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Influence of Financial Regulation in Kenya on Financial Inclusion: A Case Study of the Banking Industry in Kenya

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Influence of Financial Regulation in Kenya on Financial Inclusion: A Case Study of the Banking Industry in Kenya

By Deborah Kemunto Momanyi*

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Abstract

The positive impact of financial inclusion on the lives of the citizens of African countries as well as their economies in the last decade is non-debatable. Subsequently, financial inclusion has greatly contributed to the diminishing number of the unbanked population in African countries especially with the advent of provision of digital financial services. Nonetheless, the population of adults lacking access and usage of financial services is above two (2) billion. Finance serves a primary purpose of facilitating productive economic activities in a country. Economic growth and financial stability is best achieved in an environment with sound financial regulations. Whereas financial systems across Africa have experienced profound changes as characterised by financial deepening and rapid growth in intermediation, there is a compelling need to ensure that the day-to-day economic activities are not marred by unsound financial environments. Though the changes have positively impacted financial inclusion and intermediation in Kenya, the Central Bank of Kenya is faced by a plethora of challenges in its effort of ensuring that the economy is thriving. This is besides ensuring that there is financial stability through the enforcement of compliance, regulation and supervision of financial institutions within the banking sector. This research paper discussed the influence of financial regulations in Kenya on financial inclusion in the context of the banking industry in Kenya

This research took the nature of a survey. The population of the study on the side of the regulated institutions comprised all institutions licenced under the Banking Act. Data collection was by means of a questionnaire. The questionnaire was structured with open ended and closed ended questions. The open ended questions collect qualitative data whereas the closed ended collect quantitative data. Opinions, views and perceptions *were captured through scaling questions. From the analysis of findings, a positive correlation was established between financial inclusion variables i.e quality, usage and access and financial stability of institutions regulated by the banking act. The study recommended that the government can also through its role in regulation create a regulatory framework that encourages financial inclusion in order to enhance financial stability.*

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1.0 Introduction

Background of the Study

Finance serves the sole purpose of facilitating productive economic activity. On the other hand, the aim of regulation is to maintain financial stability and economic growth (Duisenberg, 2001).

The balance between economic growth and financial stability is rather delicate. On one hand, economic growth may be stifled in the instance where attention is fully placed on stability, and, on the flipside, hastening towards economic growth can be a recipe for future financial crises. Considering the fact that financial systems stand on unstable ground, they need to be well regulated in order to avert financial crises (Spratt, 2013).

The financial market facilitates the flow of funds from the providers of funds (primarily households) to the users of funds (generally firms and companies). This process of flow of funds involves the intervention of an intermediary since it is a rare occurrence for funds to flow from the providers to the users (Cornett & Saunders, 1999). This intermediary is known as a financial institution. There are different types of financial intermediaries which differ in their special functions. Such financial intermediaries include banks, microfinance institutions, Savings and Credit Co-operative Societies, finance companies and mutual funds, life insurance companies, pension funds and securities exchanges. Each of the aforementioned institutions provides the service of financial intermediation that is uniquely attributed to the particular institution.

Financial institutions have played a vital role as financial intermediaries in promoting financial inclusion within the numerous economies around the globe. Financial intermediaries are described as "enterprises or institutions that hold (invest in) financial assets (such as loans, mortgages, shares of stock, among others) and that obtain the funds for these investments by issuing liabilities (such as deposits, mutual fund shares, insurance obligations, pension fund obligations, and short-term debt obligations)" (White, 1999). Financial inclusion refers to the access and applying a set of adequate financial services by households and firms essential for advancement as poor family units are in a position to enhance their lives while impelling their financial movement (IDB, 2015). The Banking Association South Africa (The Banking Association South Africa, 2017) defines financial inclusion as "access and usage of a broad range of affordable, quality financial services and products, in a manner convenient to the financially excluded, unbanked and under-banked; in an appropriate but simple and dignified manner with the requisite consideration to client protection". Formal money related administrations such as store and bank accounts, instalment administrations, credits and protection ought to be readily available to the consumers to enable them to utilise the services actively and effectively in order to meet their specific needs (Klapper, El-Zoghbi, & Hess, 2016). In the alternative, financial deepening refers to the change or increment in the pool of monetary administrations that are custom fitted to the necessity of all levels in the general public (Bharat, 2014). The impact of expanding financial inclusion goes well beyond financial deepening and spans over a wide range of development goals (IDB, 2015).

The Financial Inclusion Data Working Group of the Alliance of Financial Inclusion (AFI-FIDWG) agreed on three dimensions of financial inclusion that provide the underpinning of data collection with an aim of defining a more complete concept of financial inclusion as illustrated below:

Table 1: Dimension of Financial Inclusion

Access	Availability of formal, regulated financial services:
	Physical proximity; Affordability
Usage	Actual usage of financial services and products:
	Regularity; Frequency; Duration of time used
Quality	Products are well tailored to client needs:
	Appropriate segmentation to develop products for all income levels

Source: Adapted from Alliance for Financial Inclusion Data Working Group (2011)

It is on the premise of the provision of financial services and the promotion of financial inclusion that the financial institutions and the greater financial sector receive special regulatory attention. The regulatory structure of the Kenyan financial markets flows from the aforesaid sectoral division. Thus each sector has its own specialized regulator and legislation governing it. The banking sector is regulated by the Central Bank and the governing legislation is the Banking Act, Cap 488 of the Laws of Kenya. The insurance sector is regulated by the Commissioner of Insurance and the governing legislation is the Insurance Act Cap 487. The securities sector is regulated by the Capital Markets Authority and the governing legislation is the Capital Markets Act, Cap 485A. The pensions sector is regulated by the Retirement Benefits Authority and the governing legislation is the Retirement Benefits Act, Act No. 3 of 1997.

Research Problem

Financial regulation aims at ensuring that financial stability is maintained and that there is a spur at economic growth (Tobias , 2017). The influence of financial regulation on financial inclusion cannot be derogated from especially in the banking sector.

The banking sector has witnessed a number of developments in the recent years, in particular, diversification of services offered by financial institutions, consolidations within the banking sector, conglomerations of institutions to form one-stop financial services companies, and the common phenomenon of financial crisis. Other notable changes include technological advancements in the provision of financial services (Mathenge, 2007).

In light of this, an assessment of the influence of financial regulation on financial inclusion in Kenya assumes significant importance. The influence of financial regulation on financial and economic stability in Kenya is also a matter that is to be put into consideration.

The study will limit itself to assessing the influence of financial regulation on financial inclusion in Kenya with emphasis being placed on the banking sector.

Research Objectives

The general objective of the study is to assess whether there is a relationship between financial regulation in Kenya and financial inclusion and the influence of financial regulation on financial inclusion. Emphasis will be laid on the banking industry.

The specific objectives are:

(a) To establish whether financial regulation enhances or stifles access to financial services;

(b) To assess whether financial regulation enhances or stifles usage of financial services; and

(c) To examine whether financial regulation enhances or stifles quality of financial services.

Research Questions

(a) What is the effect of financial regulation on access to financial services?

(b) How does financial regulation affect usage of financial services?

(c) What is the effect of financial regulation on quality of financial services?

Significance of the Study

The findings of the study will be beneficial to the following:

(a) Policy makers in Government in enhancing their understanding of the regulation and supervision of financial institutions and providing a basis to consider whether there is a need to reform of the regulatory and supervisory structure of the financial services industry.

(b) Regulators in the financial services industry in understanding their central role in maintaining the stability and efficient operation of the financial services industry and the financial institutions.

(c) Commercial banks in enhancing their appreciation of the goals and objectives of regulation and supervision and the benefits and costs of regulation and supervision.

(d) Researchers and academics who will use the findings as a basis for further research.

(e) Students of finance and management who will be provided with further information in the area of regulation and supervision of financial institutions.

2.0 Literature Review

Literature review is a method of analysis of articles and journals related to the specific area of study offering critical evaluation. Literature review serves the sole purpose of providing insight into the published works and enabling the researcher deduce the areas of study and the knowledge gaps.

This chapter reviews the relevant constructs and variables as well as their interactions involving: the nature of financial regulation, the nature and influence of financial stability and the dimensions of financial inclusion.

Financial Regulation

The financial markets require a strong banking system that promotes funds transfer and distribution as finances represent the means and methods through which funds are obtained, controlled, allotted and utilised (Driga & Dura, 2014). The role of banks in the financial markets varies from being intermediaries in funds re-distribution to corporate governance and improving the information problems between investors and borrowers thereby contributing to economic development. As primary financiers within the economy, banks need to be efficient providers of financial services that function properly within the legal, economic and political environment (Driga & Dura, 2014).

Banks offer a myriad of financial services that are tailored to suit the needs and demands of their customers. In addition to being lending and borrowing institutions, banks offer other types of services such as payments, settlements and funds transfer, foreign exchange transactions, savings and investment services, payroll services, financial advice, investments and bill finance and safe-deposit boxes (Driga & Dura, 2014).

Financial institutions also perform financial intermediation services that are distinct in their nature due to the certain features that are unique to their nature of business. As indicated by Cornett & Saunders (Cornett & Saunders, 1999) some of the areas giving rise to the special nature of financial institutions in the provision of services include:

(a) **Information costs:** The aggregation of funds in a financial institution provides greater incentive to collect a firm's information and monitor its actions. The relatively large size of the financial institution allows this collection of information to be accomplished at a lower average cost (so-called economies of scale).

(b) **Liquidity and price risk:** Financial institutions provide financial claims to household savers with superior liquidity attributes and with lower price risk.

(c) **Transaction cost services:** Similar to economies of scale in information production costs, a financial institution's size can result in economies of scale in transaction costs.

(d) **Maturity intermediation:** Financial institutions can better bear the risk of mismatching the maturities of their assets and liabilities.

(e) **Money supply transmission:** Depository institutions are the conduit through which monetary policy actions impact the rest of the financial system and the economy in general.

(f) **Credit allocation:** Financial institutions are often viewed as the major, and sometimes only, source of financing for a particular sector of the economy, such as farming and residential real estate.

(g) **Intergenerational wealth transfers:** Financial institutions, especially life insurance companies and pension funds, provide savers the ability to transfer wealth from one generation to the next.

(h) **Payment services:** The efficiency with which depository institutions provide payment services directly benefits the economy.

(i) **Denomination intermediation:** Financial institutions, such as mutual funds, allow small investors to overcome constraints to buying assets imposed by large minimum denomination size.

It is on the premise of the foregoing features within the financial sector and the roles played by financial institutions that the financial industry receives specific regulatory attention. Government agencies assigned regulatory functions are mandated to perform such tasks as required by the regulations.

Mathenge (2007) observes that regulation of financial institutions can be classified into:

(a) **Safety and soundness regulation:** Layers of regulation have been imposed on financial institutions to protect depositors and borrowers from the risk of failure. This is also known as Prudential Regulation and it covers such issues as capital adequacy, asset quality, management, earnings, liabilities and reporting requirements.

(b) **Monetary Policy regulation:** Regulators control and implement monetary policy by requiring minimum levels of cash reserves to be held against depository institution deposits.

(c) **Credit Allocation regulation:** Regulations support the financial institution's lending to socially important sectors, such as housing and farming, or disadvantaged groups such as blacks and women.

(d) **Consumer Protection regulation:** Regulations are imposed to prevent the financial institution's ability to discriminate unfairly in lending.

(e) **Investor Protection regulation:** Laws protect investors who directly purchase securities and/or directly purchase securities by investing in mutual funds and pension funds.

(f) **Entry and chartering regulation:** Entry and activity regulations limit the number of financial institutions in any given financial services sector, thus impacting the charter values of financial institutions operating in that sector.

(g) **Price regulation:** Regulations are imposed on maximum interest rates for lending and minimum interest rates for deposits.

According to Falkena *et al* (Falkena, Bamber, Llewellyn, & Store, 2001) there are two generic types of financial regulation and supervision that can be deduced from the above classification: **prudential regulation**, which focuses on the solvency and safety and soundness of financial institutions, and **conduct of business regulation** which focuses on how financial firms conduct business with their customers.

Prudential regulation

Considering that consumers of financial services are not well equipped to comprehensively assess the safety and soundness of financial institutions, it is vital for the financial sector to enact prudential regulation and supervision of firms. Prudential regulation is important due to imperfect consumer information, agency problems associated with the nature of financial institutions' business, and because the behaviour of a financial firm after consumers have dealt with it affects the value of their stake in the firm (Mathenge, 2007).

The protection of consumers of financial services from the subsequent behaviours of financial firms regardless of information at the time contracts are signed and purchases made is not subjectively guaranteed (Mathenge, 2007). Mathenge (2007) further expounds on the concept of prudential regulation of financial firms stating that it arises when:

(a) the institution performs a fiduciary role;

(b) consumers are unable to judge the safety and soundness of institutions at the time purchases or contracts are made;

(c) post-contract behaviour of the institution determines the value of contracts, and when the institution may become more risky because of a change in its behaviour after a long-term contract has been taken out by customers;

(d) there is a potential claim on an insurance fund or compensation scheme because the costs of hazardous behaviour of an individual financial firm can be passed on to others (those who in the end pay the compensation). If, for instance, other firms in the industry are required to pay the compensation liabilities of failed institutions it would be reasonable for these firms to demand certain minimum standards of behaviour which they are unable to enforce themselves without an external agency's intervention.

Conduct of business regulation

Conduct of business regulation and supervision lays focus on how financial firms conduct business with their customers as well as mandatory information disclosure, the honesty and integrity of firms and their employees, the level of competence of firms supplying financial services and products, fair business practices, and the way financial products are marketed (Mathenge, 2007). Conduct of business regulation further establishes guidelines for the objectivity of advice, with the aim of minimising those principal-agent problems that can arise when principals (those seeking advice) and agents either do not have equal access to information, or do not have equal expertise to assess it. On the whole, conduct of business regulation is designed to establish rules and guidelines about appropriate behaviour and business practices in dealing with customers (Mathenge, 2007).

Kenya's financial sector has historically been segmented into a number of sections. Therefore, the sector has been characterised by Banking Sector, Insurance Sector, the Capital Markets and the Retirement Benefits Sector. Other financial market sectors which however play a relatively minor role in the formal sector are building societies, Savings and Credit Co-operative Societies and micro-finance institutions.

The regulatory structure of the Kenyan financial markets flows from the aforesaid sectoral division. Thus each sector has its own specialized regulator and legislation governing it. The banking sector is regulated by the Central Bank and the governing legislation is the Banking Act, Cap 488 of the Laws of Kenya. The insurance sector is regulated by the Commissioner of Insurance and the governing legislation is the Insurance Act Cap 487. The securities sector is regulated by the Capital Markets Authority and the governing legislation is the Capital Markets Act, Cap 485A. The pensions sector is regulated by the Retirement Benefits Authority and the governing legislation is the Retirement Benefits Act, Act No. 3 of 1997.

The study focuses on the banking sector within the financial market. The Banking Sector operates under the ambit of the Banking Act Chapter 488 of the Laws of Kenya and the Central Bank of Kenya Act Chapter 491 of the Laws of Kenya. To a marginal extent the Building Societies Act Chapter 489 by the laws of Kenya also applies.

The Central Bank of Kenya is the principal regulator in the banking sector. It is the Central Bank which is mandated to regulate and supervise banks and financial institutions and mortgage finance companies and generally ensure that they comply with the provisions of the Banking Act. The Central Bank of Kenya is a key player in the promotion of the country's socio-economic development agenda and has made a significant contribution in this respect. It serves a pivotal role in steering the financial sector and economic growth. Its role in supporting the growth of the financial sector through supervision and monitoring of its performance cannot be downplayed nor ignored.

The Banking Act empowers the Central Bank to issue guidelines to banks and other financial institutions on specific matters. The Act also gives the Central Bank discretionary powers in the aforesaid issues provided in the Act.

In the recent past, the regulatory framework of the banking industry in Kenya has witnessed the enactment of novel policies and regulations as well as amendments of the existing statues and regulations in an effort to promote financial inclusion in Kenya.

A review of the milestones made in the recent past reveals Kenya's dedication in promoting financial inclusion. Remarkably, the government of Kenya has enabled a conducive environment for policymakers and regulators in establishing a benchmark in the regulations influencing financial inclusion. Notably, in February 2017, the government of Kenya debuted Huduma cards, a fintech initiative that aims to leverage partnerships with Mastercard and several prominent banks to help enrol more citizens in government services like health insurance, facilitate adoption of digital financial services among unbanked individuals, and streamline the distribution of the services (Lewis, Villasenor, & West, 2017). In May 2017, the Central Bank of Kenya and the Kenya Bankers Association organized a conference titled "Financial Inclusion 2.0: Expanding Kenya's Digital Financial Ecosystem" whose aim was to establish the emerging trends in the market that promote financial inclusion in Kenya especially the adoption of technology in the provision of financial services. Further, in May 2017, the Competition Authority of Kenya issued a directive requiring telecommunications entities and financial institutions providing mobile money services to notify customers about the price of transactions in real time (Lewis, Villasenor, & West, 2017).

The Banking (Amendment) Act (Act No. 25 of 2016) is of significant influence to financial inclusion in Kenya. The statute, enacted in September 2016, brought to fore the interest rate cap requiring banks to charge no more than four percent (4%) of the base rate (the Central Bank Rate) published by the Central bank of Kenya pursuant to Section 36(4) of the Central Bank of Kenya Act. Moreover, the statute has placed the floor on deposits held "in interest-earning" accounts at a minimum of 70 per cent of the base rate set and published by the CBK. The Amendment Act further requires banks to disclose charges, terms and conditions related to a loan to a borrower, before granting the loan, provisions similar to the stipulations outlined in the Consumer Protection Act. A year later, an unpublished analysis by the Kenya Bankers Association on whether the objectives of the Banking (Amendment) Act were met demonstrates that there is a significant downshift on the uptake of credit facilities especially to households and private entities as well as bank account deposits and withdrawals. This can be attributed to the fact that banks have shifted the portfolio reallocation from risky borrowers to less risky borrowers thereby negating the objective of the statute.

Financial stability

The World Bank Group states that financial stability denotes a financial system that is not prone to failure (crises) due to its resilience to stress (World Bank Group, 2017). A stable financial system is characterised by efficient allocation of resources, efficient assessment and management of financial risks, effective maintenance of employment levels close to the economy's natural rate and elimination of relative price movements of real or financial assets that potentially affect monetary stability or employment levels (World Bank Group, 2017). The financial system is considered to be stable where it is able to absorb the shocks resulting from adverse and unforeseen events through self-corrective measures (World Bank Group, 2017).

The financial sector has witnessed a plethora of developments such as growth in volume of financial transactions, increased complexity of new financial systems and costly crises in national financial systems as characterised in 2008 to 2009 global financial crisis. Due to the increased volume of financial transactions and integration of institutions within the financial sector and capital markets, there has been growth in the interdependence of the institutions thereby bringing to fore systemic risk.

The role of regulation in promoting financial stability through establishing diagnosis, remedies and allocation of responsibilities is paramount in ensuring economic growth. The regulation is segmented into macro-prudential and micro-prudential regulation. Macro-prudential regulation limits the costs that the economy can incur due to financial distress and economic shock thereby inhibiting the likelihood of economic failure and financial instability (Crockett, 2000). Micro-prudential regulation, on the other hand, serves the purpose of protecting the depositors from the likelihood of failure of the individual institutions

(Crockett, 2000). Hence, financial stability can be considered to be assured where every institution is financially sound.

The costs and set-backs incurred due to financial instability call for a strengthening of the financial regulation including, but not limited to macro- and micro-prudential guidelines. The disruption caused by financial instability calls for a strengthening of the supervisory and regulatory framework within the financial industry through policy co-ordination

Financial Inclusion

Financial inclusion refers to the access and applying a set of adequate financial services by households and firms essential for advancement as poor family units are in a position to enhance their lives while impelling their financial movement (IDB, 2015).

Since the commitment by a number of countries to the Maya Declaration and the G-20 Financial Inclusion Action Plan, Africa has witnessed a dramatic growth over the recent years of the interest in and dedication to promoting financial growth with individual governments setting strategies and targets to achieve financial inclusion (AFI, 2013).

In order to track the progress in achieving more inclusive financial systems and gauge their impact, a clear and unified definition of financial inclusion is necessary (AFI, 2013). The Financial Inclusion Data Working Group of the Alliance of Financial Inclusion (AFI-FIDWG) agreed on three dimensions of financial inclusion that provide the underpinning of data collection with an aim of defining a more complete concept of financial inclusion.

The importance of financial inclusion in advancing the international policy agenda and achieving the sustainable development goals is undebatable. In international forums such as the Group of 20 (G20), as part of the international policy agenda, it has been resolved that financial inclusion be incorporated into the financial regulatory and supervisory agenda, with specific targets and goals being set. Moreover, financial inclusion has also been considered to be an important component to financial stability and prudential regulation (UNCTAD, 2014).

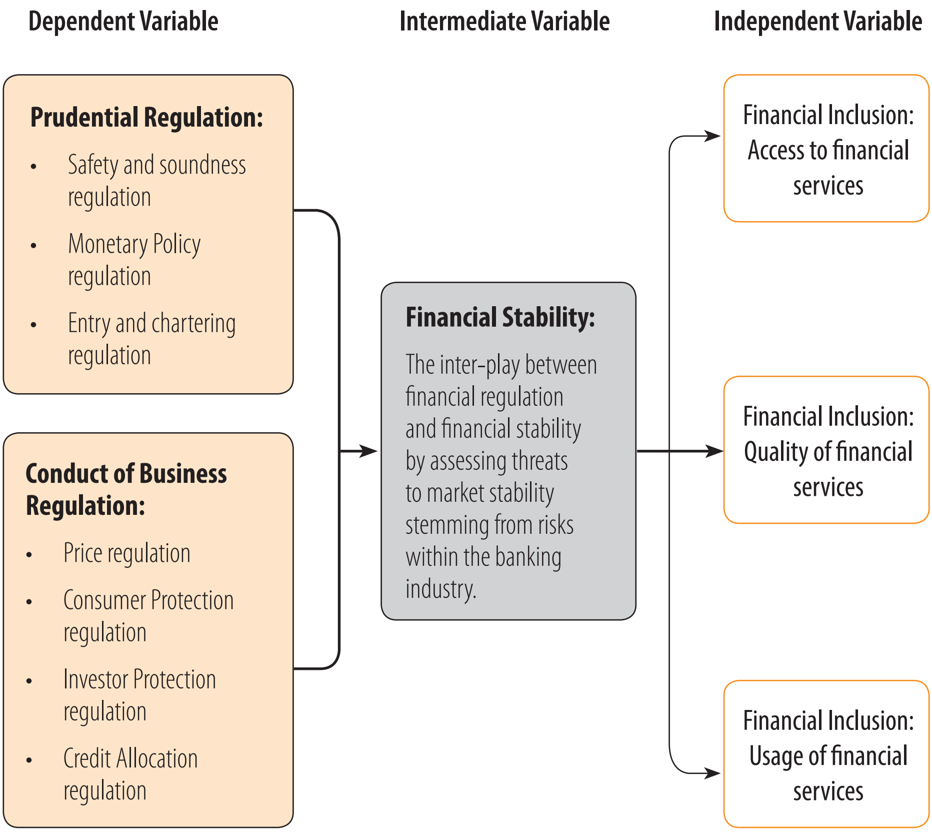
Financial inclusion has become an explicit policy objective in many African countries. While a number of government agencies are typically involved, each with its own mandate, central banks are increasingly playing an active role in promoting financial inclusion, particularly in the areas of microfinance, consumer protection, rural finance and SME access (CGAP, 2010). For instance, central banks are responsible for at least five topics related to financial inclusion in more than 60% of African countries, often with dedicated resources. Considering that financial inclusion aims to ensure that there is access to financial services to all households and business regardless of their income levels, it is prudent to understand the scope of financial inclusion across the globe and nationally.

In an effort to emphasis the nexus between financial regulation and financial inclusion, the Brookings Institution (Lewis, Villasenor, & West, 2017) established that access to and usage of affordable, secure formal financial services can be comprehensively achieved: (a) by establishing consumer protection guidelines that enable customers understand the terms and conditions of the available financial products; and (b) through the co-operation of regulators and policymakers, by providing detailed data on the progress on the financial inclusion objectives within a publicly available platform in order to facilitate greater transparency, accountability and knowledge-sharing.

The Brookings Financial and Digital Inclusion Project (FDIP) report and scorecard, initially published in August 2015, examined key questions surrounding ways to advance financial inclusion, including, among others, what legal, policy, and regulatory approaches promote financial inclusion. The 2015 report established that "Central banks, ministries of finance, ministries of communications, banks, nonbank financial service providers, and mobile network operators have major roles in achieving greater financial inclusion and should coordinate closely with respect to policy, regulatory, and technological advances". Further research was conducted in 2016 where it was further recommended that countries and policymakers are required to advance regulatory changes designed to facilitate financial inclusion especially to non-native customers including refugees. The 2017 report singled out Kenya as a top-ranked country in the promotion of financial inclusion due to its widespread adoption of mobile money services and an enabling regulatory environment especially for digital financial services. The reports focused on the following dimensions: country commitment; mobile capacity; regulatory environment and adoption. Under the regulatory environment dimension, the report laid emphasis on agent banking, inclusive ecosystem for mobile financial service deployment principals, E-money regulations, mobile money platform interoperability, account access and usage and cash-in/cash-out at agent locations. As illustrated hereinabove, there is no indication as to the influence of financial regulation on the traditional banking facilities such as branch banking, access and usage of credit facilities, consumer protection policies and regulations as well as the quality of financial services.

It is estimated that approximately 2 billion people across the globe do not use formal financial services and that there are more than 50% of adults who do not access to banking facilities (World Bank, 2017). It is worth noting that financial inclusion is a vital enabler to reducing poverty and boosting prosperity (World Bank, 2017). The population of Kenya is currently estimated at 46 million whereby 37% and 63% of the population resides in urban and rural areas respectively (World Bank, 2017). The physical presence of financial institutions in Kenya has risen from 466 in 2002 to 532 by the end of 2004 and above 1,000 in 2011 (Mugo & Kilonzo , 2017). The overall effect of the increased physical presence of financial institutions has led to an increase of the population that is financially included from 26.7% in 2006 to the current 75.3% (Mugo & Kilonzo , 2017). This illustrates the need to develop innovative, less complex and cost effective strategies through policy reforms and initiatives so as to ensure optimum financial inclusion in the country.

Conceptual Framework



Research Gap

The analysis undertaken in this study reveals that the research conducted does not comprehensively establish the relationship between financial regulation and financial inclusion. The literature has illustrated the need for more research to be conducted to enhance financial inclusion through policy reforms. The study aims at filling the lacunae in establishing a relationship between financial regulation and financial inclusion through the assessment of the influence of financial regulation on financial inclusion.

3.0 Research Methodology

Research Design

This research took the nature of a survey, where a sample of the institutions regulated under the financial regulatory framework in Kenya was studied to determine their view on the influence of financial regulation on financial inclusion.

Population

The population of the study on the side of the regulated institutions comprised all institutions licenced under the Banking Act. As at December, 2016, there were 45 institutions in the wider banking sector, made up of 42 commercial banks, 1 building society, 1 non-bank financial institution and 1 mortgage finance companies. (Source: Central Bank of Kenya website, May, 2017)

Data Collection: Primary Data

Data collection was by means of a questionnaire. The questionnaire was structured with open ended and closed ended questions. The open ended questions collected qualitative data whereas the closed ended will collect quantitative data. Opinions, views and perceptions will be captured through scaling questions. The researcher is targeting the following respondents: the chief executive officer or the company secretary or an officer in charge of regulatory affairs.

Data Analysis

Descriptive statistics was used to determine the influence of financial regulation in Kenya on financial inclusion. A regression model was used for establishing the relationship between the dependent and independent variables. The model adopted 3 independent variables: Financial inclusion-quality, financial inclusion-usage, financial inclusion-access and the dependent variable; financial stability.

The multivariate analysis was also considered to show the combined effect of all independent variables. A multivariate logit regression was used. The justification of the use of the multivariate logit regression was because it enabled the comparison of the magnitude of the probabilities (Twisk, 2003). Put in another way, it enabled the identification of which determinants were stronger than others. In addition, it was useful in estimating the model goodness of fit and overall model significance;

Defining X_i as $X_1, X_2, X_3 \ldots X_n$ as the explanatory indicators, e as the disturbance term, and β and β_0 as the coefficients, the short form of the multivariate logit regression was as expressed as follows;

$$\log \left[\frac{Prob\ (y=1)}{Prob\ (y=o)} \right] = \beta_0 + \beta X_i \qquad \text{Where } i = 1, 2, 3 \ldots n$$

The long form of the logit model was as follows;

$$\text{Log=Prob(Financial regulation=1)/ Prob(Financial regulation=0)} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$$

Where;

Y = Extent of financial stability (Low= 0, high=1)
X_1 = Usage
X_2 = Access
X_3 = Quality

In logit regression, the resulting coefficients are interpreted as logged probabilities or odds. The magnitudes of the probabilities reveal the strength and direction of the relationships and the reported / calculated p values are evaluated against the critical of value of 0.05

4.0 Findings, Data Analysis and Discussion

Introduction

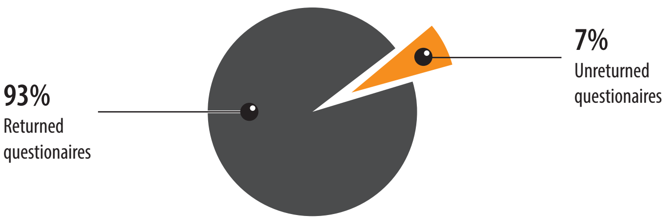
This chapter is a presentation of results and findings obtained from field responses and data, broken into two parts. The first section deals with the background information, while the other section presents findings of the analysis, based on the objectives of the study as explored by the questionnaires where both descriptive and inferential statistics have been employed.

Response Rate

It was noted from the data collected, out of the 45 questionnaires administered to institutions administered under the banking act, 42 questionnaires were filled and returned. This represented a 93.3% response rate, which is considered satisfactory to make conclusions for the study. According to Mugenda and Mugenda (2008) a 50% response rate is adequate, 60% good and above 70%, very good. Hence, the response rate in this case was according to Mugenda is very good.

This high response rate is attributed to the data collection procedure, where the researcher notified the potential participants in advance and applied the drop and pick method. The questionnaires were picked at a later date to allow the respondents adequate time to fill in the questionnaires.

Figure 1: Response rate



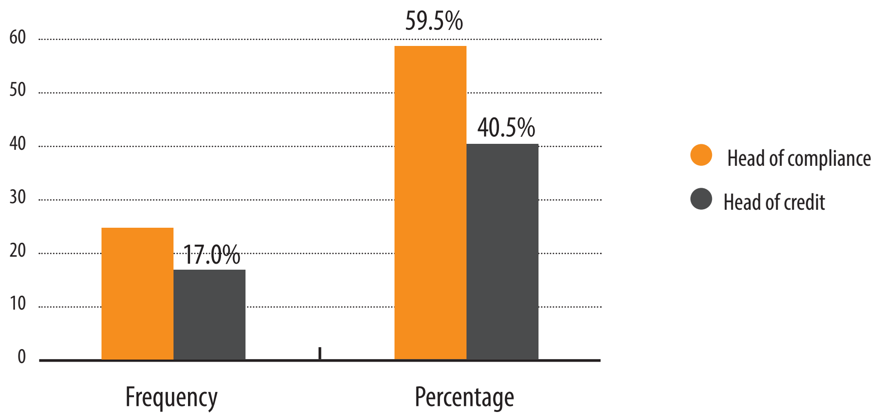
Demographic information

The demographic data seeks to establish the general information of the respondents. From the questionnaire, the following demographic statistics were established; the current position in the bank and the number of years the respondents held the current position in the bank. They are explained in the subsections below.

Current Position in the Bank

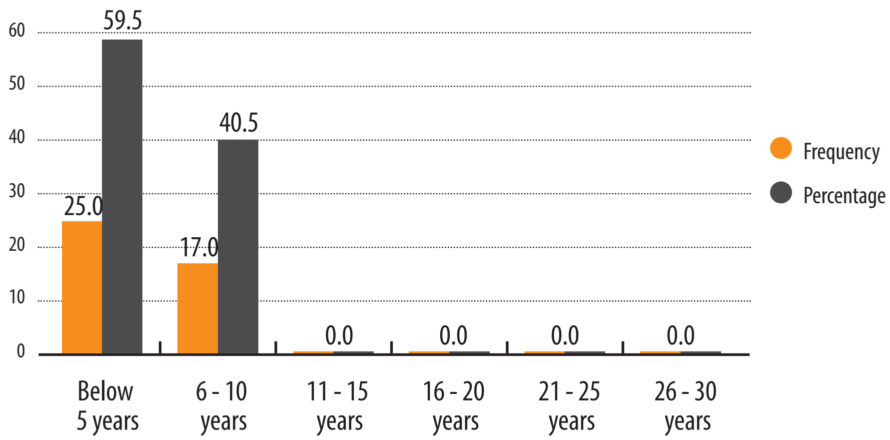
The study sought to establish from the respondents their current position in the bank. The results from the analysis of findings are illustrated in the **Figure 2** below as shown.

Figure 2: Current position in the bank



From the analysis of findings, it was noted that majority of the respondents (25, 59.5%) indicated that their current position was the head of compliance. Closely after were respondents (17, 40.5%) who indicated that their current position was the head of credits. The study thus established that the respondents were well distributed in the compliance and credit departments in the financial institutions to provide sufficient information on the influence of financial regulations in Kenya on financial inclusion.

Figure 3: Years worked in the Current position



Years worked in the Current Position

The study also sought to establish from the respondents the number years they had worked in the current position. The results from the analysis of findings are illustrated in the **Figure 3** below as shown.

From the analysis, majority of the respondents (25, 59.5%) indicated that they had worked in the current position for a period of below five years. A frequency of 17 respondents indicated that they had worked in their current position for a period of 6 to 10 years. This calculated to approximately 40.5% of the total respondents. None of the respondents indicated that that they had worked for more than 10 years.

Multicollinearity Test

Multicollinearity was tested by computing the Variance Inflation Factors (VIF) and its reciprocal, the tolerance. It is a situation in which the predictor variables in a multiple regression analysis are themselves highly correlated making it difficult to determine the actual contribution of respective predictors to the variance in the dependent variable. Thus, collinearity diagnostics measure how much regressors are related to other regressors and how this affects the stability and variance of the regression estimates. The existence of multicollinearity is a vital problem in applying multiple time series regression model. Multicollinearity is a situation when independent variables in the regression model are highly inter-correlated. Multicollinearity inflates the variances of the parameter estimates and hence this may lead to lack of statistical significance of individual predictor variables even though the overall model may be significant.

To detect for multicollinearity, the study examined the correlation matrix or by using Variance Inflation Factor (VIF) as shown in **Table 2** below. The Variance Inflation Factor (VIF) quantifies the severity of multicollinearity in an ordinary least- squares regression analysis. VIF's greater than 10 are a sign of multicollinearity; the higher the value of VIF's, the more severe the problem. Results show that all the variables had a variance inflation factors (VIF) of less than 10: Financial inclusion-quality (1.361), financial inclusion-usage (5.186) and financial inclusion-Access (2.217) on financial stability. This implies that there was no collinearity with the variables thus all the variables were maintained in the regression model. This is in conformity with the moderation assumption that the moderator and mediator must be related to both the independent and dependent variables.

Table 2 Collinearity Statistics

Variables	Tolerance	VIF
Financial inclusion-quality	0.135	7.407
Financial inclusion-usage	0.193	5.186
Financial inclusion-Access	0.451	2.217

Inferential Analysis

A multinomial logistic regression was performed to model the relationship between the predictors (i.e. financial inclusion indicators that is usage, access and quality) and financial regulation. As shown in **Table 3** below, the estimated multinomial logit model was significant at 10%

Table 3: Logit Model

Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	Df	Sig.
Intercept Only	32.779	-	-	-
Final	25.207	7.572	3	0.056

A p-value of 0.056 shows a strong, significant, positive relationship between effects of financial regulation and financial inclusion. Therefore, basing on these findings, the study deduces that there exists a strong positive relationship between the predictor variables that is usage, access and quality with the dependent which is financial stability.

An assessment of the model reveals that there is a need to develop an understanding as to why the maintenance of stability is often considered to be a natural responsibility of public authorities as indicated by Crockett (2000).

The model summary results show that financial inclusion indicators that is financial usage, access and quality for 22.4% of the variance in financial regulation as indicated by the Nagelkerke statistics in the **Table 4** below.

Table 4: Pseudo R-Square

Pseudo R-Square	
Cox and Snell	0.165
Nagelkerke	0.224
McFadden	0.136

Only one predictor, financial usage had a significant negative parameter the other predictors in the, model that is financial access and financial quality, are not significant in influencing financial regulation as indicated in the results in the **Table 5** below.

Table 5: Logit Regression Coefficients

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Strongly agree	Intercept	0.019	1.029	0.000	1	0.985	-	-	-
	Financial access	0.508	0.552	0.849	1	0.357	1.662	0.564	4.901
	Financial usage	-1.501	0.692	4.713	1	0.030	0.223	0.057	0.864
	Financial quality	0.593	0.461	1.654	1	0.198	1.810	0.733	4.471
a. The reference category is: Agree.									

Financial access was found to be statistically significant and positively related to Y ($\beta 1 = 0.508$).

Financial usage was found to be statistically significant but negatively related to Y ($\beta 2 = -1.501$).

Financial quality was found to be statistically significant and negatively related to Y ($\beta 3 = 0.593$, $P = .039$).

The above findings illustrate that there is a positive co-relation between financial inclusion, financial stability and financial regulation. In order to enable greater financial inclusion through the dimensions of quality, access and usage, the policy makers have endeavoured to set up policy objectives that have been constantly expanded to include more quality access to a wider range of financial services (Hannig & Jaansen, 2010). Moreover, the reaching the unbanked population is a major area of interest for policymakers, practitioners and academics and commercial banks.

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5.0 Conclusions and Recommendations

Conclusion

This paper has examined the relationship between financial regulation, financial stability and financial inclusion to examine whether they are mutually reinforcing, or whether there are substantial trade-offs between them.

The literature suggests that greater financial inclusion could be either positive or negative for financial stability and that greater financial regulation can be either positive or negative to financial stability.

Financial inclusion is an important aspect of development. Access to finance enhances the ability of people to engage in economical activities that lead to development. The study has reinforced this hypothesis and we can conclude that by increasing financial access, usage and quality we can increase economic development in Kenya and financial stability.

This study concludes that financial stability in Kenya has a strong positive relation with financial inclusion. The study further concludes that financial stability has a strong positive relationship with the quality usage and access in financial inclusion. The depth of the financial sector has generally promoted economic growth in Kenya. It was observed that well-functioning capital markets increases economic efficiency, investment and growth.

Recommendations

The relevance of financial inclusion in economic development cannot be over emphasized. Financial inclusion plays a vital role in development and it is important that the government recognizes the vital role played by financial inclusion and develops policies to encourage financial inclusion.

The government can also through its role in regulation create a regulatory framework that encourages financial inclusion.

Whilst analysing the influence of financial regulation on financial inclusion in Kenya, the data collected has focused on the supply-side of financial inclusion. This means that focus was placed on the providers of financial services. It is recommended that further research be conducted on the demand-side of financial inclusion. In essence, demand-side data surveys need to be conducted to provide more insight about users of financial services in order to understand their needs and the barriers they encounter when seeking formal financial services and products.

The data collected targeted a sample of the financial service providers within the banking industry. Though the information provided shed light on the research topic, it illustrated the need to conduct further research within the industry. It is recommended that data be gathered more frequently by the stakeholders as well as the financial regulators as a measure to understand the market dynamics and offer solutions to barriers that may be encountered when providing financial services.

In order to promote better policy making, a need arises to co-operate with international organisations such as the World Bank and the International Monetary Fund which encompass a broad range of financial inclusion data surveys including the Global Findex, the Global Partnership for Financial Inclusion (GPFI), Enterprise Surveys and Financial Access Survey data. The importance of utilising the data surveys in combination is that it enables the country develop legislation and policies that promote financial inclusion.

Policy makers around the world are agreeable on the fact that policies and legislations regarding financial inclusion need to be evidence-based. This draws attention to the fact that data plays a vital role in policymaking from design and implementation to monitoring and evaluation. Hence, the data should be objective, rigorous and reliable to enable policymakers identify and assess the state of financial inclusion in Kenya, establish the barriers affecting financial inclusion and draft policies that are effective and monitor the influence of such policies on financial inclusion. In order to ensure that data that is collected is useful, it is recommended that the standards set out by the Alliance for Financial Inclusion (AFI) Financial Inclusion Data Working Group (FIDWG) be adopted by policymakers. The principles set forth by FIDWG include usefulness and relevance of the indicators of financial inclusion, pragmatism, consistency in measurement and comparability of data, flexibility in assessing variations of the definitions of the indicators, balance of the data collected and aspiration to collect the data as it is defined.

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