STRATEGIC FACTORS AFFECTING COMPETITIVENESS OF PUBLIC

DEVELOPMENT FINANCE INSTITUTIONS IN KENYA

By

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TITLE

Strategic Factors Affecting Competitiveness of Public Development Finance Institutions (DFI's)

in Kenya

DECLARATION

I declare that this proposal is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author dully acknowledged.

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This research proposal has been submitted for examination with my approval as university supervisor.

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Dr. Edward Owino

ABSTRACT

After independence in 1963, Kenya government has consistently and continuously followed the world trend of ensuring development to the citizens. During 1960s and 1970s, development finance institutions (DFIs) proliferated around the world as financial intermediaries that aimed to improve social welfare. The Kenyan DFI's especially the public, were formed around 1960's. They were to act as catalysts to economic growth with clear cut mandates, targeting specific sectors of the economy. The Kenya Vision 2030, speaks of development by aiming to transform Kenya into a newly industrializing, middle-income country, providing a high quality of life to all citizens by year 2030 in a clean and secure environment. It envisages a cut out role of the financial sector which embeds the DFI's. Despite the government's support, little or bare minimum seem to have been achieved by the public DFI's. Coupled with the world desire through the United Nations call for sustainable financial development and need for governments to have sustainable approaches to budget financing for development projects, then there begs the question whether the DFI's have been competitive enough in the local and international space. By end of year 2017, the government issued a circular to the executives of the DFI's confirming the intention to consolidate the DFI's into one. Currently, the government's big talk is the big four agenda i.e., food security, healthcare, affordable housing and manufacturing that have now been allocated four hundred billion Kenya shillings in the 2018/2019 budget. The competitiveness of the public DFI's has never been to test than now. This paper seeks to study and evaluate the strategic factors that affect the competitiveness of Kenyan Public DFI's. The factors' effect on the performance of the institutions then remains a clear pointer to the institutions, government and other interested players in Kenya development agenda to respond appropriately emphasizing to deliver meaningful development that mass Kenyans have desired for many years while the mirage of better lives will be extinguished. Descriptive research design will be applied for this study. A census of seven public DFI's will be taken into consideration to examine panel data representing factors of competitiveness for ten years prior to year 2017 for each DFI. In descriptive statistics, the study will use mean, standard deviation and scatter plot. In inferential statistics, the study will use multivariate regression analysis to determine the relationship between the dependent variable (Competitiveness of DFI) and independent variables. The results of this study will be significant in reflecting how and whether long term plans that resonate to firm's structures and international practices, innovation, funding and the government's role in terms of policy helps the DFI's either to thrive or deflate. The initial expectation is that there is unutilized space for the Kenyan Public DFI's to fulfill their mandate more efficiently and effectively. The recommendations will zero in, up scaling efforts for Kenya DFI space to be competitive such as Industrial Development Corporation(IDC) of South Africa and others in developing and developed countries.

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DEDICATION

I would like to dedicate this project to my family, Judith my dear wife, Herbert, Lydia and Caleb (Kieti Junior) who have been of great inspiration to me. They prayed for me and believed in me that I had the capacity, skills and tolerance to achieve my goals in life through determination, commitment and above all their encouragement to achieve the objective of my study.

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TERMS AND DEFINITIONS

Development - is the broader long-term process by which a nation or a region improves the economic, political, and social services for the welfare of its residents resulting in increased quality of life. Economic development is measured by Human Development Index.

Economic growth – This refers to an increase in aggregate productivity of a given economy resulting in an increase in the capacity of the economy to produce goods and services, compared from one period to another. Economic growth is measured by Gross Domestic Product – which means an increase in the value of national output/national expenditure or by real national income. A higher economic growth is positively associated with a better quality of life.

Strategic planning - is a firm's way of defining its direction by identifying priorities, outcomes/results, actions, success criteria, risk mitigation mechanisms and resource allocation on those priorities to ensure that employees and other stakeholders are working towards common goals usually for a defined period.

Competitiveness – companies' ability to compete successfully on markets, nationally or internationally inspired by organizations sales and market share. It can also be taken to mean the level of production in a location or entity that drives the quality of life of that location or organization. This paper considers both definitions.

Project Financing - is the financing of long-term infrastructure, industrial projects and public services using a non-recourse or limited recourse structure off balance sheet. The debt and equity used to finance the project are paid back from the cash flow generated by the project. This is a loan structure that relies primarily on the project's cash flow for repayment, with the project's assets, rights and interests held as secondary collateral.

Public DFI's - are specialized development banks or subsidiaries majorly owned by national governments set up to support private sector development in developing countries. These institutions source their capital from national or international development funds or government guarantees. These institutions provide a crucial role in providing credit in the form of higher risk loans, equity positions and risk guarantee instruments to private sector investments in developing countries on very competitive terms.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

It is with great enthusiasm to know that, from the onset after independence in 1963, Kenya was upbeat for economic growth and development ready to build a resilient economy that would help bury the hatchets of colonialism. Within the finance sector, the need for Development Finance Institutions (DFI's) was eminent as a tool for the noble mandate. DFI's are model financial organizations whose primary mandate is to formulate and develop credit facilities aimed at funding diverse development programs (Demetriades & Hook Law, 2006; Gabriel, 2013; Nayyar, 2015). Credit products availed by the DFI's often advance finances purely aimed at implementing development programs. The DFI's have traditionally offered support for the economic growth of developing countries by crafting unique policies backed by strong financial base to support an array of economic activities (Nayyar, 2015).

The DFI's operations are guided and supported by global best practices in financial management, consistently integrating high level standards of accountability as the primary operational yardstick (Biswas, 2015).DFI's present a unique approach in funding the growth and development of strategic development projects. Primarily, development finance should be viewed as an alternative means of funding stand-alone, capital intensive projects (Africa, 2013). Project finance may be considered as credit to capital intensive projects that use future cash flows as collateral for the required loans (Culp and Forrester, 2010). Development finance is characterized by debt finance with low interest rates and loan repayments over long periods of time for firms financed in developing countries. To ensure sustainability through DFIs, development financiers seek strong returns from their investments (Glowacz, 2011). Strong

returns refer to a rate of return that is higher than a defined hurdle rate used to identify profitable opportunities. The use of development finance as a subset of project finance is sometimes used to fill deficits left by other avenues of finance. Evidently, project finance and subsequently funding development programs, requires the utilization of global best practices in facilitating the transfer of finances from the institutions to the development fronts (Barnard, 2016). Besides the strong backing of internal operational standards, in practice there should be consistent levels of operational efficiencies and strong support of accountability standards. Nayyar (2015) noted that, poor operational processes, lack of proper operational objectives and stability of internal organizational systems herald winding down of important DFI's. This demonstrates the need for the development finance programs to be anchored on long-term sustainable plans that are viable in supporting subsequent long-term operational framework.

Literature on financial organizational stability and long-term operational success has demonstrated the need for integration of stringent administrative strategies that buoy the prosperity of an organization (Barnard, 2016; Gabriel, 2013). This demonstrates that, any financial institution faces a task of integrating sufficient operational processes which are critical in the long-term existence of the organization. Even though, DFI's primary role is to support the growth of economic sectors through offering sustainable financial support, the disbursed finances eventually will need to be repaid (Onyango, 2009). This underscore the importance of integration of operational policies and programs that ensure the DFI's can accrue back all the finances issued out to support the development programs. Evidence from Biswas (2015) and Nayyar (2015) demonstrate the need for continued integration of operational policies that ensure the stability of the organization and the operational success. Primary success of a DFI is to offer substantial amount of finances that go about supporting the development programs, and subsequently ensure that these funds are successfully repaid in time (Demetriades &Hool Law, 2006). This means that, failure to successfully repay all the disbursed finances portends the likelihood of the organizational failure, which in this case the failure and the likelihood of collapse or operation of bare minimum for survival of the DFI's. Though defined severally, for this paper, A DFI is an institution which is majority owned by the government and that has an explicit legal mandate to foster economic and social development in a country, sector or target market, mainly by providing investment finance (Celice et al 2013).

1.1.1 An Overview of Strategic Factors

There exist numerous operational factors that are central to the effective administration and continued operational success of DFI's. Nayyar (2015) noted that, instituting a comprehensive operational framework, with clear coordination and controls was central to the long-term success of DFI's. Nayyar (2015) noted that, effective strategic planning was central to the success on the execution of administration processes. Planning is the process of establishing goals and choosing the means to achieve those goals (Stoner, 1996). Strategic planning, elaborates a detailed operational program highlighting processes an organization will undertake within a periodto achieve corporate goals. Biswas (2015) demonstrated an overarching process necessary in formulating operational plans for development financing. This underscores the importance of strategic planning in development finance, as a factor in creating financing plans formulated in line with both short term and long term corporate objectives for DFI's.

Past literature on financial studies has reinforced the importance of innovation as a strategy in enhancing organization competitive edge which is a critical factor in aiding organization survival in a volatile market. Gabriel (2013) and Gitman et al. (2015) explained that, financial innovativeness was central in the successful execution of the successful programs that are implemented by all types of financial institutions. Innovation helps in the creation of new ways through which products are deployed to the market in a cheaper and simpler way and subsequently achieve more satisfaction. Financial innovation can be embraced at any level by financial institutions, like the DFI's to assist them in achieving operational efficiency and subsequently assist in facilitating operational success.

DFI's operate in corporate environment, which is exposed to ferocious market factors such as competition, regulations and overall macro-economic dynamics and uncertainties. An organization's internal systems and processes that are defined in the organization culture wield significant effect in determining the likelihood of organizational success its procedures. The organizational culture forms the critical pillar in the organizational process such as the implementation of the operational processes (Lewis *et al.*, 2003). Organizational culture is vital in strategic implementation of administrative programs, as it lays the social framework that guides the processes which are executed during implementation of organizational programs (Nguyen, 2014). Organization culture, wields effect on the model of association between personnel across different levels within an organizational structure. This is important as it determines the mode of cooperation that exists between teams that are assigned important tasks within an organization, their cohesion and coordination. Organization culture is also critical considering that it determines the expectations of each individual member of a team which formthe DFI programs delivery teams that eventually determine the firm's competitiveness.

Evidence from global financial studies, has demonstrated the momentous effects of regulatory policies on the performance of financial sector (Baker, Bloom & Davis, 2016; Campiglio, 2016; Nguyen, 2014). Regulatory policies determine the limits in which organizations in anindustry can exercise their service obligations. In financial sector, regulations largely focus on the nature

of transactions and compliance to legal barriers that define such transactions (Campiglio, 2016). In addition, the structure and quality of regulatory policies can impact on the operational environment. Investors in financial industry will be enticed or deflated by the nature of regulatory policies (Baker *et al.*, 2016). Subsequently poor regulatory framework can portend disaster in a sector. This is supported by the melting of the global financial sector in 2008, attributed to bad policies that regulated the property market (Reinhart & Rogoff, 2008).

Funding is a critical component for better performance of the financial institutions, DFI's in this instance especially if the funding is diversified. It calls for innovative mobilization of new sources of finance for development, Gumede et al., (2011) in the process of intermediation. Through local and international self-drive towards the course to expand the sources of funds to ensures broader base of access to blended finance such as, pension, equity and guarantees, local bonds, diaspora remittances, allowing for dividend retention giving tax exemptions and scaling up transfers. This is only achieved when the firm realigns itself with international best practices and compliance to proven regulatory framework. Despite the presence of many factors, studies reviewed give prominence to the following four; long term strategic plans, innovations, funding and government policies.

1.1.2 Competitiveness of Development Finance Institutions

Competitiveness is fundamentally the most critical aspect of operational success in corporate sense (Fisman & Love, 2003). Evidence from Leign and Blakely (2016), Gereffi and Farnandez-Stark (2016) and Ogamba (2012) demonstrated that, competitiveness occupied the most critical factor that formed the basis of organizational survival in a highly competitive operational corporate environment. Traditionally, competitiveness is viewed as the ability of an organization to register progress and accrue value for their operations, such as successful realization of

operational objectiveness. Porter (2003) noted that the key for understanding the competitiveness is the source of national prosperity, i.e. productivity of an economy, measured by the value of its goods and services produced per unit of the nation's human, capital and national resources. Competitiveness of DFI's will therefore focus more on the efficiency of the institutions to the overall GDP with a view of fostering growth first from the organization.

Competitiveness in the perspective of cost-/market share is defined as a location's unit cost level, driving companies' ability to compete successfully on global markets (Krugman, 1994). The definition is significant for organizations that have the mandate to track and manage macroeconomic imbalances. It therefore concerns itself with locations such as of Countries and regions. It is worthy to note that locations do not go out of business due to the natural balance of give and take. Another definition of competitiveness concerns itself with productivity. It is therefore taken as a location's productivity level, driving the standard of living the individuals in that location can sustain (Porter, 1990; Porter, 2000; Delgado et al., 2013). The National Competitiveness Council of Ireland defines competitiveness as 'the ability of firms to compete in markets. Therefore, the competitiveness of a nation would provide the citizens with opportunities to improve their living standards and quality of life (Ketels, 2016). This means a Firm's ability to compete at high levels of production creates jobs that ensure increased income thereby raising the standards of living and the quality of life of the citizens.

This study concerns itself with the competitiveness of DFIs in Kenya at various aspects for realization of their institutional targets that influence the country's development agenda highly envisaged in the vision 2030 (Government of Kenya, 2007) and in cognizance of the global roll out by the United Nations during 2015 for sustainable development under the Sustainable Development Goal number one of the seventeen goals, that is eradication of poverty. The DFI's

exist as financial agencies that extend equity and capital financing for development programs. This financing process concludes at the point where the disbursed funds are fully repaid to the DFI's. In every DFI, there exist factors, that are critical to successful accomplishment of the financing process and the subsequent repayments which include and not limited to; accountability, tracking, operational capacity and efficiency in the execution of development programs. The core of Kenya's DFI's is economic development through sustained social transformation that accrue from efforts geared to long term financing and investment in development projects.

1.1.3 Development Finance Institutions(DFI's) in Kenya

In a resolution of the general assembly for United Nations (UN) on 8th December 2014, the member states affirmed and supported the adoption of the sustainable development goals (GA, 2014). Goal number one of the seventeen goals is eradication of poverty in all its form. The finance sector is identified as a key player of fighting the fag of poverty.Despite the existence of several development agencies in Kenya, the sevenpublicdevelopment finance institutions (DFI's) include; Agricultural Development Corporation (ADC), Agricultural Finance Corporation (AFC), Development Bank of Kenya (DBK) (Formerly Development Finance Company of Kenya (DFCK), IDB Capital Limited (Formerly Industrial Development Bank Limited), Industrial and Commercial Development Corporation (KTDC) now the Tourism Finance Corporation (TFC).Other DFI's include such as Shelter Afrique (Kenya), a pan Africa DFI that has its head quarter in Nairobi Kenya which also plays a major role in development financing though not considered in this paper. The Kenya government established majority of DFIs between 1954 and 1973 with the objective of providing long-term finance for economic

development (Awuondo, 2013). The DBK is one of the Kenya's premier DFIs born in 1963. It commenced operations as a DFI in 1964, making it a highly experienced organization, having offered development financing for close to four decades (KDB, 2017). Today, the institution is the biggest public DFI, estimated to have a market capitalization of about Keya Shillings, eighteen billion and continues to offer diverse development financing services.

During the early 1990's some DFI's were converted into commercial banks with an aim of making them more efficient in delivering their mandate in deepening the financial sector in the Kenya economy space. In the early 2000's, the same DFI's were converted back to their original DFI status due to their inability to operate as full commercial financial institutions except the KDB. The reasons for that was incompliance to the then existing financial sector regulations that saw the DFI's wanting in terms of undercapitalization, lending limits, excess foreign exposure, high non-performing loans, high concentration of risks of the top fifty borrowers and other inconsistencies with the Kenya Banking Act of 2000. Later during the year 2006, the government mooted a commission under the ministry of Finance to examine the Kenyan DFI's and report on the extent of delivery of the roles vested on them in terms of creating jobs in a progressive manner, deepening of the financial sector, helping to boost the targeted economic sector key areas such as Agribusiness, leather and textile industries. In year 2013, a report by the ''presidential taskforce on parastatal reforms'' recommended for consolidation of financial sector regulators for addressing and monitoring systemic financial stability (Awuondo, 2013).

The governor of the Central Bankin Kenya submitted to the 2013 Annual Association of African Development Finance Institutions Forum that, 'It is only through concerted efforts of all financial sector players that a vibrant and globally competitive financial sector can be created''. (Kenya, 2013). The Kenya Vision 2030 recognizes the significance of DFI's for Kenya's

development agenda. The vision 2030 is Government of Kenya long term development blueprint aimed at; transforming Kenya into "a newly industrializing, middle income country providing a high quality of life to all its citizens in a clean and secure environment" by 2030 (cite vision 2030). The role of the Financial Sector in the Vision 2030 is to "Create a vibrant and globally competitive financial sector, promoting high level of savings and financing Kenya's investment needs". DFI's as part of the Financial Sector are expected to contribute towards financial access especially long term financing and investment goals towards targeted economic sectors such as Agriculture, textile and manufacturing industries to help in national development.

1.2 Statement of the Problem

One of the roles of DFI's is to be catalysts for reduction of poverty in a country or region. As per the World Bank (2000), poverty is a lack of power to command resources. In Kenya, the institutions' participation in carrying out that duty has been put into question for a long time due to the discouraging poverty index as,more than 60% of people in Kenya live below the poverty line (Mohajan, 2013). The Kenya government has not reaped the maximum benefits of investing in the institutions and as such denying the public the benefits of development. The bidirectional support of the DFI's and the government to foster economic development has not been optimized to benefit the common man. The insufficiency of infrastructure in Kenya is glaring while the rate of unemployment has been increasing every year and the poverty index remaining very low after more than fifty years after independence. Having been in operation for nearly four decades, the seven-majorstate DFI's in Kenya are by now expected to have delivered substantially on the areas of development and economic growth.Massa (2011) while citing a study by Yaron (2005), noted that the performance of the state-owned DFI's recorded disappointing performance in offering alternative financial services, considering the immense potential they have. A report by Te Velde and Warner (2007) concentrated on the use of subsidies by DFIs in the private infrastructure sector. They discovered shortcomings, such as the lack of risk taking by DFIs relative to their high liquidityprior to the year 2008 world financial crisisand as well as a lack of transparency in DFIs' operations, in particular the use of technical assistance.Francisco et al. (2008) used a causal quantitative model, to examine the relationship between dependence and output index of DFI's in Honduras and Guatemala. The study demonstrated thatby integrating the subsidy dependence index with the output index is a better way to measure the performance and achievement of social objectives of DFIs. However, this was also found to be insufficient to show the strategic factors of competitiveness of the institutions.

In a statement before the house, foreign affairs committee subcommittee on Asia and the Pacific on development finance in Asia, highlighted that DFIs are not a solution to all their challenges in Asia (Runde, 2017). The European Investment Bank (EIB) (2013) also finds that African countries are constrained by inadequate financing for project preparation and implementation. (Leigland, 2010) reports that the available funding for project preparation activities in Africa is only a fraction of what it needs to be. This means that even in Asia, Development Finance Institutions are supposed to do more than they are doing in the moment, to play the catalytic role of creating jobs, raising shared economic growth and enabling pro-poor expansion of infrastructure as the hallmark of development. Affordable financing is expected to fuel the growth of sustainable businesses that promote climate resilience, a role being played by EBAFOSA, facilitating partnerships between financiers such as DFI's and actors to develop risk sharing facilities targeted at de-risking lending to the catalytic area Munang (2018). This creates the harmony that enables development when the risk sharing provides money to minimize loan defaults, reducing the cost of capital while incentivizing the private sector players who in return

create sustainable jobs along the supply chain. The devolution of services away from the urban cities help to catapult development that even helps to heal social economic inequalities and under development.

Waiyaki (2016) used auto-regression distributed log model to make an overall examination of financial development, economic growth and poverty in Kenya. The study determined that, incorporating efficiency and quality aspects in credit financing programs, contributed to positive economic growth and reduction of poverty. A study by Githua(2015), adopted census approach in gathering data on the role of DFI's in the Kenyan real estate sector. The study scrutinized, lending policies, development constraints and financing alternatives. The study found a strong effect in adequacy of fiscal policies, professionalization of development teams and determination of cost effectiveness in alternative development financing as critical components of development financing sector. From the earlier mentioned studies and others reviewed in the same area, there has been no reference to the critical DFI drivers such as efficient developments of strategic plansinnovations and or even sufficient access to diversified funding leading to a knowledge gap worth investigating. These vital factors that influence DFI are also primarily determinants of DFI survival and overall importance in economic development. This creates a need to investigate the fundamental factors that determine the competitiveness of Development Finance Institutions.

1.3 Research Objectives

The general research objective will be to determine the strategic factors that affect the competitiveness of public DFI's.

1.3.1 The specific objectives will be: -

To determine the effect of long term strategic planning on competitiveness of public
 DFI's in Kenya

- ii. To evaluate the effect of innovation on competitiveness of public DFI's in Kenya
- iii. To ascertain the effect of funding on competitiveness of public DFI's in Kenya
- To determine the effect of government policy on competitiveness of public DFI's in Kenya

1.4 Research Questions

- i. What is the effect of long term strategic planning on competitiveness of public DFI's
- ii. What is the effect of innovations on competitiveness of public DFI's
- iii. What is the effect of funding on competitiveness of public DFI's
- iv. What is the effect of government policy on competitiveness of public DFI's

1.4.1 Hypothesis

In line with the specific objectives, the study has the below hypothesis: -

H₀₁:Long Term Strategic Plans have no significant effect on competitiveness of DFI's

H₀₂: Innovations have no significant effect on competitiveness of DFI's

H₀₃: Funding has no positive effect on competitiveness of DFI's

H₀₄: Government policies have no significant effect on competitiveness of DFI's

1.5 Significance of the Study

The Government of Kenya will be able to access more knowledge on how best to support the DFI's for the overdue optimum performance of DFI's especially the state-owned. The individual DFI's will also have a chance to reflect on their roles and how best they can strategically position themselves for competitiveness. The investors will have an ideal opportunity to make informed decision and access more information on the available opportunities that exist within operations of DFI's in Kenya. Last but not the least, the researchers will find additional information to the already existing body of knowledge concerning DFI's.

1.6 Delimitations of the Study

Panel data of the seven state DFI's in Kenyan will be captured from the DFI's web sites and that of the auditor general, the Kenya Bureau of Statistics, Central Bank of Kenya repository and Public Accounts Library with an aim of identifying the strategic factors of competitiveness of DFI's for this study. It will be carried out in Nairobi County in Kenya. The effects of strategic plans, innovation and access to diversified funding of DFI's will be examined and will require time and budget, a current challenge.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

It is in this Chapter that we find a summary of information from existing literature on the selected factors of competitiveness with a view of gaining more insight on the topic of study. The chapter begins with reviews of various theories on long term strategic plans, innovation and diversified funding and competitiveness followed by empirical studies both globally, internationally and locally conducted on DFI's. The knowledge gap and the conceptual framework are also included in this chapter.

2.2 Theoretical Framework

This section covers the theoretical underpinnings of the study and specifically the Goal Setting, Diffusion of Innovation, Financial Fragility and Crisis and Resource-Based theories and Competitive Forces Model. In addition, the chapter provides the previous studies that have been conducted on factors of organizational competitiveness.

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2.2.1 The Goal Setting Theory

The goal setting theory was pitched in 1968 by an American Psychologist Edwin Locke (Chemjor, 2015). The goal setting theory is based on numerous guiding virtues, notably; clarity, challenge, commitment, feedback and task complexity. The theory began with the early work on levels of aspiration developed by Kurt Lewin and has since been primarily developed by Dr. Edwin Locke, who began goal setting research in the 1960's. The research revealed an inductive relationship between goal setting and improved organizational performance. A goal is the aim of an action or task that a person consciously desires to achieve or obtain (Locke & Latham, 2006). Goal setting involves the conscious process of establishing levels of performance to obtain desirable outcomes. This goal setting theory simply states that the source of motivation is the desire and intention to reach a goal (Chemjor, 2015). If individuals or teams find that their current performance is not achieving desired goals, they typically become motivated to increase effort or change their strategy (Locke & Latham, 2006).

Submissions by Chemjor (2015) support the goals setting theory prospect of encouraging individual goals by organizational employees which play an important role in motivating its superior performance. This is because the stakeholders keep following their goals. If these goals are not achieved, they either improve their performance or modify the goals and make them more realistic. In case the performance improves it will result in achievement of the performance management system aims (Salaman *et al.*, 2005). The theory is applicable across corporate environment considering that the least unit function of any business organization is anchored on certain list of objectives. Operational objectives form primary goals that define all operational strategies that are adopted by an organization. Goal setting approach enhances organizational drive towards the realization of operational targets.

The goal setting approach is sufficiently valid in explaining the capability of DFI's setting both long term and short term goals and determining the effective mechanisms of going about realizing these goals. Reliable, specific and clear goals can contribute to greater output and better performance. Unambiguous, measurable and clear goals accompanied by a deadline for completion avoids misunderstanding (Shahin & Mahbod, 2007). The DFI's operate with clear strategic guidelines following certain operational plans that are determined by the intended outcomes and goals. The strategic plans could be short, medium or long. Any DFI is well positioned in leveraging on the goal setting theory as the primary mechanism and guiding principles in setting long term and short term strategies that can contribute in building sustained levels of operational competitiveness in the effort to fulfill the noble mandate enshrined in what it takes to be a DFI, i.e. an institution which is majority owned by the government and that has an explicit legal mandate to foster economic and social development in a country, sector or target market, mainly by providing investment finance (Celice et al., 2013).

2.2.2 Diffusion of Innovation Theory

The research of innovation diffusion can be traced back to Schumpeter who created innovative theory in the early 20th century, and he studied the "imitation" behavior between individuals (Ying-Li & Sui, 2011). The Diffusion of Innovation (DoI) theory was popularized by Everret Rodgers in 1995 while exploring on the impact of innovation when harnessed effectively on the context of relative advantage, compatibility, complexity, trialability, and observability. The theory is concerned with the way a new technological idea, artifact or technique, or a new use of an old one, migrates from creation to use. Rogers (2003) explained that diffusion of innovation centers about acceptance and distribution of innovative solutions across a defined scope. Per

Carter and Belanger (2005) technological innovation is communicated through specific channels, over time, among the members of a social system.

Per Ali (2016) the diffusion of innovation theory offers the contextual grounding in addressing the acceptance of new technologies by the intended community. The definition of intended community refers to the people who are targeted by the new technological innovations. Carter and Belanger (2005) postulates that, people only accept and embrace new innovations, when they are satisfied with aspects of system integrity and trustfulness. Innovation on its basic understanding is pursuant of initiatives aimed at introducing new solutions which improve operations of the already existing systems (Lee *et al.*, 2011). This indicates that, innovation is intended to offer solutions that are beneficial to the consumers or customers who make up the targeted beneficiaries of the innovation.

This study seeks to scrutinize the competitiveness of DFI's by examining the fundamental factors that contribute to building the competitive prospects of corporate organizations. The diffusion of innovation theory describes that the measure of innovation success is the ability of the innovation to be accepted by the intended users (Ahmer, 2013). The DFI's operate in a hugely complex sector within a volatile business environment, which is continuously graced with new innovations and solutions aimed at enhancing financial services. This reality means that, players in the financial sector are well placed to embrace technological innovations in effort to enhance accessibility to financial services. PerChigona and Licker (2008) the acceptance of new innovations is only possible when the intended beneficiaries understand these innovations. DFI's are well placed in spearheading financial services delivery supported by substantial investments in innovative solutions to enhance operational competitiveness.

2.2.3 Theory of Financial Fragility and Crisis

The concept of financial fragility is traced to the work of Fischer (1933) and Keynes (1936). Both the economists submitted that the debt financing of investment can have destabilizing effects in an economy. The work of the two scholars was informed by the occurrence of the great depression and bank panics of 1930's. Later, Minsky (1977) advanced the theory by asserting that modern capitalists are inherently fragile because of their heavy reliance of debt to finance investments. Existing literature confirm that the main role of DFI's is to avail long term credit for financing development programmers (Demetriades & Hook Law, 2006). Therefore, the state of environment within which the firm operates is vital.

The Great Depression, like most other periods of severe unemployment, was produced by government mismanagement rather than by any inherent instability of the private economy. (Friedman, 1962). Two features are significant in the model of fragility, the economic environment must drive the agents to take actions that forge linkages between their financial positions and the position of others, and the environment must drive agents into actions that break those links either completely or to some extent. The breakage of the links leads to a financial crisis and that is what the model explains. Badhuri (2010) posed that, fragility has its root in economic prosperity that ultimately paves the way to a financial meltdown. He continued to say, '' the collapse of confidence takes place from within rather than without a 'fragile' financial sector itself. Its interlocked asset structure and resulting illiquidity becomes increasingly incapable of coping with sudden requirements of liquidity due to default.''

It is almost automatic that during such financial crisis like the case of 2008, Governments will not have enough cash to finance DFI's. The cut down on funding for the DFI's will worsen the

ability of the same institutions to extent the highly needed credit and consequently stifle the development agenda with adverse effect on the firm's capacity to deliver on their mandate.

2.2.4 Resource Based View Theory

The resource based view came to fore in the early 90's after the successful firm management evaluation study by Jay Barney, who examined mechanisms which firms could leverage on its resources to build on competitive edge. According to Barney (2001), the Resource based approach in developing organizational capacity was a critical factor that enhanced the organizational ability to survive in a hugely competitive market. The Resource Based View (RBV) gave birth to the Resource based Theory which has become central in evaluating firm capacity and resource management towards building competitiveness (Armstrong & Taylor, 2014).

The RBV theory highlights the organizational resources that create the valuable factor enabling the business organization to continue attracting new investments and growing transactions. According to Terziovski (2010), organizational strategies contribute significantly in determining the utilization and distribution of organizational resources in relation to facilitating organizational business operations. The RBV theory identifies firm resources as both tangible and intangible. Ray, Barney and Muhanna (2004) submitted that all organizational resources contribute substantially to the overall organizational competitiveness. Per West (2012), a business entity or organization is likely to achieve operational success through optimizing on the effective use and application of organizational resources.

All corporate organizations aspire to achieve growth through tapping into best operational resources and implementing comprehensive strategies to enable organization achieve its primary

mandate and objectives (Rosemann & Vom Brocke, 2015). The RBV theory posit that, all organizational resources possess competitive factor, hence vital in enabling execution of organizational processes that are aimed towards the realization of operational objectives. Ray *et al.*, (2004) argue that, efficient utilization of existing organizational resources is the commencement phase towards achieving competitiveness and corporate growth.

The RBV theory is compatible with discussion on organizational competitiveness which is the focus of this paper. The primary role of DFI's is to offer financial services to businesses to spur economic growth. This means that a substantial pool of financial resources must exist to enable the DFI's to undertake their operations. Management of financial resources requires integration of comprehensive accounting systems supported by competent, skilled and well trained support team (McKinney, 2015). The DFI's capacity to execute her operations is largely subject to its financial base and the funds at its disposal. The RBV theory, effectively address the fund management component of DFI's. Vahlne and Johanson (2017) postulated that globally acceptable standards for financial management are requisite aspects for effective financial management. The DFI's capacity to identify, measure, consolidate and recognize her financial resources consequently promulgate workable strategies is vital to the realization of corporate objectives. Therefore, assessing the existence and operationalization of long term strategies of any DFI is a key pointer to the competitiveness of the institution and this will be done in this study.

2.3 Empirical Review

Several studies have been carried out touching organizational strategies, innovations, funding in DFI's and the role of government policies on financial institutions and the literature is presented in below. The methodologies and findings are included for the studies selected.

2.3.1 Long Term Strategic Plans and Competitiveness of DFI's

Implementation of long term organizational strategies forms one of the most important administrative undertakings whose outcome wields significant implication on the overall standing and performance of the organization (Ogunmokun, Hopper, &McClymont, 2005). Long term strategic planning is regarded as the most complex organizational undertaking that occupies the highest levels of prioritization in that it determines the approach an organization takes to fulfill its primary operational goals (Li, Gouhui&Eppler, 2010; Sage, 2015). Evidently, strategic implementation refers to the process rather than the plan, so it is a phase in which, strategic organizational plans or programs are put in action. This means that, at the end of any organizational process, the results that will be accrued shall bear the hallmark of the processes that were consolidated towards implementation of the process (Barnat, 2012).

The scope of long term strategic plan is wide, considering that it incorporates numerous organizational components, which are critical in the implementation of organizational processes (Mwangi, 2016). Long term strategic plan is a zero-sum game, which means that its outcome is either a success or a failure. To effectively implement a strategy to its conclusion, all the strategic implementation fundamentals must be met in earnest and valued coherently. Li *et al* (2010) identified the long term strategic plan implementation fundamentals as the underlying driving factors that are central to the effective execution of an operational strategy. Primary strategic implementation factors that are critical to any organizational strategic process include; the organizational structure, the organizational leadership the communication structure and the organizational resources (Ogunmokun*et al.*, 2005).

The organizational culture forms the critical pillar in the organizational process such as the implementation of the operational processes (David, 2003). Organizational culture is vital in

strategic implementation as it lays the social framework that guides the processes which are executed during implementation of organizational programs (Sage, 2015). Organization culture, wields effect on the model of association between personnel across different levels within an organizational structure. This is important as it determines the mode of cooperation that exists between teams that are assigned important tasks within an organization. Organization culture is also critical considering that it determines the expectations of each individual member of a team which form the strategy implementation taskforce.

Existing perspectives on the role of strategic management in the successful implementation of long term strategic plans have identified the importance of organizational culture in the strategy formulation stage (Mwangi, 2016). Before commencement of the task execution in the strategy implementation stage, there is need for an overarching comprehensive strategy formulation activity that will put together, solid plan that will guide the project execution (Hrebiniak, 2006). Organization culture has the potential of influencing the strategy formulation process, considering its effect on the habits and behaviors of the personnel who take the leading role in the project formulation. Speculand (2009) was critical of the strategy formulation stage as one of the most vital processes whose outcome was subject to the design of the organizational culture. The influence of organization culture on strategy formulation confers huge impact on the levels of overall organizational preparedness towards the actual long term strategic plan implementation process.

The level of coordination and flow of information across different levels of an organization forms an important factor during the implementation of organizational programs (Jooste &Fourie, 2009). The flow of information, whether vertical or horizontal, reflects an

organization's communication structure which is the primary format that defines how any kind of information is distributed within the organization. Strategy implementation requires clear communication across the organization on the intricacies of the new strategy or initiative that is in scheduled to be implemented within an organization (Barnat, 2012). The organization leadership should be tasked with the responsibility of ensuring that, all the organizations internal stakeholders, including the staff and the shareholders, have a clear understanding of what the new strategy is about. Through communication, employees will be informed of their roles in the implementation of the new strategy.

Sage (2015) highlighted the importance of a clear communication process in the strategic implementation of the organizational operations, expressing the need for effective communication of instructions to all the organization personnel who will take part in the strategy implementation. In addition, information exchange should be prioritized in strategy implementation, as the teams who will be executing different tasks during strategy implementation need to coordinate amongst each other, to operate concurrently (Ogunmokun*et al*, 2005). Organization management should put in place clear feedback channels, that employees can seek clarifications on certain areas of their tasks and responsibilities during the course of strategy implementation (Mwangi, 2016). Communication channels are not only responsible for the facilitation of the exchange and sharing of information but also influences the perceptions of the employees on their roles within the organization. This influences the employees understanding of the expectations for their contribution in the long term strategic plan implementation which can potentially enhance employee commitment towards implementation success (Hrebiniak, 2006).

Effective implementation of a Long term strategic plan is subject to the distribution and the availability of resources that are necessary to the implementation of the desired course of actions (Musuva, 2013). An array of input resources that are necessary for the effective strategy implementation could encompass aspects such as the financial resources, human capital and equipment. These resources are needed to push the process of long term strategic plan implementation. Human capital resources include the particular team that will be at the forefront in the implementation of the new operational strategy (Li *et al*, 2010). Financial resources on the other hand are vital as will enhance the organizations capacity to meet the expenses that will be incurred in the process of strategic implementation (Okwachi, Gakure&Rugui, 2013). In addition, strategic implementation may require a unique set of special resources that will support the organization to successfully embrace the change. For instance, an organization may seek to implement a new marketing plan, which may require specific tools like digital installations which will require financial resources to purchase and will need to train the employees to fit into the requirements of the new operational framework.

In Githua (2015), a census was conducted for Shelter Afrique's Kenya clients and the information collected through questionnaires found out that, long term lending is a risky undertaking due to the uncertainties revolving around that business and that the Firm under study did not concentrate on the areas of her comparative advantage but rather focused to compete with the banking institutions which is not tenable. It therefore turns out that the study didn't concentrate on the key drivers of competitiveness which are embedded in any firm's strategic plan. It then becomes essential to examine the DFI's long term plans to address this gap, hence the below hypothesis was proposed.

H₀₁: Long Term Strategic Plans have no significant effect on Competitiveness of DFI's

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2.3.2 Innovations and Competitiveness of DFI's

Financial services all over the world have undergone through various innovation cycles which have occupied the major area in the management of the organization (Agénor, Canuto & Jelenic, 2014). Hence, most companies which offer financial services have embraced innovation to improve performance, and to have a competitive advantage compared to other firms in the same industry (Ilyina&Samaniego, 2011). Using a direct measure of financial constraints faced by French firms, Savignac (2008) estimated simultaneously the probability to have innovative activities and the probability to face financial constraints. She also accounted for the endogeneity of the financial constraint variable, by relating it to firms' ex ante financing structure and economic performance. She found that financial constraints significantly reduced the likelihood of firms engaging in innovative activities. Similarly, Efthyvoulou and Vahter (2012) found that lack of appropriate sources of finance is an important hampering factor to innovation performance across European countries, whereas Hottenrott and Peters (2012) found that external financial constraints are more binding for R&D and innovation activities of small firms.

Ndung'u et al (2016) studied Competitive Business Strategies on Financial Performance of Commercial Banks in Kenya and focused their study on Equity Bank Limited. It was conducted at the wake of stiff competition that had emerged specifically in the financial sector during that time due to the increased use of technology on banking systems. Customer's awareness on the availability of choice of services across banks had worsened the competition, though most of the commercial banks had continued to post increased performance in terms of profitability. In this study, data was collected through questionnaire and later analyzed using content analysis and descriptive statistics. The findings indicated that differentiation, focus, cost leadership, organizational capabilities and innovation have a significant positive effect on financial performance of commercial banks. This

supports the argument for innovations in any industry, as depicted by Grundiche (2014), that innovation has enabled firms to compete effectively in an environment which is dynamic and volatile hence facilitating competitive business environment which enables the company to achieve set goals and targets in terms of revenues, sales volume, profitability, high market share and development of products which satisfy customer needs. It therefore doesn't matter whether a public financial institution such as DFI's of otherwise, the principles will apply. This was supported by a study on determinants of financial stability among commercial banks in Kenya that established that to improve their performance, commercial banks had to implore innovations among other internal factors (Githinji 2016). In that line the following hypothesis was proposed,H₀₂: Innovations have no significant effect on competitiveness of DFI's

2.3.3 Funding and Competitiveness of DFI's

Funding in terms of subsidy provision or otherwise depends on the institutions relationship with the government, for public DFI's, they are government agents. The enabling environment is important for efficiency (De la Torre 2005). Gerschenkron (1962) advocated and defended government's ownership of banks as part of a wider public ownership of strategic sector such as agriculture and manufacturing. This is usually achieved through concessionary financing and low interest guaranteeing of investments. De la Torre (2005) also defended the government's role in reducing the problem of access.

Te Velde and Warner (2007) suggest that one of the rationales for DFI involvement stems from their endeavor to act as catalysts, helping companies implement investment plans and providing risk mitigation that enables investors to proceed with plans they might otherwise abandon, given their perceptions of risk, which are particularly high in sectors with large sunk costs. This encourages the government to stay a policy to keep financing the DFI's even when they reflect dismal performance. Therefore, the following hypothesis was proposed;

H₀₃: Funding has no positive effect on competitiveness of DFI's

2.3.4 Moderating Role of Government Policy on Competitiveness of DFI's

A census survey of public DFI's in Kenya confirmed the presence of competition from International DFI's and local financial institutions. It also cited government policies and bilateral bodies have impacted negatively on the success of the companies that were examined then Njirithia (2007). Absent in the study was the focus to determine the place of government polies on the success of DFI's, a paramount factor, that opens the chance for the current study to deliberately check on the effect of government policies on the DFI's. At the contrary, the study by Massa et al (2011), suggest that investment by multilateral DFIs plays a positive and significant role in fostering economic growth in recipient countries and that their impact is stronger in lower-income countries than in higher-income countries. Massa proceeded to foster that, "Multilateral DFIs' investments in the infrastructure, industry and agribusiness sectors play the biggest role in fostering economic growth: lower-income countries benefit mainly from investments directed to the agribusiness and infrastructure sectors, whereas higher-income countries take advantage mostly of investments in the infrastructure and industry sectors" (Massa et al 2011). Policy harmonization with international bodies then becomes the missing link to diffuse the competition of the same while kicking in the competitiveness of the DFI's.

Onyango (2009) carried out a case study to determine impact of restructuring on performance of Industrial & Commercial Development Corporation (ICDC) where the results showed an improvement in performance of the organization due to restructuring which is an aspect of policy. Increased competitiveness has something to do with efficient structures of governance and quality of Firm's assets regardless of whether human resource or otherwise. Since CDCD is a Kenyan DFI, it shed a positive light if at all the government could come up with policies and frameworks to help DFI's reforms in Kenya. In support of this, the government should come up with enabling environment to assist the financial institutions, who are helping the same government to achieve their mandate. The enabling environment includes enhancing creditor and shareholder rights, upgrading prudential regulation, modernizing accounting practices, and promoting more reliable systems of information on debtors (De la Torre 2005). There is then the need to investigate the gap of efficient government policies and regulations which affect the level of subsidies and accumulation of wealth through favorable returns by DFI's, hence this study hypothesized

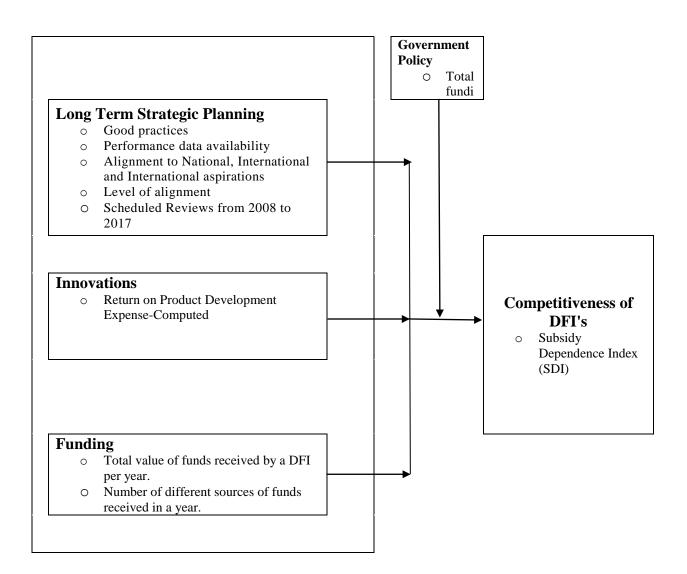
H₀₄: Government policies have no significant effect on competitiveness of DFI's was proposed

2.4 Conceptual Framework

The conceptual framework figure 2.1 below represents one dependent i.e. Competitiveness of Development Finance Institutions and three independent variables i.e., the factors that affect competitiveness of DFI's represented by, long term strategic planning, innovations and funding, together with a moderating variable-government policy.

Figure 2.1: Conceptual Model

Independent VariablesModerating Variable Dependent Variable



Source – Author's (2018)

2.5 Operationalization of the Study Variables

Re	search Objectives	Type of Variable and Variable Description	Indicators	Measurement of Indicators	Data Collection Method	Type of Scale	Type of Analysis	Level of Analysis
1.	To determine the effect of long term strategic planning on competitiveness of DFI's in Kenya	Independent Variable Long term strategic planning	Strategic plan Vision Mission Core values Implementation plan, Strategy review scores	Strategic plan document Good practices Performance data availability Alignment to National, International and International aspirations Scheduled Reviews between 2008 and 2017	Data collection sheet Document Examination Document examination guide	Nominal scale	Qualitative	Descriptive and inferential statistics
2.	To evaluate the effect of innovation on competitiveness of DFI's in Kenya	Independent Variable Innovation	Return on Product Development Expense i.e., (RoPDE) – Use the formula.	Audited Financial Statements: - (Notes to the Financial statements).	Data collection sheet Document examination guide	Interval scale	Quantitative	Descriptive and inferential statistics
3.	To ascertain the effect of funding on competitiveness of DFI's in Kenya	Independent Variable Funding	Total value of funds received by a DFI per year. Number of different sources of funds received in a year.	Audited Financial Statements; - (Notes to the Financial statements).	Data collection sheet Document Examination Document examination guide	Nominal scale	Quantitative	Descriptive and inferential statistics
4.	To determine the effect of government policy on competitiveness of DFI's in Kenya	Independent Variable Government policy	Amount of government spending on a given DFI as a percentage of total Gross Domestic Product (GDP) in a year.	Organization annual reports	Data collection sheet Document Examination Document examination guide	Nominal scale	Quantitative	Descriptive and inferential statistics

5. Competitiveness of Kenyan DFI's	Dependent Variable	SDI	Audited Financial Statements: - Comprehensive Income Statement Balance Sheet	Data collection sheet Document Examination Document examination guide	Nominal scale	Quantitative	Descriptive and inferential statistics

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section describes the methods, techniques and strategies that were used to address the research problem. It provides information on the research design that will be employed in the study, the population of the study, data collection technique and concludes with data analysis technique that will be used.

3.2 Research Design

A research design is a plan, structure and strategy of investigation so conceived as to obtainanswers to research questions or problems. Burns and Grove (2001:223) state that designing a study helps researchers to plan and implement the study in a way that will help them obtain the intended results, thus increasing the chances of obtaining information that could be associated with the real situation. The plan is the complete scheme or programme of the research. It includes an outline of what the investigator will do from writing the hypotheses and their operational implications to the final analysis of data (Kerlinger, 1986). Various designs exist and are applicable depending on the type of research. Descriptive research design will be applied for this study. Descriptive research design is systematic, empirical design in which the researcher does not have direct control of the independent variable as their manifestation has already occurred or because they inherently cannot be manipulated (Mugenda&Mugenda, 2008). This will be applicable since it is seeking to examine the performance or competitiveness of the Kenyan DFI's over ten years for seven public DFI's. The period under examination will be since beginning of year 2008 up to end of year 2017.

3.3 Target Population

A population is a complete census of all items or people in a research's area of study (Mugenda&Mugenda, 1999). The entire collection of 'things' in which we are interested in is referred to as population Hyndman (2008). The target population in this study will be all the seven public DFI Institutions in Kenya, which comprises of the list identified by the Kenya Institute for Public Policy Research and Analysis (KIPPRA). Due to the small number of the target population, sampling will not be conducted and so the study will be a census. The same is available in Appendix III. Seven public DFI's observed over ten years.

3.4 Data Collection

The study will rely on secondary data which will be collected using data collection sheet marked Appendix II. The secondary data will be obtained from the seven DFI's published annual financial reports for the period between January 2007 and December 2017 and strategic plans within that period. The reports and documents will be obtained from the firms' published annual reports, Central Bank of Kenya (CBK), office of the Auditor General, the Kenya Treasury and KIPPRA website. The result will be annual information detailing the dependent variable and independent variables for the 7 DFIs in Kenya.

The specific data to be collected include; value of total turnover/income, value of Value of costs per their categories, total profit before tax, value of total assets, value of total deposits, value of total share capital and equity. Other documents to be examined include chairman's reports and strategic plans. The data will be keyed in a data collection sheet for analysis.

3.5 Data Analysis and Processing

Data analysis consists of examining, categorizing, tabulating or otherwise recombining the evidence to address the initial propositions of a study (Yin, 1994). Normally the data collected in a study is usually extensive therefore the answers to the study questions must be satisfied through a deliberate organization of the data with an aim of extracting relevant and reliable information. The collected data will be sorted, classified, coded and then tabulated for easy analysis. Collected data will be analyzed using both the descriptive and the inferential statistics. SPSS computer package version 22 will be used as an aid in the analysis. In descriptive statistics, the study will use mean, standard deviation and scatter plot. In inferential statistics, the study will use multivariate regression analysis to determine the relationship between the dependent variable (Competitiveness of DFI) and independent variables: long term strategic plans, innovations, funding and government policy. The regression model below will be employed: -

 $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon.$

Where: -

Y = Competitiveness of DFI

 α = y intercept of the regression equation.

 β_1 , β_2 , β_3 , β_4 , = are the slope of the regression

- X_1 = Long term strategic plans
- $X_2 = Innovations$
- $X_3 = Funding$

 $X_4 =$ Government policy

 ϵ =error term

3.5.1 Measurement of the Independent Variables

In this study, the independent variables are the impetus of competitiveness of DFI's and vice versa. X_1 = Long term strategic planning.(Njirithia, 2007) determined that all the seven public DFI's had a strategy in place running for at least one year. The long-term planning will be evaluated using an index that measures how effective a strategic plan is by considering key inputs in the strategic plan and linkage to company deliverables-outputs. Scores of 1-10 will be awarded against: -

- Good practices rating score as per the Association of African Development Finance Institutions (AADFI) Prudential Standards, Guidelines and Rating System (PSGRS)
- Performance data availability
- Alignment to National, International and International aspirations Linkage to: -
 - Vision 2030 Kenya
 - AU Agenda 2063 Africa Union Agenda
 - UN-SDG's United Nations Sustainable Development Goals
- Level of alignment of the Vision, Mission, objectives to the various strategies and the organization structure
- Scheduled Reviews between 2008 and 2017

DFI's with effective long term strategic plans will score high in the index.

 X_2 = Innovations - Innovation variable will be measured using a formula of Return on Product Development Expense i.e., (RoPDE) which is a formula for computing innovativeness (Malinoski & Perry, 2011). The specific DFI's financial statements are expected to contain the information. Calculated asin: -

(GM - PDE) RoPDE = -----

Where: -

PDE

(GM) is Gross Margin, and

(PDE) is Product Development Expense

GM* may also be called gross profit, determined by subtracting cost of sales from revenue. Cost of sales or cost of goods sold (CoGS), normally includes the material, labor and overhead associated with delivering a production unit.

PDEwill typically include the engineering, technician, product marketing and associated management labor expense, fully burdened (benefits, facilities, IT, depreciation).

 X_3 = Funding - This variable will be measured in two ways. In the first regression funding, will be measured in terms of the total value of funds received by a DFI in each financial year while in the second regression, funding will be measured in terms of the number of different sources of funds received in a year.

3.5.2 Measurement of Dependent Variable

Competitiveness of DFI's will be the dependent variable. Francisco et al., (2008) tested and proposed a model better suited to assess DFI's performance by applying performance assessment that considers the subsidies received and the social objective by using the bank level data. The same Subsidy Dependence Index (SDI) formula was developed by Yaron (1992a), which measures a DFI's sustainability and the Output Index which measures the level of fulfillment of the social objective by the DFI. Integration of both indices assesses the cost effectiveness of the DFI in conjunction with the level of subsidy provided and the social

objective mandate. A subsidy independent DFI has no social cost to the society and this is a good tool to measure competitiveness of DFI's in Kenya and elsewhere. Social cost is defined as the opportunity cost of public resources used by a DFI; it is positive for a subsidy-dependent DFI and negative for a subsidy-independent DFI Schreiner (1999).Below is computation of the SDI: -

The amount of the annual subsidy received by a DFI is defined as: -

$$S = A (m - c) + [(E * m) P] + K$$

Where: -

S = Annual subsidy received by the DFI

A = DFI concessionary borrowed funds outstanding (annual average)

m = Social opportunity costs, or the interest rate that the DFI would be assumed to pay for borrowed funds without access to borrowed concessionary funds

C = Interest rate on DFI's average annual (concessionary) borrowed funds outstanding

E = Average annual equity

P = Reported annual profit before tax (adjusted, when necessary, for loan loss provisions, inflation, and so on)

K = The sum of all other annual subsidies received by the (DFI)—such as partial or complete coverage of its operational costs by the state.

S

SDI = -----

Where: -

SDI = Index of subsidy dependence of DFI

S = Annual subsidy received by the DFI (see above)

LP = Average annual outstanding loan portfolio of the DFI

I = Average yield earned on the loan portfolio of the DFI.

3.5.3 Measurement of the Moderating Variable

 X_4 = Government policy- This variable will be measured using the formula used by Crump (1989) which is arrived at by expressing the amount of government spending on a given DFI as a percentage of total Gross Domestic Product (GDP).

3.5.4 Model Estimation and Fitness Criteria

The study will conduct several tests in model estimation which are explained as follows;

3.5.4.1 Heteroscedasticity

Heteroscedasticity refers to a situation where variance of the error term varies with change in the number of observation. Presence of heteroscedasticity does not have an impact on the unbiasedness and linearity of the regression coefficient since it only affects the best property of OLS, which renders the conclusion made while testing hypothesis invalid (Gujarati, 2004). The study therefore tests for heteroscedasticity using The Bickel version of the Breusch-Pagan test, tests for both within and between heteroscedasticity.

3.5.4.2 Autocorrelation

This refers to a case where error term is related to its preceding value. Presence autocorrelation however, do not affect the unbiasedness of the estimates but render hypothesis testing inapplicable. Autocorrelation occurs mostly in time series data. The reason behind this is the fact that such data assumes a certain trend as the time changes. Autocorrelation does not affect the unbiasedness, linearity and asymptotic nature of the estimators. The only problem is that it violates the Best property of OLS which makes conclusion hypothesis testing wrong. This study therefore uses Breusch-Godfrey test to check whether data experience serial autocorrelation (Gujarati, 2004).

3.5.4.3 Multicollinearity

Multicollinearity refers to a situation where some of the explanatory variables are related. The variables may be increasing or decreasing over time. Multicollinearity makes the coefficient of regression to be indeterminate. Multicollinearity may be common among variables, but what matters is the degree (Gujarati, 2004). To check for the presence of multicollinearity, the study uses the variance inflation factors (VIF) test (Nachtscheim, 2004).

35.4.4 Stationarity

Stationarity refers to a case where the mean of the data is time independent. Unit root tests are used to detect non-stationarity in all the variables. If variables are non- stationary, there is a tendency of the estimates to change over time. This characteristic leads to spurious estimates. Therefore, if variables are found to be non-stationary, successful differencing is applied until the bias is eliminated. The null hypothesis in this case is that the variable under consideration is nonstationary. Augmented Dickey Fuller (ADF) test is used in testing for stationarity (Gujarati, 2004).

3.5.4.5 Normality Test

One of the assumptions of classical linear regression model is that the error term must be normally distributed with zero mean and a constant variance denoted as μ (0, σ 2). The error term is used to capture all other factors which affect dependent variable but are not considered in the model. However, it is thought that the omitted factors have a small impact and at best random. For OLS to be applied, the error term must be normal (Gujarati, 2004). To confirm whether the error term is normal or not, the study will employ the Shapiro-Wilk test.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND INTERPRETATION

4.1 Introduction

This study sought to establish the strategic factors affecting competitiveness of public DFI's in Kenya. Therefore, the chapter presents findings from panel data analysis of the secondary data on financial statements and strategic plans of 7 DFI's. The data was sourced from the Parliamentary Service Commission (PSC) library, Auditor General's (AG) website, DFI's websites and offices. The chapter begins with a discussion of descriptive and exploratory data analysis of the panel. Diagnostic testing to examine existence of panel level of stationarity, multicollinearity of independent variables, serial correlation, cross sectional dependence, heteroscedasticity and normality of error terms is conducted next. Later, a Prais Winsten panel regression model with corrected standard errors is fitted to determine the effect of the three independent variables and one moderating variable on competitiveness of the DFI's. Lastly, the chapter discusses the study findings (comparing and contrasting the same with other studies) and a summary of key findings.

4.2 Response Rate

Panel data was obtained from the audited financial statements and strategic plans and a response rate of 83% was attained. The researcher managed to obtain secondary data on long term strategic planning, innovation, funding and government policy and derived competitiveness by considering Subsidy Dependence Index (SDI). The researcher determined that one of the institutions, the ADC, was not a pure DFI but rather an implementing partner for agricultural projects incollaboration with the National and County Governments to improve Agriculture

S.NO	STATE	ASSIGNED	ENABLING	MANDATE	
	CORPORATION	CODE	LEGISLATION		MINISTRY

inKenya therefore not considered in fitting the research model.

1.	Agricultural	0	Agricultural	Promotion and execution	Agriculture,
	Development Corporation		Development Corporation Act, Cap 444 of 1986	of agricultural schemes and reconstruction in Kenya by initiating, assisting or expansion of agricultural undertaking lands and enterprises. The Government land bank for agriculture land	Livestock & Fisheries
2.	Agricultural Finance Corporation	1	Agricultural Finance Corporation Act Cap. 323	Development of agriculture and agricultural industries by making loans to farmers, groups and other persons engaging in agriculture or agricultural industries	National Treasury
3.	Development Bank of Kenya Ltd	2	Companies Act, Cap 486 Merchant Shipping Act, 1989	Development Finance	Industrialization & Enterprise Development
4.	Industrial Development Bank	3	Companies Act, Cap 486	A Development Finance Institution (DFI)	National Treasury
5.	Industrial and Commercial Development Corporation	4	Industrial and Commercial Development Corporation Act, Cap 445	Facilitating the industrial and economicdevelopment of Kenya	Industrialization & Enterprise Development
6.	Kenya Industrial Estates (KIE)	5	Companies Act, Cap 486	Address indigenization of businesses, capital formation, regional dispersion of wealth, and exploitation of local resources through provision of industrial sheds, subsidized credit and improvement of entrepreneurial skills to indigenous owned Micro, Small and Medium industries (MSMIs) with special focus on rural industrial development.	Industrialization & Enterprise Development
7.	Kenya Tourist Finance Corporation (Formally KTDC)	6	The Tourism Act, 2011	to develop tourism facilities and finance private investors	East African Affairs, Commerce & Tourism

Table 4.0 DFI Mandate

Source: Researcher (2018)

4.3 Descriptive Statistics

The study examined the descriptive pattern of all the variables, study findings were summarised as shown in Table 4.1. From the findings on average all DFI's had an average Competitiveness of 11,380.14% with an overall variation of 105,730.90, over minimum of -522,687.00% and maximum of 272,032%. Strategic plans had a mean of 0.49%. Innovations had a mean of 1.955%, Funding had a mean of 72,4141% while the moderating variable, Government Policy had a mean of 3546778.6%. The maximum value was 3,600,000 from Funding while the minimum was 0.6. from strategic plans.

Table 4.1 Descriptive Statistics

. xtsum dfico sp innovation funding govtfpolicy

Variable		Mean	Std. Dev.	Min	Max	Observat	ions
dfico	overall between within	11380.14	105730.9 54695.82 92971.69	-522687 -61558 -449748.9	272032 92072.36 322629.1	N = n = T =	60 6 10
sp	overall between within	.4866667	.1156656 .125645 0	.3 .3 .4866667	.6 .6 .4866667	N = n = T =	60 6 10
innova~n	overall between within	1.954722	5.6868 2.576372 5.16861	672701 3688882 -2.746648	40.0588 6.24804 38.12531	N = n = T =	60 6 10
funding	overall between within	724141	971756.1 791071.6 643409.5	0 0 -497565.6	3600000 2070000 2602434	N = n = T =	60 6 10
govtfp~y	overall between within	546778.6	765612.5 516542.2 600039.5	0 0 -513976.8	2800000 1228282 2286023	N = n = T =	60 6 10

Source:Researcher 2018.

•

4.3 Exploratory Data Analysis

Exploration data analysis examined heterogeneity across the DFI's and over a period of ten years. This analysis was essential in the determination of whether to use the panel data models or simply use pooled regression models. Exploratory data analysis was done using graphs to examine the trend of returns within and across the DFI's.

4.3.1 Competitiveness Plot

This study used competitiveness plots to study within-firm behavior of SDI. Figure 4.1 below indicates the empirical SDI over the ten-year period. The competitiveness plot reveals that Firm 1, 3 and 5 did not change much over the period of study. Firm 2 had highest income on loan portfolio in 2013 and 2014 with a sharp drop in the following year, a situation that affected the overall output. Firm 4's competitiveness was static due to a constant support by the government with minimal changes in loan portfolio.

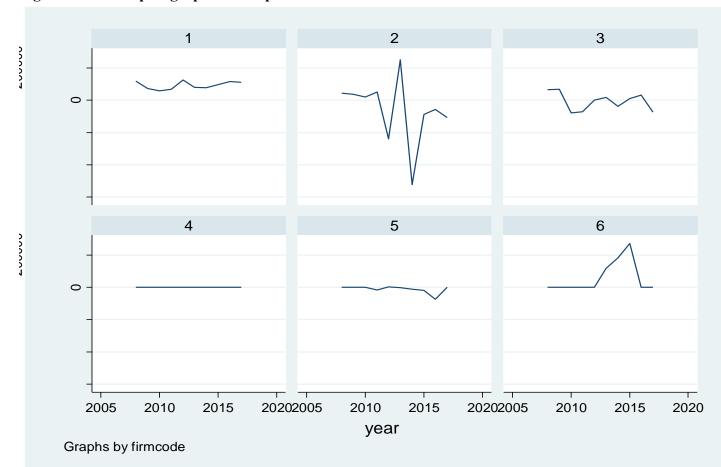


Figure 4.1. DFI's plot graph of Competitiveness - SDI

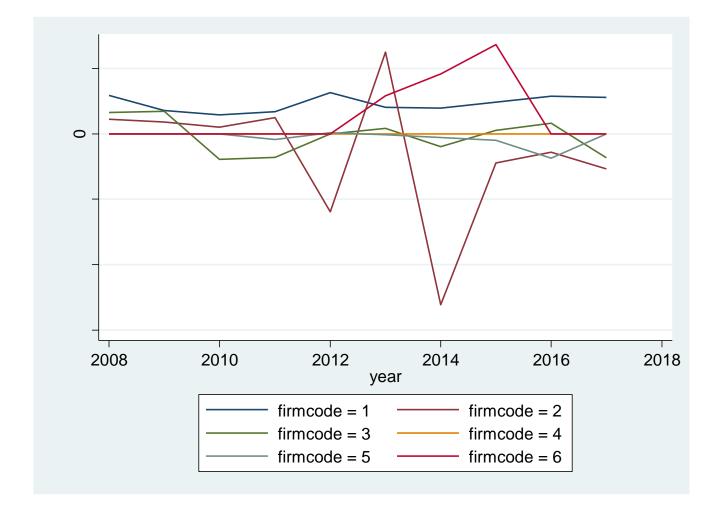
Code: 1 Agricultural Finance Corporation(AFC)

- 2 Development Bankof Kenya (DBK)
- 3 IDB Capital Limited(IDB)
- 4 Industrialand Commercial Development Corporation(ICDC)
- 5 Kenya Industrial Estates (KIE)
- 6 Tourism Finance Corporation(TFC)

Source: Researcher 2018

4.3.2 Overlain Plot

Further observation of the overlain competitiveness plot was carried out to determine if there were non-significant slope differences among these 6 DFI's. Indications were slopes being non-significantly different from the graph for all the DFI's. The y intercepts displayed a similar trend as explained before for all the Firms. Figure 4.2 below indicates the Competitiveness Overlain Plot of the DFI's.

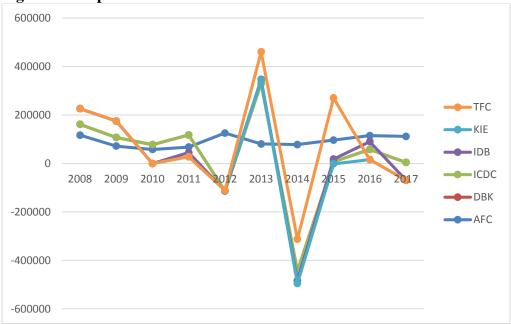




Source: Researcher 2018.

4.3.3 Overlain Plot

Other aspects of the institution were viewed from the trend analysis of the competitiveness vis a vis independent variables. This showed the response of DFI's over the ten years period and results presented graphically as in figure 4.3 below:-





Source: Researcher (2018)

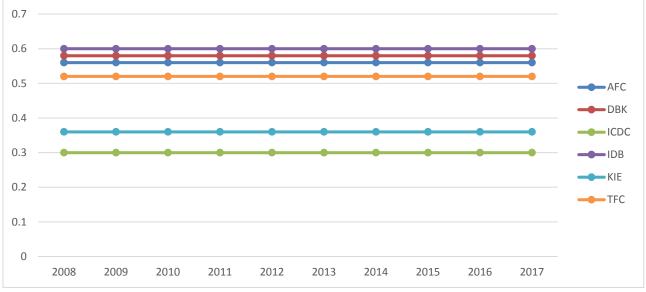
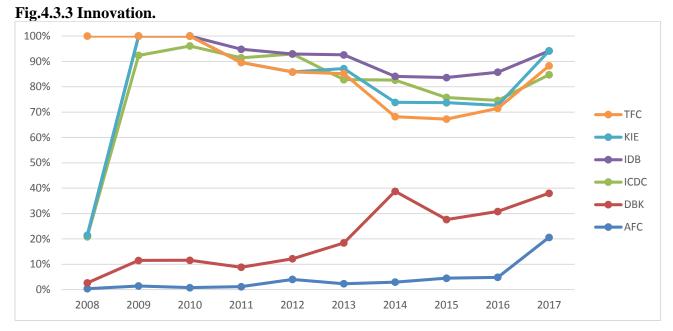
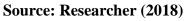


Fig.4.3.2 Strategic Planning.

Source: Researcher (2018)





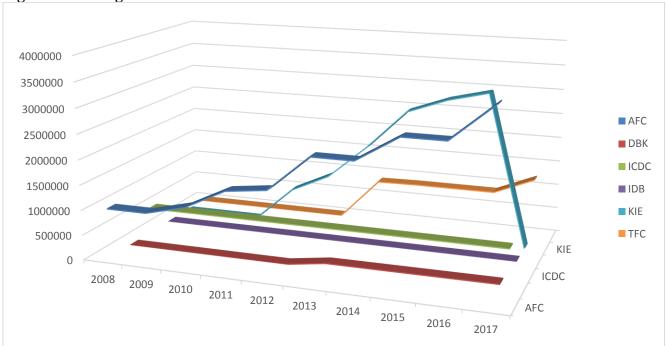
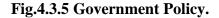


Fig.4.3.4 Funding.

Source: Researcher (2018)





Source: Reseacher (2018)

4.4 Diagnostic Testing

This section reports on result of the diagnostic analysis of the panel data. Specifically, the section reports on existence of time-related fixed effects and the suitability of fitting pooled regression models as compared to panel data models. The study also examines the presence of heteroskedasticity and serial correlation. Lastly an analysis is done to determine if random effects or fixed effects models should be used.

4.4.1 Test for Random Effects

To begin with, we first examined the practicability of fitting a pooled regression model than the panel data model. The Breusch-Pagan LM test was used to determine if a simple linear regression model was more preferable than the random effects model. As table 4.2 below

indicates chi-square values for the model was insignificant (p>0.001) on transformed data, implying existence of insignificant competitiveness among the DFI's. Consequently it was found inappropriate to use panel regression models.

Table 4.2 Test for suitability of model-OLS

Table 4.2 Chi-Square values for the Breusch-Pagan LM Test for Random effects

Model	Dependent variable	χ²-value	p-value
1	Competitiveness	0.00	1.000

Source: Researcher (2018)

4.4.2 Test for Fixed Effects

Next, the study examined the presence of fixed effects. If such effects were present, then one would be required to account for the effects either by inclusion of dummy variables to capture the effects or fitting a two-way random effects model. The results of this test, shown in table 4.3, reveal that there was no significant fixed effects (p>0.05) thus no need to fit two-way component models. A small p-value for the ch-squared statistic associated with the test, obtained from this study, leads to rejection of the random effects model in favor of the fixed effects model.

Table 4.3 Test Results for Fixed Effects

Model	Dependent Variable	F-Value	P-Value
1	Competitiveness	0.85	0.5974
	10		

Source: Researcher (2018)

4.4.4 Test for Multicollinearity

Multicollinearity is the study of the relationship between independent variables in a study. It is also viewed as the absence of a strong correlation between two or more independent variables. A

correlation matrix is the conventional check for multicollinearity (Field, 2009). The matrix measures the nature and strength of relationship between the explanatory variables informing the study. To test for multicollinearity, Variance Inflation Factor (VIF) was adopted. VIF quantifies the severity of multicollinearity in a regression analysis. The magnitude of multicollinearity was analyzed by considering the size of VIF. According to Sosa-Eacudero (2009) if VIF = 1, there is no correlation, if VIF is more than 5 but less than 10, there is moderate correlation and if VIF is greater than 10, there is high correlation. The common rule of thumb is that VIF should be less than 3 (Kutner, Nachtsheim&Neter, 2004). In table 4.4 below the VIF for all the variables excluding the control variable in this study is 3.98 hence an indication that all the variables are within the threshold for multiple regression analysis and that there appears to be no excessive multicollinearity amongst the biases.

Table 4.4 Multicollinearity Diagnostics

•	$\vee \perp \perp$

Variable	VIF	1/VIF
ln_inv ln_spkk ln_fun	5.50 4.55 1.88	0.181875 0.219694 0.531317
Mean VIF	3.98	

Source: Researcher (2018)

4.4.5 Test for Heteroscedasticity

Lastly a test was conducted to examine the presence of heteroscedasticity and serial correlation in the panel data. To test for heteroscedasticity, the modified Wald test for GroupWise heteroscedasticity in fixed effect regression model was used. From the results of the two test, indicated in table 4.5, it was noted that heteroscedasticity was present (p > 0.001) while there was no serial correlation among the panels (all p>0.05). Robust standard error then necessary. Robust standard error is usually used when heteroscedasticity or serial correlation is evident among the panels.

Table 4.5	Heterosced	asticity [Test Re	sults S	Summarv

	Test for heterosced	Serial Correlation			
Model	Dependent variable	χ ² -σαλυε	p- value	F-value	p-value
1	Competitiveness	0.68	0.8789	477.688	0.0291

. xttest3

Modified Wald test for groupwise heteroskedasticity in fixed effect regression model

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

chi2 (3) = 0.68 Prob>chi2 = 0.8789

Source: Researcher (2018)

 Table 4.5 Autocorrelation Test Results

Wooldridge test for autocorrelation in panel data H0: no first order autocorrelation

F(1, 1) = 477.688Prob > F = 0.0291

Source: Researcher (2018)

4.5Model Fitting: Simple Regression Withoutthe moderating variable.

Due to violation of linear regression assumption by presence of heteroskedasticity though without serial correlation the Hausman test of the model specification was not done to decide between fixed or random effects. The researcher fitted a Prais Winsten Panel regression model (with corrected standard errors)that produces robust results in the presence of serial correlation, cross sectional dependence and heteroscedasticity. The results are as per table 4.6 below.

4.5.1Prais Winsten Panel Regression with Corrected Standard Errors without the moderating variable.

The panel regression results without the moderating variable (Government policy) presented in table 4.6 below reflect that the constant was 26.10555 and that this value was positive and significant at the 5% level. This implies that in the absence of the influence of the independent variables, the dependent variable is deemed to have a value of 26.1055.

The regression results post a coefficient of 18.91734 for Strategic planning, with a p- value of 0.000. This implies that there was a statistically significant positive relationship between the strategic planning and competitiveness of DFI's without the influence of Government policies. Essentially, a 1% increase in strategic plans would result to 18.91734 % increase in Competitiveness of DFI's.

The coefficient of Innovation at the ratio of -0.401 was statistically insignificant at 5 % level with p-value of 0.131 that is greater than 0.05. The results indicate that there was insignificant positive relationship between Innovations and competitiveness of DFI's. Thus, a unit change in Innovation ratio would result to a -0.4% change in competitiveness.

The coefficient of Funding is -0.2893 and insignificant with a p-value of 0.167 which is greater than 0.05. The results indicate that there was an insignificant negative relationship between Funding as measured by Competitiveness. The negative beta coefficients indicate that there is a negative relationship between the dependent and the independent variable though insignificant.

Equation (i) can therefore be rewritten as:

 $Y = 26.11 + 18.92 X_1 - 0.40 X_2 - 0.29 X_3 \dots (i)$

Where: -

Y = Dependent Variable (DFI's Competitiveness)

26.11 = Constant (Level of competitiveness when all independent variables are at zero and without moderation.

18.92 = Coefficient of X1(Change in the dependent variable due to unit change in X1

X1 = Strategic Planning

-0.40 = Coefficient of X2(Change in the dependent variable due to unit change in X2)

X2 = Innovation

-0.29 = Coefficient of X3 (Change in the dependent variable due to unit change in X3)

X3 = Funding

Table 4.6 Simple Regression Results without the Control Variable

. xtpcse ln_DKK ln_spkk ln_inv ln_fun,correlation(ar1) hetonly

Prais-Winsten regression, heteroskedastic panels corrected standard errors

Group variable:	firmcode			Number of obs	:	=	21
Time variable:	year			Number of grou	ps :	=	3
Panels:	heteroske	edastic	(unbalanced)	Obs per group:	min :	=	1
Autocorrelation:	common AF	R(1)			avg :	=	7
					max :	=	10
Estimated covaria	nces	=	3	R-squared	:	=	0.9646
Estimated autocor	relations	=	1	Wald chi2(3)	:	=	491.69
Estimated coeffic	ients	=	4	Prob > chi2	:	=	0.0000

ln_DKK	Coef.	Het-correcte Std. Err.	d z	P> z	[95% Conf.	Interval]
ln_spkk ln_inv ln_fun _cons	18.91734 4010383 2892953 26.10555	1.265828 .2655811 .2095023 2.364965	14.94 -1.51 -1.38 11.04	0.000 0.131 0.167 0.000	16.43637 9215678 6999123 21.47031	21.39832 .1194911 .1213218 30.7408
rho	.548362					

Source: Researcher (2018)

•

4.5.2Prais Winsten Panel Regression with Corrected Standard Errors with the moderating variable.

The panel regression results with the moderating variable (Government policy) presented in table 4.7 below reflect that the constant was -32.31878 and that this value was negative and insignificant at the 5% level. This implies that in the absence of the influence of the independent variables and the moderating variable, the dependent variable is deemed to have a value of - 0.226 i.e. p-value more than 0.05, meaning the overall model is insignificant with the moderating variable.

The regression results post a coefficient of 6.603 for Strategic planning, with a p value of 0.273. This implies that there was a statistically insignificant positive relationship between the strategic planning and competitiveness of DFI's. Essentially, a 1% increase in strategic plans would result to 6.06 % increase in Competitiveness of DFI's.

The coefficient of Innovation at -1.073568 was statistically significant at 5 % level with p-value of 0.000 that is less than 0.05. The results indicate that there was significant negative relationship between Innovations and competitiveness of DFI's. Thus, a unit change in Innovation ratio would result to a -1.1% change in competitiveness.

The coefficient of Funding is 5.059265 and insignificant with a p-value of 0.082 which is greater than 0.05. The results indicate that there was an insignificant positive relationship between Funding as measured by competitiveness. The positive beta coefficients indicate that there is a positive relationship between the dependent and the independent variable though insignificant. Essentially, a 1% increase in Funding loans would result to a 5.06 % increase in competitiveness. The coefficient of Government policy -2.00663, p-value of 0.150 showing that government policy has negative influence on competitiveness though insignificant (P-value is more than 0.05).

Equation (ii) can therefore be rewritten as: -

 $Y = -32.32 + 6.06 X_1 - 1.07 X_2 + 5.06 X_3 - 2.01 X_4 \dots (ii)$

Where: -

Y = Dependent Variable (DFI's Competitiveness)

 $6.06 = \text{Coefficient of } X_1(\text{Change in the dependent variable due to unit change in } X1)$

 $X_1 =$ Strategic Planning

-1.07 = Coefficient of X₂(Change in the dependent variable due to unit change in X2

 $X_2 = Innovation$

 $5.06 = \text{Coefficient of } X_3$ (Change in the dependent variable due to unit change in X3)

 $X_3 = Funding$

2.01= Coefficient of X₄ (Change in the dependent variable due to unit change in X4

 $X_4 = Government Policy$

Table 4.7 Prais Winsten Panel Regression with Corrected Standard Errors with the moderating variable. (Government Policy)

Prais-Winsten regression, heteroskedastic panels corrected standard errors Number of obs 20 Group variable: firmcode = Time variable: Number of groups 2 year = Panels: heteroskedastic (balanced) Obs per group: min = 10 Autocorrelation: common AR(1) avg = 10 max = 10 Estimated covariances = 2 R-squared = 0.9868 Estimated autocorrelations = 1 Wald chi2(4) 1498.21 = Estimated coefficients = 5 Prob > chi2 0.0000 =

ln_DKK	Coef.	Het-correcte Std. Err.	d z	P> z	[95% Conf.	. Interval]
ln_spkk ln_inv ln_fun ln_gnv _cons	6.06304 -1.073568 5.059265 -2.00663 -32.31878	5.535378 .298068 2.906847 1.395624 26.70054	1.10 -3.60 1.74 -1.44 -1.21	0.273 0.000 0.082 0.150 0.226	-4.786101 -1.657771 6380512 -4.742003 -84.65087	16.91218 4893659 10.75658 .7287424 20.01331
rho	.1264301					

Source: Researcher (2018)

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings of the previous chapter as guided by the specific objectives, conclusion, limitations encountered during the study. This chapter also elucidates the policy recommendations that policy makers can implement to achieve the desired DFI competitiveness. Lastly, the chapter presents suggestions for further research which can be useful to future researchers.

5.2 Summary of Findings

5.2.1 Discussion on strategic planning and competitiveness of public DFI's in Kenya

The first research objective sought to establish the relationship between strategic planning and competitiveness of DFI's. The study established a significant and positive relationship between strategic planning and competitiveness. These findings are consistent with the study by (Njirithia, 2007) who found out that the presence of articulate strategic plan was a prerequisite for organizations performance. In the same breath, governments policy had a moderating role for competitiveness thus the strategies alignment with government agenda is necessary.A consolidated process and effort of implementation is more impactive than the plan itself. This is a position supported by (Barnat, 2012).

If the government availed the more needed support to the DFI's, then they would wholly and exclusively bring in the additionality of development. Having a positive influence on competitiveness, strict implementation of strategic plans per the DFI mandate has the potential of great results, better than the current scenario. Jacob Yaron determined that SDI is all about sustainability with zero at hundred percent sustainability, negative SDI meaning exceeding dependence while positive SDI meaning dependence to that level.

5.2.2 To evaluate the effect of innovation on competitiveness of public DFI's in Kenya

The study found out that there was no positive relationship between innovations and competitiveness of public DFI's in Kenya. This is inconsistent with the findings of Ndung'u et al (2016) who found out that innovations have positive effect on financial performance for banks in Kenya. Given that development banks are unique institutions for among other roles, correcting market imperfections, catalytic aspect of intermediation for economic development. The KenyanDFI's did not authoritatively stand to be counted on innovation. Innovation was elusive leading to the insignificant result in this study. Investment in innovation is the way to go, whether in private or public DFI's in the country. This was supported by (Githinji 2016), who determined that for better performance, innovation must be in the matrix. Several Kenyan public DFI's have changed and rebranded, including changing their names, but the situation has not changed much. It is the internal structures that comply with internal control systems coupled with deliberate effort on the part of government to insist on innovation that will change the narrative.

5.2.3. To ascertain the effect of funding on competitiveness of public DFI's in Kenya

It was established by the study that funding had no relationship with competitiveness of DFIs.It was Te Velde and Warner (2007) who insisted that governments should continue funding and supporting DFI's to help them carry their mandates. This aspect was evidently neglected by the government pushing the DFI's to veer off their mandate for sustainability. Development bank proved the possibilities that exist by succeeding in operating as a commercial bank also, meeting the high demands of the central bank. Several DFI's were investing in Private companies to earn dividends and used their rental income for survival. The role of government policy was also coming in handy to ensure the DFI's still operated within the law confirming the moderation effect by the government policies on funding of DFI's.

5.2.4 To discuss the effect of government policy on competitiveness of public DFI's in Kenva

The study established that the model was significant without the control variable (Government policy) while the converse was true in the presence of the moderating variable. This raises a very interesting debate, the main question being, are the government policies working for or against competitiveness of the DFI's. The government policies are expected to positively help the institutions navigate development but the reality in Kenya is the opposite. There is a negative effect though not significant relationship between government policies and competitiveness of DFI's. This agrees with the study that found out that government policies and bilateral bodies impacted negatively on the success of the companies that were examined then by Njirithia (2007). Impliedly good policies and laws would midwife thriving DFI's in Kenya otherwise the DFI's cannot operate in a legal vacuum if they must be competitive. The Kenya government owns the DFI's and it is therefore prudent to own up their responsibility of better results of these public institutionsYaron (2005).Before year 2011, the institutions were subsidy dependent but

the situation changed due to change in government policies and the political environment of the institutions.

5.3 Conclusion

From the study findings, long term strategic planning and government policy significantly positively affect DFI competitiveness. The study therefore concludes that improvement in long term strategic planning and enhancements in government policy lead to an increase in DFI competitiveness. Innovations and funding were found to be statistically insignificant determinants of DFI competitiveness, thus they do not significantly influence it. The choice not to be innovative or avail capital by the owner of the DFI's i.e. the Kenyan government, DFI's led to this result of study.

This study concludes that independent variables selected for this study long term strategic planning, innovations, funding, and government policyinfluence DFI competitiveness in Kenya. This is as evidenced by p value and F value in the ANOVA summary. The fact that the four independent variables explain 29.8% of changes in DFI competitiveness imply that the variables not included in the model explain 70.2% of changes in DFI competitiveness.

5.4 Recommendations

The study established that there was a positive influence of long term strategic planning and government policy on DFI competitiveness. This study recommends adequate measures to be put into place to improve the competitiveness of DFIs. DFIs should endeavor to devote time and financial resources to craft strategic plans which will augment their competitiveness. Strategic planning will be able to set the institution's priorities, focus energy and resources, strengthen operations, ensure that employees and other stakeholders are working toward common goals,

establish agreement around intended outcomes/results, and assess and adjust the organization's direction in response to a changing environment.

Governments should also devise strategies and policies to boost DFIs competitiveness. Majorly, the role of government policy is reflected in the mandate received by the DFI. This mandate defines the scope, specialization, and importance of the DFI as a government policy instrument. However, governments should consider changing the core mandates or directives of DFI's which have mainly remained unchanged since the time of their inception. This can be done as a reflection of changing times and economic landscapes.

5.5 Limitations of the Study

The scope of this research was for ten years 2008-2017. It has not been determined if the results would hold for a longer study period. Furthermore, it is uncertain whether similar findings would result beyond 2017. A longer study period is more reliable as it will consider major economic conditions such as booms and recessions.

One of the limitations of the study is the quality of the data. It is difficult to conclude from this research whether the findings present the true facts about the situation. The data that has been used is only assumed to be accurate. The measures used may keep on varying from one year to another subject to prevailing condition. The study utilized secondary data, which had already been obtained and was in the public domain, unlike the primary data which is first-hand information. The study also considered selected determinants of and not all the factors affecting the dividend payout ratio mainly due to limitation of data availability. Data collection was also a challenge because it was difficult to access the required data from the relevant sources.

For data analysis purposes, the researcher applied a multiple linear regression model. Due to the shortcomings involved when using regression models such as erroneous and misleading results when the variable values change, the researcher cannot be able to generalize the findings with certainty. If more and more data is added to the functional regression model, the hypothesized relationship between two or more variables may not hold.

5.6 Suggestions for Further Research

Thereare other variables affecting DFI competitiveness apart from the ones highlighted in the study. From the summary model, it is evident that 70.2% of the variations in DFI competitiveness are explained by these variables. It is imperative for a future research to be conducted comprising these variables.

The study concentrated on the last ten years since it was the most recent data available. Future studies may use a range of many years, for instance, from 1970 to date and this can be helpful to confirm or disapprove the findings of this study. The scope of the study was limited to Kenyan DFIs, further study can be done on DFIs operating in other countries. Finally, due to the shortcomings of regression models, other models such as the Vector Error Correction Model (VECM) can be used to explain the various relationships between the variables.

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APPENDICES

Appendix I: Letter of Introduction



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KCAU/SGS/MSc/Aug.18/7

August 8, 2018

To whom it may concern,

Dear Sir/Madam,

RE: FRANCIS KIETI MUTUNGA REG. NO. 16/09295

It is my distinct pleasure to introduce to you Mr. Francis Mutunga who is a student in our institution pursuing a Master of Science in Development Finance at the School of Business and Public Management.

Francis is conducting research on a topic titled: "Strategic Factors Affecting Competitivenes: of Development Finance Institutions (DFI's) In Kenya" which is part of the requirements of the program he is pursuing. The research as well as the data procured thereof shall be used for academic purposes only.

Any assistance accorded to him is highly appreciated.

In case of further inquiry, do not hesitate to contact the undersigned.

Yours faithfully,

Dr Nyaribo Misuko

Dean, School of Graduate Studies & Research

Appendix II: Secondary Data Collection Sheet

Name of DFI

A. Variable X1 – Long Term Planning Score Sheet

Detail	Score/Rate
Prudential Standards, Guidelines and Rating System (PSGRS) Score	
Alignment to National, International and International aspirations to: -	
 Vision 2030 – Kenya 	
 AU Agenda 2063 – Africa Union 	
o UNSDG's	
Alignment of the Vision, Mission, objectives to the various strategies	
Scheduled Reviews between 2008 and 2017	
Has performance Data on strategic objectives	
Scheduled Reviews between 2008 and 2017	

Appendix II: Secondary Data Collection Sheet (Continued)

Year	Annual Subsidy Received	Annual Outstanding Loan	Average Yield Earned	Total Funds Received	Government Funding	GDP	Gross Margin	Product Development Expense
2008								
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								

B. Variable X2, X3 & X4 Indicator Data

Appendix III: List of Kenyan Public Development Finance Institutions

- 1. Agricultural Development Corporation (ADC)
- 2. Agricultural Finance Corporation (AFC).
- Development Bank of Kenya (DBK) (Formerly Development Finance Company of Kenya (DFCK)
- 4. IDB Capital Limited (Formerly Industrial Development Bank Limited)
- 5. Industrial and Commercial Development Corporation (ICDC)
- 6. Kenya Industrial estates (KIE)
- Kenya Tourist Development Corporation (KTDC) now Tourism Finance Corporation (TFC).