

**RESOURCE UTILIZATION AND FINANCIAL SUSTAINABILITY OF DEVOLVED  
ADMINISTRATIONS: A CRITICAL LITERATURE REVIEW**

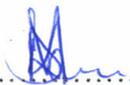
**DOLREEN KAIMURI MURITHI**

**AN INDEPENDENT STUDY PAPER SUBMITTED TO THE SCHOOL OF BUSINESS IN  
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE  
DOCTOR OF PHILOSOPHY DEGREE IN BUSINESS ADMINISTRATION OF THE  
UNIVERSITY OF NAIROBI**

**JULY, 2016**

## DECLARATION

I hereby declare that this independent study paper is my original work and has not been presented to any other University for award of any degree.



05/05/2016

Signature

Date

Dolreen K. Murithi

Reg. No D80/97272/2015

This Independent study paper is submitted with my approval for examination to the university, as a university supervisor



05/08/2016

Signature

Date

Dr. Cyrus M. Iraya

Department of Finance and Accounting

School of Business, University of Nairobi

## ACKNOWLEDGEMENT

I am deeply obliged to my supervisor Dr. Cyrus Mwangi Iraya for his exemplary guidance and support without whose help this independent study paper would not have been a success. I wish you God's blessings as you continue to make a contribution in the advancement of knowledge in this field.

To the University of Nairobi library personnel, I highly appreciate your tireless effort to ensure that the students access the required learning materials at the right time. May the almighty God bless you in your endeavors to assist learners' to access information.

To my great friends Consolata Ndung'u and Njenga whose encouragement during challenging moments has given me strength to sail through. I wish you well as we travel this academic journey together.

## DEDICATION

Dedicated to Solomon, Rehema and Bashir for their strong will.

## TABLE OF CONTENTS

<b>DECLARATION</b> .....	<b>ii</b>
<b>DEDICATION</b> .....	<b>iv</b>
<b>ABSTRACT</b> .....	<b>x</b>
<b>CHAPTER ONE: INTRODUCTION</b> .....	<b>1</b>
1.1 Background of the Study .....	1
1.1.1 Resource Utilization.....	2
1.1.2 Financial Sustainability .....	3
1.1.3 Devolved Administrations.....	4
1.2 Research Problem .....	6
1.3 Research Objectives.....	7
1.4 Value of the Study .....	8
1.5 Organization of the Paper .....	8
<b>CHAPTER TWO: THEORETICAL LITERATURE REVIEW</b> .....	<b>9</b>
2.1 Introduction.....	9
2.2 Theoretical Foundation.....	9
2.2.1 Subsidiarity Principle.....	9
2.2.2 Dynamic Capabilities Theory.....	10
2.2.3 Economic Sustainability Model .....	10
2.2.4 Oates' Decentralization Theorem .....	11
2.3 Relationship between Variables .....	12
2.3.1 Resource Utilization and Financial Sustainability .....	12
2.3.2 Resource Utilization, Financial Systems and Financial Sustainability .....	13
2.3.3 Resource Utilization, Macro-economic Factors and Financial Sustainability.....	14
2.3.4 Resource Utilization, Financial Systems, Macro-economic Factors and Financial Sustainability ...	15
<b>CHAPTER THREE: EMPIRICAL LITERATURE REVIEW</b> .....	<b>17</b>
3.1 Introduction.....	17
3.2 Resource Utilization and Financial Sustainability.....	17
3.3 Resource Utilization, Financial Systems and Financial Sustainability .....	18
3.4 Resource Utilization, Macro-economic Factors and Financial Sustainability.....	18
3.5 Resource Utilization, Financial Systems, Macro-economic factors and Financial Sustainability	20
3.6 Summary of Empirical Literature Review and Research Gaps .....	21
3.7 Conceptual Framework.....	23
3.8 Measurement of Variables .....	24
3.8.1 Resource Utilization.....	24
3.8.2 Financial Sustainability .....	25

3.8.3 Financial Systems .....	25
3.8.4 Macro-economic Forces.....	26
<b>CHAPTER FOUR: SUMMARY, CONCLUSION AND RECOMMENDATIONS.....</b>	<b>28</b>
4.1 Summary .....	28
4.2 Conclusion .....	29
4.3 Knowledge Gaps Identified .....	29
4.4 Recommendations for Further Research .....	30
<b>References .....</b>	<b>31</b>

## LIST OF ABBREVIATIONS

**DEA** - Data Envelopment Analysis

**DMUs** - Decision Making Units

**IMF** - International Monetary Fund

**NGO** - Non- Governmental Organization

**OSS** - Operational Self Sufficiency

**ROA** - Return on Assets

**TFP** - Total Factor Productivity

## ABSTRACT

Issues of resources utilization are crucial since that capacity of organizations to fully and profitably exploit resources is a key indicator of competitiveness. In past several years, economic instability has emerged in economies worldwide and emphasis on financial sustainability need not be compromised. There is need for states to embrace innovation and creativity to be able to manage scarce resources and be self dependent. This study aimed at establishing how resource utilization impact on financial sustainability of devolved administrations. This is a literature review paper whereby detailed literature of the objectives of the study was done. Various studies in the area of interest were reviewed to help the researcher to formulate a problem statement and give a wider perspective of the study variables. Theoretical literature review was explored particularly on key theories and theoretical relationships that helped to gain deeper understanding of the study variables. A review of how the study variables have been measured by previous researchers was done as well as critique of the literature reviewed in this study. Further, empirical literature review under which related empirical studies explaining the study variables are discussed. From the theoretical and empirical literature reviewed a conceptual framework was developed to illustrate the study variables relationship. The findings revealed a need to implement more cost effective approach that would raise more revenue in the long run. It was revealed that it is difficult to address the problem of regional economic disparity through state-run macroeconomic guidelines hence a need to split into regional policy intervention is critical as an element of development. Therefore there is a need for more enhanced information on utilizing scarce resources amid competing projects to enable institutions to attain self financial sustenance. Since different regions of the world enjoy different natural resources and favourable climate conditions it is recommended that their availability to be tested to ascertain their influence or the role they might have played in sustainability. Citing the cases that were able to utilize their resources and operate to the foreseeable future, it can be recommended that a study be done to evaluate the processes they embraced so as to remain sustainable and find out the indicators they use to check their financial sustainability.

## CHAPTER ONE INTRODUCTION

### 1.1 Background of the Study

In recent time the political map of global economies has witnessed swift transformation with a rising trend towards decentralization followed by the regions of nations that require greater independence to run their own affairs. The drive for decentralization may be developmental, political, cultural or religious. Whatever the motive, if it entail the decentralization of fiscal policy touching on the provision of vital and basic public services and adjustment in their financial support arrangements then, it has crucial resource repercussion. Thus, devolution is essential for all state's citizens, not only those of the decentralized territories. Policy changes adopted by devolved administrations can shape the level and blend of public services and changes in the funding arrangements by central government, quality of service rendered, can also have an effect on the pace of economic development both at regional and the country levels. It was Rodrigez and Bwire (2004) argument that a cohesive state is more competent since its flexible to do business among regions, replica costs in security and law enforcement are evaded while provision of public goods can be well co-ordinated. These sentiments are explicit about the undesirability of wearing away the homogenous spirit of a country although devolution may be a retrograde policy.

This study is guided by subsidiarity principle coined by Oswald-von (1952). It' an organizing belief supporting that matters should be taken care of by the least centralized capable authority. Oates (1999) provides specific procedure to address the challenge of power transfer in the public domain using the decentralization theorem of Oates. The principle recommend that common wellbeing is likely to be improved if Pareto-efficient levels of public facilities are made available by sub-national administrations other than by the stipulation of a common level of spending proposed by the central state. The study is further guided by economic sustainability theory that posit; with no assumption that ordinary resources are at all times exchangeable by monetary capital. Herman and Daly (2001) argument was that proponents of natural economics, then sustaining prospect for the future need well-built preservation measures in order to maintain ecological goods and to have economies running in accordance to natural confines. Dynamic capabilities Theory coined by Pfeffer and Salancik (1978) observe organizations as possessing reserve of important technology and extra firm-specific assets (Teece, 1990). The theory states that organizations are diverse with respect to resources, capabilities, donations or gifts.

Devolution entails formation of new level of locally chosen policy-makers and law makers concentrate solely on devolved area and they are directly in contact with core issues in that region. The exploration for comprehensive, inclusive, and participatory administration has embraced the

lane of devolution given that competent delivery of public services have been elongated by extremely centralized government officialdom (Mwabu et al., 2008). As much as the citizenry of world economies embracing devolution look forward to this inclusivity, participation and efficient delivery of public services, then the motivation behind this study is to ascertain whether these participants factored the issues of sustainability; Another factor is the curiosity that whilst many countries/states have had their fair share of failed devolution, many others, especially those in developing economies are opting for devolution.

In the past there has been a trend for states to concentrate power. In the late 20th century, groupings in the central and unitary structure gradually wanted to trim down the power of central governments by taking power closer to the people through local and regional administrations. In the United States, supporters of states' rights preferred to disperse power from Washington, D.C., to state and local governments. This kind of movement was experienced all through the global economies, even if the two major outstanding took place in France and in the United Kingdom in the 1980s and the late 1990s respectively. Systems that have been used in governance by many developing countries have tended to follow inheritance from their colonizers. To some extent, they have been bound to conflicts because of their mismatch with aspirations of the locals or carried out within very narrow limits (Talbot & Lynch, 2005). Some countries such as Thailand and Nepal were not under colonial rules but they have histories of centralization not much different from the colonial countries. Within the Asian spheres, the scale of interest to deconcentration was the only important element. The other important elements namely the development of devolution had been very slow and disappointing as deconcentrated units became more cosmetic than substantial (Asian Report, 2014). In the past African nations have had their fair share of complex, personalized and greatly centralized administration structure and practices in managing areas of public administration, hence taking the devolution route. Albeit some failures experienced, many of devolved states in Africa and elsewhere in the world are working well (Kauzya, 2007).

### **1.1.1 Resource Utilization**

In Ricklefs (2005), resources are the things that are able to satisfy human needs and make a life comfortable for people and communities. He further asserts that resources are typically natural or artificial materials, energy. Benefits of effective use of resource are varied and could include greater wealth accumulation, fulfillment of basic human needs or wants, appropriate running of a certain system, as well as improved wellbeing and make good, efficient and maximum use of resources. The idea of resources has been practiced in various spheres, such as business, ecology, computer science, management and human capital therefore associated to the notion of competition, sustainability, preservation and leadership. Its relevance in human society, business or non-business aspects call for

resource distribution through a sound resource management. According to Sumit (1998) resources are seen to possess three major characteristics such as value, scarcity and likelihood to deplete or utilization bound to be renewable or non-renewable, potential or actual.

The financial results of an organization will be a reflection of whether it is fully exploiting possessions available to them. Understanding a business from financial results will mean being able to measure the success of sales and marketing efforts, research and administration for instance. Many businesses and institutions fail because they haven't learned the importance of resource management. Of importance, then to competently manage and apportion personnel and equipment for various projects, to use time gainfully and to avoid idle resources especially when offering public services. Gaining access to valuable know how on the accessibility of the resource and having them available when needed plays a crucial part in managing overheads and carrying out the project activities smoothly. With so many businesses competing, resources need to be maximized to maintain competitiveness. Proper utilization of resources is essential to keep activities streamlined.

Tser-yieth (2005) used data envelopment analysis (DEA) to evaluate resource utilization efficiency of 23 university libraries in Taipei City and County which encompasses use of single input/output measure to describe efficiency and compute the entire efficiency score. Sumit (1998) used data envelopment analysis (DEA) to assess a firm level resource utilization measure and determine variation in resource utilization between organizations. DEA method has been applied by various authors to assess resource-handling in a range of setting; such as airlines (Schefcyk, 1993) and in education (Ray, 2001).

### **1.1.2 Financial Sustainability**

Largely, sustainability would mean the ability of a manager to uphold an organization in the longterm. Though, the description of financial sustainability can differ extensively in the context of for-profit organizations and nonprofits depending on the business operation structures, revenue arrangement, and overarching goal of the business or undertaking (Bowman, 2011). In both for-profit and nonprofit organizations, financial capacity is made up of resources that provide an organization the capability to grasp opportunities and respond to unanticipated business and environmental pressure while upholding general functions of the enterprise. In Kotsogiannis and Schwager (2008), financial sustainability mirrors the extent of managerial flexibility to change assets allocation in reaction to opportunities and threats that face them. According to Bowman (2001) financial sustainability can be understood as the ability to maintain financial capacity in the long run. Despite an organization's for-profit or nonprofit standing, the obstacles of instituting financial capacity and financial sustainability are core to organizational role.

Bearing in mind the organizational hindrances that come up when generating revenues, financial sustainability is the organization's ability to acquire revenues in order to carry on productive processes or projects at a consistence or increasing pace in order to generate outcome such as accomplishing the mission, goals, or objectives of the organization. The way to achieve these outcomes is a fundraising capacity that enables it to execute projects and activities that result to that goal. Attaining organizational financial sustainability is what all organizations aim for, therefore this concept is vital in the sense that devolved administrations cannot for ever depend on central state/government for funding. If this is so, then the essence of devolution is lost (Barney, 2001). Theoretically, financial sustainability facilitates institutions to take care of their administrative overheads and to prioritize activities so as to achieve their missions. Nevertheless, the proportions of organizations that attain financial sustainability continue to be very low owing to lack of inventiveness or dedication. To realize sustainability, an organization requires building and growing the four types of capital: physical (taking into account the financial aspect), intellectual, social, and organizational. Menard and North (1997) posit that the possibility of organizational leaders to do all this lie on two aspects: own managerial skills and inventiveness in articulating an influential, futuristic vision that motivate workers and stakeholders; and the opportunities, rewards and endorsements that the economic, political and legal setting avail to the organization's top management and the workforce.

Financial sustainability concept is operationalized by the four pillars that are fundamental for the financial sustainability of any organization as well as assessing and managing risks (Fehr & Hishigsuren, 2007). First they include strategic and financial planning which means an organization should have clear goal on short term and long term income-generation projects. The other pillar of financial sustainability is the ability to broaden revenue horizons that encompasses internal income generation and other revenue sources that offer the main financial support. Thirdly, identifying how to administer resources is as crucial to attaining financial sustainability as understanding how to produce income. Well-organized procedures in terms of administration and finances are overseen by a sequence of institutional guidelines that aid in making the best of the resources and ensure clarity in fiscal administration. In addition, these measures should facilitate anticipation of organization's financial position and, eventually, make proper timely decisions. Efficient measures can permit creation of income through the financial management of available assets since self income generation is a mean that an organization can utilize to expand its sources of revenue.

### **1.1.3 Devolved Administrations**

De Vries (2000) defines devolution as the statutory granting of powers to plan, decide and run public affairs from central government or agencies at a sub-national stage, which includes regional or local

levels. In Rodden, Eskeland and Litvack (2003) devolution also engages formation of a new level of locally chosen policy-makers and law makers whose mandate is concentrated entirely on the devolved subject and are sometimes more closely in contact with its key subjects.

In the UK, devolution was a precursor of possessing the potential to guide in the advancement of 'completely diverse social policies' (Mooney et al., 2006). The degree to which power and resources are spread or centralized has at all times been a touchy issue in the United States of America (USA). Some experimentation in devolution, such as that of Pakistan, appears to imply that it generates 'true change' in terms of prospects for populace to have their issues being heard and upheld (Asian Development Bank et al., 2004). In the United Kingdom, the supremacy of the labour party in the early 2000s upheld normative position points for policy advancement (Woods, 2004). The Canadian experience however demonstrated how devolution can present space for the influence of neoliberal ideology (McBride & McNutt, 2007). In regard to studies on relation between devolution and local economic development in Germany, India, Italy, Mexico, Spain, and the USA, devolution was reported not to necessarily cause greater economic effectiveness and there emerges to be an association between global devolution projects and rising income disparities across regions (Rodríguez-Pose & Bwire, 2004). As Rodríguez-Pose and Gill (2004) put forward the worldwide movement in devolution has been the desertion of the conventional equalization function of central government in support of economic and public contest that lead to larger development of originally wealthy and influential regions to the disadvantage of poorer settings. However, devolution may possibly still lead to embedding inequalities if correct strategies are not employed.

Kauzya (2007) emphasized that in terms of public management, in the past African states have been encountered difficult, modified and extremely centralized authority systems and practices. The pursuance for all-encompassing, linking, and participatory governance has embraced the route of decentralization since efficient delivery in third world economies of public amenities has extensively been stalled by exceedingly centralized government official procedures (Mwabu et al., 2008). This new widespread trend has triggered a corresponding surge of research regarding the criteria for the allocation of resources among different tiers of government and the outcomes of such allocations on redistribution, equity, and development (Arzaghi & Henderson, 2005; Tanzi, 2008). The three functional roles of a government are making steady, resource allotment and circulation that may revolutionize as decentralization effect takes charge. However in matters of devolution, the issue of efficiency in resource allocation and utilization cannot be disregarded.

Devolution may create or strengthen independent units or tiers of government, relocate authority for decision making, funding and administration to local government components. In excessive, devolution concerns a terrain that could become an entirely autonomous state with definite

geographical boundaries, completely in charge of taxation and public spending, other external policies and responsibility for its law creation and enforcement that supports its the rule of law territory (Klugman, 2004). Whilst some central governments partially devolve power and authority with others devolving the fiscal policy fully, financial sustainability is key to success of any meaningful devolved system of governance. At initial stages of devolution the support of the central government is essential as the local governments develop their systems, although at the teething stage, the public services expected by the citizenry cannot be withheld.

## **1.2 Research Problem**

Organizational profitability is in a way associated to project management effectiveness and best resource exploitation. Institution whether business oriented or otherwise continue to agonize with these central competencies normally undergo overhead spillovers, schedule setback and discontented clientele since they fall short to match the correct tasks or responsibilities with the specific resources based on ability, availability and to pursue effort to ensure that available resources are allowing the work being completed on budget (Mun & Yanqing, 2005). Existing economic status of communities present financial constraints and economic changes which in turn dispute financial sustainability of projects while implementation and use of digitized financial systems especially in developing areas is associated with costs that require sufficient resources that can support the sustainability of projects. Bahl and Linn (2002) indicate that the resources needed comprise those essential for provision of technical infrastructure as well as those that generate demand. Hutton and Leads-Williams (2006) argue that financial sustainability strategies also involve other forms of resources like unpaid assistant staff or joint resources from other organizations plus persuading another organization carry on a venture you started. Financial sustainability has been one of the most challenging issues within the realm of development both at program and project levels which Balford (2003) attributes to general high recurrent costs, wastage, theft and unwarranted additional costs. Barney (2001) suggested that financing needs are at least an order of magnitude greater than what is currently available therefore; success has been limited in developing mechanisms and circumstances that create situations in which resources necessarily for development are assured. Sustainable resources are those resource systems planned and run to entirely add to the objectives of the public, today and in future whilst preserving the environmental integrity, the issues that have been of paramount concern to the way resources are maintained and utilized (Mital & Pennaltur, 2008).

In recent decades, there has been witnessed a new wave toward decentralization across the globe motivated in part by calls for democratization and, to a notable extent, by the theoretical economic advantages of the transfer of power and resources (Bird & Tarasov, 2004; Dafflon, 2012; Oates, 2008; Patsouratis, 1990; Rodriguez-Pose & Sandall, 2008). Developing countries have embraced the

devolution initiatives with hopes that it will steer economies to success despite many failed devolved states. Currently local financial autonomy has become an intriguing subject of study for researchers and supranational organizations, yielding significant results for the theory and practice of fiscal decentralization in recent decades. The majority of the research is based on the IMF (2008), OECD (2010), and World Bank (2013) statistical databases, which serve for cross-country comparisons. However, there is little research on case studies that look at intra-country decentralization. The importance of such an analysis is highlighted by Bodman and Hodge (2010) who denote that examination of particular nations are capable of using more refined budget procedures owing to superior information availability. While it is clear that, inter- or intra-country analysis can add to the enhanced understanding of the foundation of vertical fiscal organization in specific countries, avoiding some problems such as data comparability, historical, cultural, political and institutional differences between countries, research is very limited.

There has not been a common agreement on the definition of what financial sustainability is, but commonly it is all about being in a capacity to be available for the beneficiaries in the probable future. It is seen as the contrary of closing down operations merely because of running out of funds. Whereas the majority of studies are only informed by records of local administration personnel as opposed to comprising supported records from their direct superior, cases of incomplete data being collected for study are present (Anthony & Kate, 2011). Studies in devolved government's context are largely limited to devolution in their particular countries hence generalization cannot be absolute outside the national span. whereas the idea of financial sustainability and resource utilization have been studied widely including Mark (2006), Anthony and Kate ( 2011), Sean (2007) and Sumit (1998) in other contexts, no study known to the researcher that have been done in the area of decentralized administrations. The research question this study seeks to answer is: What is the effect of resource utilization on financial sustainability of devolved administrations?

### **1.3 Objectives of the Study**

This study focuses on a broad objective which sought to investigate whether possible moderators and possible interveners influence the relationship between resource utilization and financial sustainability in devolved administrations. Arising from this broad objective the specific objectives are to:

- i. Establish the effect of resource utilization on financial sustainability of devolved administrations.
- ii. Determine the possible interveners on the relationship between resource utilization and financial sustainability of devolved administrations.

- iii. Determine the possible moderators on the relationship between resource utilization and financial sustainability of devolved administrations.
- iv. Determine the joint effect of resource utilization, possible interveners and possible moderators on financial sustainability of devolved administrations.

#### **1.4 Value of the Study**

It is envisioned that the findings of this study will contribute to the existing body of knowledge by providing a better understanding of the influence of possible moderators and possible interveners on the relationship between resource utilization and financial sustainability which has not been explored adequately in literature especially in the local context. Given that previous studies were undertaken in different types of private sectors and global economies, this study will attempt to provide a general applicability of the variables under study in the devolved governments' context and in the world of academia.

It is also anticipated that the results of the study will help managers, decision makers and opinion leaders to understand the importance of the relationship between resource utilization and financial sustainability and the role of possible moderators and interveners in this relationship. The findings may also be used by states that are anticipating taking the devolution route as a point of reference.

Policy makers in the devolved administrations will use the results of this study to address their context specific challenges in the areas of resource utilization, possible moderators, possible interveners and financial sustainability. The central governments will also be guided on funding policies of local administrations for sustainable devolution processes.

#### **1.5 Organization of the Paper**

This study is in two parts; part one cover preliminary information and the abstract while part two covers chapter 1- 4 of the paper. Chapter one details the introduction which encompasses the background of the study, study variables, study context, problem statement, objectives and value of the study and how the paper has been organized. The second chapter discusses theoretical literature review; it explores key theories and theoretical relationships between the variables while chapter three captures the empirical literature review under which empirical studies explaining the study variables are discussed. Summary of empirical literature review and research gaps, conceptual framework are also discussed in this chapter as well as how the study variables have been measured. Chapter four outlines the summary, conclusion and recommendations; these includes summary, conclusion, knowledge gaps identified and recommendations for further research. At the tail end of this chapter, the work cited from various authors is recognized in the list of references.

## **CHAPTER TWO THEORETICAL LITERATURE REVIEW**

### **2.1 Introduction**

Chapter two of the study discusses theoretical literature review. First section discusses key theories that inform this study and helps to gain a broader understanding of the study concepts. The next section discusses literature showing theoretical relationships between various variables in the studies reviewed.

### **2.2 Theoretical Foundation**

This section reviews the key theories that guide this study particularly dynamic capabilities theory and economic sustainability model. An exploration of the key propositions, discussion of the background, the critiques as well as the implications on the study concepts. Subsidiarity principle and Oates' decentralization theorem have been explored to help understand study concepts in the devolved administrations context. The review of these theories culminates in an outline of conceptual framework of this study.

#### **2.2.1 Subsidiarity Principle**

German theologian and aristocrat Oswald-von (1952) developed the principle of subsidiarity. His effort shaped the social philosophy which holds that government ought to carry out only those initiatives which surpass the capability of persons or private groups acting autonomously. He further stressed out subsidiarity as the policy rule where responsibilities for guideline and allocation of public facilities and amenities should be transferred to the greatest extent probable consistent with interests of a nation or, to the 'lowest' spatial rank of government suitable for the exercise with the intention that government is reachable and answerable to those affected by its choices (Galligan, 2005). This principle was a foundation of Australian mutual intergovernmental restructuring in the 1980s-1990s and still stands a principle for which centralized systems are commonly seen as exclusively adapted (Oates, 1999).

Nonetheless subsidiarity has been recognized as complicated to operationalize institutionally (Stephen & Graeme, 2000). Regardless of the expression, public financial, institutional and policy structures have continued to be highly centralized in practically. Being a basic principle of communal philosophy, rigid and unalterable, that an administration should not remove from individuals and entrust to the community what they can achieve by their own endeavor and industry. Positive subsidiarity is regarded as the moral imperative for joint, institutional or governmental action to create the social conditions required to the full sustainable and efficient expansion of an

individual or community. This principle helps to understand the concepts of the study from a wider perspective of devolution.

### **2.2.2 Dynamic Capabilities Theory**

Dynamic Capabilities Theory arose from a resource based view (RBV) founded by Pfeffer and Salancik in 1978 that perceives establishments as possessing stocks of important technology or other firm-specific resources (Teece, 1990). Whereas firms are not homogeneous in regard to resource, capabilities, and other contributions, these endowments are therefore difficult to adjust (Amit & Schoemaker, 2007; Barney, 2001). Capabilities are the business processes desirable to configure assets in beneficial ways. The aspect of dynamic capabilities stresses the position of strategic management in adapting, incorporating, and reassembling such physical resources to compliment the requirements of the business changing environment (Teece, Pisano & Shuen, 2005).

As Dynamic Capabilities Theory evolves over time, researchers differ not only on what the unit of analysis is but also about the processes by which learning occurs to achieve dynamic capabilities. The idea that routines could lead to dynamic capabilities opposes arguments that routines breed resistance (King & Tucci, 2008). A few studies query whether big established corporations can ever attain the flexibility in incorporating information that is necessary to generate new capabilities (Grant, 2006). Other researchers noted, nonetheless, that routines that safeguard ongoing transformation processes can exist on a higher level (Argyris & Schon, 1998; Benner & Tushman, 2003). Nevertheless, just as proper practice with operating routines safeguard and embed those routines, familiarity with changing operating routines demands modification in routines that makes comparable changes in the future. This theory has implications on study concept regarding the best resource based structures of organizations, staffing roles as well as employees, production policies, contracting and sub-contracting, external organizational relations, and other numerous dimensions of organizational approach.

### **2.2.3 Economic Sustainability Model**

In line with the model explanation formulated by economist Solow (1989) sustainability is proposed as an investment predicament, in which potential investors should use returns from the use of natural resources to develop more opportunities of identical or superior worth. Collective spending on the underprivileged or on safeguarding the environment, although possibly permissible on other grounds, it diverts from the intended investment therefore competing with a commitment to sustainability.

With no assumption that natural assets are at all times exchangeable with financial capital, Herman and Daly (2001) disputed that other advocates of ecological economics, than sustaining opportunity

for the future involves strong preservation measures to safeguard ecological assets and to maintain economies operating in confinement to natural limits. In another standpoint the association between opportunity and capital, expenditure on the deprived may be looked upon as a sort of investment in the future. Economist Sen (2005) put forward that if development is seen as freedom command, choices are then formed for the future by building options for today's underprivileged since additional options leads to larger development sustaining opportunity as the future requires investing in individual self-importance today. Well-built sustainability provides priority to the conservation of natural assets as weak sustainability ignores definite obligations to sustain any particular good, supporting only a common principle to leave future generations better off than we are today.

#### **2.2.4 Oates' Decentralization Theorem**

The decentralization theorem was coined by Oates in 1999. The theory postulates that the central administration cannot discriminate public policy on a locale basis. The assumption has from time to time been warranted by some informational benefit of local governments regarding the social and economic characteristics of settings. In the revelation principle, uneven information can't be verified as adequate to clarify the reasons as to why the central government cannot duplicate the allocation of local governments, when governments are perceived to be caring. Additionally, empirical investigations appear to establish that central policies are homogeneous across countries. On the basis of a stylized representation of public sector governance with self-centered policy-makers, centralization and decentralization are the same (Weak Decentralization Theorem) any time informational excesses across regions are wished away (Lockwood, 2001).

As observed by Mueller (1999) contrary to the decentralization theorem, self-interested bureaucrats and politicians are not sufficient to cause the allocation be pareto-inefficient and that asymmetric information presents the span for self-centeredness unfolding thus, adverse selection is taken into account by assuming that information about technology in public domain is privately monitored by the local and government agencies situated in every region. In cases where technology know how is privately observed, most excellent efficiency may be unattainable for the reason of incentive problems while the policy-makers may well utilize their informational lead by declaring untrue state of regional public technology. In a complex world where individuals and groups compete for scarce resources, this theorem helps to understand the context of devolution and why it has become a trend in the world economies.

## **2.3 Relationship between Variables**

In this section, theoretical relationships between various variables of this study are discussed. These include relationship between resource utilization and financial sustainability, resource utilization, financial systems and financial sustainability, resource utilization, macroeconomic factors and financial sustainability and resource utilization, financial systems, macroeconomic factors and financial sustainability.

### **2.3.1 Resource Utilization and Financial Sustainability**

In Ashraf, Karlan, and Yin (2003) it was indicated that the force behind developing feasible financial products appropriate to intended markets like savings products has concurred with the swift drift in the microfinance industry for self-reliance. It therefore can be deduced that practical financial products like microsavings deposit services and financial independence is strongly associated with financial sustainability. It becomes visible that a link exists among the trends to expand microsavings products and becoming autonomous. Towards that spirit, microsavings can turn out to be a source of financial resources for micro finance institution (MFI) by using customer's investments as a resource to advance services and enlarge outreach such as improving its day to day business operations hence translating into improved financial sustainability. Hannig and Wisniwski (2009) were in agreement that customer's deposits in this case considered as savings can be converted into capital for the MFIs. Additionally, they proposed that in a situation of general macroeconomic steadiness, small charitable savings can assemble huge amounts of finances that are more established than other financing sources. In Kelly (2011) it was concluded that lending savings services does not lead to better business undertakings.

PWC (2006) posit that local government in the states that had practiced extensive mergers and states that had not experienced structural reform, continue to encounter financial troubles. Precisely, local infrastructure in all Australian parts was in such severe situation and only the pumping in of billions of dollars past the financial capacity of local government could remedy the situation. It was further argued that structural transformation in other places had not succeeded to eliminate financial unsustainability.

Dyer and Singh (1998) argued that whether paying attention to specific resources or on their linkages, investigations concentrate on the internal resources of a firm. Comparably, an additional research revealed the knowledge that critical resources a firm owns could too lengthen firm continued existence (Dyer & Singh, 1998). Consequently, the impression that inter-firm resource connection are also key source of alternative behavior has turn out to be widespread wisdom and numerous studies confirm the idea that inter-firm interactions are loci of establishing sustainable

firms. Most importantly, tasks resource manager is to ensure that all assets placed under their care are effectively utilized. Managing utilization is difficult, and it requires that you know the assignment status, skills, availability, and interests of resources (Muttalib, 2003).

### **2.3.2 Resource Utilization, Financial Systems and Financial Sustainability**

The essence of any financial system is to implement measures that follow up all financial activities revolving about all tangible and non-tangible resources a firm owns. At a firm level, the financial system covers all facet of finances like accounting procedures, income and cost schedules and balance sheet authentication all which are vital for a financially sustainable organization. Whereas constant, seasoned, visionary champion are vital to firm's achievement, organizations will not at any time fully exploit resources and advantages if they fail to shift from depending on champion to a more vibrant capability that incorporate them as a part element of the entire system. To boost their understanding of the way firms can transform capabilities for enabling key sustainable innovations, they need to learn to apply their resources maximally (Tadesse, 2002).

In contemporary economies, financial systems take up a key responsibility in apportioning limited resources by helping to direct individual or household savings to both corporate and public sector and distribute investment finances between organizations. As a result of firms generate gains, the financial systems in place also aid in channeling the returns back to households. In aiding this essential role, financial systems of diverse structures have emerged in many countries with some being bank-based and others financial markets based (Chuck & Solomon, 2006). Financial systems in the structure of enhanced accounting and disclosure regulations, and improved corporate governance through establishments, will curb the hold linking the cost of internal and external finances and boost growth particularly for institutions that rely most on external funding.

A major innovation capability involves constant relations of several elements of the management system that surpass the sophistication of simple operating schedules that form the center of dynamic capability theory in today's economy. A number of exact elements in a management system that might comprise a sustainable dynamic organization sighted as an integrated system include visible organization structure, financial systems, exploratory processes and skills, authority and decision-making methods, suitable performance evaluators as well as apt culture and leadership framework. When properly integrated and allocated the right resources in timely manner, these fundamentals are crucial and adequate for structuring sustainable systems (Gina, 2008).

### **2.3.3 Resource Utilization, Macro-economic Factors and Financial Sustainability**

A gender analysis identifies socially and culturally clear cut responsibilities for male and female, and considers their roles and power relations when devising guidelines and services although in most cases the female population is perceived inferior in these relations (Johnson, 1997). Nevertheless, negotiation for changes should be aimed at both women and men and more importantly noted that, women and men are heterogeneous sets, therefore any analyses can vary by social class, age, ethnicity and religion affiliation. When analyzing finances and economic projects across genders, typically some constraints are identifiable on women that include time limit, mobility, and restriction over cash, loads of unremunerated labor, obstacles to attain formal education and rewarding productive activities.

Social norms in addition to legal regulations occupy a major position on how corporations and individuals carry out economic transactions. Studies have established that factors save for prices or expenditure determines choices of people when making decision to buy, sell, invest or lend. Such informal norms can eliminate particular groups more still they can be useful in development, like the social customs that protect natural resources supported by harsh community sanctions for the defiant (Zhou & Assaad, 1996). Enactment of laws and by-laws that safeguard the use of natural resources, reduce degradation and depletion is the role of states so as to achieve sustainability in the long term (Ennen & Richter, 2010).

Economists accentuate the position of financial development in improved recognition of investment opportunities, minimizing investment in highly tradable but unprofitable assets, organizing savings, enhancing technological improvement can lead to superior economic development (Stieglitz & Heine, 2007). The question arises as to whether establishments truly appreciate and dynamically deal with the interdependence between resource necessities of responsibilities and the actual resources on hand; mainly in the perspective of external (in this case perceived as macro-economic factors) relationships or if they unite resources available anchored in different heuristics, like the variety of resource profiles given that managerial decisions are tricky to observe. Financial sustainability is central and ought to be compatible with advancement objectives hence financial institutions should increase citizens' participation in the contribution to social capital. Practitioners need to recognize the significance of this participation for development and poverty reduction, protection of resources and promote research to uncover current patterns and markets.

### 2.3.4 Resource Utilization, Financial Systems, Macro-economic Factors and Financial Sustainability

Rajan and Zingales (2008) put forward that the intrinsic worth of financial systems are a function of the comparative agreeability of the setting and the comparative worth of price indicator. Markets need sustaining implementation measures composed of strong regulations. Additionally they asserted that in cases of weak laws coupled by deficient contract enforcement, banks crop up to internalize business transactions since they can put into effect contract for protection of resources. Allen and Gale (2002) posit that economists are inclined to support policies that endorse competent production, whether by promoting the taking on or creation of further efficient technologies, reliable financial mechanisms, and operation of a specific technology in a functionally efficient approach or the adjusting the producers size to attain economies since this will be a stepping stone towards a self-sustainable system.

Hofstede (1997) observes that individuals insight of uncertainty and survival mechanisms are persuaded considerably by national culture they reside in, thus the arrangement of a country's financial system can be shaped by the level of risk acceptance prevailing in such national culture of a country. It is further argued that culture dictate values which consecutively influence attitudes and then mould behaviour, an order empirically verified by Homer and Kahle (2007). Since a system is an autonomous quasi-symmetry, external forces such as natural forces, trade, economical, political dominance or technological breakthroughs. Besides legal systems pressure, arrangement of financial systems are as well linked to uncertainty evasion, an element of country culture that is directly reflected on how resources are allocated among competing and risky units (Levine, 2005).

While the objective of a nation is to defend the continuity and resource interest of deprived in the society and groups that wholly or partially depend on use of a specific natural resource for their continued existence, such demands result to a range of political, economic and administrative contradiction. Distinct and conflicting ambitions from various state agencies may result in or stimulate resource conflicts and power tussle (Blair, 1999). The inclination for varied interests to garner backing in different spheres of the state like the differing claims on natural resources protection against strengthening of agriculture is not rare and many countries have experienced these scenarios. Different financiers have advocated for different and incompatible plans for ecological resource management and improvement. The implication of such policy discrepancies and institutional disintegration for resource preservation endeavours can be considerable to all parties (Padgett & Galan, 2010).

Financial sustainability is fundamental in structuring better financial institutions given that to uphold professional, formal institutions essentially means sticking to the major dream of economic development whose main concern is production, enterprises and growth. Advanced financial institutions long discovered that markets for further innovative services which champion social reproduction activities and support input by and answerability to communities. They come up with measures and guidelines that are able to contribute to positive societal changes. Remittance mechanisms and coordinating committees are some of the ways to integrate the concepts of optional economic theories when proposing newer versions of financial institutions. As an outcome, such institutions might turn out to be a actual substitute rather than a reproduction of prevailing banking systems.

## CHAPTER THREE EMPIRICAL LITERATURE REVIEW

### 3.1 Introduction

Chapter three of this study entails the review of empirical studies that relate to the study concepts. Summary of empirical literature review and research gaps identified are discussed and the study variables relationships are schematically represented in form of a conceptual framework that help to gain deeper understanding on the interrelationships between the study variables. The chapter also discusses how the study variables have been measured in the studies reviewed.

### 3.2 Resource Utilization and Financial Sustainability

Existing empirical evidence reveals that there exist a correlation amid utilization of resources and sustainability. Sumit (1998) sought to ascertain why some firms could be in good position at utilizing resources than others as he sought to ascertain empirically differences in resource utilization model among firms. He used U.S telecommunication industry as the context of his study. He calculated three set of scores for 39 telecommunication firms in six periods; 1975, 1978, 1981, 1984, 1989 and 1990 and applied data envelopment analysis (DEA) method in data analysis. The study found out that: 12 out of 39 firms were equally efficient and they had a foreseeable future and that relative competent. It was further found that managers were not keen in producing revenues. Firm's excess resource utilization was seen as a section of the overall resources which roughly emulate the firm overall efficiency score. DEA procedure however, measures resource use on a firm-level basis and it calls for the study to be able to be categorized as so. The six periods set for the study (15 years span) for a telecommunication study is such a long duration since this industry is prone to environmental and technological changes. The inter-transfer of managers across firms in the industry was not factored since a performing manager could have been transferred to a non-performing firm and vice versa.

Amy, Luisa and Anne (2012) examined the benefits of collaboration teams with high complementary resources and low operation costs. The researchers studied aspects that explicate international scholars' accomplishment in publishing in North American management journals through collaboration. Derived from worldwide entry mode literature, it was proposed that international collaboration teams thrive better upon increased complementary resources therefore minimize operation costs. The study used archival sample data of 364 articles from by 982 authors from 44 countries in 10 NA management journals for years 2003 to 2010. They merged further findings from 23 semi-structured interviews, and they provided a research model to clarify on the resources and costs entrenched in the teams and the methods that would assist change costs into resources.

Hypothesis of the study recommended a positive association among complementary resources and steady publication accomplishment. They further found out that having more assistant professors (in this case human resource) was linked to more publication achievement in the long run.

### **3.3 Resource Utilization, Financial Systems and Financial Sustainability**

Richard (2002) study objectives were to identify core institutional components of financial systems; and how financial revolutions occurred and whether most people with no affluent set of choices of financial services influence economic history. The data for the study was gathered on real Gross Domestic Product (GDP) per capita in relation to global mean chosen from seven countries (Italy, Netherlands, United Kingdom, Japan, United States, France and Germany) dated from 1500-1998. While the study utilized data for few countries from developed economies, the availability of data for such lengthy period of time (1500- 1998), about 50 decades raises reliability questions. Since the states selected for the study operate in diverse political, social-cultural and economic environments, the evolution of financial systems could have been affected by multiple factors that the study did not capture.

Mark (2006) investigated what financial sustainability is and why it is a suitable objective, the way to measure and what advances the levels of financial sustainability. He gathered data from 18 participants who were the primary senior staff of Southern NGOs. The findings of the study were that: Key factors in making sure that loan are paid off, is initiating quick action when a scheduled payment is delayed. Most of those who fail to remit payments sometimes have the funds to repay but could have forgotten therefore it is crucial to put in place systems that can instantly spot delayed payments and take speedy measures to follow-up.

### **3.4 Resource Utilization, Macro-economic Factors and Financial Sustainability**

Josef (1999) sought to examine Eastern European industrial performance by means of frontier production functions in order to distinguish more precisely between the factors leading to the decline of the growth of industrial output in the region and how available factors of production are utilized. Estimated frontier production function data was collected for the East European countries (Poland, Hungary, Czechoslovakia and Germany Democratic Republic) by the price indices. Output of industries was measured in constant prices for all countries and was regarded as stock capital. Labour inputs were measured either by an index of hours worked in industry or by the number of hours worked directly. It was found out that the magnitude and timing of changes in technical efficiency suggest that macroeconomic factor is a major determinant of technical efficiency. Findings further revealed that in all the countries changes in efficiency of resource utilization were more receptive to amendments in macroeconomic factors as to the economic modifications. The quantity of labour that

is relocated in cyclical slump was established to be potentially elevated levels of concealed unemployment.

Anthony and Kate (2011) in a study to identify sustainability indicators for festivals as well as their applicability to a coastal case study sampled a broad view of event organizers on how to best achieve sustainability. Data was deduced by NVIVO to point out a central set of indicators which an industry recognizes as central to check its sustainable practice. The findings revealed a need to implement more cost effective approach that would raise more revenue in the long run and that the area could be generally improved upon. They also found out that people 'do their own thing', however some of the more enlightened events understand it is not really a competition thus a need for better ties with the community and other operators in the industry. The factors identified in achieving the progression included additional finances, flexibility in operations and being continuously open to new ideas and the business environment in general. The study was a case study for Isle of Wight festival that operated in a highly controlled location thus it's not correct to generalize the findings to festivals that operate in open and non-controlled environments. The data required for some indicators was not fully collected thus the results are bound to be inconclusive. There existed no strict environmental policies thus the results lacks a basis of comparison as to whether there is progress or compliance.

In their study carried out in Kenya, Otieno, Rotich and Mulongo (2014) relied on the following three objectives in its attempt to answer the devolution and governance related conflicts in Africa with Kenya as a case; Identifying devolution and governance conflicts in Africa, finding mitigations to devolution and governance conflicts in Africa and highlighting prospects and challenges to devolution and governance conflicts in Africa. The study opted to use a qualitative design as well as document analysis to come up with its body of reliable knowledge in this topic of study. The findings were: The Kenyan experience is dissimilar as per her socio-economic-political dynamics that are not so different from African countries. The Kenyan scenario was probably very ambitious to have trusted an implementation of a new system to a winning government singly and that the constitutionalism had mitigating factor to devolution and governance conflicts in Kenya. The findings further revealed that African countries including Kenya being cased in the study have a lot to learn from the Asian experiences of the past. Despite the drawbacks with devolution world over, the devolution experiment in Kenya has brought with it some renewed energy in the management of public affairs in the Kenyan case where devolution seems to have neglected even the requirements of national cohesion commission for human resource in favour of locals.

### **3.5 Resource Utilization, Financial Systems, Macro-economic factors and Financial Sustainability**

Chuck (2006) studied what makes countries to vary in the arrangement of their financial systems. Data was collected on financial systems for a large cross-section of 41 states that was analyzed using multivariate regression. Findings revealed that countries typified by higher uncertainty averting are probable to have a bank-based system. Uncertainty avoidance was found to be of significance in setting apart countries with financial systems when legal environment, economic progression, political pressure and level of institutional advancement variables are controlled. Other than the influence of the legal system, design of financial system was found to be correlated to uncertainty evasion, which is seen as part of the aspect of national culture. The findings further revealed that there exist a connection amid tradition literature and finance literature signifying a traverse disciplinary justification of financial systems since strength and superiority of a legal system steer the position of financial system in pooling resources and transforming them across time and space. Data collected across 41 countries was a good representation of developed and developing economies thus the findings can be generalized.

Kristie et al. (2012) focused how to implement a monitoring framework for ecological, economic and social sustainability and resource monitoring in business plan of ranchers. The working group adapted 17 indicators from 64 national and regional branded as sustainable rangelands roundtable (SRR). Ranch appraisal indicators suggested were chosen with three major features namely; quantifiable measure, informative to the business measure and that the indicator is observed at the farm scale and quantifiable by the ranchers. Resource check procedures for every pointer in terms of methods, time usage, technical assistance and level of skill were evaluated. Findings of the study pointed out that ecological, social and economic monitoring data coupled with weather records can aid a rancher in improved harmonizing the resource capabilities. It was further revealed that monitoring data and business plans are both practical managing devices separately however merging both maximizes management and sustainability of ranch and rangeland.

### 3.6 Summary of Empirical Literature Review and Research Gaps

This chapter reviews empirical literature of the study. The empirical literature was done on the relationship between various variable of the study. Table 3.1 shows a summary of selected empirical studies done relating to the variables of this study.

Table 3.1 Summary of Selected Empirical Studies and Knowledge Gaps

Variables	Author (Year)	Title of the Study	Findings	Knowledge gaps
Resource utilization  Efficiency	Sumit (1998)	Utilization of Resources:  Perspectives from the U.S. Telecommunications Industry	12 out of 39 firms were equally efficient and they had a foreseeable future.  Relative competent managers had knowhow that they are efficient in exploiting material resources, but no knowledge in generating income.  A firm's surplus resource consumption as a section of the entire real resources utilized broadly emulates its general efficiency score.	Major environmental and technological changes have taken place in this ever-changing industry  The study used few variables  Gradual opening of global market change resource buildup plan with the firm.
Financial systems  Taxes  Leadership  Political influence	Richard (2002)	Financial Systems and Economic Modernization	The findings revealed financial insurgency as being readily swift and orderly accomplishment of existing administration and it was politically controversial.  Financial specialist count alot as they recognize and appreciate institutional components and function of good financial systems.  Financial systems serve the desires of regimes economic survival.  Financial institutions such as banks, the securities markets and steady currency play big and even underlying roles in a sustainable economic growth.  No financial system has flourished when public (finances) resources are weak.	Study of the same nature can be done with a focus on developing economies  A study that focuses on more recent developments and factor the effect of technology on development of financial systems
National culture  Uncertainty of Avoidance  Legal system	Chuck (2006)	National culture and financial systems	Nations typified by high improbability avoidance are likely to embrace bank-based system.  Uncertainty avoidance was found to be of significant in distinguishing nations with	Use more studies variables  Narrow a similar study to focus on developed

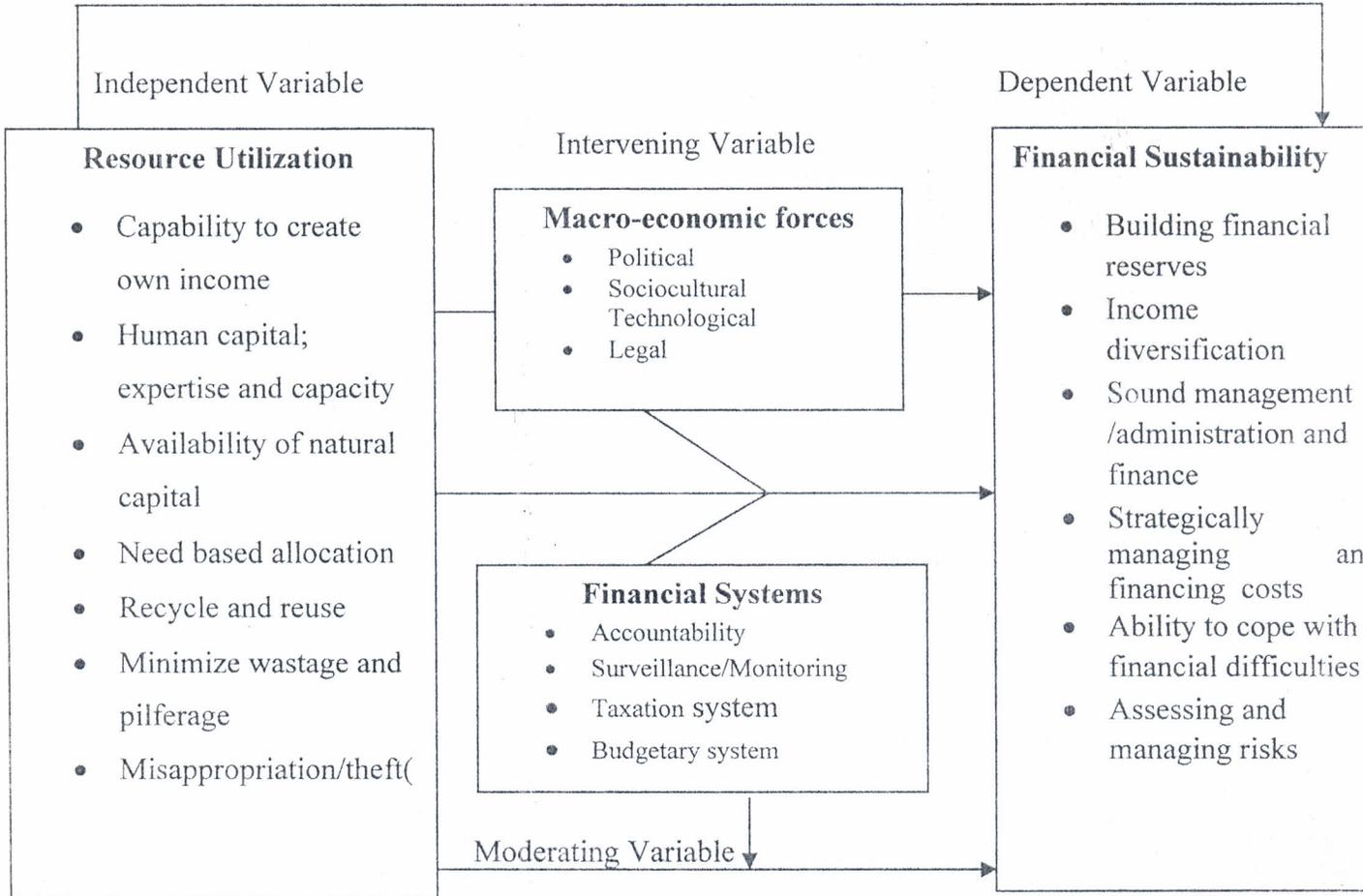
			<p>financial systems when legal environment, economic progression, political pressure and level of institutional progression variable were controlled.</p> <p>Configuration of financial system was found to be associated with uncertainty evasion which is an aspect of national culture.</p> <p>There exist a relationship between tradition literature and finance literature signifying a multi-disciplinary reason of financial systems.</p> <p>vigor and superiority of legal system read out the function of financial system when pooling resources and transforming them across time and space.</p>	administrations in country
<p>Resource Utilization</p> <p>Wise spending</p>	Sean (2007)	<p>Don't beg for resources - spend them wisely</p>	<p>Time and again it is overlooked how much more is used up on healthiness, education, social amenities, accommodation and other community services.</p> <p>While Northern Ireland doesn't fit squarely into the category of developing economy the obvious facts from such countries demonstrate that over 40 years of international assistance has yielded positive result projected.</p> <p>Lavish development relief has not pulled out majority of the beneficiary countries from poverty. Actually the association is reversed, with more development aid resulting to greater economic underdevelopment</p>	<p>Focused on spending aspect of states.</p> <p>The context study is United states which is developed economy; a similar study can be carried out for developing economies</p>
<p>Sustainability Indicators: Financial/Economic Environmental Technological Social- Cultural requirements</p>	Anthony and Kate (2011)	Identify sustainability indicators for festivals as well as their applicability to a coastal case study	<p>Implement more cost-effective approach that would raise more revenue in the long run.</p> <p>People 'do their own thing', however some of the more enlightened events understand it is not really a competition thus a need for better ties.</p> <p>Factors for progression included additional finances, flexibility in operations and continuously open to new ideas and the business environment in general</p>	<p>A similar study can be done in different contexts e.g. non-controlled locality and compare the results</p> <p>Data collection method that specifically targets respondents can be used to enable better analysis and conclusions.</p>

The empirical literature review highlighted studies done on the study variables from the global and regional perspectives. The reviewed studies however have not combined similar intervening variable and moderating variables as the current study and the variables studied previously were based on different contexts. The review of literature therefore identified conceptual, methodological, and contextual research gaps.

### 3.7 Conceptual Framework

The schematic diagram below is the conceptual framework. A review of literature identifies four variables: resource utilization (independent variable), financial systems (moderating variable), macro-economic forces (intervening variable) and financial sustainability (dependent variable). Resource utilization is defined by seven indicators/elements; ability to generate own income, human skills and abilities, natural resources, allocation on need basis, recycling/reusability, wastage and misappropriation/theft. It is presumed that resource utilization will influence the financial sustainability but the degree and direction of this influence will be moderated by macro-economic forces. Financial systems act as an intervening variable and will influence the utilization of resources and therefore crucial in determination of financial sustainability. The interaction of these variables, presumably affects financial sustainability.

Figure 3.1 Conceptual Framework



### **3.8 Measurement of Variables**

This sub-section discusses how the four variables have been measured in previous studies. The way a measure is performed is based on the type of variable under consideration in the analysis therefore various kinds of variables are measured in a different ways. Measurement of variable is important to help in evaluating the appropriateness of the statistical techniques used, and consequently ascertain whether the conclusions derived from them are valid.

#### **3.8.1 Resource Utilization**

In Debreu (1951), inefficiency of the allocation of resources in an economy was ascertained by calculating how minimal resources could achieve same point of fulfillment to the final consumers. The model checks the technical and allocative inefficiency in the economy with only basics like resources, technology, and preferences provided. This model however, is micro-economic and it presumes that technical change do not take place. The shortcoming of this model is that it revolves around individual preferences data. Farrell (1957) used allocative efficiency measure considered an incomplete model that is accustomed on prices. It considers cost reduction achievable by altering the combination of inputs when prices are provided. In the two models Farrell technical efficiency and Debreu coefficient of resource utilization are defined in the course of balanced input reduction.

Kydland and Prescott (1982), Burnside, Eichenbaum and Rebelo (1995) used total factor productivity (TFP) to determine capital utilization. TFP is the section of output not reflected by the amount of inputs used in production. The level can therefore be ascertained the efficiency and intensity of utilizing inputs in production. TFP intensification was also established by Solows' residual which entails growth rates of collective yield, aggregate capital, collective labour and alpha the capital share. TFP plays an important task on economic upward and downward movements, economic advancement and cross-country per capita income disparities. On business phase frequencies, TFP is robustly related with production and the actual hours worked.

Stewart and Anthony (2003) used data envelopment analysis model to evaluate resource input congestion for distribution centers. By means of a downstream petroleum firm, they presented a more asymmetrical analysis by decomposing distribution efficiency into managerial, scale, and systematic efficiency, and examining the effect of corporate-level decision making by putting on board non-flexible variables. The analysis discovers chances to enhance efficiency at organizational level by means of substitute views of the operational problem. This approach moreover offers keen managers a purposeful means to appraise performance at the level of the organizational component even if efficiency might differ within a firm.

Tser-yieth (2005) utilizes data envelopment analysis (DEA) while assessing relative resource utilization efficiency of 23 university libraries in Taipei City. Notably he employs a single input/output measure to set apart efficiency/performance and compute the overall efficiency attainment, and technical and scale efficiency scores of each university library unit. DEA however, is a nonparametric technique in operations research and economics used to estimate production frontiers. Mostly the measure is employed to empirically evaluate productive efficiency in decision making units (DMUs). Even if DEA has a strong relation to production theory in economics, the model is as well used for operations management benchmarks, such that measure set is chosen to yardstick the accomplishment of manufacturing and service functions.

### **3.8.2 Financial Sustainability**

Kelley (2011) used return on assets (ROA) and operational self sufficiency (OSS) to measure financial sustainability. ROA is derived as the income net of taxes divided by entire assets while operational self sufficiency is expressed as financial returns divided by sum of financial costs net loan loss provision expenses and operating expenses. NGOs commonly measure sustainability of their credit programmes by use a proportion figure said to be loan settlement rate (Mark, 1999). This method is an inadequate measure of firms' funds sustainability because credit settlement is just part, although vital element of the sustainability representation and the problems associated with repayment rate percentages that do not factor in arrears, default and write-off.

Gibson (2003) used cost of funds, operating costs, loan write-off and inflation to measure financial sustainability in savings and credit programmes. Kenya rural enterprise program (K-REP) applies a straightforward sustainability index to analyze performance which is gotten as the total overheads covered by the revenue (K-REP, 1996). The World Bank supports the application of comparable subsidy dependence index (SDI), an equally suitable tool for determining financial sustainability although the manner it is structured implies that it is more probable to be useful to economic analysts other than managers of NGOs savings and credit programmes in search of ways to make better the operational performance.

### **3.8.3 Financial Systems**

A financial system is measured by its ability to perform its vital functions relating to; resource allocation based on sound criteria, improvement of the productive and investment efficiency of assisted enterprises, and reduction of transaction costs and risk of depositors, borrowers and the financial institution. This therefore makes certain that financial services industry function on the basis of operational agility and purposeful independence with a view to improving efficiency, productivity and profitability (Falko, 2004). According to Bhatt (1992), a financial system is

considered sound in its effectiveness to ensure the integrity and autonomy of operations of banks and DFIs.

A financial system permits the exchange of finances amid lenders, potential investors and possible borrowers. These systems function at national, global and firm-specific levels. While in a firm, it encompasses all aspects of finances such as accounting measures and revenue expense schedules, they at times consist of compound, strongly connected services, markets and establishments used to present efficient and standard linkage among investors and depositors (Allen & Gale, 2009). A Financial system can be measured by its ability to permit resources to be allocated, invested, or circulated in economic sectors and facilitating persons and corporations to split linked risks.

Richard (2002) posits that an effective financial system is the one that practices plausible public finances and public debt management, steady monetary system and a , strong banking systems, steered by an effective central bank, functional securities markets in addition to a stable insurance industry. Richard (2002) further argues that financial leaders are importance elements for a successful financial system. Such leaders know and understand the central institutional mechanisms of a functional financial system the way these mechanisms operate, interrelate, and strengthen each other in financial setup. The manner in which such leaders cater for the needs of governments and the general economy is important because they possess the political and administrative ability to execute such systems which are a central factor in drawing and sustaining capital inflows.

### **3.8.4 Macro-economic Forces**

The political factors of a nation refer to the steadiness of the political environment and the outlook of political parties or movements, which is closely associated to the membership. Political influence cannot be undermined and can manifest in government influence on tax policies, trading agreements and they are unavoidably entangled with legal factors like national service regulation, global business regulations and restrictions, and safeguarding of consumers. The economic factors prevailing in a country signify the larger economy from the perspective of economic growth rates, employment and unemployment scales, costs and quality of unprocessed materials like power, gasoline, interest rates and monetary policies, exchange rates and inflation rates and could differ according to countries structures. In a give nation or state, socio-cultural aspect symbolize the culture of the society that an organization is based in which includes demographics, age distribution of the population, populace growth rates, level of education, how wealth is distributed, arrangements of social classes, living conditions and lifestyle (Baffoe, 2008).

A firms technological factors encompass the pace of fresh inventions and development, changes in information distribution and mobile technology, internet and e-commerce and government spending

on research. Frequently technological developments tend to focus on digital and internet-related quarters, although a firm should take in materials development, new methods of manufacture, distribution and logistics. Environmental impacts are manifested by restricted natural capital, waste management and reuse measures. Investment in technology lead to change and is accounted for by investment in plant and machinery and the level of research and development (R&D) that lead to change in product quality and efficiency (Saon, 2006).

## CHAPTER FOUR SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 4.1 Summary

While the concepts of financial sustainability and resource utilization have been studied widely and separately including Mark (2006), Anthony and Kate (2011), Sean (2007) and Sumit (1998) in other contexts, majority of the research is based on the IMF and World Bank (2013) statistical databases, which serve for cross-country comparisons therefore no study known to the researcher that have been done in the area of decentralized administrations. This study seeks to investigate the relationship between resource utilization and financial sustainability in devolved administrations and find out if the possible moderators and interveners introduced influence the relationship between the two. From the literature reviewed the moderating and intervening variables are reported to give varied results albeit with combination of study variables not of interest to the researcher. From the positive subsidiarity principle perspective, the moral essence for collective, institutional or governmental agenda is to avail social conditions indispensable for sustainable and efficient development of the community. This principle also helps to understand the concepts of the study from a wider perspective of devolution. While the thought of dynamic capabilities stresses on the function of strategic management in adapting, incorporating, and reconfiguring physical resources to correspond to the requirements of the changing environment, economist Sen (2005) sees development as freedom command, where options are created for the long run by generating options for today since more opportunities will compel superior development sustaining opportunity.

Empirical analysis proves that essential policies are heterogeneous across countries as such, irregularly inclined information is not adequate to make clear why the central government does not duplicate the portioning of local governments, when governments are in any case thought to be caring. Consequently, the thought that inter-firm resource linkages are an important source of unconventional behavior, research demonstrate idea that inter-organizational associations are loci of formation of sustainable firms. While financial system is regarded as a set of implemented measures that monitor all financial activities revolving about the physical and non-tangible resources a firm owns, in contemporary economies, financial systems take up a key role in apportioning limited resources by facilitating the channeling of individual or household savings to both the corporate and public sector and distribute investment funds amongst firms. Social norms and legal system take a noteworthy role on how establishments and individuals carry out economic transactions in that case a gender analysis identifies socially and culturally distinct roles for male and female populace taking into account these roles and power relations when developing policies and services. Arrangement of financial systems is as well linked to uncertainty avoidance, an aspect of a country's culture that is directly reflected on how resources are allocated among competing and risky units.

## **4.2 Conclusion**

The theoretical and empirical literature reviewed indicates relationship between the variables chosen for this study. The literature supports the critical role of managing an organization's resources for profitability and long run survival. Assets are very core to profit and non-profit organizations and they aid in generating revenues and provision of services. Difference in resource utilization across firms has been characterized by macro-economic factors such as the strength and quality of legal framework of countries. Political factor is portrayed as playing influential role in the way institutions are run. While sustainability is proposed as an investment problem, it's also unclear from the review how competent managers are efficient in employing tangible resources, and not how to create incomes, a factor that leads to threat in survival of firms. While financial systems are part of the composition of the setting and the corresponding worth of price indicators, markets need sustaining transitive mechanisms in the form of strong regulations. Cited literature also points that there are no known cases in which financial systems flourished when public resources (finances) and the legal frame work are weak.

Despite the drawbacks with devolution world over, the devolution experiment continue and many countries are seen to be moving the same direction; As the literature supports, human being prefer autonomy in managing the issues that concern them. Failure to utilize resources properly either due to mechanisms put in place or sheer wasteful habits and theft, the devolved administrations have found themselves at crossroads in matters of financially sustaining both short term and long term development projects. Social expenditure on the unfortunate populace in regard to essential services though possibly permissible on other basis diverts firm's investment and as a result competes with sustainability commitment.

## **4.3 Knowledge Gaps Identified**

Complexity of tackling the challenge of regional economic disparity by use of national macroeconomic procedures and the urge for distinct regional policy involvement is a critical element of development. Therefore there is a need for more enhanced information on utilizing scarce resources amid competing projects to enable institutions to attain self financial sustenance especially in the context of devolved administrations.

Most of studies address a regional or multiple states; therefore very few studies are carried out on country/state basis. A study needs to be conducted on the variables on a single country context since this allows the opportunity of rich data. Cases of incomplete data collected for analysis were present. Thus the choice of data collection method that targets the right respondents in of importance, this will give conclusive results and enable generalization of study results.

In most studies, the context (devolution) is used interchangeably with decentralization, deconcentration and decongestion. An analysis can therefore be conducted among states that have devolved the authority to ascertain whether they have done in wholly or partially and categorize them accordingly. Gradual opening of global markets aided by technological changes can alter resource accumulation strategies within organization/states, this phenomena goes deeper in local economies and even has direct and indirect effect on small administration units of devolution.

#### **4.4 Recommendations for Further Research**

Since literature provides substantial evidence of unsustainable (failed) devolved systems, a further research can be carried out to review what happens in case of failure. Does the central government reverse the power and autonomy granted to devolved/local government and continue operating as if devolution never took place? Further research can be done to find out the remedial strategies that failed devolution processes opt for.

Different regions of the world enjoy different natural resources and favourable climate conditions. It would be prudent if these resources were tested to ascertain their influence or the role they might have played in sustainability; with control variables such as macro-economic conditions being factored in the study.

Citing the cases that were able to utilize their resources and operate to the foreseeable future, it can be recommended that a study be done to evaluate the processes they embraced so as to remain sustainable and find out the indicators they use to check their financial sustainability. The support of a government is very essential in a devolution process. It therefore practical if a comparative study can be conducted using the same variables on a situation where the state gives substantial support and where the devolving administrations are left to work on their own during the initial stages.

## References

- Allen, F. & Gale, D. (2001). Financial markets, intermediaries and intertemporal smoothing. *Journal of Political Economy*, 103(3), 523-546.
- Allen, F., & Gale, D. (2009). Comparing financial systems. *Journal of Finance and Economics*, 1, 54-71.
- Amit, R., & Schoemaker, P. J. H. (2007). Strategic assets and organizational rent. *Strategic Management Journal*, 14(1), 33-46.
- Amy, Y. O., Luisa, V., & Anne, S. T (2012). International collaboration for academic publication: implications from the resource-based view and transaction cost theory. *Management and Leadership*, 3(61), 67-7.
- Anthony, G., & Kate, P. (2010). Sustainable management for maritime events and festivals. *Journal of Coastal Research*, Special Issue 61, 26-49.
- Argyris, C., & Schon, D. A. (1978). *Organizational learning: a theory of action perspective*. Reading, MA: Addison-Wesley
- Arzaghi, M., & Henderson J. V. (2005). Why countries are fiscally decentralizing. *Journal of Public Economics*, 89, 1157-1189.
- Ashraf, N., Karlan, D., & Yin, W. (2003). Testing savings product innovations. *Asian Development Bank*, 8, 12-22.
- Asian Development Bank, United Kingdom department for international development and world bank (2004). *Devolution in Pakistan*. Islamabad: Author
- Bahl, R. W., & Linn, J. F. (2002). *Urban public finance in developing countries* (Published for the world bank by Oxford University Press, Oxford, England; New York, NY)
- Balford, E. (2003). Biodiversity in developing countries; where are we trying to achieve? *Oryx Conservation Journal*, 37(4), 407-419.
- Barney, J. B. (2001). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99-120.
- Benner, M. J., & Tushman, M. L. (2003). Exploitation, exploration, and process management: the productivity dilemma revisited. *Academy of Management Review*, 28(2), 238-256.
- Bhatt, V. V. (1992). On restructuring the financial system. *Economic and Political Weekly*, 27(8), 389-390.
- Bird, R., & Tarasov, A. (2004). Closing the gap: fiscal imbalances and intergovernmental transfers in developed federations. *Environment and planning C: Government and Policy*, 22, 77-102.
- Blair, H. W. (1999). Democracy, equity and common property resource management in the Indian subcontinent. *Development and Change*, 27(3), 475-499.
- Bodman, P. & Hodge, A. (2010). What drives fiscal decentralization? Further assessing the role of income. *Fiscal Studies*, 31, 373-404.

- Bowman, W. (2011). Financial capacity and sustainability of ordinary nonprofits. *Non-profit Management and Leadership*, 22(1), 37-51.
- Burnside, C., Eichenbaum, M. & Rebelo, S. (1995). Capital utilization and returns to scale. *Macroeconomics Annual*, 3, 67-110.
- Chuck, C. Y. K., & Solomon, T. (2006). National culture and financial systems. *Journal of International Business Studies*, 37(2), 227-247.
- Dafflon, B. (2012). The political economy of decentralization in sub-Saharan Africa: A new implementation model in Burkina Faso, Ghana, Kenya, and Senegal. Edward Elgar, Cheltenham, UK
- De Vries, M. S. (2000). The rise and fall of decentralization: a comparative analysis of arguments and practices in European countries. *European Journal of Political Research*, 38, 193-224.
- Debreu, G. (1951). The coefficient of resource utilization. *Econometrica*, 19(3), 273-292.
- Dyer, J. H., & Singh, H. (1998). The relational view: cooperative strategy and sources of inter-organizational competitive advantage. *Academy of Management Review*, 23, 660-679.
- Ennen, E., & Righter, A. (2010). The whole is more than the sum of its parts-or is it? A review of the empirical literature on complementarities in organizations. *A Journal of Management*, 36, 207-233.
- Falko, F. (2004). On the stability of different financial systems. *Journal of the European Economic Association*, 2(6), 969-1014.
- Farrell, M. J. (1957). The measurement of productive efficiency. *Journal of the Royal Statistical Society*, 120, 253-281.
- Fehr, D., & Hishigsuren, G. (2007). Raising capital for microfinance: sources of funding and opportunities for equity financing. Southern New Hampshire University.
- Gibson, A. (2003). NGOs and income generation projects. lessons from the joint funding schemes. *Development in Practice*, 3(3), 16-22.
- Gina, C. O. (2008). Major innovation as a dynamic capability: a systems approach. *Journal of Product Innovation Management*, 25, 313-330.
- Grant, R. M. (2006). Prospering in dynamically-competitive environments: organizational capability as knowledge integration. *Organization Science*, 7(4), 375-387.
- Hannan, H., & Daly, B. (2001). *Local public finance in Europe*. Edward Elgar, Cheltenham, UK
- Hannig, A., & Wisniwski, S. (2009). Mobilizing the savings of the poor: experience from seven deposit-taking institutions. Mimeo, GTZ, Eschborn, Germany
- Hofstede, G. (1997). The cultural relativity of organizational practices and theories. *Journal of International Business Studies*, 14(2), 75-89.
- Homer, T. C. & Kahle, M. G. (2007). The financial systems of the Portuguese social security system. *The Geneva Papers on Risk and Insurance. Issues and Practice*, 29(3), 417-439.
- Howard, L., & Miller, J. (1995). Fair pay for fair play: Estimating pay equity in professional baseball with data envelopment analysis. *Academy of management journal*, 36(4), 882-894.

- Hutton, J. M., & Leads-Williams, N. (2006). Sustainable use and incentive driven conservation; realigning human and conservation interests. *Oryx Conservation Journal*, 37(2), 215-226.
- International Monetary Fund (IMF), (2008). Government financial statistics division Washington, DC
- Kauzya, J. (2007). Dissolving the public realm? The logics and limits of neoliberalism. *Journal of Social Policy*, 33(1), 27-48.
- Kelley, B. (2011). Does offering microsavings make sense for microfinance institutions? *The American economist*, 56(2), 15-27.
- King, A., & Tucci, C. L. (2008). Incumbent entry into new market niches: the role of experience and managerial choice in the creation of dynamic capabilities. *Management Science*, 48(2), 171-187.
- Klugman, K. (2004). Innovations in aid of strategic theory of the firm. *Strategic Management Journal*, 8, 11-15.
- Kotsogiannis, C., & Schwager, R. (2008). Accountability and fiscal equalization. *Journal of Public Economics*, 92, 2336-2349.
- K-REP (1996). Monthly statistical report of K-REP supported minimalist credit, Nairobi. Kenya - rural enterprise programme.
- Kristie, A. M., John, A. T., Michael, S., Cindy, G., Stanley, F. H., John, E., et al. (2012). Ranch business planning and resource monitoring for rangeland sustainability. *Rangelands*, 34(1), 11-18.
- Kydland, F., & Prescott, E. (1982). Time to build and aggregate fluctuations. *Econometrica*, 50(6), 1345-1370.
- Levine, R. (2005). Financial development and economic growth; views and agenda. *Journal of economic literature*, 35(2), 688-726.
- Lockwood, B. (2001). Distributive politics and the costs of centralisation. *Review of Economic Studies*, 69(2), 313-337.
- Mark, H. (2006). Financial sustainability in savings and credit programmes. *Development in Practice*, 6(2), 144-150.
- McBride, S. & McNutt, K. (2007). Devolution and neoliberalism in the Canadian welfare state: ideology, national and international conditioning frameworks, and policy change in British Columbia. *Global Social Policy*, 7(2), 177-201.
- Menard, C., & North, D. C. (1997). Transactions costs and beyond: recent developments. *Journal of Economic History*, 49(4), 13-28.
- Mital, A., & Pennaltur, A. (2008). Advanced technologies and humans in manufacturing workplaces. An interdependent relationship. *International Journal of Industrial economies*, 33, 295-313.
- Mooney, G., Scott, G., & Williams, C. (2006). Introduction: rethinking social policy through devolution. *Critical Social Policy*, 26(3), 483-497.
- Mueller, A. (1999). Local government under devolution in twenty two years of devolution: an evaluation of the working of provincial councils in Sri Lanka, Rajagiriya. *Institute for Constitutional Studies*, 3, 193-215.

- Mun, C. T., & Yanqing, D. (2005). Resource utilization and disparities in compulsory education in China. *China Review*, 5(1), 1-31.
- Muttalib, M. A. (2003). Decentralization: local self government institutions and resource mobilization-the Indian experience, in decentralization, local government institutions, and resource mobilization.
- Mwabu, G., & Kibua, T. N. (2008). *Decentralization and devolution in Kenya: New approaches*. University of Nairobi Press.
- Oates, W. E. (1999). An essay on fiscal federalism. *Journal of Economic Literature*, 37(11), 20- 49.
- Oates, W. E. (2008). On the evolution of fiscal federalism: theory and institutions. *National Tax Journal*, 61(2), 313-334.
- OECD (organization for economic co-operation and development), (2010). Fiscal decentralization database.
- Oswald-von, N. (1952). Social question: subsidiarity principle in organizations. *Journal of conservative Catholicism*, 3, 81-92
- Otieno, J. T., Rotich, J. K., & Mulongo, L. S. (2014). Devolution and governance conflicts in Africa: Kenyan scenario. *Public Policy and Administration*, 4(6), 57-70.
- Padgett, R. C., & Galan, J. I. (2010). Effect of research and development intensity on CSR. *Journal of Business Ethics*, 93, 407-418.
- Patsouratis, V. (1990). Fiscal decentralization in the EEC countries. *Public Finance*, 45(3), 423-439.
- Pfeffer, J. & Salancik, G. R. (1978). *The external control of organizations: a resource dependence perspective*. New York, NY, Harper and Row
- PriceWaterhouseCoopers (PWC) (2006). National financial sustainability study of local government, PriceWaterhouseCoopers, Sydney
- Rajan, R. G., & Zingales, L. (2008). Financial dependence and growth. *American Economic Review*, 88(3), 559-586.
- Ray, S. C. (2001). Resource use efficiency in public schools. A study of Connecticut data. *Management Science*, 57(12), 1620-1628.
- Richard, S. (2002). Financial systems and economic modernization. *The Journal of Economic History*, 62(2), 277-292.
- Ricklefs, N. (2005). The challenges of decentralization, paper presented on global forum in fighting corruption, Brasilia
- Rodden, J., Eskeland, G. S., & Litvack, J. I. (2003). *Fiscal decentralization and the challenge of hard budget constraints* (MIT Press, Cambridge, MA)
- Rodriguez-Pose, A, & Sandall, R. (2008). From identity to the economy: analyzing the evolution of the decentralization discourse. Environment and planning C. *Government and Policy*, 62, 54-72.
- Rodriguez-Pose, A., & Bwire, A. (2004). The economic (in)efficiency of devolution. Environment and planning B. *Government and Policy*, 36, 1907-1928.

- Rodríguez-Pose, A. & Gill, N. (2003). The Global trend towards devolution and its implications, environment and planning C: *Government and Policy*, 21(3), 333-351.
- Scheczyk, M. (1993). Operational performance of airlines. An extension of traditional measurement paradigms. *Strategic management journal*, 14(4), 301-317.
- Sean, F. (2007). Don't beg for resources: spend them wisely. *Fortnight Journal of Research*, 452, 16-27.
- Sen, A. (2005). The three R's of reform. *Economic and Political*, 40(19), 1971-1974.
- Solow, R. M. (1989). On the intergenerational allocation of natural resources. *Scandinavian Journal of Economics*, 88, 141-149.
- Stewart, R. M., & Anthony, D. R. (2003). An exploratory analysis of resource utilization across organizational units: Understanding the resource based view. *International Journal of Operations and Production Management*, 73, 19-30.
- Stephen, T., & Graeme, Y. (2000). The frontiers of power for the European Union. *Natural Resources & Environment*, 15(1), 16-19.
- Stieglitz, N., & Heine, K. (2007). Innovations and the role of complementarities in a strategic theory of the firm. *Strategic Management Journal*, 28, 1-15.
- Sumit, K. M. (1998). On the utilization of resources: perspectives from the U.S. telecommunications industry. *Strategic Management Journal*, 19(9), 809-833.
- Tadesse, S. (2002). Financial architecture and economic performance. International evidence. *Journal of Financial Intermediation*, 11(4), 429-454.
- Talbot, K., & Lynch, O. (2005). Balancing acts: Community based management and natural law in Asian and the pacific. World resources institute, Washington D.C
- Tanzi, V. (2008). The future of fiscal federalism. *European Journal of Political Economy*, 24, 7105-7112.
- Teece, D. J. (1990). Economics of scope and the scope of the enterprise. *Journal of Economic Behavior and Organization*, 1, 223-247.
- Teece, D. J., Pisano, G., & Shuen, A. (2005). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.
- Tser-yieth, C. (2005). A measurement of the resource utilization efficiency of university libraries. *International Journal of Production Economics*, 53(1), 6-19.
- Woods, K. J. (2004). Political devolution and the health services in Great Britain. *International Journal of Health Services*, 34(2), 323-349.
- Worldbank (2013). Fiscal decentralization indicators, Website of the Worldbank dedicated to decentralization and Sub-national regional economics
- Zerbe, R. O. Jr. (2009). *Economic efficiency in law and economics*. Cheltenham, UK: Edward Elgar Publishing.