.

The findings show that financial disclosure as a tool for market discipline supports bank stability though not in all context as investigated. Also, the study examines the effect of sub-index disclosure on bank stability and interesting result was found. The findings of this study have significant implication for policy-makers and other stakeholders. This Suggest that, the effect of financial disclosure as a tool of market discipline for bank stability is not straight forward and depends on the context in which the nexus is examined. Meaning policy makers are advised to recognize the heterogeneity and contextual difference in Africa and to consider in policy directions.

This study provides empirical evidence on financial disclosure and bank stability using data from Africa to bridge the knowledge gap. The study fills this gap by providing empirical evidence within the context for the insightful relations between disclosure and stability. The study contributes to financial disclosure and stability literature.

Effect of Financial Disclosure on stability; Evidence from Africa

4.1 Introduction

The intentions of policy makers to advance corporate disclosure is to restore investors' confidence regarding stability of the financial sector. Specifically, the banking sector's new regulatory framework (Basel 111) directs strict disclosure requirement following the global financial crisis. The rationale for greater disclosure demand is to empower stakeholders to monitor and control excessive risk taking of the banks. This position to advance information disclosure is viewed positively among regulators and other relevant stakeholders. Thus, complexities of banking intermediation process and opacity of asset value in the sector imposes a lot of challenge on regulators alone to effectively sanitize the financial market. Thus, to avoid another financial crisis, attention is gravitating towards enhancing corporate disclosure practices. The financial crises reveal that the level of bank disclosure was not adequate enough for the market. This heightens the debate on information disclosure and safety in the banking sector.

Corporate disclosure arises from information asymmetry (Akerlof, 1970) and the multi-relationship-based transactions (Wilson et al., 2010) resulting in complex agency conflicts between managers, board, Shareholders, debt-holders and other stakeholders in the banking sector. Disclosure policy is deemed relevant to banking sector reform. Advancing information disclosure reduces information asymmetry between management and financial stakeholders, and so mitigating the agency problems (Jensen & Meckling 1979; Myers & Majluf, 1984). Access to information is critical to financial market development and economic growth. Corporate disclosure signifies the means by which relevant information is provided to corporate stakeholder. Ali, Frynas, and Mahmood (2017) explain corporate disclosure to

encompass financial information, narratives, mandatory requirements (i.e., disclosure by law and accounting standards) and voluntary (i.e., disclosure by external pressures or internal decision-making).

The key objective of corporate disclosure is to promote market discipline in the banking sector (Bushman & Williams, 2012). Information disclosure facilitates monitoring, reduce information asymmetry, enhance efficient capital allocation and lower cost of capital (Durnev, Li, Mørck, & Yeung, 2004). Market discipline (private monitoring) represents actions taking by shareholders, creditors, and other counterparties to influence investment, operational and risk-taking decisions (Flannery, 2001). The role of market discipline seems effective for monitoring and ensuring bank risk strategies than the discipline imposes by regulators to avert banks excessive risk-taking (Nier & Baumann, 2006). The complementary role of the market discipline to regulatory discipline entails information disclosure. Information disclosure supports price stability, increase market liquidity and decrease uncertainty among market participants (Lambert, Leuz, & Verrecchia, 2007). Along similar lines, greater disclosure works to promote market discipline resulting in low risk-taking and increases performance in the banking sector (Berger & DeYoung, 1997). They argue that, in the absence of information disclosure, it will cost market participants to acquire information concerning their investment transactions hence, the relevance of market-risk disclosures.

Notwithstanding to the benefits, some studies offer other potential costs to disclosure. Corporate disclosure can reveal information possible to aid competitors (Verrecchia, 1983; Darrough & Stoughton, 1990), additionally, transparency may lead to a bank's vulnerability to deposit withdrawals, disturbing the effective intermediation of banks (Dang et al., 2017; Morris & Shin, 2002; Diamond & Dybvig, 1983). Likewise, others propose the potential costs of

disclosure as, hindering extraction of private rents, possible release of proprietary information to competitors and rendering the bank less stable (Hanson et al., 2015; Diamond & Rajan, 2001; Calomiris & Kahn, 1991). Furthermore, others argue that misinterpretation of bank information may result in bank runs that can render an entire banking system failure (Calomiris & Mason, 1997; Gilbert & Vaughan, 1998; Kaufman, 1994). Banks' failure may be attributed to the problems of financial disclosure resulting to bank run. An overreaction of the financial market given certain disclosures can jeopardize the market in terms of capital mobilization. The banking business relies on trust and confidence from investors hence any form of disclosure that adversely impact investor confidence can escalate to the entire bank system because of the contagion effect resulting in systemic failure.

Consequent to the discussed literature, the ambiguous attributes to bank disclosure in terms of stability is inconclusive. This study contributes to the literature using cross country data from Africa to determine the association of financial disclosure and bank stability.

4.2 Related Literature on Bank Disclosure and Stability

The banking sector is considered intrinsically opaque and, in comparison to other sectors the banking sector rated highly opaque (Blau et al., 2017). Bank opaqueness is a long-standing problem which is well known in theory, practice and the field of regulation. For instance, the Basel III demand for greater transparency and market discipline as a form of significant policy initiative to enhance bank regulation (Basel Committee on Banking Supervision, 2013). In fact, the Basel III policy initiative is linked to the increased complexities in the modern bank's business model which compounds the problem of banks opacity (Morgan, 2002; Flannery et al., 2013). Bank opacity is as a result of the intermediation role as providers of liquidity

(Diamond, 1984) in the assets transformation process and delegated monitors (Diamond & Dybvig, 1983). Bank opacity is linked to inefficient market discipline (Demsetz & Lehn, 1985; Cordella & Yeyati, 1998; Boot & Schmeits, 2000), this eventually creates distorted risk-taking incentives. Banking theory predicts that opacity stimulate risk-taking behaviours, and with weak monitoring leading to instability. To address the problem of bank opacity requires greater information disclosure to enhance transparency for market discipline.

Existing evidence, in line of theoretical predictions, emphasizes on country-level transparency measures (Demirguc-Kunt et al., 2008; Bushman & Williams, 2012) where as others employ accounting-based disclosure indications (Nier, 2005; Nier & Baumann, 2006; Du, Song, & Wu, 2016). Corporate transparency provides a yardstick to assess banks monitoring (Boot & Schmeits, 2000), as such bank opacity serves as a conduit for less monitoring given that monitoring efforts could be costly (Nier, 2005). Thus, opacity in theory stimulates bank risk-taking. The evidence found by Demirguc-Kunt et al. (2008), Bushman and Williams (2012) shows that country-level transparent increases bank soundness. A similar result was found by Nier (2005) and Nier and Baumann (2006), even though they employed accounting-based disclosure indicators. Also, Vallascas and Keasey (2013) using liquidity-based transparency measures found a decrease in banks' default risk. Barth et al. (2004) confirmed that accurate disclosure stimulates control of the banking sector through empowered private agents exerting corporate control leading to enhanced stability, performance and development. Bank transparency is expected to decrease the accumulation of risks in view of market discipline to limit imprudent banking

4.3 Construction of Variables

4.3.1 Proxy for Bank stability

The study measures bank stability using the z-score as the dependent variable. The z-score as a measure of bank stability has been widely used in most bank soundness related studies (Boyd & Graham, 1988; Laeven & Levine, 2009; Barry et al., 2011). Laeven and Levine (2009) propose the index as a measure of distance from insolvency. Thus, it inversely proxies the possibility of the bank's failure. The z-score as a measure bank stability compare with other market-based risk measures such as standard deviation of the stock returns or the market beta, z –score has a direct measure of the bank's distance from insolvency (probability of default), which is the main concern of depositors and deposit insurers. The index is a relativity measure which is determined by using accounting information and it links firm profitability, solvability, and volatility. Accordingly, it provides information on the number of standard deviation units by which profitability can fall to render the bank insolvent. It is given by the ratio as;

$$Z = \frac{\overline{ROA} + \overline{E/TA}}{\sigma_{ROA}}$$

As specified above, \overline{ROA} and $\overline{E/TA}$ represent the average return on assets and equity to total assets, accordingly over the sample period, whereas σ_{ROA} is the standard deviation of return on assets. From the ratio, the stability of the bank increases as high profitability and capitalization while high standard deviation of profitability decreases bank stability. In other words, an increase (decrease) in the z-index indicates a decrease (increase) in overall bank risk exposure and more (less) bank stability.

4.3.2 Measure of Information Disclosure

The information disclosure captured in this study is annual financial disclosure index sourced from the Bank scope. The concept disclosure is difficult to calculate as there are numerous channels of communication. Studies show that disclosure can be assessed in two dimensions (Hassan & Marston, 2010); that is the implicit approach (e.g. views of financial analysts/investors on banks' disclosure practices and explicit approach (e.g. content analysis. Disclosure of good/bad information, and disclosure index). Indeed, banks financial statements appear more complicated to apprehend by most stakeholders given the nature of bank contracts and supplementary complex derivatives (Greenspan, 2001). For this study, disclosure index follows the works (Du, Song, & Wu, 2016; Nier & Baumann, 2006). To construct a composite disclosure index based on inclusions and omissions of items in the bank's annual accounting statements. Additionally, other studies have used a disclosure index to capture information and corporate transparency (Baumann & Nier, 2004; Huang, 2006; Nier 2005; Setiyono & Tarazi, 2014). Moreover, the level of annual statement disclosed is highly correlated with the level of other media disclosures (Lang & Lundholm, 1993). By this index, Nier (2005) finds that improved bank disclosure results in overall financial stability whereas Baumann and Nier (2006) show the enhanced bank annual statement disclosure lead to risk reduction in the banking sector.

The index comprises a broad list of items disclosed in banks financial statements. The items could be classified as a mandatory or voluntary disclosure. Following the framework originally suggested by Baumann & Nier (2006) which was later used by Huang (2006). The paper by Nier and Baumann (2006) examines bank transparency effect on risk-taking. Thus, investigating the extent to which higher levels of transparency enhance market discipline and provide more incentives for banks to limit the risk of default by holding larger capital buffers.

Their primary measure of transparency is a bank level disclosure index constructed by counting the number of individual disclosures available from the Bank Scope. The index captures more than one sources of financial risks that banks disclosures or not (e.g., interest rate risk, credit risk, liquidity risk, market risk). Each item in the index is assigned the value of one (1) where reported and zero (0) if otherwise attaining a total maximum value to be eighteen (18). The disclosure index aggregates information originating from six categories, namely: (1) Loans; (2) Other earning assets; (3) Deposits (4) other funding; (5) Memo lines; and (6) Incomes. Each category had sub-index created of disclosure (see Appendix for the list of 18 disclosure items). These items measure the level of detail provided by the banks regarding accounting information published in accounts and sourced from the Bank scope database. Higher counts in terms of value of the items mean higher levels of financial disclosure and invariably higher transparency.

The calculation method for the disclosure index is specified as;

$$Disc = \frac{1}{18} \sum_{i=1}^{18} s_i$$

Where Disc is the disclosure index and s_i represent the disclosure on each item

Table 4. 1 : Financial Disclosure Variable

Financial Disclosure Indicators	Measure	Description	Source	Expectation
Disc	Total number of financial statement disclosures	Full disclosure	Computed by the author based on data from Bank Scope	+
Sub-indices				
Adi	Total number of assets disclosures	Assets Disclosure	Computed by the author based on data from Bank Scope	+
Oead	Total number of other earning assets disclosure	Other earning assets Disclosure	Computed by the author based on data from Bank Scope	+
Ldi	Total number of liabilities Disclosures	Liability Disclosure	Computed by the author based on data from Bank Scope	+
Ofdi	Total number of other funding disclosures	Other Funding Disclosure	Computed by the author based on data from Bank Scope	+
Mldi	Total number of memo line disclosures	Memo Line Disclosure	Computed by the author based on data from Bank Scope	+
Isdi	Total number of income statement disclosures	Income Statement Disclosure	Computed by the author based on data from Bank Scope	+

Source: Computed by author based on data from Bank Scope

4.4.3 Countries and their Disclosure Averages

The Table 4.2 presents the countries and the average disclosure by country with respect to the number of banks used. The table is presented accounting to the countries with highest average financial disclosure. The country Namibia recorded the highest disclosure score of 9.92 whereas Zimbabwe had the lowest score of 0.73. The scores recorded has no relation to the

number of banks but possibly the regulatory regime to ensure compliance to the bank's financial disclosure in their financial statement. The reason is that Namibia had 8 banks just as Rwanda, and Mauritania yet their average disclosure scores are 9.92, 6.82, and 6.03 respectively. Also, Zimbabwe had 23 banks just as Ghana yet the disparity in their disclosure is very wide, as Ghana scored 8.63, Zimbabwe had the lowest score of 0.73.

Table 4.2: Country Average Disclosure Score

Country Name	Number of Banks	Average disclosure
NAMIBIA	8	9.921875
EGYPT	33	9.314394
UGANDA	17	9.066176
GHANA	23	8.63587
SWAZILAND	6	8.541667
MOZAMBIQUE	13	8.134615
MAURITIUS	18	7.909722
TUNISIA	21	7.89881
BOTSWANA	13	7.807692
ETHIOPIA	24	7.759162
ALGERIA	17	7.580882
KENYA	43	7.516035
SOUTH AFRICA	34	7.356618
UNITED REPUBLIC OF TANZANIA	34	7.162879
RWANDA	8	6.828125
ZAMBIA	24	6.755208
SENEGAL	12	6.541667
BURKINA FASO	9	6.416667
MOROCCO	20	6.36875
MAURITANIA	8	6.03125

MALAWI	14	5.991071
MALI	10	5.975
SUDAN	15	5.25
CAMEROON	12	5.072917
BENIN	10	5.025
SIERRA LEONE	13	4.634615
NIGERIA	31	4.616935
COTE D'IVOIRE	19	4.085526
ZIMBABWE	23	0.7282609

Note: The table reports number of banks observations and country's average values of financial disclosure; the definition of disclosure variables are reported in the Appendix 11

4.4 Methodology

This study employs the panel data framework which entails both cross-sectional and time series data to ensure both time and entity observations are captured. This ensures reliability in findings and results. Again, Wooldridge (2005) also states that the panel data has the ability to control for omitted variable biases and also captures both time and cross-sectional dimensions of the dataset. For the purpose of the study, annual data is obtained from Bank Scope and World Development Indicators (WDI) databases. Specifically, bank-specific variables are computed based on data from Bank Scope, while data on macroeconomic conditions are obtained from WDI. The data for this study spans from 2006 to 2012. In all banks from 29 Africa countries are employed (see Appendix 4 for a number of banks per country) Although the data appears old, attempts to obtain current data has proved unsuccessful; hence the use of the data. To specify our model, the panel form is stated as:

$$Y_{i,t} = \alpha_i + \beta X_{i,t} + \varepsilon_{i,t} \quad \dots\dots\dots \quad (Eq. 4.a)$$

Subscript “i” denotes a cross-sectional dimension of a bank for “i”= 1,...,N while Subscript “t” denotes a time series dimension for “t”=2006 - 2012. Y_{it} represents the dependent variable, α_i is the constant term of all periods and specific to a bank fixed effect, β is a vector of parameters ($1 \times k$) to be estimated on the input or independent variables, X_{it} is a vector of observations on the input variables ($1 \times k$) for the model ε_{it} which signifies *iid* is the error term.

4.4.1 Estimation Technique

This study employs the Prais-Winsten estimation technique after the fixed effect model which was selected by the Hausman test (Appendix 3) was tested heteroscedastic (Appendix 1) and autocorrelated (Appendix 2). The Prais-Winsten technique is a generalized least square model and controls for both autocorrelated and heteroscedastic errors. Thus, the Prais-Winsten estimation technique estimates linear regressions that are corrected for panel specific serially correlated residuals and heteroskedastic (see Prais-Winsten, 1954). The estimation model is obtained from the AR (1) model from the error. Also, the Prais-Winsten technique is employed ahead of Cochrane-Orcutt (1949) estimation technique which is also a GLS technique and controls for both serially correlated residuals and heteroskedastic for a number of reasons. First, while the Cochrane-Orcutt estimation employs lags definitions and losses the first observations, the Prais-Winsten preserves the first observations and make more reliable estimates given the increased number of observations compared to the Cochrane-Orcutt estimation. Again, the Cochrane-Orcutt lacks the ability to deal with serial correlation closer to one while Prais-Winsten does so with much ease (Judge et al., 1985). Furthermore, the asymptotic results suggest that the feasible Prais-Winsten estimator is best for most applied circumstances. Hence, the Prais-Winsten estimation is deem best for the estimations for this study.

Full Model

The full model considers the whole independent variables to predict the dependent variables. This regression estimation represents the full model to predict bank stability given the whole explanatory variables.

$$\begin{aligned} LnZScore_{it} = & \beta_0 + \beta_1 disc_{it} + \beta_2 adi_{it} + \beta_3 oead_{it} + \beta_4 ldi_{it} + \beta_5 ofdi_{it} + \beta_6 mldi_{it} + \beta_7 isdi_{it} + \beta_8 \\ & manqua_{it} + \beta_9 capital_{it} + \beta_{10} bsize_{it} + \beta_{11} sgrowth_{it} + \beta_{12} div_{it} + \beta_{13} profit_{it} + \beta_{14} infl_{it} + \beta_{15} lngdppc_{it} \\ & + \beta_{16} trend_t + \varepsilon_{it} \dots\dots\dots \end{aligned} \quad \text{(Eq. 4.b)}$$

LnZScore denotes bank stability, *disc* denotes overall bank financial statement disclosure, *and* denote assets disclosure, *oead* denotes other earning assets disclosure, *ldi* denotes liability disclosure, *ofdi* denote other funding disclosure, *mldi* denote memo lines disclosure, *isdi* denote income statement disclosure, *mangua* denotes management quality, *capital* denote capital adequacy, *bsize* denotes size of bank, *sgrowth* denote growth in sales, *div* denotes income diversification, *profit* denotes profit maximization, *infl* denotes inflation rate, *lngdppc* denotes citizenry welfare, and *trend* is an econometric technique used to capture the effect of technological change and time effects. The ε_{it} which signifies *iid* is the error term.

The full model is estimated in ¹Islamic and Non-Islamic oriented economies and ²high and low developed credit markets in Africa.

¹ An economy is classified as an Islamic economic when 50% or more of the population are Muslims. The classification is based on data from *Research on Islam and Muslims in Africa (RIMA)* (<http://muslimsinfrica.wordpress.com>).

² To determine low and high developed credit markets, economies that have their credit to private sector by banks below and above the average credit to private sector by banks

Table 4. 3: Summary of Variables

Variable	Measurement	Definition	Source	Expected Sign
Dependent Variable				
LnZScore	[capital Adequacy +ROA]/ σROA	Bank Stability	Computed by author based on data from Bank Scope	
Independent Variables of Interest: Bank Financial Statement Disclosure Indicators				
Disc	Total number of financial statement disclosures	Full disclosure	Computed by author based on data from Bank Scope	+
Adi	Total number of assets disclosures	Assets Disclosure	Computed by author based on data from Bank Scope	+
Oead	Total number of other earning assets disclosure	Other earning assets Disclosure	Computed by author based on data from Bank Scope	+
Ldi	Total number of liabilities Disclosures	Liability Disclosure	Computed by author based on data from Bank Scope	+
Ofdi	Total number of other funding disclosures	Other Funding Disclosure	Computed by author based on data from Bank Scope	+
Mldi	Total number of memo line disclosures	Memo Line Disclosure	Computed by author based on data from Bank Scope	
Isdi	Total number of income statement disclosures	Income Statement Disclosure	Computed by author based on data from Bank Scope	
Independent Variables: Control Variables				
Div	non-interest income/total assets	diversification	Computed by author based on data from Bank Scope	+/-
sgrowth	[current year sales-previous year sales]/previous year sales	Growth and investible potentials	Computed by author based on data from Bank Scope	+
Profit	Net income/ total equity	Bank profitability	Computed by author based on data from Bank Scope	+
capital	total equity/ total assets	capitalization	Computed by author based on data from Bank Scope	[+]
Bsize	Log of total asset	Bank Size	Computed by author based on data from Bank Scope	[+]
manqua	operating expenses/operating income	management quality	Computed by author based on data from Bank Scope	[-]
Ingdppc	Natural log of gross domestic product per capital	Citizenry welfare	World Development Indicators database	[+]
Infl	consumer price index	macroeconomic stability	World Development Indicators database	[-/+]

(21.97%) for the period are considered as low and high developed financial sector respectively

4.4.2 Discussion Sample and Summary Statistics

From the Table 4.4, it is observed that bank stability which is computed as the log of zscore (lnzscore) shows an average growth of 3.13% over the period under study. Furthermore, it is observed that average bank stability grew by the highest percentage of 3.44% and 3.39% in high developed credit markets and Islamic oriented economies in Africa respectively. This is an indication that the stability of banks in highly developed credit markets and Islamic oriented economies in Africa is better than their counterparts in low developed credit markets and Non-Islamic oriented economies in Africa respectively.

From Table 4.4, the key independent variable is financial disclosure capture in an index. The financial disclosure index follows the works of (Du et al., 2016; Nier & Baumann, 2006). Additionally, other studies have used a disclosure index to capture information and corporate transparency (Baumann & Nier, 2004; Huang, 2006; Nier 2005; Setiyono & Tarazi, 2014). There are six sub-indices aggregated to form the composite financial disclosure index (disc). Namely, assets disclosure, other earning asset disclosure, liability disclosure, other funding disclosure, memo lines disclosure and income statement disclosure. they were captured based on data from Bank Scope and disclosure criteria designed by (Baumann & Nier, 2004; Wang et al., 2015). Their primary measure of transparency was bank level disclosure index constructed by counting the number of individual disclosures available from the Bank Scope. The index captures more than one sources of financial risks that banks disclosures or not (e.g., interest rate risk, credit risk, liquidity risk, market risk).

Each item in the index is assigned the value of one (1) where reported and zero (0) if otherwise attaining a total maximum value to be eighteen (18). The disclosure index aggregates

information originating from six categories, namely: (1) Loans; (2) Other earning assets; (3) Deposits (4) other funding; (5) Memo lines; and (6) Incomes. Each category had sub-index created of disclosure (see Appendix for the list of 18 disclosure items). These items measure the level of detail provided by the banks regarding accounting information published in accounts and sourced from the Bank scope database. Higher counts in term of value of the items mean higher levels of financial disclosure and invariably higher transparency.

It is observed that the average overall financial statement disclosure for the full sample is 6.76 implying that on the average, banks in Africa disclose only 6.76 out of 18 disclosure criteria required. This shows that financial statement disclosure in Africa is low. Given banks in Africa on the average, 37.55% out of 100% of the required disclosures on the financial statement of banks. Additionally, although overall average bank financial statement disclosure is high in developed credit markets, the difference in its disclosure is not much different from banks in low developed credit markets, Islamic and Non-Islamic oriented economies in Africa. On the specific financial statement disclosures, similar trends and observations are made for assets disclosure, liability disclosure, other funding disclosure, memo lines disclosure, and income statement disclosure; hence no need to repeat these trends and observations.

Table 4. 4: Summary of Statistics of Variables

Variable	Full Sample					Islamic Sample			Non-Islamic Sample			High Developed Credit Market Sample			Low Developed Credit Market Sample		
	Obs	Mean	Std.	Min	Max	Obs	Mean	Std.	Obs	Mean	Std.	Obs	Mean	Std.	Obs	Mean	Std.
lnzscore	2185	3.131	1.265	-2.813	8.102	745	3.386	1.235	1440	2.999	1.260	1015	3.441	1.193	1170	2.862	1.264
disc	4248	6.759	5.770	0.000	15.000	1408	6.793	5.443	2840	6.742	5.927	1778	7.366	5.769	2470	6.322	5.732
adi	4248	2.333	2.075	0.000	5.000	1408	2.302	1.918	2840	2.348	2.148	1778	2.558	2.083	2470	2.171	2.054
oead	4248	1.216	1.148	0.000	3.000	1408	1.173	1.083	2840	1.237	1.179	1778	1.338	1.159	2470	1.128	1.132
ldi	4248	0.938	0.877	0.000	2.000	1408	1.001	0.880	2840	0.907	0.874	1778	0.983	0.863	2470	0.906	0.886
ofdi	4248	0.878	0.814	0.000	2.000	1408	0.977	0.837	2840	0.829	0.798	1778	0.972	0.836	2470	0.810	0.791
mldi	4248	0.881	0.810	0.000	2.000	1408	0.793	0.689	2840	0.924	0.861	1778	0.944	0.811	2470	0.835	0.808
isdi	4248	0.514	0.500	0.000	1.000	1408	0.548	0.498	2840	0.497	0.500	1778	0.571	0.495	2470	0.472	0.499
manqua	2496	0.675	0.573	0.000	9.333	850	0.609	0.424	1646	0.709	0.634	1117	0.595	0.468	1379	0.740	0.639
capital	2585	0.160	0.151	-0.962	1.000	898	0.136	0.123	1687	0.173	0.163	1152	0.167	0.168	1433	0.155	0.136
bsize	2585	6.134	1.785	0.000	11.750	898	7.063	1.649	1687	5.639	1.653	1152	6.739	1.849	1433	5.647	1.572
sgrowth	1953	0.220	1.185	-24.000	27.400	672	0.276	1.551	1281	0.191	0.936	912	0.209	1.309	1041	0.230	1.064
div	1799	0.296	0.188	-2.500	2.000	551	0.272	0.204	1248	0.307	0.179	809	0.267	0.187	990	0.320	0.186
profit	2531	0.045	0.048	-0.036	1.810	865	0.031	0.019	1666	0.052	0.056	1130	0.039	0.031	1401	0.050	0.057
infl	4156	1.498	18.119	-0.011	244.110	1408	0.077	0.060	2748	2.226	22.248	1778	0.087	0.057	2378	2.554	23.901
lngdppc	4248	6.884	0.989	5.168	8.858	1408	7.198	0.664	2840	6.728	1.082	1778	7.350	1.034	2470	6.547	0.802

LnZScore - bank stability, *disc* - overall bank financial statement disclosure, *adi* - assets disclosure, *oead* - other earning assets disclosure, *ldi* - liability disclosure, *ofdi* - other funding disclosure, *mldi* - memo lines disclosure, *isdi* - income statement disclosure, *mangua* - management quality, *capital* - capital adequacy, *bsize* - size of bank, *sgrowth* - growth in sales, *div* - income diversification, *profit* - profit maximization, *infl* - inflation rate, *lngdppc* - citizenry welfare

4.4.3 Discussion of Pearson's Correlation Matrix

From Table 4.5 is the Pearson's correlation as a mechanism for checking and monitoring multicollinearity. Following Kennedy (2008), multicollinearity threshold is set at 0.7. The study observes possible collinearity between the disclosure variables and the disclosure variables are substituted into the model alternately in order to avoid the problem of multicollinearity. Hence, the multicollinearity problem observed in the Pearson's correlation matrix is not a problem and will be taken care of by alternatively substituting the disclosure variable into the model. Additionally, the Variance Inflation Factor (VIF) for each variable is computed in Appendix 5. With the rule of thumb that the VIF value of variables acceptable in the model should not exceed 10 (see Brooks, 2005), though it is observed that some of the disclosure variables exceeds the VIF threshold, it will be taken care of by not including all the disclosure variables at once in the models to be estimated. This then solves the issue of the variables exceeding the acceptable VIF threshold. Furthermore, the normality of each variable is present in Appendix 4 and indicates that with the exception of liability disclosure, other funding disclosure, memo lines disclosure, income statement disclosure and all the other variables are normally distributed around their means. However, given that normality is an additional and weak assumption, estimating the models without normality of liability disclosure, other funding disclosure, memo lines disclosure and income statement disclosure models is adequate. Given that all the basic assumptions for regressions have been observed, the results and findings are deemed to be reliable, efficient, consistent and representative enough.

Table 4. 5: Pearson’s Correlation Matrix

	lnzscore	disc	Adi	oead	Ldi	ofdi	mldi	isdi	manqua	capital	bsize	sgrwoth	div	profit	infl	lngdppc
lnzscore	1.000															
disc	0.032	1.000														
adi	0.062	0.968	1.000													
oead	-0.008	0.921	0.846	1.000												
ldi	-0.003	0.909	0.855	0.797	1.000											
ofdi	0.067	0.889	0.834	0.778	0.775	1.000										
mldi	-0.072	0.916	0.862	0.845	0.797	0.773	1.000									
isdi	0.057	0.881	0.828	0.792	0.806	0.768	0.772	1.000								
manqua	-0.297	-0.120	-0.112	-0.091	0.011	-0.111	0.030	-0.193	1.000							
capital	0.118	-0.359	-0.241	-0.212	-0.310	-0.257	-0.099	-0.288	0.059	1.000						
bsize	0.257	0.355	0.219	0.243	0.179	0.420	0.037	0.321	-0.311	-0.318	1.000					
sgrwoth	0.008	0.071	0.072	0.046	0.062	0.025	0.011	0.004	-0.053	-0.060	0.007	1.000				
div	-0.180	-0.101	-0.088	-0.083	0.045	-0.132	-0.122	0.132	0.041	0.075	-0.143	0.006	1.000			
profit	-0.067	0.057	0.097	0.017	-0.017	-0.004	0.092	-0.043	-0.064	0.182	-0.170	0.040	-0.173	1.000		
infl	0.004	-0.093	-0.089	-0.084	-0.085	-0.086	-0.086	-0.081	-0.033	0.027	-0.110	-0.004	-0.021	0.051	1.000	
lngdppc	0.134	0.087	0.070	0.073	0.029	0.171	0.074	0.092	-0.103	0.114	0.418	-0.028	-0.173	-0.108	-0.069	1.000

LnZScore - bank stability, *disc* - overall bank financial statement disclosure, *adi* - assets disclosure, *oead* - other earning assets disclosure, *ldi* - liability disclosure, *ofdi* - other funding disclosure, *mldi* - memo lines disclosure, *isdi* - income statement disclosure, *mangua* - management quality, *capital* - capital adequacy, *bsize* - size of bank, *sgrwoth* - growth in sales, *div* - income diversification, *profit* - profit maximization, *infl* - inflation rate, *lngdppc* - citizenry welfare

4.4.4 Empirical Model Diagnosis tests

The empirical results of objective 2 on the effect of financial disclosure on bank stability as defined in equation 4.c is presented. The model estimator is appropriate in explaining the relationship between financial disclosure variables and bank stability given the nature of the data used.

From the objective 2 which examines the effect of financial disclosure on bank stability in Africa the result is presented. To gain a better understanding of the dynamics between disclosure and bank stability, the data sample was split into Islamic populated and Non-Islamic populated economies and developed and less developed credit market economies beside the full sample. Table 4.6a presents the regression results using panel corrected standard error (PCSE) estimation technique. However, the independent variable of interest - financial disclosure is an index with a composite score made up of 18 individual items which comprise six (6) sub-indices. For deeper examination, the study decomposes the index into the six sub-indices. The rationale is that each composite (i.e., sub-index) could generate a unique effect on bank stability.

4.4.5 Discussion of Empirical Results

From Table 4.6, the results on financial disclosure (full index) in the PCSE model shows that information disclosure as a tool for market discipline to moderate banks risk-taking is positively related to stability only when the study is viewed from the non-Islamic populated and developed credit market economies. However, the study fails to find such evidence when the results are run for the whole Africa, Islamic populated and less developed credit economies.

Clearly, the banking system in Islamic economies practicing Islamic banking performed differently from the Non-Islamic economies given that the Sharia law is what applies. The literature suggests low compliance to corporate disclosure among Islamic banks against the basis value of their banking system (Hassan, 2010; Kamla, 2013). However, a study by (Mollah, 2017) on determinants of Islamic bank risk-taking across countries reveal that corporate governance and financial disclosure have the significant impact on Islamic bank risk-taking while the sharia board appears not to place a limit on risk-taking. Therefore, financial disclosure support bank stability in Non-Islamic populated and developed credit market economies. As found in earlier studies (Blum, 2012; Nier & Baumann, 2006), financial disclosure as a tool for market discipline stimulates bank stability hence the new Basle III promoting the need to strengthen disclosure policy in the financial sector.

Considering the control variables, it is reported that quality management capturing efficiency in managing operational cost had a negative significant effect on stability implying that lower management quality in managing operational cost derails stability of banks in Africa, Non-Islamic and Islamic and developed and less developed credit economies in Africa. This is consistent with prior studies (Athanasoglou et al., 2008).

However, capital adequacy is found to be positively and significantly related to stability, Non-Islamic and Islamic and developed and less developed credit economies in Africa. This finding supports the theories of financial distress that argue that capital serves as a basis for improving the financial stability of banks. This is evident in the regulation of banks as regulators tend to increase capital requirements to improve the financial strength of banking sectors.

Similarly, a positive and significant relationship is observed between bank size and stability indicating that bank size has some economic gains that promote the stability of banks and evident from the economies of scale and scope concept. Sale growth is reported to be negatively and significantly related to the stability of banks in Non-Islamic and Less developed credit economies in Africa. Thus, as the sales of banks increases, it exposes the banks to credit risk losses which increases the financial stress on banks and hence reduced bank stability in Non-Islamic and Less developed credit economies in Africa.

Following concentration- stability and concentration-fragility hypothesis, the study reports evidence in support of concentration-stability as diversification reduces stability in the whole of Africa, Non-Islamic, Islamic and Less developed credit market economies. This implies that as banks concentrate their operations on a few activities, stability is reduced. Surprisingly, profitability which is expected to have improved the stability of banks (see Neequaye, 2018) rather reduces the stability of banks in the whole of Africa, Non-Islamic, Islamic and Less developed credit market economies. However, it is argued that the pursuit of profitability increases the risk-taking behaviours of banks and hence reduce the stability of banks.

The study shows a negative and significant effect of inflation on the stability of banks in Islamic populated economies in Africa as expected. This finding supports the findings of (Molyneux & Thornton :1992 cited in Guru 2002 & Claessens, 2001) who argues that inflation weakens the financial power of banks hence leading to reduced stability in banks.

Gross domestic product per capita is negatively and significantly related stability of banks. It is argued that the increase in gross domestic product per capita is evidence of improved welfare of the citizenry. Hence following the loan growth theory, when the welfare of citizenry increases demand for loans declines and forces banks to redesign credit and loans products to lower the stringent processes, procedures and conditions surrounding lending in order to attract more clients which leads to reduced stability in the operations of banks.

Table 4. 6: Effect of Financial Disclosure on Stability; Evidence from Africa - PCSE Results

VARIABLES	(1) Full Sample	(2) Non-Islamic Sample	(3) Islamic Sample	(4) Less Developed Credit Market Sample	(5) Developed Credit Market Sample
Disc	-0.00225 (0.0165)	0.0520* (0.0301)	-0.0178 (0.0203)	-0.00825 (0.0210)	0.0497** (0.0225)
Manqua	-0.689*** (0.131)	-0.626*** (0.171)	-0.667*** (0.150)	-1.576*** (0.112)	-0.404*** (0.111)
Capital	3.505*** (0.340)	5.928*** (0.692)	2.913*** (0.382)	4.810*** (0.445)	2.282*** (0.401)
Bsize	0.225*** (0.0270)	0.155*** (0.0469)	0.286*** (0.0354)	0.179*** (0.0417)	0.129*** (0.0304)
Sgrwoth	-0.0745** (0.0326)	-0.0175 (0.0293)	-0.251*** (0.0677)	-0.231*** (0.0655)	-0.0150 (0.0260)
Div	-0.805*** (0.199)	-0.625* (0.337)	-1.352*** (0.241)	-0.629** (0.287)	-0.574** (0.268)
Profit	-4.541*** (1.203)	-12.33*** (3.711)	-3.298** (1.349)	-4.315*** (1.345)	-2.023 (1.993)
Infl	-0.387 (0.405)	-4.192*** (1.116)	-0.0866 (0.451)	-1.128* (0.601)	-0.706 (0.541)
Lngdppc	-0.0693** (0.0344)	0.227** (0.0951)	-0.141*** (0.0361)	-0.118* (0.0627)	-0.148*** (0.0407)
institutions	0.00477*** (0.00165)	0.00530 (0.00380)	0.00471*** (0.00180)	0.00436** (0.00206)	0.00613** (0.00249)
Trend	-0.0564*** (0.0213)	-0.0610* (0.0356)	-0.0675*** (0.0254)	-0.0651** (0.0271)	-0.0428 (0.0309)
Constant	2.896*** (0.358)	0.696 (0.883)	3.478*** (0.410)	3.892*** (0.508)	3.481*** (0.463)
Observations	1,430	428	1,002	754	676
R-squared	0.570	0.599	0.596	0.592	0.597
Number of bankcode	376	126	250	219	166

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

4.4.6 Discussion of Disclosure Sub-indices Results

However, splitting in the financial disclosure index into sub- disclosure index as shown in Tables 4.7, 4.8, 4.9, 4.10, 4.11, and 4.12 Table 4.7 presents the regression results on the effect of asset disclosure and bank stability. The results show asset disclosure has positive significant relation to stability examining from a Non-Islamic populated and developed credit market economies. The implication for such economies is that, the market given the information disclosure monitors the banks in terms of assets quality hence the positive effect of stability. Surprisingly, we found a significant negative effect of asset disclosure on bank stability in Islamic populated economies. Meaning asset disclosure does not support bank stability in Islamic populated economies. Probably, the reason for the low compliance to corporate disclosure as found in these studies (Kamla, 2013; Syafri & Hassan 2010).

Interestingly, from Table 4.8 and Table 4.10 which consider the effect of other earning asset disclosure index and other funding disclosure index report no significant effect on bank stability across all the samples used. Probably, the market is not keen on other earning asset disclosure and other funding disclosure to influence the bank stability across all the samples used.

From Table 4.9, the results show the effect of liability disclosure on bank stability and the findings are positive viewing the result from Islamic economies and less developed credit markets. Thus, liability disclosure (depositors' market discipline) is positively significant to bank stability in economics where the banking system is governed by sharia law and for less developed credit markets.

Considering Table 4.11, the results present the effect of memo line disclosure on stability and show a negative significant relation to stability from the Islamic economies. Again, we found Islamic economies exhibiting strong adverse effect on bank stability with regards to memo line disclosure. The memo line disclosure comprises off-balance sheet transactions as well as contingent liabilities of which transparency in term of disclosure is require to enhance market monitoring. Yet, we found no significant effect in all the samples with the exception of Islamic economies reporting a negative effect on bank stability.

Finally, on the sub-indices is income statement disclosure and Table 4.12 shows the effect of income statement disclosure on stability. The results show a positive significant relation viewing results from the full sample and developed credit markets sample. Interestingly, the other samples, Islamic and non-Islamic populated economics and the less developed credit market had no significant relation between income statement disclosure and bank stability.

Table 4. 7 : Effect of Assets Disclosure on Bank Stability, Evidence from Africa - PCSE Results

VARIABLE S	(1) Full Sample	(2) Non-Islamic Sample	(3) Islamic Sample	(4) Less Developed Credit Market Sample	(5) Developed Credit Market Sample
Adi	-0.000254 (0.0332)	0.135** (0.0583)	-0.0824** (0.0375)	-0.0230 (0.0448)	0.112** (0.0446)
Manqua	-0.690*** (0.131)	-0.646*** (0.172)	-0.663*** (0.148)	-1.573*** (0.112)	-0.407*** (0.114)
Capital	3.514*** (0.335)	5.984*** (0.730)	2.973*** (0.372)	4.822*** (0.438)	2.136*** (0.393)
Bsize	0.224*** (0.0266)	0.172*** (0.0441)	0.292*** (0.0347)	0.178*** (0.0419)	0.142*** (0.0295)
Sgrwoth	-0.0745** (0.0326)	-0.0166 (0.0294)	-0.252*** (0.0669)	-0.231*** (0.0655)	-0.0155 (0.0265)
Div	-0.802*** (0.199)	-0.713** (0.348)	-1.398*** (0.241)	-0.630** (0.287)	-0.551** (0.271)
Profit	-4.590*** (1.190)	-12.61*** (3.702)	-3.133** (1.331)	-4.315*** (1.329)	-1.614 (1.958)
Infl	-0.394 (0.402)	-3.965*** (1.061)	-0.0662 (0.450)	-1.145* (0.598)	-0.632 (0.542)
Lngdppc	-0.0693** (0.0349)	0.204** (0.0908)	-0.148*** (0.0363)	-0.120* (0.0635)	-0.143*** (0.0422)
Institutions	0.00476*** (0.00164)	0.00523 (0.00381)	0.00470*** (0.00180)	0.00435** (0.00205)	0.00606** (0.00247)
Trend	-0.0567*** (0.0213)	-0.0588* (0.0354)	-0.0667*** (0.0253)	-0.0650** (0.0271)	-0.0399 (0.0312)
Constant	2.880*** (0.354)	0.812 (0.830)	3.611*** (0.386)	3.906*** (0.504)	3.465*** (0.479)
Observations	1,430	428	1,002	754	676
R-squared	0.569	0.602	0.598	0.588	0.588
Number of bankcode	376	126	250	219	166

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 4. 8 : Effect of Other Earning Assets Disclosure on Bank Stability, Evidence from Africa - PCSE Results

VARIABLES	(1) Full Sample	(2) Non-Islamic Sample	(3) Islamic Sample	(4) Less Developed Credit Market Sample	(5) Developed Credit Market Sample
Oead	-0.0112 (0.0414)	0.0796 (0.0789)	-0.0154 (0.0526)	-0.0632 (0.0510)	0.0622 (0.0584)
Manqua	-0.692*** (0.131)	-0.582*** (0.178)	-0.670*** (0.150)	-1.590*** (0.110)	-0.397*** (0.112)
Capital	3.499*** (0.338)	5.897*** (0.697)	2.949*** (0.377)	4.772*** (0.439)	2.214*** (0.391)
Bsize	0.224*** (0.0260)	0.184*** (0.0472)	0.279*** (0.0341)	0.178*** (0.0400)	0.148*** (0.0295)
Sgrwoth	-0.0745** (0.0326)	-0.0186 (0.0286)	-0.252*** (0.0677)	-0.229*** (0.0650)	-0.0138 (0.0260)
Div	-0.805*** (0.200)	-0.599* (0.344)	-1.331*** (0.237)	-0.645** (0.289)	-0.582** (0.268)
Profit	-4.555*** (1.158)	-12.00*** (3.774)	-3.532*** (1.315)	-4.323*** (1.319)	-1.409 (1.944)
Infl	-0.375 (0.406)	-4.093*** (1.150)	-0.0870 (0.451)	-1.034* (0.597)	-0.671 (0.543)
Lngdppc	-0.0691** (0.0348)	0.225** (0.0969)	-0.138*** (0.0364)	-0.120* (0.0634)	-0.154*** (0.0415)
Institutions	0.00475*** (0.00164)	0.00503 (0.00383)	0.00466*** (0.00180)	0.00441** (0.00205)	0.00605** (0.00249)
Trend	-0.0563*** (0.0213)	-0.0534 (0.0356)	-0.0681*** (0.0254)	-0.0651** (0.0270)	-0.0401 (0.0310)
Constant	2.898*** (0.348)	0.860 (0.852)	3.325*** (0.386)	3.955*** (0.499)	3.827*** (0.453)
Observations	1,430	428	1,002	754	676
R-squared	0.568	0.580	0.595	0.587	0.595
Number of bankcode	376	126	250	219	166

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 4. 9 : Effect of Liability Disclosure on Bank Stability, Evidence from Africa - PCSE Results

VARIABLES	(1) Full Sample	(2) Non-Islamic Sample	(3) Islamic Sample	(4) Less Developed Credit Market Sample	(5) Developed Credit Market Sample
Ldi	0.0917 (0.0649)	0.0255 (0.108)	0.186** (0.0748)	0.215** (0.0906)	0.0910 (0.0867)
Manqua	-0.702*** (0.134)	-0.602*** (0.182)	-0.679*** (0.151)	-1.651*** (0.112)	-0.408*** (0.115)
Capital	3.620*** (0.335)	5.833*** (0.688)	3.250*** (0.397)	5.079*** (0.448)	2.297*** (0.415)
Bsize	0.217*** (0.0262)	0.192*** (0.0440)	0.273*** (0.0337)	0.164*** (0.0394)	0.147*** (0.0289)
Sgrwoth	-0.0780** (0.0327)	-0.0185 (0.0290)	-0.258*** (0.0670)	-0.247*** (0.0640)	-0.0171 (0.0261)
Div	-0.850*** (0.200)	-0.637* (0.337)	-1.392*** (0.231)	-0.753** (0.297)	-0.638** (0.273)
Profit	-4.801*** (1.152)	-12.24*** (3.767)	-4.036*** (1.307)	-5.083*** (1.323)	-1.262 (1.906)
Infl	-0.459 (0.400)	-3.763*** (1.050)	-0.167 (0.447)	-1.360** (0.596)	-0.679 (0.544)
Lngdppc	-0.0638* (0.0335)	0.209** (0.0927)	-0.130*** (0.0344)	-0.126** (0.0615)	-0.147*** (0.0404)
Institutions	0.00488*** (0.00164)	0.00547 (0.00380)	0.00480*** (0.00181)	0.00434** (0.00205)	0.00631** (0.00249)
Trend	-0.0585*** (0.0210)	-0.0518 (0.0357)	-0.0717*** (0.0252)	-0.0711*** (0.0267)	-0.0409 (0.0308)
Constant	2.762*** (0.338)	1.034 (0.833)	2.995*** (0.374)	3.710*** (0.468)	3.782*** (0.459)
Observations	1,430	428	1,002	754	676
R-squared	0.577	0.586	0.618	0.597	0.595
Number of bankcode	376	126	250	219	166

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 4. 10: Effect of Other Funding Disclosure on Bank Stability, Evidence from Africa - PCSE Results

VARIABLES	(1) Full Sample	(2) Non-Islamic Sample	(3) Islamic Sample	(4) Less Developed Credit Market Sample	(5) Developed Credit Market Sample
Ofdi	-0.0703 (0.0619)	-0.118 (0.109)	-0.0822 (0.0715)	-0.0387 (0.0790)	-0.0221 (0.0856)
Manqua	-0.691*** (0.131)	-0.582*** (0.176)	-0.672*** (0.150)	-1.574*** (0.111)	-0.401*** (0.114)
Capital	3.534*** (0.334)	5.851*** (0.706)	3.020*** (0.381)	4.827*** (0.436)	2.147*** (0.384)
Bsize	0.233*** (0.0273)	0.215*** (0.0502)	0.288*** (0.0355)	0.179*** (0.0418)	0.157*** (0.0302)
Sgrwoth	-0.0752** (0.0327)	-0.0172 (0.0281)	-0.254*** (0.0673)	-0.233*** (0.0650)	-0.0137 (0.0263)
Div	-0.813*** (0.200)	-0.640* (0.338)	-1.351*** (0.238)	-0.632** (0.287)	-0.599** (0.272)
Profit	-4.368*** (1.162)	-11.98*** (3.732)	-3.351** (1.314)	-4.311*** (1.359)	-1.096 (1.949)
Infl	-0.404 (0.400)	-3.759*** (1.034)	-0.114 (0.450)	-1.178** (0.598)	-0.614 (0.541)
Lngdppc	-0.0677* (0.0351)	0.204** (0.0953)	-0.136*** (0.0366)	-0.116* (0.0630)	-0.152*** (0.0417)
Institutions	0.00484*** (0.00164)	0.00556 (0.00380)	0.00472*** (0.00180)	0.00433** (0.00206)	0.00603** (0.00249)
Trend	-0.0569*** (0.0213)	-0.0522 (0.0356)	-0.0671*** (0.0254)	-0.0659** (0.0270)	-0.0381 (0.0310)
Constant	2.909*** (0.348)	1.098 (0.825)	3.325*** (0.382)	3.841*** (0.487)	3.914*** (0.468)
Observations	1,430	428	1,002	754	676
R-squared	0.567	0.585	0.596	0.589	0.590
Number of bankcode	376	126	250	219	166

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 4. 11: Effect of Memo Line Disclosure on Bank Stability, Evidence from Africa - PCSE Results

VARIABLE	(1) Full Sample	(2) Non-Islamic Sample	(3) Islamic Sample	(4) Less Developed Credit Market Sample	(5) Developed Credit Market Sample
Mldi	-0.0939 (0.0587)	0.0427 (0.116)	-0.126* (0.0681)	-0.102 (0.0752)	-0.0550 (0.0850)
Manqua	-0.689*** (0.130)	-0.595*** (0.177)	-0.667*** (0.148)	-1.569*** (0.109)	-0.397*** (0.114)
Capital	3.467*** (0.336)	5.844*** (0.697)	2.883*** (0.377)	4.829*** (0.435)	2.143*** (0.406)
Bsize	0.224*** (0.0258)	0.190*** (0.0445)	0.277*** (0.0334)	0.176*** (0.0404)	0.155*** (0.0275)
Sgrwoth	-0.0748** (0.0326)	-0.0182 (0.0286)	-0.252*** (0.0679)	-0.229*** (0.0654)	-0.0124 (0.0263)
Div	-0.835*** (0.199)	-0.616* (0.350)	-1.361*** (0.238)	-0.675** (0.290)	-0.600** (0.271)
Profit	-4.305*** (1.179)	-12.12*** (3.779)	-3.233** (1.332)	-4.271*** (1.293)	-0.983 (2.037)
Infl	-0.348 (0.401)	-3.761*** (1.048)	-0.111 (0.452)	-1.112* (0.593)	-0.601 (0.545)
Lngdppc	-0.0651* (0.0353)	0.209** (0.0944)	-0.130*** (0.0372)	-0.122* (0.0632)	-0.148*** (0.0440)
Institutions	0.00472*** (0.00164)	0.00554 (0.00382)	0.00472*** (0.00180)	0.00428** (0.00206)	0.00600** (0.00248)
Trend	-0.0542** (0.0212)	-0.0528 (0.0363)	-0.0683*** (0.0254)	-0.0635** (0.0271)	-0.0366 (0.0311)
Constant	2.980*** (0.348)	1.018 (0.837)	3.455*** (0.393)	3.988*** (0.505)	3.935*** (0.467)
Observations	1,430	428	1,002	754	676
R-squared	0.571	0.587	0.597	0.587	0.575
Number of bankcode	376	126	250	219	166

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Table 4.12: Effect of Income Statement Disclosure on Bank Stability, Evidence from Africa - PCSE Results

VARIABLES	(1) Full Sample	(2) Non-Islamic Sample	(3) Islamic Sample	(4) Less Developed Credit Market Sample	(5) Developed Credit Market Sample
Isdi	0.284* (0.149)	0.509 (0.360)	0.236 (0.161)	0.142 (0.198)	0.507*** (0.178)
Manqua	-0.687*** (0.130)	-0.623*** (0.179)	-0.663*** (0.147)	-1.595*** (0.110)	-0.380*** (0.106)
Capital	3.575*** (0.336)	5.910*** (0.647)	3.006*** (0.381)	4.886*** (0.431)	2.196*** (0.395)
Bsize	0.209*** (0.0258)	0.182*** (0.0452)	0.263*** (0.0334)	0.169*** (0.0413)	0.131*** (0.0281)
Sgrwoth	-0.0735** (0.0328)	-0.0152 (0.0293)	-0.259*** (0.0670)	-0.231*** (0.0647)	-0.0117 (0.0267)
Div	-0.904*** (0.197)	-0.806** (0.369)	-1.381*** (0.225)	-0.681** (0.303)	-0.696** (0.275)
Profit	-4.873*** (1.150)	-13.03*** (3.783)	-3.840*** (1.297)	-4.576*** (1.314)	-1.944 (1.870)
Infl	-0.467 (0.403)	-3.943*** (1.049)	-0.135 (0.454)	-1.253** (0.603)	-0.694 (0.534)
Lngdppc	-0.0580* (0.0327)	0.186** (0.0941)	-0.125*** (0.0347)	-0.118* (0.0622)	-0.134*** (0.0401)
Institutions	0.00480*** (0.00165)	0.00539 (0.00382)	0.00470*** (0.00180)	0.00439** (0.00206)	0.00614** (0.00250)
Trend	-0.0564*** (0.0211)	-0.0458 (0.0357)	-0.0697*** (0.0252)	-0.0657** (0.0270)	-0.0388 (0.0309)
Constant	2.668*** (0.346)	0.880 (0.836)	3.106*** (0.393)	3.763*** (0.495)	3.496*** (0.451)
Observations	1,430	428	1,002	754	676
R-squared	0.576	0.599	0.596	0.595	0.597
Number of bankcode	376	126	250	219	166

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

4.5 Chapter Summary

Corporate transparency essentially is to strengthen market discipline through greater information disclosure. Advancing transparency through information disclosure in the banking sector is to promote market discipline with the aim to reduce plausible banking crises. The study sets out to examine the effect of information disclosure on bank stability. The banking sector aside the problem of information asymmetry, is classified as more opaque than other sectors (Morgan, 2002; Haggard & Howe, 2007) and the evidence to banks opacity is provided by Flannery et al. (2004, 2013). In view of this issues in the banking sector, the debate on disclosure policy is considered keen.

Although information disclosure is socially desirable (Frolov, 2004; Diamond, 1985), the connection among its merits and demerits results in partial or no disclosure hence the need for more interrogation. Nonetheless, the banking literature offers conflicting results on the implications on greater information disclosure. Whiles the proponents of greater disclosure in the banking sector argues for efficient resource allocation as a result of improving market discipline (Bliss & Flannery, 2002). On the contrary, the proprietary cost of disclosure (Diamond & Rajan, 2001; Hanson et al., 2015) as well as misinterpretation of disclosure leading to bank run (Calomiris & Mason, 1997; Gilbert & Vaughan, 1998) renders the nexus on disclosure and stability ambiguous.

The study seeks to answer the question – how does the effect of information disclosure to the market affects bank stability. This study examines empirically, the effect of financial disclosure on bank stability. In view of the ambiguous nature of information disclosure on bank stability, the study splits the sample into Non-Islamic and Islamic populated and Developed and Less

developed credit market economies. For better analysis of the disclosure and stability nexus, the study decomposes the index into sub-indices. The rationale is that, each composite (i.e., sub index) could generate unique effect on bank stability.

The result shows a strong support for financial disclosure as a tool for market discipline in relation to bank stability, although the result varies across the different samples used. Thus, explaining the strong contextual dependence of disclosure-stability nexus. The study found positive significant relation from the non-Islamic populated and developed credit market economies. For the non-Islamic economies operates convention banking as opposed to the Islamic banking mostly found in the Islamic populated economies as such the rule of engagement varies and possibly the reason for the results. However, for developed credit market economies, the expectation is that, the financial market is developed compared to the less developed credit market which plausibly explains the results.

Furthermore, the results from the disclosure sub-indices established support for asset disclosure again in non-Islamic populated and developed credit market economies. On the contrary, found a negative relation between asset and memo line disclosure on bank stability in the Islamic populated sample. For liability disclosure, we posit a significant positive relation to stability in Islamic populated and less-developed credit market economies. Also, found a significant support for income statement disclosure on stability in Africa and developed credit market economies.

The Bank regulators emphasis on transparency in reference to the potential role of market discipline through information disclosure to regulate bank stability as projected by the Basel

Committee on Banking Supervision (Basel II and III). The notion is that in a well-functioning economy, market participants take keen interest to bank disclosure so as to monitor and control risk-taking behaviours of managers. This is known as market discipline and works to mitigate undue risk taking and to ensure stability. In view of the ambiguity of the disclosure-stability nexus, we have established strong support for bank disclosure and stability in non-Islamic populated and developed credit market economies. Thus, the heterogeneous nature of Africa's settings requires for contextualization of such study. With this, the study provides empirical evidence from Africa's perspective and contributes to the information disclosure and stability literature.

Appendix

Appendix 1: Wooldridge test for autocorrelation in panel data

H0: no first order autocorrelation

F (1, 221) = 175.132

Prob > F = 0.0000

Appendix 2: Modified Wald test for groupwise heteroskedasticity in fixed effect regression model

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

chi2 (304) = 2.3e+30

Prob>chi2 = 0.0000

Appendix 3: Hausman Test

	Coefficients			sqrt(diag(V_b-V_B))
	(b) zscore1fe	(B) zscore1re	(b-B) Difference	S.E.
Manqua	-0.2790	-0.4802	0.2012	0.0420
Capital	4.4233	2.9814	1.4418	0.7198
Bsize	0.2189	0.2060	0.0129	0.1523
Sgrwoth	0.0082	-0.0206	0.0288	0.0090
Div	-0.5597	-0.7822	0.2225	0.2439
Profit	0.9542	-2.8778	3.8321	2.1212
Infl	-0.7307	-0.5833	-0.1474	0.2294
Lngdppc	0.6772	-0.0718	0.7491	0.7792
Trend	-0.0391	-0.0231	-0.0160	0.0262

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(9) = (b-B)'[(V_b-V_B)⁽⁻¹⁾](b-B)

= 51.49

Prob>chi2 = 0.0000

Appendix 4: Number of Banks per country (Islamic country - *)

Code	Country	Number of Banks	Code	Country	Number of Banks
1	Algeria*	17	16	Mozambique	13
2	Benin	10	17	Namibia	8
3	Botswana	13	18	Nigeria*	31
4	Burkina*	9	19	Rwanda	8
5	Cameroon	12	20	Senegal*	12
6	Cote D'Ivoire	19	21	Sierra Leone*	13
7	Egypt*	33	22	South Africa	34
8	Ethiopia	24	23	Sudan*	15
9	Ghana	23	24	Swaziland	6
10	Kenya	53	25	Tunisia*	21
11	Malawi	14	26	Uganda	17
12	Mali*	10	27	Tanzania	34
13	Mauritania*	8	28	Zambia	24
14	Mauritius	18	29	Zimbabwe	23
15	Morocco*	20			

Appendix 4: Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
Lnzscore	2185	0.988	15.789	7.042	0.000
Disc	4248	0.916	196.577	13.786	0.000
Adi	4248	0.971	68.372	11.029	0.000
Oead	4248	0.995	10.952	6.248	0.000
Ldi	4248	1.000	0.442	-2.132	0.983
Ofdi	4248	1.000	1.086	0.215	0.415
Mldi	4248	1.000	1.006	0.016	0.494
Isdi	4248	1.000	0.041	-8.367	1.000
Manqua	2496	0.482	751.850	16.981	0.000
Capital	2585	0.681	477.596	15.837	0.000
Bsize	2585	0.992	12.720	6.529	0.000
Sgrwoth	1953	0.302	809.691	17.020	0.000
Div	1799	0.865	145.199	12.614	0.000
Profit	2531	0.441	820.689	17.214	0.000
Infl	4156	0.048	2186.852	20.060	0.000
Lngdppc	4248	0.922	182.576	13.593	0.000

Appendix 5: Variance Inflation Factor

Variable	VIF	1/VIF
Disc	90.790	0.011
Adi	19.230	0.052
Oead	14.440	0.069
Ldi	7.670	0.130
Mldi	7.410	0.135

Ofdi	7.400	0.135
Bsize	1.870	0.534
Lngdppc	1.640	0.610
Capital	1.440	0.696
Profit	1.400	0.715
Infl	1.190	0.837
Div	1.190	0.842
Manqua	1.120	0.891
Sgrwoth	1.020	0.981

Appendix 6: Disclosure index

VARIABLES	DESCRIPTION
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Assets

Loans S1:	Loans by maturity Sub 3 months, 3–6 months, 6 months–1 year, 1–5 years,
S2:	Loans by type Loans to Municipalities/Government, Mortgages, HP/Lease,
S3:	Loans by counterparty Loans to Group Companies, Loans to other Corporate, Loans to Banks
S4:	Problem loans Total Problem loans
S5:	Problem loans by type Overdue/Restructured/Other non-performing

Other Earning Assets

- S6: Securities by type (detailed breakdown) Treasury Bills, Other Bills, Bonds, CDs, Equity Investments, other Investment
- S7: Securities by type (coarse breakdown) Government Securities, Other Listed Securities, Non-listed Securities
- S8: Securities by holding purpose Investment Securities, Trading Securities

Liabilities

- Deposits** S9: Deposits by maturity Demand, Savings, Sub 3 months, 3–6 months, 6 months– 1year, 1-5years, 5years+
- S10: Deposit by type of customer Banks Deposits, Municipal/Government

Other Funding

- S11: Money market funding Total Money Market Funding
- S12: Long-term funding Convertible Bonds, Mortgage Bonds, Other Bonds, Subordinated Debt, Hybrid Capital

Memo lines

- S13: Reserves Loan Loss Reserves (Memo)
- S14: Capital Total Capital Ratio, Tier 1 Ratio, Total Capital, Tier 1 Capital
- S15: Contingent Liabilities Total Contingent Liabilities
- S16: Off-Balance Sheet Items Off-Balance Sheet Items

Income statement

S17: Non-interest Income Net Commission Income, Net Fee Income, Net
Trading Income

S18: Loan Loss Provisions Loan Loss Provisions

Source: Adopted from Nier and Baumann (2006), used as Financial Disclosure; the data
captured from the Bankscope database

CHAPTER FIVE

The Relationship between Internal Governance Structures and Financial Disclosure

5.0 Abstract

This study examines the relationship between internal corporate governance structures and financial disclosure in Africa. The rationale is to determine the level of influence of internal governance structures on bank financial disclosure. The extant literature posits that one of the end products of good corporate governance is information disclosure leading to corporate transparency. The study used panel dataset from Bank scope spanning the period 2006 – 2012.

The results show strong support for some internal governance structures and financial disclosure. We found consistent significant support for audit independence and corporate disclosure. This indicates that quality audit committee serves as check on management and influence informative disclosure for transparency which strengthen the market to instill management discipline. Similar results were found for female representation on the board and non-executive board membership.

The study has provided evidence to the internal governance structures that stimulate financial disclosure using data from developing countries. The study has contributed to literature in the area of internal governance structures, financial disclosure and banking sector.

The Relationship between Internal Governance Structures and Financial Disclosure

5.1 Introduction

The relevance of corporate disclosure through the annual financial reports is considered one of the key aspects of good corporate governance practices. Ensuing from the Basel Committee on banking supervision (2005) and Tian and Chen (2009), corporate disclosure is fundamental to corporate governance. Suggesting that the corporate governance structures influence the level of information disclosure. According Leong (2005) disclosure and transparency are related to good corporate governance. However, Beekes and Brown (2006) found that better-governed firms provide greater informative disclosure using 250 Australian rated firms of the 2002 Horwath Corporate Governance Report.

The emerging reforms to corporate governance structure to the market has among other factors endorsement to advancing disclosure requirements (Hermalin & Weisbach, 2003). Again, Information disclosure is proposed for reducing informational asymmetries as well as agency problems, improve the governance and performance of banks, and lower the costs of funding (Jensen & Meckling, 1976; Myers & Majluf, 1984). As explained by Adiloglu and Vuran (2012), corporate governance represents the quality, transparent and reliable relations between shareholders, board of directors, management and employees clarifying the authority and responsibility of each to the delivering of sustainable value to all stakeholders. From the authors, it is evident that corporate transparency has a link to governance structure. As argued by Glaum et al. (2013) financial reporting is a significant aspect of corporate governance intended to decrease information asymmetry between a company's management and its stakeholders. With this, the authors point to the fact that enhancing corporate transparency through disclosure supports the capital-market participants to better evaluate management's decision-making process.

Consequently, the study empirically examines the existing relation between the internal corporate governance structures (i.e., board structure, CEO duality and audit independence) on financial disclosure. The study employs firm level governance structure and disclosure in a developing cross-country analysis over time period considered. Whereas earlier studies considered single country data analysis, others provided international level evidence on the link between corporate governance mechanism and the level of transparency, given the notion that, quality corporate governance practices promote the level of transparency. Nevertheless, the results appear contradictory justifying the need for further research. Our study contributes to the growing literature in the area of internal corporate governance structures, information disclosure, and the banking sector.

5.2.1 Bank Control Variables

From the literature, there are various determinants of corporate disclosure beside corporate governance structures. Among these factors are firm size, profitability and capital structure. Studies argue in support of greater disclosure given the level of firm size and its performance in terms of profitability (Bonson & Escobar, 2006; Morris et al., 2012; Glaum et al., 2013). The expectation is that, firms with higher records of profitability appear to disclose more information to market as compared to less profitable firms (Morris et al., 2012). Again, the firms' ownership structure which translate to the capital structure is also reported to influence disclosure (Francis et al., 2011; Ertuna & Tukul, 2013). According to Francis et al. (2011) firms with diffuse owners are most experience problems of asymmetry as compared to those with close ownership. In the case of banks, the ownership in term of financier is more diffuse and so experience the problems of asymmetry. Consequently, we controlled for bank capital as one of the variables in determining corporate disclosure.

5.2.2 Country's Institutional Quality

Moreover, to influence the level of corporate disclosure for transparency does not solely depend on internal corporate governance but also the institutional environment within a country plays a role. As studies show, countries with weak legal system and strong governance renders their banks ineffective as a result of corruption, non-compliance of corporate rules, and ineffective enforcement of laws (La Porta et al., 1998; Levine, 1998; Barth et al., 2004). To examine the influence of quality institutional environment, we considered Kaufmann et al. (2009) institutional quality index. There are six governance indicators namely; voice and accountability, political instability and violence, governance effectiveness, regulatory quality, rule of law and control of corruption. From the six-governance indicator, we employed governance effectiveness, regulatory quality and rule of law for the study. Government effectiveness captures the quality of public service provision, quality of bureaucracy, freedom of the civil service from political interference, and credibility of government commitment to policies. The regulatory quality evaluates friendly market policies, and the frustrations from undue regulations. Whereas the rule of law captures the confidence level of agents in and compliance to the rules of the society. In terms of measurement these indicators range from -2.5 to +2.5, and the greater the values, the better the country's institutional quality or regulatory environment.

The Kaufman institutional quality index exhibits the national governance structures meant to address the agency's challenges and information asymmetry in the market (Aguilera, 2005; La Porta et al., 2000). The index comprises formal constraints (i.e., regulations and law, political regulations, economic and procedures as well as other clearly stated restrictions on firm behaviour) and informal rules made up of unwritten rules yet are relatively significant, social

norms, conventions, code of ethics and values (Kaufmann et al., 2011; Schiehl et al., 2014; Yoshikawa et al., 2014). The national governance structures create an environment to motivate economic participants to comply with the laws and regulations. Earlier literature projects the national governance structures as a means to offer protection for investors against expropriation from corporate management and to safeguard the interest of minority investors rights (La Porta et al., 2000; Aslan & Kumar, 2014; Schiehl et al., 2014). Consequently, depending on the level of rigorousness of the governance structures tend to influence information disclosure and control the market intermediaries leading to limiting information asymmetries. Again, the governance structure can induce pressure on the board of directors and management to comply with their regulation's mandates (Yoshikawa et al., 2014). Accordingly, a rigor national governance structure can work as effective external governance control measure to protect investors and induce accountability and information disclosure.

5.3.1 Summary Statistics

Table 5.1i presents the summary statistics of the variables employed in this study. The sample period spans between 2006 and 2012.

Table 5.1: Summary of Variables

Variable	Measurement	Definition	Source	Expected Sign
Dependent Variable				
Disc	Total number of financial statement disclosures	Full disclosure	Computed by author based on data from Bank Scope	+
Adi	Total number of assets disclosures	Assets Disclosure	Computed by author based on data from Bank Scope	+
Oead	Total number of other earning assets disclosure	Other earning assets Disclosure	Computed by author based on data from Bank Scope	+
Ldi	Total number of liabilities disclosures	Liability Disclosure	Computed by author based on data from Bank Scope	+
Ofdi	Total number of other funding disclosures	Other Funding Disclosure	Computed by author based on data from Bank Scope	+
Mldi	Total number of memo line disclosures	Memo Line Disclosure	Computed by author based on data from Bank Scope	+
Isdi	Total number of income statement disclosures	Income Statement Disclosure	Computed by author based on data from Bank Scope	+
Independent Variables of Interest: Bank Financial Statement Disclosure Indicators				
Disc	Total number of financial statement disclosures	Full disclosure	Computed by author based on data from Bank Scope	+
ceoduo	Dummy of 1 when CEO doubles as board chairman and 0 otherwise	Chief Executive Officer Duality	Computed by author based on data from Bank Scope	+
bodsize	Natural log of number of board members	Number of Board members	Computed by author based on data from Bank Scope	+
Nonexec	Ratio of non-executive members to total board size	Non-executive members	Computed by author based on data from Bank Scope	+/-
Bodgen	Ratio of female board members to total of board size	Female board members	Computed by author based on data from Bank Scope	+/-
Auditind	Dummy of 1 when audit committee is chaired by a non-executive member and 0 otherwise	Audit Committee Independence	Computed by author based on data from Bank Scope	+

Independent Variables: Control Variables				
Profit	Net income/ total equity	Bank profitability	Computed by author based on data from Bank Scope	+
Capital	total equity/ total assets	capitalization	Computed by author based on data from Bank Scope	[+]
Bsize	Log of total asset	Bank Size	Computed by author based on data from Bank Scope	[+]
Kaufman's Institutional Quality				
Rulelaw	Public confidence in the rules of the society	Rule of law	World Bank Development Indicators	[+]
Goveff	Quality of Public service	Government effectiveness	World Bank Development Indicators	[+]
Regqual	Friendly Market	Regulatory Quality	World Bank Development Indicators	[+]

5.3.2 Discussion Sample and Summary Statistics

Table 5.2, presents the variables used to examine the relation between internal corporate governance structures and financial. The dependent variable is the financial disclosure captured from an index as used by Nier and Baumann (2006). It is shown that the average overall financial statement disclosure for the sample is 6.76 implying that on the average, banks in Africa disclose only 6.76 out of 18 disclosure criteria required.

CEO duality (ceoduo) which measures concentration of corporate power and continuity and consistency in decision making and implementation is on the average of 5.6% in the full sample. This implies that about 5.6% of the bank board chairpersons doubled as chief executive officers (CEOs). The number of people that constitute a board on the average is 9 given the sample. However, in terms of presence of non-executive board members, we recorded an

average of 13%. On board diversity in terms of gender, the average female representation on bank boards is 10%. The audit independence reports an average of 13.4% of audit committees chaired by non-executive directors from the sample.

Additionally, with regards to other control variables, we recorded an average of 6.13% as bank sized (bsize) which is the log of total assets for the study period given the sample. Whereas capital adequacy is on the average of 16% of total assets for the sample and the average profitability measured as return on equity (roe) shows a return of 12% for the period under study given the sample.

Table 5.2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
DISC	4,248	6.758945	5.770168	0	15
ADI	4,248	2.332863	2.074736	0	5
OEAD	4,248	1.215631	1.148138	0	3
LDI	4,248	0.937853	0.877148	0	2
OFDI	4,248	0.877825	0.813934	0	2
ISDI	4,248	0.513889	0.499866	0	1
CEODUO	3,161	0.055679	0.229336	0	1
BODSIZE	3,168	8.919192	6.892272	0	46
NONEXEC	3,168	0.128486	0.232306	0	0.9
BODGEN	3,168	0.099645	0.126033	0	1
AUDITIND	3,167	0.133881	0.340578	0	1
goveff	4,248	8.634607	18.22513	-1.55329	81.25

regqual	4,248	9.144899	18.94399	-2.16231	83.65385
rulelaw	4,248	8.782501	18.51995	-1.8196	78.40376
Bsize	2,591	2805.066	10077.44	0	126730
Capital	2,591	16.15583	15.3115	-95.94	100
Profit	2,573	12.03699	45.53056	-901.73	965.74

5.3.3 Discussion Correlation Matrix

Table 5.3 presents the correlation matrix which is necessary to ensure the absence of multicollinearity problems. This problem occurs when some explanatory variables are correlated, causing instability of the estimated coefficients and resulting to high standard deviations. The rational of the correlation matrix is to allow analysis of connections between variables. Positive coefficients (negative) indicate a positive relationship (negative) between them. Obtaining correlation coefficients greater than 0.5 can give an indication of a multicollinearity problem between the independent variables included in the model. From the results below, there is no coefficient $>$ than 0.5 hence, the model is free from multicollinearity problem. According to Kennedy (2008), multicollinearity threshold is set at 0.7. The study observes possible collinearity between the disclosure variables and the disclosure variables are substituted into the model alternately in order to avoid the problem of multicollinearity. Hence, the multicollinearity problem observed in the correlation matrix is not a problem and has been taken care of by alternatively substituting the disclosure variable into the model.

Table 5.3: Correlation Matrix

	DICS	ADI	OEAD	LDI	OFDI	MLDI	ISDI	CEODUO	BODSIZE	NONEXEC	BODGEN	AUDITIND	GOVEFF	REGQUAL	RULELAW	BSIZE	PROFIT	CAPITAL
DICS	1																	
ADI	0.8267	1																
OEAD	0.6884	0.3784	1															
LDI	0.59	0.3778	0.2532	1														
OFDI	0.4651	0.2713	0.1714	0.1511	1													
MLDI	0.6015	0.3827	0.41	0.2148	0.1212	1												
ISDI	0.5327	0.3383	0.2931	0.3249	0.185	0.2018	1											
CEODUO	0.0304	0.029	0.0329	-0.008	0.055	0.0369	0.037	1										
BODSIZE	0.0443	0.0448	0.0016	0.0893	0.0067	0.0142	0.0365	-0.1003	1									
NONEXEC	0.1771	0.1531	0.1996	0.0077	0.0326	0.1883	0.0292	-0.0818	0.1974	1								
BODGEN	0.1301	0.1147	0.1361	0.0452	0.0709	0.0083	0.074	-0.086	0.2448	0.2048	1							
AUDITIND	0.1115	0.1014	0.1302	0.0177	0	0.103	0.0661	-0.0164	0.2625	0.5943	0.1655	1						
GOVEFF	0.1039	0.0589	0.0975	0.0272	0.0965	0.057	0.0713	-0.0125	0.047	0.0802	0.0157	0.0946	1					
REGQUAL	0.129	0.0745	0.1196	0.033	0.1153	0.09	0.0675	-0.0034	0.0243	0.0915	0.0191	0.0962	0.9647	1				
RULELAW	0.1092	0.0585	0.1047	0.0345	0.0991	0.0634	0.0697	-0.0048	0.033	0.0758	0.0173	0.0845	0.9797	0.9665	1			
BSIZE	0.3202	0.2004	0.1961	0.1605	0.4234	0.0209	0.3024	0.1401	0.1652	0.0634	0.0856	0.0149	0.1155	0.1108	0.1033	1		
PROFIT	0.0465	0.0416	0.0646	0.0146	0.0045	0.0047	0.0818	-0.002	0.0337	-0.061	0.0127	0.0023	0.0066	-0.0256	0.0034	0.1223	1	
CAPITAL	0.4203	0.2833	0.2605	0.3438	0.2712	0.1735	0.3197	-0.0563	0.0698	0.0908	0.04	0.0926	0.0181	-0.0256	-0.0219	0.3316	0.0993	1

Dics - overall bank financial statement disclosure, *adi* - assets disclosure, *oead* - other earning assets disclosure, *ldi* - liability disclosure, *ofdi* - other funding disclosure, *mldi* - memo lines disclosure, *isdi* - income statement disclosure, *ceoduo* - chief executive duality, *bodsize* - size of board, *nonexec* - the number of non-executive members, *bodgen* - number of female board members, *auditind* - independence of the audit committee *capital* - capital adequacy, *bsize* - size of bank, *profit* - profit maximization, *Goveff* – government effectiveness, *rulelaw* – rule of law, *regqual* – regulatory quality.

5.4.1 Methodology

This study employs the panel data framework which entails both cross-sectional and time series data to ensure both time and entity observations are captured. This ensures reliability in findings and results. Again, Wooldridge (2018) also states that the panel data has the ability to control for omitted variable biases and also captures both time and cross sectional dimensions of the dataset. For the purpose of the study, annual data is obtained from Bank Scope and World Development Indicators (WDI) databases. Specifically, bank specific variables are computed based on data from Bank Scope, while data on macroeconomic conditions are obtained from WDI. The data for this study spans from 2006 to 2012. Although the data appears old, attempts to obtain current data has proved unsuccessful; hence the use of the data. To specify the model, the study specifies the panel model as:

$$Y_{i,t} = \alpha_i + \beta X_{i,t} + \varepsilon_{i,t} \quad \text{.....} \quad (\text{Eq.5.a})$$

Subscript “i” denotes a cross sectional dimension of a bank for “i”=1,...,N while Subscript “t” denotes a time series dimension for “t”=1,...,T. Y_{it} represents the dependent variable, α_i is the constant term of all periods and specific to a bank fixed effect, β is a vector of parameters ($1 \times k$) to be estimated on the input or independent variables, X_{it} is a vector of observations on the input variables ($1 \times k$) for the model ε_{it} which signifies *iid* is the error term.

5.4.2 Estimation Technique

This study employs the Prais-Winsten estimation technique after the fixed effect model which was selected by the Hausman test (Appendix 3) was tested heteroscedastic (Appendix 1) and autocorrelated (Appendix 2). The Prais-Winsten technique is a generalized least square model and controls for both autocorrelated and heteroscedastic errors. Thus, the Prais-Winsten estimation technique estimates linear regressions that are corrected for panel specific serially

correlated residuals and heteroskedastic (see Prais-Winsten, 1954). The estimation model is obtained from the AR (1) model from the error. Also, the Prais-Winsten technique is employed ahead of Cochrane-Orcutt (1949) estimation technique which is also a GLS technique and controls for both serially correlated residuals and heteroskedastic for a number of reasons.

First, while the Cochrane-Orcutt estimation employs lags definitions and losses the first observations, the Prais-Winsten preserves the first observations and make more reliable estimates given the increased number of observations compared to the Cochrane-Orcutt estimation. Again, the Cochrane-Orcutt lacks the ability to deal with serial correlation closer to one while Prais-Winsten does so with much ease (Judge et al., 1985). Furthermore, the asymptotic results suggest that the feasible Prais-Winsten estimator is best for most applied circumstances. Hence, the Prais-Winsten estimation is deem best for the estimations for this study.

5.4.3 Full Model

The full model considers the whole independent variables to predict the dependent variables. This regression estimation represents the full model to predict bank financial disclosure given the whole explanatory variables.

$$Disc_{it} = \beta_0 + \beta_1 ceoduo_{it} + \beta_2 bodsize_{it} + \beta_3 nonexec_{it} + \beta_4 bodgen_{it} + \beta_5 auditind_{it} + \beta_6 bsize_{it} + \beta_7 profit_{it} + \beta_8 capital_{it} + \beta_9 goveff_{it} + \beta_{10} rulelaw_{it} + \beta_{11} regqual_{it} + \beta_{12} trend_t + \epsilon_{it} \dots \dots \dots \quad (\text{Eq. 5.b})$$

Disc denotes financial disclosure, *ceoduo* denotes chief executive duality, *bodsize* denote size of board, *nonexec* denotes the number of non-executive members, *bodgen* denotes number of female board members, *auditind* denote independence of the audit committee, *capital* denote

capital adequacy, *bsize* denotes size of bank, , *profit* denotes profit maximization, *rulelaw* denote rule of law, *goveff* denote government effectiveness and *regqual* denote regulatory quality and *trend* is an econometric technique used to capture the effect of technological change and time effects. The ε_{it} which signifies *iid* is the error term

The full model is estimated in Sub-indices of the financial disclosures; Asset, other earning Asset, Liability, other funding, Memo line and Income Statement

5.5.1 Empirical Model Diagnosis tests

The empirical results of objective 3 examines the relationship between financial disclosure and bank internal corporate governance structures in Africa as presented in equation 5.c. The model estimator is suitable in explaining the relationship between financial disclosure and internal corporate governance structures among Africa banks with reference to the nature of the data used.

To gain a better understanding of the dynamics between these financial disclosure and corporate governance variables, we decomposed the disclosure index into the six sub-indices disclosure (asset, other earning assets, liability, other funding, memo line and income statement). The rationale is that each composite (i.e., sub-indices) could generate a unique effect with internal corporate governance structures. Table 5.4 presents the results which are categorized into four different estimations of fixed effect (FE), random effect (RE), generalize least square (GLS) and panel corrected standard error (PCSE). This is to check for robustness in the nexus of financial disclosure and internal governance structures.

The results of the relation between financial disclosure and internal corporate governance structures as specified in the equation 5.c is presented in table 5.4. The model diagnostics test shows the R-squared values for the preferred estimation PSCE in the table 5.4 accordingly.

The results from the preferred Model found positive significant association between board diversity (i.e., non-executive board and board gender) and bank disclosure for transparency. Although Eng and Mak (2003) found firms with more non-executive boards providing less disclosure in Singapore, on the contrary, our result on non-executive boards is in line with the literature that shows improved corporate disclosure given the level of outsider directors (Beekes & Brown, 2006; Lim et al., 2007).

Additionally, audit independence had significant support for bank disclosure. Audit independence is to ensure quality of management accountability to stakeholder. As indicated in the literature, audit quality promotes better financial disclosure (Bonson & Escobar, 2006; Glaum, 2013).

We also found a negative relation between board size and disclosure. The empirical results on board size and disclosure are inconclusive, whereas some studies provide significant support (Cormier et al., 2010; Lim et al., 2007), our established negative result is similar to Chiang and He (2010). Plausibly the average number of 9 could be classified large (Jensen, 1993) hence the ineffective role to stimulate corporate disclosure.

Further, the results from the institutional quality variable did not meet our expectation. We only found a negative relation between government effectiveness and disclosure whereas the others like rule of law and regulatory quality had no significant relation with corporate disclosure.

From the firm level control variable, we established a significant relation between bank size and corporate disclosure. However, the bank capital exhibited a significant negative relation to corporate disclosure.

Table 5.4: Results on Internal Governance Structures and Financial Disclosure

Dep. Var. DISC	(1) FE	(2) RE	(3) GLS	(4) PCSE
Ceoduo		0.014 (0.436)	0.053 (0.198)	-0.181 (0.225)
Bodsize		-0.019 (0.016)	-0.005 (0.007)	-0.011* (0.007)
nonexec		1.287** (0.543)	1.492*** (0.264)	1.349*** (0.279)
bodgen		1.535* (0.854)	1.687*** (0.377)	1.262*** (0.381)
auditind		0.515 (0.372)	0.307* (0.177)	0.499*** (0.179)
Bsize	0.771*** (0.103)	0.472*** (0.053)	0.251*** (0.029)	0.446*** (0.053)
Capital	-2.831*** (0.421)	-3.998*** (0.358)	-5.843*** (0.339)	-4.763*** (0.402)
profit	7.920*** (1.606)	2.640*** (0.961)	5.981*** (0.944)	0.840 (2.402)
goveff	-0.007 (0.009)	-0.011 (0.009)	-0.053*** (0.016)	-0.016* (0.010)
regqual	-0.014* (0.007)	-0.009 (0.007)	0.041*** (0.012)	0.006 (0.007)
rulelaw	0.014 (0.010)	0.013 (0.010)	0.005 (0.016)	0.005 (0.010)
trend	0.172*** (0.022)	0.213*** (0.018)	0.259*** (0.029)	0.257*** (0.024)
Constant	5.968*** (0.619)	7.779*** (0.344)	9.032*** (0.227)	7.928*** (0.398)
Observations	2,036	2,036	2,036	2,036
R-squared	0.257			0.868
Number of bankcode	372	372	372	372

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

5.5.2: Discussion of Disclosure Sub-indices Results

The financial disclosure index decomposed into sub- disclosure indices have results shown in Tables 5.5.i, 5.5.ii, 5.5.iii, 5.5.iv, 5.5.v, and 5.vi. Table 5.5.i present the regression results on the link between asset disclosure and internal corporate governance structures. The result shows a significant support for audit independence and asset disclosure whereas the relation between

board size and asset disclosure is negative. We also established significant relation between bank profitability and asset disclosure.

From Table 5.5.ii the regression results show the link between other earning asset disclosure and internal corporate governance structures. The result found a significant support for both board gender and audit independence in relation to other earning asset disclosure whereas the relation between board size and non-executive board were negative in relation to other earning asset disclosure. We further found significant support between bank profitability and other earning asset disclosure. However, we established a negative association between regulatory quality and other earning asset disclosure

Considering Table 5.5.iii which presents the results on the relation between liability disclosure and internal corporate governance structures. We found a significant support for between audit independence and liability disclosure whiles the relation for board size and liability disclosure established a negative result. Again, bank profitability had a positive link with liability disclosure.

From Table 5.5.iv which show the results on the link between other funding disclosure and internal corporate governance structures. We established a negative relation between board size and other funding disclosure. Similarly, bank profitability is found to support other founding disclosure. We however, found a negative association between regulatory quality and other funding disclosure.

The results from Table 5.5.v present the relation between memo line disclosure and internal corporate governance structures. The results show a significant support for both board gender and audit independence in relation to memo line disclosure whereas the relation between board sizes is negative. Also, a negative association is found between regulatory quality and memo line disclosure.

Table 5.5.vi presents the results on the relation between income statement disclosure and internal corporate governance structures. We established significant support between audit independence and income statement disclosure while the relation for board size and income statement disclosure established a negative result. There is a negative link between regulatory quality and income statement disclosure. Again, bank profitability had a positive link to income disclosure.

Table 5.5.i: Results on Internal Governance Structures and Asset Disclosure

Dep. Var – Asset Disc	(1) FE	(2) RE	(3) GLS	(4) PCSE
ceoduo		-0.066 (0.368)	-0.063 (0.189)	-0.082 (0.241)
bodsize		-0.011 (0.013)	-0.017** (0.007)	-0.015* (0.008)
nonexec		-0.594 (0.462)	-0.571** (0.251)	-0.310 (0.280)
bodgen		0.758 (0.718)	0.806** (0.359)	0.691 (0.440)
auditind		0.507 (0.316)	0.597*** (0.168)	0.351* (0.185)
bsize	-0.008 (0.126)	0.010 (0.048)	0.040 (0.028)	0.006 (0.033)
capital	-1.302** (0.510)	-0.851** (0.387)	-0.494 (0.322)	-0.120 (0.311)
profit	-1.134 (1.948)	0.896 (0.957)	1.529* (0.898)	1.007*** (0.382)
goveff	-0.007 (0.011)	-0.007 (0.011)	-0.018 (0.015)	-0.004 (0.010)
regqual	-0.014 (0.009)	-0.014* (0.009)	-0.011 (0.012)	-0.009 (0.008)
rulelaw	0.005 (0.012)	0.006 (0.012)	0.015 (0.015)	-0.000 (0.010)
trend	0.245*** (0.026)	0.238*** (0.020)	0.217*** (0.027)	0.234*** (0.025)
Constant	1.913** (0.751)	1.668*** (0.316)	1.538*** (0.215)	1.578*** (0.230)
Observations	2,036	2,036	2,036	2,036
R-squared	0.095			0.235
Number of bankcode	372	372	372	372

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 5.5.ii: Results on Internal Governance Structures and Other Earning Asset Disclosure

Dep. Var- OEAD	(1) FE	(2) RE	(3) GLS	(4) PCSE
ceoduo		0.019 (0.203)	0.005 (0.105)	-0.002 (0.132)
bodsize		-0.013* (0.007)	-0.016*** (0.004)	-0.017*** (0.004)
nonexec		-0.473* (0.254)	-0.414*** (0.140)	-0.346** (0.168)
bodgen		0.609 (0.395)	0.538*** (0.200)	0.585** (0.274)
auditind		0.316* (0.174)	0.336*** (0.093)	0.253** (0.117)
bsize	0.029 (0.071)	0.012 (0.027)	0.026* (0.015)	0.001 (0.018)
capital	-0.342 (0.289)	-0.311 (0.217)	-0.262 (0.179)	-0.083 (0.179)
profit	0.328 (1.105)	0.998* (0.534)	1.473*** (0.500)	0.886*** (0.207)
goveff	0.004 (0.006)	0.005 (0.006)	0.003 (0.008)	0.006 (0.006)
regqual	-0.016*** (0.005)	-0.015*** (0.005)	-0.010 (0.006)	-0.010** (0.005)
rulelaw	0.003 (0.007)	0.002 (0.007)	-0.002 (0.009)	-0.003 (0.006)
trend	0.149*** (0.015)	0.148*** (0.011)	0.137*** (0.015)	0.147*** (0.014)
Constant	0.626 (0.426)	0.761*** (0.175)	0.719*** (0.120)	0.795*** (0.128)
Observations	2,036	2,036	2,036	2,036
R-squared	0.112			0.194
Number of bankcode	372	372	372	372

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Table 5.5.iii: Results on Internal Governance Structures and Liability Disclosure

Dep. Var- L.Disc	(1) FE	(2) RE	(3) GLS	(4) PCSE
ceoduo		0.125 (0.151)	0.105 (0.080)	0.126 (0.109)
bodsize		-0.006 (0.005)	-0.007** (0.003)	-0.007* (0.004)
nonexec		-0.169 (0.190)	-0.171 (0.106)	-0.208 (0.130)
bodgen		0.252 (0.295)	0.268* (0.151)	0.224 (0.232)
auditind		0.105 (0.130)	0.122* (0.071)	0.150* (0.084)
bsize	0.071 (0.056)	0.006 (0.020)	0.018 (0.012)	-0.004 (0.016)
capital	-0.364 (0.226)	-0.244 (0.167)	-0.108 (0.136)	-0.067 (0.145)
profit	-1.120 (0.863)	0.279 (0.408)	0.892** (0.378)	0.454** (0.196)
goveff	-0.004 (0.005)	-0.004 (0.005)	-0.009 (0.006)	-0.003 (0.005)
regqual	-0.004 (0.004)	-0.005 (0.004)	-0.004 (0.005)	-0.004 (0.004)
rulelaw	0.001 (0.005)	0.001 (0.005)	0.006 (0.006)	0.001 (0.004)
trend	0.115*** (0.012)	0.121*** (0.009)	0.112*** (0.011)	0.116*** (0.011)
Constant	0.267 (0.332)	0.573*** (0.132)	0.497*** (0.091)	0.619*** (0.106)
Observations	2,036	2,036	2,036	2,036
R-squared	0.122			0.179
Number of bankcode	372	372	372	372

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 5.5.iv: Results on Internal Governance Structures and Other Funding Disclosure

Dep. Var- OF.Disc	(1) FE	(2) RE	(3) GLS	(4) PCSE
ceoduo		-0.068 (0.143)	-0.095 (0.073)	-0.076 (0.069)
bodsize		-0.004 (0.005)	-0.005** (0.003)	-0.005* (0.003)
nonexec		0.014 (0.179)	-0.014 (0.098)	0.034 (0.105)
bodgen		0.027 (0.279)	0.016 (0.140)	0.134 (0.141)
auditind		0.217* (0.123)	0.214*** (0.065)	0.126 (0.078)
bsize	0.095* (0.050)	0.002 (0.019)	0.006 (0.011)	-0.014 (0.014)
capital	-0.145 (0.202)	-0.237 (0.152)	-0.210* (0.125)	-0.087 (0.117)
profit	-0.267 (0.770)	0.691* (0.375)	1.018*** (0.349)	0.666*** (0.172)
goveff	-0.001 (0.004)	-0.001 (0.004)	-0.004 (0.006)	0.000 (0.004)
regqual	-0.010*** (0.004)	-0.010*** (0.003)	-0.006 (0.005)	-0.007** (0.003)
rulelaw	0.007 (0.005)	0.006 (0.005)	0.006 (0.006)	0.003 (0.004)
trend	0.065*** (0.010)	0.077*** (0.008)	0.073*** (0.011)	0.076*** (0.010)
Constant	0.156 (0.297)	0.656*** (0.123)	0.638*** (0.084)	0.719*** (0.095)
Observations	2,036	2,036	2,036	2,036
R-squared	0.068			0.195
Number of bankcode	372	372	372	372

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Table 5.5.v: Results on Internal Governance Structures and Memo Line Disclosure

Dep.Var- ML.Disc	(1) FE	(2) RE	(3) GLS	(4) PCSE
ceoduo		-0.006 (0.144)	-0.032 (0.074)	0.007 (0.085)
bodsize		-0.007 (0.005)	-0.010*** (0.003)	-0.009*** (0.003)
nonexec		-0.169 (0.180)	-0.106 (0.098)	-0.123 (0.096)
bodgen		0.493* (0.280)	0.447*** (0.141)	0.306* (0.184)
auditind		0.223* (0.123)	0.255*** (0.066)	0.242*** (0.076)
bsize	0.004 (0.050)	0.002 (0.019)	0.016 (0.011)	0.001 (0.012)
capital	-0.525*** (0.203)	-0.289* (0.153)	-0.003 (0.126)	0.048 (0.124)
profit	-0.124 (0.776)	0.227 (0.377)	0.060 (0.352)	0.140 (0.158)
goveff	-0.000 (0.004)	-0.000 (0.004)	-0.003 (0.006)	0.001 (0.004)
regqual	-0.009** (0.004)	-0.009** (0.003)	-0.007 (0.005)	-0.006* (0.003)
rulelaw	0.003 (0.005)	0.003 (0.005)	0.005 (0.006)	0.000 (0.004)
trend	0.089*** (0.010)	0.087*** (0.008)	0.076*** (0.011)	0.085*** (0.010)
Constant	0.692** (0.299)	0.665*** (0.124)	0.602*** (0.085)	0.607*** (0.081)
Observations	2,036	2,036	2,036	2,036
R-squared	0.084			0.179
Number of bankcode	372	372	372	372

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Table 5.5.vi: Results on Internal Governance Structures and Income Statement Disclosure

Dep. Var-IS.Disc	(1) FE	(2) RE	(3) GLS	(4) PCSE
ceoduo		0.033 (0.087)	0.024 (0.045)	0.024 (0.064)
bodsize		-0.004 (0.003)	-0.005*** (0.002)	-0.006** (0.002)
nonexec		-0.056 (0.109)	-0.017 (0.060)	-0.019 (0.085)
bodgen		0.183 (0.169)	0.131 (0.086)	0.201 (0.140)
auditind		0.141* (0.074)	0.140*** (0.040)	0.118** (0.055)
bsize	0.025 (0.031)	-0.008 (0.011)	-0.003 (0.007)	-0.006 (0.009)
capital	-0.399*** (0.127)	-0.322*** (0.094)	-0.202*** (0.078)	-0.129 (0.081)
profit	0.702 (0.483)	0.659*** (0.231)	0.708*** (0.216)	0.563*** (0.133)
goveff	0.002 (0.003)	0.002 (0.003)	-0.000 (0.004)	0.001 (0.003)
regqual	-0.006*** (0.002)	-0.005** (0.002)	-0.003 (0.003)	-0.004* (0.002)
rulelaw	0.001 (0.003)	0.000 (0.003)	-0.000 (0.004)	-0.000 (0.002)
trend	0.059*** (0.007)	0.062*** (0.005)	0.057*** (0.007)	0.062*** (0.007)
Constant	0.218 (0.186)	0.401*** (0.075)	0.384*** (0.052)	0.370*** (0.065)
Observations	2,036	2,036	2,036	2,036
R-squared	0.109			0.199
Number of bankcode	372	372	372	372

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

5.6 Chapter Summary

The aim of this study is to examine the influence of internal governance structure on bank financial disclosure from Africa. The results show strong support for some internal governance structures and financial disclosure. We found consistent significant support for audit independence and corporate disclosure. This indicates that quality audit committee serves as check on management and influence informative disclosure for transparency which strengthen the market to instill management discipline. Again, it was consistently established that, board size had a negative influence on corporate disclosure. Given an average board size of 9 which is considered large, we concluded that to promote informative disclosure, stakeholders have to control the number of boards. Also, board diversity in terms of female representation had significant support for corporate disclosure. Following the literature on female board in connection to less financial risk, where disclosure is to serve as a tool for market discipline then stakeholders could consider increasing the number of female representations on the board to stimulate corporate disclosure. However, the results established significant support for non-executive board membership and disclosure using the full disclosure index but found a negative relation with other earning asset disclosure. This mixed report which is not strange in the literature yet non-executive board membership is one of the strong elements of good internal governance measures and using the report on full disclosure, we will advocate for more non-executive board to promote corporate disclosure. For CEO duality, we recorded no significant relation to financial disclosure. This was not surprising given that the sensitive role of management is as a result of information power possession hence given this dual leadership even makes it quite difficult to sieve information from management.

Interestingly, the established results on the Kaufman institutional quality measures, namely governance effectiveness, regulatory quality and rule of law had either negative support or no

significant relation to financial disclosure. We found negative support for government effectiveness and disclosure using the full disclosure index while the sub-indices show a negative relation to regulatory quality. Although, studies claim significant support between the institutional quality and information disclosure (Kaufmann et al., 2011; Zattonu & Van Ees, 2012; Barakat & Hussainey, 2013). The evidence of Barakat and Hussainey (2013) using 85 banks from 20 European with rigorous institutional quality (e.g., the rule of law) found a significant increase in the operational risk disclosures. However, the results have no significant effect between rule of law and financial disclosure. This possibly explains the weakness in the institutional quality measures employed.

However, we found significant support for bank size and financial disclosure using the full disclosure index. This result is in line with the findings made by (Glays, 2013; Morris et al., 2013). The effect of bank size can be ambiguous under a “too big to fail” attitude as argued by Gonzalez (2005), and so plausibly larger banks can afford to disclose more than the smaller banks. However, given the results with the sub-indices with the exception of memo-line disclosure, we found significant support for bank profitability and financial disclosure. This implies that high performing banks will like the market to know how well they are doing than their less performance counterparts. Also, bank capital has significant adverse relation with financial disclosure. Most often information disclosure is requested by creditors and not shareholders given that governance traditionally has been skewed to ensure shareholder wealth maximization which could induce management to pursue risky investment with the aim to maximize profit. Moreover, in the case of banks, capital is highly contributed by creditor with less /no control on management decisions. This could possibly suggest the reason why bank regulators are pushing for stringent disclosure measures to enhance protection for such investors.

Bank financial disclosure is meant to alleviate problems of information asymmetry between management, investors and other relevant stakeholders. As supported theoretically, Hirtle (2007) posits that greater disclosure is to inform investors to assess the firms' condition for market reaction as a form of corrective measure on management decision. The banking business is a risky venture and are highly opaque as the corporate governance structure alongside regulatory structures are to induce management to disclose information. Thus, to strengthen market discipline and to control bank managers from undue risk-taking ventures for healthy financial sector. The study has provided evidence to the internal governance structures that stimulate financial disclosure using data from developing countries. The study has contributed to literature in the area of internal governance structures, financial disclosure and banking sector.

CHAPTER SIX

The interactive role of Bank Governance and disclosure on stability

Abstract

The study examines the direct and joint effect of internal corporate governance and financial disclosures on bank stability. The study is motivated by policies direction toward corporate governance reforms and the strict measures to advance disclosures for corporate transparency with the aim of ensuring bank stability.

We explored annual bank-level accounting information for 304 banks from 29 Africa countries from the year 2006 -2012. Specifically, corporate governance variables as well as bank-specific variables were sourced from Bank Scope data base, while data on macroeconomic conditions were obtained from World Development Indicators. The study using the unbalance panel data employed panel corrected standard error (PCSE) estimation models.

The results of the study established a complimentary effect among the internal corporate governance structures and disclosure on bank stability. Even where non-executive board membership adversely affects bank stability when interacted with disclosure variables, the result shows significant positive effect on stability. Moreover, bank size and capitalization were found to stimulate bank stability. For the purpose of promoting bank stability, our findings recommend the Africa banks leverage on policies that promote effective internal corporate governance structures and advance financial disclosure to promote stability.

The Interactive Role of Bank Governance and Disclosure on Stability

6.1 Introduction

There are several literatures that emphasizes the strong linkage of corporate governance mechanisms on bank risk taking (Sanders et al., 1990; Anderson & Fraser, 2000; Caprio et al., 2007; Laeven & Levine, 2009; Pathan, 2009; DeYoung et al., 2013). In spite of all this extant literature on bank governance influence on risk taking, the existing literature is dearth. The study aims to bridge this gap in the literature. The global authorities endorsing the relevance of corporate governance structure to the market have adopted several regulatory changes, one of which is to advance disclosure requirements (Hermalin & Weisbach, 2003). As explained by Adiloglu and Vuran (2012), corporate governance represents the quality, transparent and reliable relations between shareholders, board of directors, management and employees clarifying the authority and responsibility of each to the delivering of sustainable value to all stakeholders. From the authors, it is evident that corporate transparency has a link to governance structure.

The study aims to contribute to the banking literature on internal governance structures and information disclosure in view of stability. The works on corporate disclosure by earlier researchers cannot be discounted (Diamond & Verrecchia, 1991; Leuz & Verrecchia, 2000; Hearly & Palepu 2001; Graham, Harvey, & Rajgopal, 2005; Boone & White 2015; Leuz & Wysocky, 2016). This study focuses on bank disclosure as information disclosure is one of the tenets of corporate governance. The focus on financial sector and specifically on the banking sector is as a result of the following; 1- the essential role play by banks in fueling economic growth and business performance (Levine, 2004); 2- while the sector is heavily regulated in terms of the financial reporting requirements, studies show that the banking sector is more opaque than the non-financial firms (Morgan 2002; Flannery, Kwan, Nimalendran, 2004, 2013;

Huizinga & Laeven, 2012); 3- the failure of the sector translate into entire economic breakdown. Base on the numerated settings of the sector, it is imperative to highlights implications of the information disclosure and governance structures on stability.

Notwithstanding the peculiarity and the essential role of the banking sector, there appears limited studies in the area of corporate governance and information disclosure. This study focuses on internal governance structures and financial disclosure is considered as the corporate disclosure. The motivation for this study emanates from the 2008 global financial crisis that resulted in the grim economic repercussions. Moreover, it is confirmed that a well-functioning financial system translates to a healthier economy (Mehran & Mollineaux, 2012). According to Andrea, Lotte and Chloe (2012) there is a huge difference in corporate governance practices and disclosure standards in developed and emerging markets. The models of governance in most emerging economies differ largely from the common practices in developed economies. This difference occurs in the institutional, organizational and market infrastructures of emerging and developed markets. This creates an important gap in the banking literature and this study bridges the gap using data from Africa.

6.2 Data and Methodology

This chapter employ the same data used for empirical chapter 3 and 4 and their statistical summary have been presented in those chapters for reference.

6.2.1 Empirical Model

To specify our model, the panel form is stated as:

$$Y_{i,t} = \alpha_i + \beta X_{i,t} + \varepsilon_{i,t} \quad \dots\dots\dots \quad (\text{Eq. 6.a})$$

Subscript “i” denotes a cross-sectional dimension of a bank for “i” = 1, ..., N while Subscript “t” denotes a time series dimension for “t” = 2006 – 2012. Y_{it} represents the dependent variable, α_i is the constant term of all periods and specific to a bank fixed effect, β is a vector of parameters ($1 \times k$) to be estimated on the input or independent variables, X_{it} is a vector of observations on the input variables ($1 \times k$) for the model ε_{it} which signifies *iid* is the error term.

Following the Prais-Winsten estimation technique, the full bank stability models are estimated.

6.2.2 Full Model

The full modelling is the complex model from the baseline. This model considers the whole independent variables to predict the dependent variables. This regression estimation represents the full model to predict bank financial disclosure given the whole explanatory variables.

$$\text{LnZScore}_{it} = \beta_0 + \beta_1 \text{Gov}_{it} + \beta_2 \text{Dics}_{it} + \beta_3 (\text{Gov} \times \text{Disc})_{it} + \beta_4 \text{Control}_{it} + \beta_5 \text{infl}_t + \beta_6 \text{lngdppc}_t + \beta_7 \text{trend}_t + \varepsilon_{it} \dots\dots\dots \quad (\text{Eq. 6.b})$$

LnZScore denotes bank stability, $\beta_1 \text{Gov}_{it}$ represents *ceoduo* - chief executive duality, *bodsize* as size of board, *nonexec* as the number of non-executive members, *bodgen* as number of female board members, *auditind* as independence of the audit committee, $\beta_2 \text{Dics}_{it}$ represents *disc* as overall bank financial statement disclosure, *asd* denote assets disclosure, *oead* denotes other earning assets disclosure, *ldi* denotes liability disclosure, *ofdi* denote other funding

disclosure, *mldi* denote memo lines disclosure, *isdi* denote income statement disclosure, β_3 (*Gov x Disc*)_{it} denotes the interaction between Gov and Disc, $\sum B_4 Control_{it}$ represents *mangua* as management quality, *capital* as capital adequacy, *bsize* as size of bank, *sgrowth* as growth in sales, *div* as income diversification, *profit* as profit maximization, $\beta_5 infl_t$ as inflation rate, $\beta_6 lngdppc_t$ denotes citizenry welfare, and *trend* is an econometric technique used to capture the effect of technological change and time effects. The ϵ_{it} which signifies *iid* is the error term

The full model is estimated in two (2) dimension base on the level of banking sector development, i.e., using the mean of private sector bank credit to categorize the highly developed and less developed economies in Africa

6.3 Empirical Model Diagnosis tests

The objective four seeks to examine the interactive role of bank governance and disclosure on stability in Africa. The aim is to ascertain complimentary or substitution effect of bank governance and disclosure on stability. This is to offer clarity given the discussion ensuing after the global financial crisis where results are skewed towards bank governance reforms and stringent disclosure policy. The study empirically examines the interaction between bank governance and financial disclosure on stability.

The level of financial market development is critical to the economic growth and stability. The banking sector dominates the financial market in Africa and the level of its development has significant influence on the economic growth agenda. Accordingly, Beck and Levine (2002) demonstrate that the use of private credit to GDP is linked to economic growth. In view of this, we controlled the level of bank development in the examination of the interactive effect of bank

governance and disclosure on stability. Following prior studies Rajan and Zingales (1998), Beck et al. (2000), Kroszner et al. (2007), among others, the level of a country's bank development is measured as the ratio of private credit of deposit money banks to GDP sourced from the World Bank Database.

For this objective, the data source and measurement of variables as well as the summary statistics are same as the earlier discussions. The tables present the findings on the interactive role of bank governance and disclosure on stability. Further, regression results using panel corrected standard error (PCSE) estimation technique has seven estimations as a result of the disclosure variables (made up of full disclosure index and six sub-indices) interacting the five internal governance structures and viewed from both highly developed banking sector and less developed banking sector.

6.3.1 Empirical Model Diagnosis tests

The empirical results of objective four examines the interactive role of bank governance and disclosure on stability as specified in equation 6.c. The model estimator is suitable in explaining the objective.

6.3.2 Discussion of Empirical Results- Interactive role of CEO Duality and Financial Disclosure on Stability

Table 6.1a shows the results on interacted internal governance structure (CEO duality) with financial disclosure on stability. Although, the CEO duality in terms of corporate leadership has generated a lot of controversy in the governance literature and the empirical results is mixed and inconclusive. The results show complimentary effect of CEO duality and asset disclosure

on bank stability in a highly developmental credit market. This implies that CEO duality supports assets disclosure which represents the banks' wealth and stimulate bank stability in highly developed financial market. However, none of the other disclosure items interacted with CEO duality produced any significant relation with bank stability.

Also, from Table 6.1b, which reports on the interactive effect of CEO duality with financial disclosure, have bank stability as the dependent variable in a less developed financial market. The results find no significant effect across on estimations given bank stability. This result could be attributed to the nature of the financial market being less developed and so the impact of dual corporate leadership may be insignificant.

Table 6. 1a-Interactive role of CEO Duality and Financial Disclosure on Stability – For Highly developed Credit Market

VARIABLES	(2) High Dev.	(1) High Dev.	(3) High Dev.	(4) High Dev.	(5) High Dev.	(6) High Dev.	(7) High Dev.
Ceoduo	-1.168 (1.361)	-1.578 (1.241)	2.173 (1.368)	0.441 (0.658)	-0.877 (1.034)	0.698 (1.261)	0.0137 (0.533)
Adi		-0.118 (0.0818)					
Ceoadi		0.495* (0.284)					
bodsize	0.0407*** (0.00868)	0.0411*** (0.00873)	0.0381*** (0.00839)	0.0415*** (0.00858)	0.0413*** (0.00851)	0.0405*** (0.00867)	0.0408*** (0.00855)
nonexec	-0.473 (0.426)	-0.452 (0.414)	-0.516 (0.419)	-0.538 (0.415)	-0.498 (0.421)	-0.519 (0.425)	-0.512 (0.413)
Bodgen	-0.0659 (0.434)	-0.0590 (0.436)	-0.00800 (0.430)	0.0397 (0.435)	-0.00877 (0.436)	-0.0484 (0.440)	-0.102 (0.417)
auditind	-0.379 (0.254)	-0.400 (0.252)	-0.306 (0.251)	-0.380 (0.249)	-0.364 (0.254)	-0.359 (0.252)	-0.349 (0.251)
manqua	-0.333** (0.132)	-0.326** (0.132)	-0.325** (0.138)	-0.322** (0.140)	-0.324** (0.138)	-0.317** (0.131)	-0.368*** (0.134)
Capital	2.524*** (0.761)	2.667*** (0.720)	2.500*** (0.794)	3.085*** (0.854)	2.735*** (0.755)	2.698*** (0.746)	2.568*** (0.687)
Bsize	0.213*** (0.0609)	0.205*** (0.0614)	0.214*** (0.0593)	0.193*** (0.0629)	0.189*** (0.0626)	0.206*** (0.0609)	0.214*** (0.0630)
sgrowth	-0.0378 (0.0240)	-0.0174 (0.0309)	-0.0621*** (0.0209)	-0.0524** (0.0242)	-0.0573** (0.0233)	-0.0502 (0.0377)	-0.0439* (0.0251)
Div	-0.725 (0.499)	-0.658 (0.497)	-0.629 (0.495)	-0.809 (0.519)	-0.632 (0.490)	-0.742 (0.515)	-0.731 (0.506)
Profit	0.808 (4.587)	0.606 (4.391)	0.481 (4.488)	-0.234 (4.529)	0.0830 (4.481)	0.671 (4.579)	1.082 (4.571)
Infl	-0.557 (1.990)	-0.668 (1.963)	0.338 (1.927)	-0.577 (1.986)	-0.423 (2.101)	-0.414 (1.954)	-0.573 (2.046)
lngdppc	0.191** (0.0958)	0.191** (0.0945)	0.212** (0.0943)	0.212** (0.0969)	0.208** (0.0968)	0.204** (0.101)	0.186* (0.0990)
Trend	0.129 (0.136)	0.123 (0.122)	0.0647 (0.121)	-0.0187 (0.127)	0.0291 (0.127)	0.0615 (0.125)	0.124 (0.137)
o_cons	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Disc	-0.0458 (0.0432)						
ceodisc	0.139 (0.108)						
Oead			-0.162 (0.122)				
ceooead			-0.621 (0.627)				
Ldi				0.241			

Ceoldi				(0.172) 0.125 (0.364)			
Ofdi					0.0609 (0.178)		
ceofdi					0.877 (0.597)		
Mldi						-0.114 (0.163)	
ceomldi						-0.0732 (0.703)	
Isdi							-0.527 (0.433)
Ceoisdi							0.574 (0.620)
Observations	141	141	141	141	141	141	141
R-squared	0.455	0.459	0.461	0.458	0.456	0.451	0.454
Number of bankcode	141	141	141	141	141	141	141
Wald Chi2	3068.79***	3034.33***	3974.83***	2943.65***	3111.16***	3056.65** *	2304.34***
Interaction Term	1.66	3.05*	0.98	0.12	2.15	0.01	0.86

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Table 6.1b-Interactive role of CEO Duality and Financial Disclosure on Stability – For Less developed Credit Market

VARIABLES	(1) Less Dev.	(2) Less Dev.	(3) Less Dev.	(4) Less Dev.	(5) Less Dev.	(6) Less Dev.	(7) Less Dev.
ceoduo	-0.889 (0.829)	-0.238 (0.960)	-0.0874 (0.521)	0.284 (0.516)	0.426 (0.486)	-0.494 (0.571)	0.950 (0.876)
Adi	0.0265 (0.0373)						
ceoadi	0.209 (0.185)						
bodsize	0.00993** (0.00463)	0.0100** (0.00458)	0.00960** (0.00462)	0.00788* (0.00461)	0.00850* (0.00463)	0.00894* (0.00464)	0.00897** (0.00454)
nonexec	-0.501* (0.261)	-0.529** (0.263)	-0.541** (0.267)	-0.474* (0.267)	-0.541** (0.268)	-0.463* (0.265)	-0.457* (0.253)
bodgen	-0.537* (0.278)	-0.542* (0.279)	-0.529* (0.276)	-0.560** (0.275)	-0.508* (0.274)	-0.560** (0.277)	-0.558** (0.269)
auditind	0.131 (0.145)	0.135 (0.147)	0.149 (0.147)	0.146 (0.146)	0.159 (0.151)	0.144 (0.144)	0.0568 (0.144)
manqua	-1.494*** (0.159)	-1.501*** (0.159)	-1.483*** (0.157)	-1.530*** (0.158)	-1.468*** (0.155)	-1.476*** (0.157)	-1.485*** (0.152)
capital	2.634*** (0.386)	2.687*** (0.383)	2.690*** (0.382)	2.980*** (0.389)	2.678*** (0.387)	2.614*** (0.393)	2.606*** (0.357)
Bsize	0.139*** (0.0306)	0.134*** (0.0309)	0.144*** (0.0301)	0.134*** (0.0289)	0.161*** (0.0312)	0.145*** (0.0293)	0.127*** (0.0290)
sgrwth	-0.226*** (0.0637)	-0.226*** (0.0632)	-0.225*** (0.0627)	-0.231*** (0.0619)	-0.224*** (0.0614)	-0.226*** (0.0635)	-0.231*** (0.0609)
Div	-1.128*** (0.196)	-1.108*** (0.199)	-1.122*** (0.203)	-1.163*** (0.196)	-1.153*** (0.201)	-1.182*** (0.205)	-1.152*** (0.198)
Profit	-5.215*** (1.171)	-5.362*** (1.187)	-5.000*** (1.150)	-5.470*** (1.134)	-4.631*** (1.186)	-4.656*** (1.263)	-5.163*** (1.167)
Infl	-0.796* (0.461)	-0.819* (0.461)	-0.810* (0.466)	-0.809* (0.457)	-0.753 (0.458)	-0.716 (0.464)	-0.736 (0.458)
lngdppc	-0.118*** (0.0418)	-0.115*** (0.0413)	-0.117*** (0.0419)	-0.103*** (0.0398)	-0.116*** (0.0424)	-0.117*** (0.0421)	-0.0901** (0.0402)
Trend	-0.0540** (0.0220)	-0.0562** (0.0219)	-0.0541** (0.0219)	-0.0588*** (0.0215)	-0.0527** (0.0217)	-0.0525** (0.0218)	-0.0589*** (0.0216)
Disc		0.0251 (0.0188)					
ceodisc		0.0196 (0.0756)					
Oead			0.0383 (0.0499)				
ceooead			0.0429 (0.208)				
Ldi				0.252*** (0.0726)			

Ceoldi				-0.163 (0.302)			
Ofdi					-0.0834 (0.0717)		
ceofdi					-0.257 (0.300)		
Mldi						-0.111 (0.0701)	
ceomldi						0.315 (0.334)	
Isdi							0.584*** (0.158)
ceoisdi							-0.998 (0.893)
Constant	4.512*** (0.379)	4.347*** (0.410)	4.489*** (0.389)	4.161*** (0.369)	4.564*** (0.371)	4.731*** (0.395)	3.995*** (0.392)
Observations	1,053	1,053	1,053	1,053	1,053	1,053	1,053
R-squared	0.598	0.602	0.599	0.610	0.593	0.595	0.609
Number of bankcode	296	296	296	296	296	296	296
Wald	273.95***	271.90***	273.36***	310.83***	283.55***	269.96***	294.13***
Interaction Term	1.28	0.07	0.04	0.29	0.73	0.89	1.25

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

6.3.3 Discussion of Empirical Results- Interactive role of Audit Independence and Financial Disclosure on Stability

The results of Table 6.2a present on interacted internal governance structure (audit independence) with financial disclosure on stability in a highly developed financial market. The results on audit independence (not -interacted) had significant negative relation to bank stability in most of the estimates. Implying that, audit independence as a corrective tool on management behaviour does not support bank stability. However, interactions with financial disclosure had complementary support for bank stability. These results were found with liability disclosure and income statement disclosure. The interpretation is that, audit independence alone as a governance tool could not influence bank stability where measures are put in place to enforce financial disclosure particularly for liability and income statement, then, the complimentary effect between the two benefit the bank in terms of stability.

Moreover, the study reports similar results of the interactive effect of audit independence and financial disclosure on stability in a less developed financial market. The results are found in Table 6.2b. Meaning the difference in environment with reference to the level of financial development has influence on bank stability.

Table 6. 2a-Interactive role of Audit independence and Financial Disclosure on Stability – For Highly developed Credit Market

VARIABLES	(1) High Dev.	(2) High Dev.	(3) High Dev.	(4) High Dev.	(5) High Dev.	(6) High Dev.	(7) High Dev.
Auditind	-1.175 (0.791)	-1.814* (0.994)	-1.283* (0.677)	-1.584*** (0.548)	0.155 (0.687)	-0.403 (0.672)	-1.388*** (0.447)
Adi	-0.145 (0.0953)						
Auditindadi	0.182 (0.172)						
Bodsize	0.0393*** (0.00869)	0.0384*** (0.00842)	0.0374*** (0.00818)	0.0398*** (0.00866)	0.0402*** (0.00855)		0.0394*** (0.00849)
Ceoduo	0.582* (0.338)	0.558 (0.347)	0.566 (0.347)	0.619* (0.316)	0.571* (0.325)	0.478 (0.381)	0.459 (0.360)
Nonexec	-0.463 (0.414)	-0.451 (0.427)	-0.430 (0.427)	-0.585 (0.416)	-0.587 (0.419)	-0.650 (0.432)	-0.502 (0.411)
Bodgen	-0.0871 (0.436)	-0.147 (0.426)	-0.0826 (0.422)	0.0462 (0.418)	0.0198 (0.438)	0.155 (0.554)	-0.0773 (0.417)
Manqua	-0.322** (0.129)	-0.337*** (0.127)	-0.348** (0.137)	-0.321** (0.134)	-0.306** (0.139)	-0.296** (0.130)	-0.373*** (0.127)
Capital	2.618*** (0.729)	2.628*** (0.725)	2.592*** (0.716)	3.515*** (0.796)	2.693*** (0.755)	2.723*** (0.815)	2.607*** (0.694)
Bsize	0.214*** (0.0612)	0.219*** (0.0612)	0.216*** (0.0613)	0.202*** (0.0633)	0.202*** (0.0615)	0.274*** (0.0589)	0.217*** (0.0624)
Sgrwoth	-0.0569** (0.0244)	-0.0517** (0.0241)	-0.0462** (0.0230)	-0.0494** (0.0238)	-0.0442* (0.0234)	-0.0415 (0.0285)	-0.0334 (0.0248)
Div	-0.670 (0.512)	-0.681 (0.499)	-0.773 (0.487)	-0.680 (0.488)	-0.671 (0.525)	-0.852 (0.531)	-0.751 (0.501)
Profit	0.656 (4.393)	0.498 (4.460)	-0.453 (4.436)	-0.950 (4.345)	0.412 (4.588)	0.235 (4.567)	0.756 (4.491)
Infl	-0.521 (1.971)	-0.286 (1.948)	0.605 (1.886)	-0.404 (1.952)	-0.136 (2.110)	0.333 (1.971)	-0.335 (1.984)
Lngdppc	0.191** (0.0962)	0.207** (0.0966)	0.228** (0.0946)	0.220** (0.0947)	0.198** (0.0978)	0.224** (0.107)	0.175* (0.101)
Trend	0.135 (0.120)	0.151 (0.130)	0.103 (0.117)	-0.0144 (0.121)	-0.00176 (0.131)	0.0303 (0.133)	0.148 (0.132)
o_cons	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Disc		-0.0695 (0.0488)					
Auditinddisc		0.113 (0.0761)					
Oead			-0.292** (0.134)				
Auditindoead			0.382 (0.257)				

Ldi				0.123 (0.180)			
auditindldi				0.716** (0.351)			
Ofdi					0.174 (0.196)		
Auditindofdi					-0.309 (0.365)		
Mldi						-0.149 (0.189)	
Auditindmldi						0.175 (0.376)	
Isdi							-0.640 (0.396)
Auditindisdi							1.093** (0.471)
Observations	141	141	141	141	141	141	141
R-squared	0.456	0.458	0.467	0.471	0.453	0.408	0.458
Number of bankcode	141	141	141	141	141	141	141
Wald	2936.44***	3056.99***	3144.13***	3023.05***	2972.82***	2604.44***	1094.41***
Interaction	1.12	2.21	2.22	4.16**	0.72	0.22	5.38**

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

**Table 6.2b-Interactive role of Audit independence and Financial Disclosure on Stability
–For Less developed Credit Market**

VARIABLES	(1) low quality	(2) low quality	(3) low quality	(4) low quality	(5) low quality	(6) low quality	(7) low quality
auditind	0.0103 (0.442)	-0.348 (0.605)	0.0551 (0.388)	-0.356 (0.323)	0.277 (0.324)	0.0900 (0.343)	-1.344*** (0.439)
adi	0.0371 (0.0397)						
auditindadi	0.0305 (0.100)						
bodsize	0.00923** (0.00466)	0.00976** (0.00460)	0.00949** (0.00461)	0.00811* (0.00458)	0.00863* (0.00463)	0.00862* (0.00462)	0.00787* (0.00458)
ceoduo	-0.00269 (0.171)	-0.0102 (0.173)	-0.00153 (0.171)	0.00324 (0.168)	0.00469 (0.172)	-0.00427 (0.166)	0.0200 (0.173)
nonexec	-0.518** (0.261)	-0.543** (0.261)	-0.546** (0.267)	-0.493* (0.264)	-0.528* (0.275)	-0.500* (0.266)	-0.394 (0.255)
bodgen	-0.543* (0.280)	-0.549* (0.281)	-0.532* (0.278)	-0.590** (0.277)	-0.484* (0.270)	-0.560** (0.275)	-0.546** (0.270)
manqua	-1.496*** (0.158)	-1.503*** (0.159)	-1.483*** (0.157)	-1.526*** (0.157)	-1.470*** (0.156)	-1.476*** (0.157)	-1.491*** (0.154)
capital	2.682*** (0.390)	2.703*** (0.365)	2.716*** (0.366)	3.111*** (0.377)	2.746*** (0.395)	2.617*** (0.379)	2.974*** (0.389)
bsize	0.143*** (0.0310)	0.136*** (0.0310)	0.145*** (0.0302)	0.138*** (0.0291)	0.159*** (0.0309)	0.150*** (0.0297)	0.132*** (0.0292)
sgrwth	-0.227*** (0.0629)	-0.228*** (0.0629)	-0.225*** (0.0625)	-0.230*** (0.0615)	-0.221*** (0.0621)	-0.227*** (0.0630)	-0.222*** (0.0634)
div	-1.123*** (0.199)	-1.106*** (0.200)	-1.120*** (0.202)	-1.131*** (0.195)	-1.152*** (0.201)	-1.156*** (0.206)	-1.207*** (0.194)
profit	-5.144*** (1.172)	-5.355*** (1.195)	-4.995*** (1.141)	-5.558*** (1.122)	-4.647*** (1.211)	-4.656*** (1.247)	-5.363*** (1.167)
infl	-0.784* (0.462)	-0.805* (0.459)	-0.796* (0.464)	-0.835* (0.457)	-0.766* (0.461)	-0.705 (0.464)	-0.814* (0.457)
lngdppc	-0.117*** (0.0422)	-0.112*** (0.0417)	-0.116*** (0.0426)	-0.105*** (0.0396)	-0.114*** (0.0422)	-0.117*** (0.0425)	-0.101** (0.0406)
trend	-0.0548** (0.0220)	-0.0563** (0.0219)	-0.0543** (0.0219)	-0.0591*** (0.0215)	-0.0527** (0.0217)	-0.0521** (0.0218)	-0.0577*** (0.0216)
disc		0.0229 (0.0198)					
auditinddisc		0.0393 (0.0469)					
oead			0.0375 (0.0521)				
auditindoead			0.0412 (0.142)				
ldi				0.198** (0.0775)			

auditindldi				0.312*			
				(0.181)			
ofdi					-0.0884		
					(0.0751)		
auditindofdi					-0.0939		
					(0.190)		
mldi						-0.0937	
						(0.0743)	
auditindmldi						0.0460	
						(0.182)	
isdi							0.434***
							(0.163)
auditindisdi							1.415***
							(0.429)
Constant	4.438***	4.345***	4.473***	4.228***	4.560***	4.670***	4.156***
	(0.385)	(0.415)	(0.387)	(0.372)	(0.377)	(0.397)	(0.394)
Observations	1,053	1,053	1,053	1,053	1,053	1,053	1,053
R-squared	0.595	0.603	0.599	0.613	0.595	0.595	0.620
Number of bankcode	296	296	296	296	296	296	296
Wald	269.23***	274.19***	279.74	316.03***	284.21***	273.71***	302.12***
Interaction	0.09	0.70	0.08	2.96*	0.24	0.06	10.89***

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

6.4 Discussion of Empirical Results- Interactive role of Non-Executive Board and Financial Disclosure on Stability

Table 6.4a is the results on interacted internal governance structure (non-executive board) with financial disclosure on stability in a highly developed financial market. The results on non-executive board representing board independence (not -interacted) had significant negative relation to bank stability in most of the estimates. Suggesting that non-executive board alone had adverse influence on bank stability. However, the interactions with financial disclosure reported complementary effect in support for bank stability. These results were found with the full disclosure and other earning asset disclosure. The intuition from these results is that board independence together with financial disclosure work well (compliment) to positively influence bank stability.

Moreover, with the same estimations viewing from a less developed financial market has results shown in Table 6.4b. The results present that non-executive board (not -interacted) had negative significant relation to bank stability in most of the estimations. However, the interactions with financial disclosure produced a complimentary effect on bank stability. Thus, a positive association between board diversity and other funding disclosure as well as the sub-indices disclosure such as other earning asset, other funding, memo line and income statement.

Table 6 .4a-Interactive role of Non-Executive Board and Financial Disclosure on Stability – For Highly Developed Credit Market

VARIABLES	(1) High Dev.	(2) High Dev.	(3) High Dev.	(4) High Dev.	(5) High. Dev.	(6) High Dev.	(7) High Dev.
Nonexec	-2.863* (1.521)	-5.010** (1.994)	-2.752** (1.233)	-1.777* (0.961)	-0.823 (1.215)	-1.658 (1.459)	0.521 (2.288)
Adi	-0.181* (0.0999)						
Nonexecadi	0.504 (0.334)						
Bodsize	0.0391*** (0.00865)	0.0375*** (0.00840)	0.0370*** (0.00827)	0.0399*** (0.00830)	0.0400*** (0.00844)		0.0404*** (0.00847)
Ceoduo	0.611* (0.331)	0.585* (0.346)	0.584* (0.343)	0.646** (0.305)	0.585* (0.322)	0.454 (0.396)	0.533 (0.351)
Bodgen	-0.0554 (0.444)	-0.112 (0.424)	-0.0962 (0.402)	0.102 (0.435)	-0.00987 (0.430)	0.165 (0.555)	-0.0813 (0.420)
Auditind	-0.274 (0.249)	-0.258 (0.251)	-0.296 (0.247)	-0.388 (0.250)	-0.329 (0.256)	-0.105 (0.248)	-0.369 (0.255)
Manqua	-0.296** (0.132)	-0.273** (0.138)	-0.322** (0.135)	-0.296** (0.144)	-0.313** (0.139)	-0.308** (0.128)	-0.411** (0.190)
Capital	2.631*** (0.752)	2.823*** (0.680)	2.839*** (0.692)	3.341*** (0.774)	2.767*** (0.780)	2.642*** (0.798)	2.567*** (0.706)
Bsize	0.218*** (0.0612)	0.214*** (0.0589)	0.220*** (0.0591)	0.201*** (0.0631)	0.195*** (0.0604)	0.260*** (0.0552)	0.209*** (0.0638)
Sgrwth	-0.0605** (0.0243)	-0.0530** (0.0238)	-0.0484** (0.0230)	-0.0479** (0.0227)	-0.0429* (0.0231)	-0.0411 (0.0287)	-0.0423* (0.0247)
Div	-0.648 (0.503)	-0.729 (0.480)	-0.902* (0.484)	-0.770 (0.501)	-0.725 (0.522)	-0.860 (0.531)	-0.623 (0.509)
Profit	1.020 (4.408)	0.824 (4.516)	-0.678 (4.491)	-0.111 (4.389)	-0.000104 (4.561)	0.438 (4.620)	0.877 (4.437)
Infl	-0.496 (1.974)	-0.416 (1.947)	0.650 (1.904)	-0.395 (1.975)	-0.331 (2.077)	0.131 (2.000)	-0.517 (1.982)
Lngdppc	0.189** (0.0944)	0.218** (0.0934)	0.225** (0.0927)	0.238** (0.0972)	0.200** (0.0995)	0.234** (0.104)	0.196** (0.0991)
Trend	0.149 (0.121)	0.186 (0.127)	0.126 (0.113)	-0.0408 (0.121)	0.0340 (0.131)	0.0525 (0.133)	0.0842 (0.125)
o._cons	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Disc		-0.0981** (0.0493)					
Nonexecdisc		0.341** (0.143)					
Oead			-0.364*** (0.135)				
Nonexecoead			0.938** (0.424)				
Ldi				0.147			

Nonexecldi					(0.191)		
					0.702		
					(0.564)		
Ofdi					0.0672		
					(0.190)		
Nonexecofdi					0.171		
					(0.649)		
Mldi						-0.214	
						(0.184)	
Nonexecmldi						0.579	
						(0.737)	
Isdi							-0.278
							(0.355)
Nonexecisdi							-1.046
							(2.220)
Observations	141	141	141	141	141	141	141
R-squared	0.459	0.468	0.478	0.463	0.451	0.410	0.455
Number of bankcode	141	141	141	141	141	141	141
Wald	2083.22***	3030.22***	3142.91***	3066.83***	2988.54***	2610.53***	2882.74***
Interaction	2.27	5.70**	4.90**	1.55	0.07	0.63	0.22

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Table 6.4b-Interactive role of Non-Executive Board and Financial Disclosure on Stability – For Less Developed Credit Market

VARIABLES	(1) Less Dev.	(2) Less Dev.	(3) Less Dev.	(4) Less Dev.	(5) Less Dev.	(6) Less Dev.	(7) Less Dev.
Nonexec	0.307 (0.482)	-3.880*** (0.850)	-1.835*** (0.645)	-0.917 (0.665)	-1.614*** (0.578)	-1.922*** (0.622)	-1.978*** (0.459)
Adi	0.0561 (0.0385)						
Nonexecadi	-0.147 (0.0967)						
Bodsize	0.00915* (0.00468)	0.00819* (0.00467)	0.00881* (0.00463)	0.00799* (0.00460)	0.00696 (0.00475)		0.00711 (0.00439)
Ceoduo	0.0101 (0.171)	0.00729 (0.172)	-0.00743 (0.171)	0.0218 (0.169)	0.0166 (0.170)	-0.0325 (0.164)	0.0176 (0.174)
Bodgen	-0.553** (0.278)	-0.574** (0.279)	-0.545* (0.279)	-0.564** (0.275)	-0.505* (0.274)	-0.485** (0.244)	-0.509* (0.268)
Auditind	0.0972 (0.139)	0.190 (0.141)	0.184 (0.143)	0.139 (0.142)	0.225 (0.155)	0.194 (0.143)	0.0209 (0.143)
Manqua	-1.511*** (0.158)	-1.483*** (0.156)	-1.482*** (0.155)	-1.528*** (0.158)	-1.482*** (0.156)	-1.453*** (0.156)	-1.483*** (0.154)
Capital	2.729*** (0.399)	2.881*** (0.352)	2.818*** (0.369)	3.044*** (0.396)	2.721*** (0.386)	2.732*** (0.374)	2.904*** (0.355)
Bsize	0.140*** (0.0310)	0.132*** (0.0304)	0.142*** (0.0298)	0.132*** (0.0286)	0.157*** (0.0307)	0.150*** (0.0284)	0.131*** (0.0286)
Sgrwoth	-0.230*** (0.0633)	-0.225*** (0.0624)	-0.225*** (0.0623)	-0.232*** (0.0618)	-0.223*** (0.0614)	-0.220*** (0.0625)	-0.226*** (0.0632)
Div	-1.176*** (0.203)	-1.047*** (0.196)	-1.130*** (0.198)	-1.135*** (0.201)	-1.227*** (0.206)	-1.144*** (0.197)	-1.140*** (0.200)
Profit	-5.439*** (1.179)	-5.190*** (1.149)	-4.865*** (1.124)	-5.458*** (1.129)	-4.784*** (1.185)	-4.802*** (1.154)	-5.341*** (1.169)
Infl	-0.820* (0.462)	-0.753 (0.460)	-0.763 (0.464)	-0.812* (0.457)	-0.811* (0.460)	-0.664 (0.467)	-0.767* (0.459)
Lngdppc	-0.127*** (0.0425)	-0.0892** (0.0405)	-0.103** (0.0418)	-0.0965** (0.0398)	-0.116*** (0.0422)	-0.100** (0.0427)	-0.0864** (0.0403)
Trend	-0.0535** (0.0221)	- 0.0566*** (0.0218)	-0.0525** (0.0217)	-0.0593*** (0.0215)	-0.0500** (0.0216)	-0.0518** (0.0216)	-0.0561*** (0.0217)
Disc		-0.00145 (0.0208)					
nonexecdisc		0.259*** (0.0654)					
Oead			-0.00905 (0.0526)				
nonexecoead			0.511** (0.229)				
Ldi				0.209*** (0.0788)			
nonexecldi				0.267			

				(0.352)			
Ofdi					-0.183**		
					(0.0783)		
nonexecofdi					0.695**		
					(0.322)		
Mldi						-0.184**	
						(0.0747)	
nonexecmldi						0.808***	
						(0.314)	
Isdi							0.279
							(0.182)
nonexecisdi							1.681***
							(0.475)
Constant	4.469***	4.456***	4.481***	4.190***	4.769***	4.726***	4.201***
	(0.382)	(0.410)	(0.386)	(0.369)	(0.381)	(0.391)	(0.394)
Observations	1,053	1,053	1,053	1,053	1,053	1,053	1,053
R-squared	0.592	0.609	0.600	0.611	0.594	0.598	0.617
Number of bankcode	296	296	296	296	296	296	296
Wald	269.74***	297.60***	289.42***	329.18***	296.86***	265.71***	293.46***
Interaction	2.30	15.72***	5.00***	0.57	4.66**	6.64**	12.52***

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

6.5 Discussion of Empirical Results- Interactive role of Board Gender and Financial Disclosure on Stability

The results from Table 6.5a present on interactive effect of internal governance structure (board gender) with financial disclosure on stability in a highly developed financial market. The results on board diversity in terms of female representation on the board (not -interacted) had mixed results with regards to estimations 1 and 5. The results in estimation 1 had a significant negative effect on bank stability while that of 5 had significant support for bank stability. Although such mixed results are not new in the bank governance literature given the role of female boards on firm performance. However, when interacted with financial disclosure, the results had both complementary and substitution effect on bank stability. The interaction between board diversity and asset disclosure shows positive association effect on bank stability while that of board diversity and other funding disclosure shows a substitution effect on bank stability.

Moreover, the same estimations viewing from a less developed financial market has results shown in Table 6.5b. The results show that, female representation on the board (not -interacted) had negative significant relation on bank stability. Yet the interactions with financial disclosure produced a complimentary effect on bank stability. Thus, a positive association between board diversity and other funding disclosure.

Table 6. 5a -Interactive role of Board Gender and Financial Disclosure on Stability – For Highly Developed Credit Market

VARIABLES	(1) High Dev.	(2) High Dev.	(3) High Dev.	(4) High Dev.	(5) High Dev.	(6) High Dev.	(7) High Dev.
Bodgen	-5.713** (2.494)	-1.902 (3.286)	0.727 (2.103)	-1.178 (2.095)	2.495* (1.421)	-0.244 (1.516)	-1.158 (3.427)
Adi	-0.248** (0.114)						
Bodgenadi	1.353** (0.599)						
Bodsize	0.0368*** (0.00826)	0.0385*** (0.00802)	0.0402*** (0.00822)	0.0413*** (0.00854)	0.0401*** (0.00841)	0.0401*** (0.00823)	0.0398*** (0.00860)
Ceoduo	0.581* (0.344)	0.563* (0.336)	0.624** (0.308)	0.611* (0.315)	0.548* (0.320)	0.572* (0.323)	0.477 (0.387)
Nonexec	-0.492 (0.403)	-0.511 (0.419)	-0.491 (0.422)	-0.535 (0.415)	-0.508 (0.399)	-0.524 (0.423)	-0.530 (0.411)
Auditind	-0.388 (0.242)	-0.368 (0.252)	-0.329 (0.250)	-0.384 (0.247)	-0.336 (0.247)	-0.358 (0.255)	-0.338 (0.249)
Manqua	-0.328** (0.132)	-0.325** (0.131)	-0.333** (0.137)	-0.319** (0.138)	-0.333** (0.139)	-0.316** (0.132)	-0.352*** (0.131)
capital	2.559*** (0.767)	2.600*** (0.755)	2.406*** (0.786)	3.230*** (0.881)	2.698*** (0.778)	2.696*** (0.749)	2.605*** (0.693)
bsize	0.201*** (0.0605)	0.215*** (0.0613)	0.217*** (0.0596)	0.194*** (0.0620)	0.208*** (0.0623)	0.206*** (0.0614)	0.216*** (0.0623)
sgrwoth	-0.0582** (0.0243)	-0.0479** (0.0235)	-0.0487** (0.0230)	-0.0476** (0.0241)	-0.0490** (0.0230)	-0.0481** (0.0245)	-0.0381 (0.0262)
div	-0.792 (0.531)	-0.731 (0.516)	-0.738 (0.489)	-0.870 (0.535)	-0.769 (0.522)	-0.743 (0.518)	-0.660 (0.501)
profit	0.788 (4.401)	0.753 (4.589)	0.255 (4.416)	-0.361 (4.527)	-0.727 (4.613)	0.703 (4.500)	0.909 (4.502)
infl	-0.709 (1.940)	-0.429 (1.972)	0.216 (1.918)	-0.481 (1.987)	-0.574 (2.071)	-0.445 (2.046)	-0.370 (2.020)
lngdppc	0.195** (0.0939)	0.195** (0.0974)	0.200** (0.0947)	0.218** (0.0993)	0.177* (0.101)	0.203** (0.101)	0.194** (0.0986)
trend	0.214* (0.128)	0.134 (0.139)	0.0783 (0.126)	-0.0121 (0.122)	0.0106 (0.128)	0.0678 (0.143)	0.120 (0.139)
o._cons	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
disc		-0.0521 (0.0496)					
Bodgendisc		0.150 (0.270)					
oead			-0.149 (0.166)				
bodgenoead			-0.324 (0.928)				
ldi				0.185			

						(0.181)	
bodgenldi						0.675	
						(1.161)	
ofdi						0.272	
						(0.210)	
bodgenofdi						-1.535*	
						(0.829)	
mldi						-0.134	
						(0.220)	
bodgenmldi						0.126	
						(0.931)	
isdi							-0.605
							(0.648)
Bodgenisdi							1.087
							(3.454)
Observations	141	141	141	141	141	141	141
R-squared	0.465	0.452	0.459	0.459	0.458	0.451	0.453
Number of bankcode	141	141	141	141	141	141	141
Wald	3052.05***	3085.07** *	3112.31***	3010.72***	3049.03***	2618.72***	2883.31***
Interaction	5.10**	0.31	0.12	0.34	3.43*	0.59	0.10

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Table 6.5b-Interactive role of Board Gender and Financial Disclosure on Stability – For Less Developed Credit Market

VARIABLES	(1) Less Dev.	(2) Less Dev.	(3) Less Dev.	(4) Less Dev.	(5) Less Dev.	(6) Less Dev.	(7) Less Dev.
bodgen	-0.870 (1.358)	-2.592 (1.803)	-1.115 (0.844)	-1.541* (0.805)	-1.929** (0.761)	-0.885 (0.766)	-0.794 (1.351)
adi	0.0309 (0.0450)						
bodgenadi	0.0789 (0.302)						
bodsize	0.00919* (0.00470)	0.00936** (0.00464)	0.00947** (0.00461)	0.00756* (0.00458)	0.00877* (0.00452)	0.00819* (0.00465)	0.00859** (0.00424)
ceoduo	-0.00220 (0.173)	0.00414 (0.173)	0.00274 (0.171)	0.0165 (0.170)	0.0232 (0.170)	-0.00269 (0.167)	0.0166 (0.173)
nonexec	-0.524** (0.262)	-0.567** (0.260)	-0.553** (0.266)	-0.470* (0.261)	-0.528** (0.267)	-0.488* (0.266)	-0.452* (0.257)
auditind	0.146 (0.147)	0.147 (0.145)	0.154 (0.146)	0.138 (0.141)	0.147 (0.150)	0.163 (0.145)	0.0774 (0.145)
manqua	-1.495*** (0.159)	-1.505*** (0.161)	-1.483*** (0.157)	-1.528*** (0.157)	-1.458*** (0.157)	-1.479*** (0.156)	-1.484*** (0.154)
capital	2.679*** (0.389)	2.698*** (0.377)	2.741*** (0.380)	3.039*** (0.392)	2.626*** (0.377)	2.662*** (0.392)	2.628*** (0.375)
bsize	0.143*** (0.0310)	0.134*** (0.0309)	0.144*** (0.0302)	0.133*** (0.0288)	0.157*** (0.0310)	0.149*** (0.0296)	0.127*** (0.0287)
sgrowth	-0.226*** (0.0628)	-0.227*** (0.0628)	-0.225*** (0.0625)	-0.230*** (0.0615)	-0.220*** (0.0617)	-0.227*** (0.0629)	-0.225*** (0.0637)
div	-1.119*** (0.199)	-1.108*** (0.200)	-1.115*** (0.203)	-1.177*** (0.195)	-1.134*** (0.199)	-1.167*** (0.208)	-1.201*** (0.196)
profit	-5.183*** (1.179)	-5.333*** (1.189)	-5.016*** (1.141)	-5.463*** (1.125)	-4.493*** (1.188)	-4.676*** (1.252)	-5.237*** (1.152)
infl	-0.790* (0.463)	-0.822* (0.459)	-0.808* (0.464)	-0.819* (0.457)	-0.785* (0.458)	-0.720 (0.463)	-0.798* (0.461)
lngdppc	-0.117*** (0.0421)	-0.114*** (0.0416)	-0.118*** (0.0419)	-0.0991** (0.0397)	-0.109** (0.0425)	-0.119*** (0.0419)	-0.0964** (0.0401)
trend	-0.0546** (0.0221)	-0.0547** (0.0220)	-0.0538** (0.0219)	- (0.0215)	-0.0502** (0.0217)	-0.0516** (0.0217)	-0.0532** (0.0218)
disc		0.0117 (0.0225)					
bodgendisc		0.168 (0.143)					
oad			0.0193 (0.0587)				
bodgenoad			0.252 (0.323)				
ldi				0.186** (0.0838)			
bodgenldi				0.599 (0.445)			
ofdi					-0.196** (0.0867)		
bodgenofdi					0.898** (0.421)		
mldi						-0.114 (0.0913)	
bodgenmldi						0.216	

						(0.467)	
isdi							0.472**
							(0.198)
bodgenisdi							0.261
							(1.360)
Constant	4.466*** (0.388)	4.501*** (0.428)	4.530*** (0.394)	4.249*** (0.374)	4.686*** (0.373)	4.720*** (0.405)	4.144*** (0.408)
Observations	1,053	1,053	1,053	1,053	1,053	1,053	1,053
R-squared	0.592	0.599	0.599	0.608	0.596	0.595	0.607
Number of bankcode	296	296	296	296	296	296	296
Wald	272.68***	265.72***	269.01***	315.57***	280.94***	271.61***	292.52***
Interaction	0.07	1.38	0.61	1.81	4.55**	0.21	0.04

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

6.6 Discussion of Empirical Results- Interactive role of Board Size and Financial

Disclosure on Stability

The results of Table 6.6a show interacted internal governance structure (board size) with financial disclosure on stability in a highly developed financial market. The results on board size (not -interacted) has no significant effect on bank stability with the exception on estimation 5five with other funding disclosure reporting a significant positive support on stability. Implying that board size gives its level of diversity and quantity which hardly influences bank stability. However, when interacted with financial disclosure the results show a complementary effect on bank stability. This result was found with asset disclosure whiles the other disclosure variables interacted had no significant effect on bank stability. The possible interpretation could be attributed to the quality of the board in terms of size to generate positive effect on stability even when interacted with financial disclosure.

Additionally, with the same estimations viewing from a less developed financial market has results shown in Table 6.6b. The results show that, the number of the board (not -interacted) had negative significant relation on bank stability with most of the estimates reporting no significant relation. However, the interactions with financial disclosure produce a complimentary effect on bank stability. Thus, a positive association between board size and financial disclosure. The results were found with full disclosure, other earning assets and liability disclosure.

Table 6.6a -Interactive role of Board size and Financial Disclosure on Stability – For Highly developed Credit Market

VARIABLES	(1) High Dev.	(2) High Dev.	(3) High Dev.	(4) High Dev.	(5) High Dev.	(6) High Dev.	(7) High Dev.
Bodsize	-0.0437 (0.0364)	-0.0116 (0.0588)	0.0460 (0.0362)	0.0324 (0.0412)	0.0691** (0.0289)	0.0409 (0.0311)	0.0486 (0.161)
Adi	-0.283** (0.128)						
Bodsizeadi	0.0191** (0.00859)						
Ceoduo	0.558 (0.344)	0.567* (0.336)	0.625** (0.308)	0.632** (0.317)	0.554* (0.330)	0.576* (0.323)	0.504 (0.366)
Nonexec	-0.484 (0.407)	-0.504 (0.423)	-0.501 (0.420)	-0.550 (0.414)	-0.521 (0.406)	-0.523 (0.423)	-0.526 (0.410)
Bodgen	-0.185 (0.422)	-0.127 (0.435)	0.0236 (0.444)	0.0465 (0.434)	-7.30e-05 (0.448)	-0.0502 (0.448)	-0.0817 (0.419)
Auditind	-0.381 (0.246)	-0.357 (0.251)	-0.334 (0.250)	-0.374 (0.250)	-0.362 (0.245)	-0.355 (0.250)	-0.342 (0.249)
Manqua	-0.311** (0.127)	-0.322** (0.130)	-0.333** (0.137)	-0.318** (0.139)	-0.319** (0.135)	-0.316** (0.131)	-0.357** (0.147)
Capital	2.807*** (0.712)	2.594*** (0.761)	2.439*** (0.785)	3.109*** (0.844)	2.784*** (0.745)	2.697*** (0.751)	2.605*** (0.693)
Bsize	0.228*** (0.0639)	0.222*** (0.0621)	0.217*** (0.0598)	0.195*** (0.0625)	0.210*** (0.0638)	0.206*** (0.0613)	0.216*** (0.0621)
Sgrwth	-0.0458* (0.0236)	-0.0464** (0.0234)	-0.0491** (0.0228)	-0.0503** (0.0238)	-0.0423* (0.0234)	-0.0478** (0.0240)	-0.0397 (0.0253)
Div	-0.669 (0.520)	-0.701 (0.511)	-0.747 (0.495)	-0.805 (0.528)	-0.677 (0.515)	-0.743 (0.519)	-0.666 (0.525)
Profit	0.754 (4.336)	0.874 (4.611)	0.235 (4.424)	-0.236 (4.513)	-0.205 (4.555)	0.722 (4.505)	0.937 (4.546)
Infl	-0.721 (1.950)	-0.420 (1.971)	0.193 (1.895)	-0.529 (1.976)	-0.235 (2.079)	-0.402 (1.957)	-0.420 (1.996)
Lngdppc	0.169* (0.0930)	0.190** (0.0963)	0.200** (0.0946)	0.213** (0.0975)	0.194* (0.0993)	0.205** (0.100)	0.192* (0.0986)
Trend	0.229* (0.125)	0.176 (0.148)	0.0812 (0.127)	-0.0152 (0.128)	-0.0160 (0.133)	0.0608 (0.130)	0.0874 (0.209)
o._cons	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Disc		-0.0763 (0.0669)					
Bodsize-disc		0.00391 (0.00470)					
Oead			-0.156 (0.198)				
Bodsizeoead			-0.00271 (0.0149)				
Ldi				0.210			

Bodsizeildi				(0.276)			
				0.00485			
				(0.0219)			
Ofdi					0.246		
					(0.247)		
Bodsizeofdi					-0.0178		
					(0.0190)		
Mldi						-0.116	
						(0.252)	
Bodsizeildi						-0.000267	
						(0.0184)	
Isdi							-0.354
							(1.212)
Bodsizeisdi							-0.00858
							(0.163)
Observations	141	141	141	141	141	141	141
R-squared	0.463	0.453	0.459	0.458	0.453	0.451	0.453
Number of bankcode	141	141	141	141	141	141	141
Wald	3483.54***	3256.81*	3151.09***	2915.53***	3017.16***	3096.44***	2890.05***
		**					
Interaction Term	4.95**	0.69	0.03	0.05	0.88	0.00	0.00

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Table 6.6b-Interactive role of Board size and Financial Disclosure on Stability – For Less developed Credit Market

VARIABLES	(1) Less Dev.	(2) Less Dev.	(3) Less Dev.	(4) Less Dev.	(5) Less Dev.	(6) Less Dev.	(7) Less Dev.
Bodsize	-0.0198 (0.0199)	-0.0615** (0.0280)	-0.0295** (0.0137)	-0.0270 (0.0191)	0.0127 (0.0133)	-0.00323 (0.0114)	-0.00163 (0.00956)
Adi	-0.0220 (0.0577)						
Bodsizeadi	0.00682 (0.00472)						
Ceoduo	0.00644 (0.174)	0.0298 (0.172)	0.0209 (0.167)	0.0241 (0.168)	-0.000662 (0.172)	0.00328 (0.167)	0.0211 (0.173)
Nonexec	-0.522** (0.262)	-0.577** (0.267)	-0.587** (0.274)	-0.483* (0.267)	-0.521** (0.265)	-0.489* (0.268)	-0.452* (0.255)
Bodgen	-0.559** (0.280)	-0.609** (0.289)	-0.577* (0.297)	-0.560** (0.272)	-0.496* (0.272)	-0.583** (0.277)	-0.579** (0.273)
Auditind	0.136 (0.146)	0.151 (0.147)	0.167 (0.149)	0.171 (0.146)	0.148 (0.147)	0.165 (0.147)	0.0587 (0.145)
Manqua	-1.488*** (0.158)	-1.508*** (0.156)	-1.505*** (0.155)	-1.513*** (0.158)	-1.469*** (0.157)	-1.483*** (0.156)	-1.478*** (0.155)
Capital	2.695*** (0.389)	2.792*** (0.386)	2.848*** (0.391)	3.022*** (0.390)	2.696*** (0.389)	2.676*** (0.388)	2.588*** (0.361)
Bsize	0.146*** (0.0314)	0.136*** (0.0312)	0.144*** (0.0305)	0.135*** (0.0287)	0.160*** (0.0318)	0.150*** (0.0299)	0.126*** (0.0290)
Sgrwoth	-0.223*** (0.0624)	-0.224*** (0.0620)	-0.223*** (0.0617)	-0.228*** (0.0613)	-0.221*** (0.0621)	-0.227*** (0.0628)	-0.223*** (0.0638)
Div	-1.087*** (0.197)	-1.031*** (0.199)	-1.108*** (0.199)	-1.120*** (0.195)	-1.155*** (0.201)	-1.148*** (0.207)	-1.182*** (0.197)
Profit	-5.006*** (1.178)	-5.246*** (1.207)	-5.003*** (1.175)	-5.274*** (1.156)	-4.586*** (1.208)	-4.720*** (1.216)	-5.208*** (1.158)
Infl	-0.793* (0.464)	-0.780* (0.462)	-0.767 (0.467)	-0.877* (0.457)	-0.782* (0.465)	-0.703 (0.466)	-0.779* (0.459)
Lngdppc	-0.115*** (0.0419)	-0.117*** (0.0412)	-0.125*** (0.0420)	-0.0994** (0.0399)	-0.113*** (0.0425)	-0.123*** (0.0418)	-0.0957** (0.0404)
Trend	-0.0552** (0.0220)	-0.0563** (0.0219)	- 0.0568** *	-0.0592*** (0.0215)	-0.0533** (0.0222)	-0.0518** (0.0217)	-0.0567*** (0.0220)
Disc		-0.0216 (0.0264)					
Bodsize-disc		0.00583** (0.00234)					
Oead			-0.106 (0.0716)				
Bodsizeoead			0.0179** *				

			(0.00625)				
Ldi				0.0825			
				(0.0980)			
Bodsizefdi				0.0194*			
				(0.0104)			
Ofdi					-0.0757		
					(0.0967)		
Bodsizeofdi					-0.00275		
					(0.00836)		
Mldi						-0.158	
						(0.104)	
Bodsizemldi						0.00757	
						(0.00782)	
Isdi							0.399**
							(0.181)
Bodsizeisdi							0.0115
							(0.0102)
o.bodsize							-
Constant	4.644***	4.894***	4.865***	4.404***	4.537***	4.805***	4.217***
	(0.394)	(0.444)	(0.402)	(0.365)	(0.404)	(0.416)	(0.397)
Observations	1,053	1,053	1,053	1,053	1,053	1,053	1,053
R-squared	0.588	0.598	0.592	0.614	0.590	0.593	0.607
Number of bankcode	296	296	296	296	296	296	296
Wald	262.66***	275.14***	274.79**	320.08***	276.41***	267.89***	211.36***
			*				
Interaction	2.09	6.22**	8.26***	3.51*	0.11	0.94	1.27

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

6.7 Chapter Summary

The evidence from banking literature suggests that weak governance induce management undue risk-taking (Kirkpatrick, 2009; Chen & lin, 2016; Diaz & Huang, 2017). The various attempts made by earlier studies (Ho & Wong, 2001; Larcker et al., 2007; Bhasin, 2009; Aytekin et al., 2013) to define corporate governance ensued from Organization for Economic Cooperation and Development (OECD) who defines corporate governance as a set of relationships between company's management, board of directors, shareholders and other stakeholders (OECD, 2004, p. 11). This definition implies that for harmonious working of the structure, communication (information disclosure) is key serving as the life blood to the effective relationship among the stakeholders. The rationale for corporate disclosure is to stimulate market discipline (private monitoring) of firm as a form of corrective mechanism for sustainable operation (Bushman & William, 2012). The study examines the interactive effect of bank governance and financial disclosure on bank stability in Africa. The aim of this study is to contribute to the growing literature in the area of internal corporate governance structures, information disclosure, and the bank stability using the case of Africa.

The results show significant complimentary effect of CEO duality and asset disclosure on bank stability in a highly development credit market. This implies that CEO duality supports assets disclosure which represents the banks wealth and stimulate bank stability in highly developed financial market. Again, the study established similar results for audit independence, board independence and board size. The intuition from these results is that, the governance variables alone may not influence bank stability as expected yet, with the combination of bank disclosures with generative positive effect on bank stability representing the compliment role between the governance variables and corporate disclosure. However, the findings on board diversity in terms of female representation on the board gave mixed results. The interaction

between board diversity and asset disclosure shows positive association effect on bank stability while that of board diversity and other funding disclosure shows a substitution effect on bank stability. This could be attributed to the number of female representation as well as the level of financial development in a country. On the other hand, the results from less developed financial market given board gender interacted with governance produced complimentary effect indicating the positive effect on bank stability.

Finally, the study has added to the knowledge on the interaction effect of internal corporate governance and financial disclosure on bank stability. Thus, from the African context, the nexus is examined. In an ideal environment where bank governance is effectively working, corporate disclosure and transparency will be byproduct. Unfortunately, that is not the case. The Africa market is characterized with weak corporate governance practices and the level of corporate disclosure is considered poor. To induce trust and confidence in the banking sector, the governance structure and the disclosure policy ought to be reconsidered. Hence this study provides empirical evidence given which the interaction between governance and disclosure and its influence on bank stability. The results demonstrate positive link between governance and disclosure which explains the complimentary effect on bank stability.

CHAPTER SEVEN

Summary of Findings, Conclusions and Recommendations

7.1 Introduction

This thesis examined the effect of bank governance, and financial disclosure on stability, employing bank-level data from Africa. To better understand this nexus, the study splits the sample into Non-Islamic and Islamic populated and developed and less developed credit market economies. The rationale is to enable comprehensive understanding of bank stability in Africa and its sub-divisions. The study empirically examines the effect of internal governance structures on bank stability. It also investigated the nexus on disclosure- stability. We again analyzed the relation between internal governance structures and financial disclosure. Lastly, the study examined the interactive effect of bank governance and disclosure on stability. This final chapter presents a summary of the findings, the contributions of the study, conclusions, policy recommendations as well as study limitations and suggestions for future research.

7.2 Summary of Findings

Management behaviour of undue risk-taking leads to banking crises. This originates the discussion on the role of governance and information disclosure as a form of control measures on banks to maintain stability. Following the severe economic repercussion from the global financial crisis, and other banking crisis in both developed and developing economies, a dynamic debate had emerged among policy makers, regulators, central bankers, academics and other stakeholders with regards to bank governance reforms and the need to enhance disclosure for transparency and market discipline. This thesis empirically examined the role of internal governance structures and financial disclosure on bank stability and presents the findings as follows;

- Ensuing from the thesis's objective on internal governance structure, we established a significant support for board size and CEO duality in relation to bank stability. This result is contextual since the same result was not found in other samples investigated. Thus, the conflict of interest given CEO duality is not applicable everywhere and on the contrary CEO duality can offer quick responds to policies in a dynamic setting as a result of unified leadership. Whiles larger board for complex firms such as banks can provides quality advice to management for sound banking practice.
- Interestingly, board diversity from the context of female representation on the board and board independence measured by non-executive board did not support bank stability. Hitherto, some literature on board diversity has argued that diversity in the boardroom may detract performance due to prolonged discussions, boardroom quarrels, and lack of tolerance and trust which may delays decision making and militate against strategic direction hence our existing results.
- Additionally, the study found positive support for financial disclosure on bank stability, specifically, non-Islamic populated economies and that of developed credit market economies. The results then propose that, the effect of financial disclosure on bank stability varies across different forms of economies used making the effect of information disclosure on bank stability strongly contextual.
- However, the results on the sub-indices of the disclosure index, established support for asset disclosure again in non-Islamic populated and developed credit market economies. On the contrary, the study found a negative relation between asset

disclosure and memo line disclosure on bank stability in the Islamic populated sample. Moreover, in Islamic populated and less -developed credit market economies had a significant positive relation between liability disclosure and bank stability. Furthermore, in developed credit market economies showed a significant relation between income statement disclosure and bank stability.

- With regards to internal governance structures, we found a positive significance relation between audit independence, and financial disclosure. Similarly, board independence as well as board diversity in terms of female representation on the board had significant influence on disclosure. Also, board size recorded a negative influence on corporate disclosure.

- From the bank level control variables, we have established that bank stability hinges on bank size and capital. This probably supports the ‘too big to fail’ axiom in the banking literature that the bigger the bank the higher its stability and in line, the bank regulatory requirement for increase in capital can strengthen the banks to absorb uncertainties.

- Finally, from the interaction made between bank governance and financial disclosure, the study established a complementary effect between governance and disclosure on stability. Suggesting that the bank governance and financial disclosure jointly work effectively to promote stability in Africa. This is in line with the banking regulatory framework on bank governance reforms as well as stringent measures on disclosure to increase bank transparency with the aim to ensure bank stability and healthy financial sector.

7.3 Contributions of the Study

This thesis offers a number of key contributions;

Firstly, we have added to existing literature on the corporate governance, and in particular, bank governance which offers limited empirical research. The study focuses on bank governance with respect to stability debate by shifting from the known area of ownership structure, CEO remunerations as well as the agency theory in relation to bank risk taking. This focus on the internal corporate governance structures in the banking sector and their influence on stability using the stakeholders' theory with the aim to strengthen knowledge on the fundamental corporate governance structures role to bank stability. By so doing, we add to existing knowledge given the existing findings from the study.

Secondly, the study makes a contribution to empirical knowledge by examining the association between bank governance and financial disclosure with the aim to establish the influence of board characteristics on financial disclosure. This is relevant since the evidence is almost not in existence given the context of the study. We found that audit committee independence, female representation on the board as well as board independence have a significant association to financial disclosure. Whiles board size shows a negative relation to financial disclosure.

The study succeeded in furthering the position that bank governance has positive association with financial disclosure and they complement each other in relation to bank stability. This is relevant for the banking sector to leverage for stability and to limit any form of financial crisis with dire economic consequence.

The study realized that in terms of leveraging on bank governance and financial disclosure with regards to stability, the less developed financial economies have greater convergence possibility than highly developed financial economies. This implies that policy makers can strengthen internal governance structures jointly with greater disclosure policies to ensure bank stability in the less financially developed economies for their economic expansion.

Finally, the study established the empirical differences in Islamic economies and non-Islamic economies from the context of bank corporate governance. The study found no significant relations between bank governance structures on Islamic economies banks in term of stability. Signifying the difference between bank corporate governance structures among Islamic economies banks and non-Islamic economies banks.

7.4 Conclusions

The study comprises of four empirical papers that examine the relationships among bank governance, financial disclosure and stability. The relationships among these three variables are relevant to modern banking and financial stability of which extant literature is limited particularly, from the developing market context. The study produces interesting conclusions. From the results of the study, it is clear that bank governance can serve as a catalyst to stimulate financial disclosure and to promote stability. Moreover, it has been established that banks in Africa can promote good corporate governance and information disclosure policies that promote financial transparency to stimulate stability, and invariable support healthy financial sector for economic growth and development. A healthy financial sector boasts market trust and confidence for effective resource allocation and value creation for stakeholders.

Additionally, it is worthy to note that bank size and capital have a significant support for stability. This connotes that, banks in Africa need not to operate in smaller sizes in a fragmented manner but can merge operations to augment their size to impact their stability positively. By this, joint operations will also increase owners' capital to enable the banks to absorb any market shock and promote stable financial sector. However, the bank size and profitability also have positive influence on financial disclosure. This is relevant as information disclosure in the banking sector is to promote market discipline and ensure reasonable bank risk-taking ventures for value creation and stability of other things being equal.

Further, the heterogeneous nature of African countries has been made clear from the nexus the study examined. This implies that policies on bank governance and financial disclosure intended for financial stability ought to be contextualize for effective results. The diversity of Africans in terms of level of bank development, religiosity with reference to Islamic populated and non-Islamic populated economies were examined. Fascinatingly, it was clear that regular corporate governance had no significant relation to bank stability in Islamic populated economies whereas the result was different for non-Islamic economies. The notion is that probably these Islamic populated economies will most likely operate Islamic banking with its distinct from the conventional banking practices. The Islamic banking is practiced under the Shariah (Islamic law) which forbid interest charges and speculative investments yet allow profit sharing. Although, the Islamic law does not limit the Islamic banks from adopting the regular corporate governance structure as well as disclosure policies, the results show no significant relation and less compliance to corporate disclosure.

7.5 Policy Recommendations

The dominance of the banking in the financial sectors projects the stability of the sector's critical for effective financial intermediary process, resource allocation, capital formation and economic well-being. In view of this, 'good bank governance' ought to be enhanced to stimulate financial stability. Where good bank governance is, the governance structures set policy directions, monitor and control management behaviour towards firm value creation for shareholders and other stakeholders. For the management of banks, efficiency in cost management is key to stability hence, this should deploy innovative ways of operative to minimize cost and to avoid bank fragility.

The thesis offers a number of policy recommendations. The positive influence of bank governance, and financial disclosure on stability in Africa's banking sector has been firmly established. With reference from the findings, we recommend that regulators of the Africa banking sector, can leverage of the compliment effect of bank governance and disclosure by strengthen the policies with stringent compliance to stimulate stability of the banking sector.

Again, the banking sector thrives on trust and confidence for effective intermediation. As part of the financial sector reforms aiming best corporate governance practices and bank transparency measures, the market should be empowered and the role of government interference in the bank (guarantees) should be minimize if not eliminated to promote bank stability. One of the lessons from the thesis is that, financial disclosure as a tool for market discipline significantly support stability but for the market to discipline banks and minimize excess risk taking require credible, relevant and clear information disclose as a form of motivation as well as no or less government guarantee.

Regarding the complimentary effect between bank board and financial disclosure in stimulating stability, we recommend that, investors take keen interest to influence policy directions to constitute effective internal governance structures and information disclosure measures to enhance bank transparency in order to ensure stable performance and sanity for the entire financial sector.

Regulators of the banking sector in Africa should take keen interest in the bank board because of the fundamental role it performs to ensure that management behaviour does not undermine the performance and stability of the bank. A key lesson from this thesis is the significant support the board has with the stable operations of the bank. As such we recommend that the board ought to be punished if it fails on its mandate to perform. Given the failure of the bank can be contagious and undermine the economic stability

Further, policy recommendation to strengthen bank stability is to augment the capital base and increase the size of the banks. The banking sector in most African countries appears small in size and fragmented which makes them fragile to withstand any form of market risk. With augmented capital banks with less capacity to meet capital policy could merge with other bank(s) to increase size and capital for stable financial market.

For the heterogeneous nature of Africa market, we recommend that, policies on bank governance and disclosure with regards to stability should be contextualize for effective result. Also, for Africa's banks to stabilize the financial market, policy makers should control macroeconomic environment for price stability. Thus, the level of inflation ought to be controlled to its minimum to promote bank stability.

7.6 Limitations and Suggestions for Future Research

The study has succeeded in making some useful contributions to the analysis given the relationship among bank governance, financial disclosure and stability from the African context. Notwithstanding the contributions there are some limitations worth acknowledging. They include the inability to gather bank data on all countries in Africa as well as the time span being quite old. In view of this, an expanded data set study on banks in all countries in Africa with updated time period is recommended. Indeed, where possible, future studies should be done on continental level and advanced knowledge on bank governance, disclosure and stability.

Also, given the digital age and the level of technological advancement, future research should consider other forms of corporate disclosure on the bank's website and other social media platforms to evaluate the effect of bank monitoring (market discipline) and risk-taking behaviours of management. Additional, external corporate governance structures could be examined to further the existing knowledge with regards to bank stability.

Further, future studies should probe the outcome of the Kaufman's institutional quality variables moderating influence on financial disclosure in terms of internal corporate governance link to bank disclosure with reference to the third empirical chapter.

Finally, each of the four empirical papers can be re-examined by comparing the used samples among developing and developed economies. Results from such research will definitely advance knowledge of the bank governance, disclosure and stability nexus.

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