

**THE RELATIONSHIP BETWEEN AGENCY COSTS AND  
OPERATIONAL EFFICIENCY OF NON-GOVERNMENTAL  
ORGANIZATIONS IN KENYA**

**BY**

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## **DECLARATION**

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

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This research project has been submitted for examination with my approval as the University Supervisor.

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Special gratitude to my entire family for their moral support and constant encouragement through this journey.

## **DEDICATION**

I dedicate this work to my loving parents James Mbiti and Marysella Mumbua for the strong education foundation they laid for me and their words of encouragement.

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## **LIST OF ABBREVIATIONS**

<b>GDP</b>	Gross Domestic Product
<b>GoK</b>	Government of Kenya
<b>NGO</b>	Non-Governmental Organization
<b>SACCO</b>	Saving and Credit Co-operative Society
<b>SPSS</b>	Statistical Package for Social Sciences

## ABSTRACT

Even though NGOs are dedicated to doing well, the fact that they are non-commercial entities implies that most of them lack the bottom line and so there is need for organization leadership, accountability, performance and results. The interest of the shareholder of wealth maximization and stock value addition does not exist in an NGO setup thus checks on excessive compensation may be lacking. The absence of competition for market share and the lack of measure of business success, profit for commercial entities, may also lead to compromise on efficiency. The society has over the past few years been concerned on the management of NGOs and use of community as 'rubber stamp' to mobilize finances and other resources that end up benefiting the management alone. Some NGOs have been deregistered for non-compliance while others appear but do not stay operational for long. This study sought to examine the association between agency costs and operational efficiency of NGO's in Kenya. The population for the study was all the 150 NGO's operating in Kenya. The sample for the study was 15 NGO's and the researcher managed to get data from 12 of them giving a response of 80 percent which was considered adequate for the study. The independent variables for the study were agency costs as measured by asset utilization ratio liquidity as measured by current ratio, firm size as measured by natural logarithm of total assets and debt structure as measured by long term debt divided by (shareholders equity + long term debt). Operational efficiency was the dependent variable and was measured by revenue turnover. Secondary data was collected for a period of 10 years (January 2007 to December 2016) on an annual basis. The study employed a descriptive cross-sectional research design and a multiple linear regression model was used to analyze the association between the variables. Statistical package for social sciences version 21 was used for data analysis purposes. The results of the study produced R-square value of 0.119 which means that about 11.9 percent of the variation in operational efficiency of NGO's in Kenya can be explained by the four selected independent variables while 88.1 percent in the variation of operational efficiency of NGO's in Kenya was associated with other factors not covered in this research. The study also found that the independent variables had a weak correlation with operational efficiency of NGO's in Kenya ( $R=0.344$ ). ANOVA results show that the F statistic was significant at 5% level with a  $p=0.000$ . Therefore the model was fit to explain the association between the selected variables. The findings further revealed that liquidity and debt structure produced negative and statistically significant values for this study. Agency costs and firm size were found to be statistically insignificant determinant of operational efficiency of NGO's in Kenya. This study recommends that a comprehensive assessment of NGO's immediate liquidity position should be undertaken to ensure the company is operating at sufficient levels of liquidity that will lead to improved operational efficiency of firms. This is because a firm's liquidity position is of high importance since it influences the firm's current operations.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Widening separation of ownership and control responsibilities and emphasis of the investor on short-term performance and returns has resulted in the increase in agency problems in the modern-day organization. Self-serving behavior on the part of managers focused on status and acts of accounting mismanagement are the various ways in which Agency costs can explicit themselves. Reduced firm efficiency and wider impacts on other corporate stakeholders, such as debt providers, employees and society in general are the various ways in which the adverse effects of these actions are felt. More emphasis has been placed on the importance of agency costs due to the realization of the consequences as a result of agency problems (Lauterbach & Vanisky, 1999).

Berle and Means (1932) was the first scholar to bring out the issue of agency costs where he asserted that inconsistent interests of management and stockholders lead agency costs might be incurred in the separation of ownership and control. Jensen and Meckling (1976) established that agency problems might be caused by the incomplete contractual relationship between the principal and the agent. There are costs incurred in the separation of ownership and management. Canonical agency problem was introduced by Berle & Means (1932) they suggested that corporate monitoring is caused by dispersed ownership. Jensen and Meckling (1976) as a contribution to these suggested that there is need for formalizing agency costs as a conflict of interest between managers and shareholders.

Most Kenyan non-governmental organizations are funded by private donors, the Kenyan Government initiatives and the international agencies and are concerned with the improvement of the livelihood of Kenyans focusing on areas such as education, advocacy of children rights, agricultural research, water, health and sanitation. Nongovernmental organizations in Kenya have adapted the concept of agency costs in order to address the agency problem which arises as a result of separation of ownership and control.

### **1.1.1 Agency Costs**

The self-serving behavior on the side of managers focused on empire-building objectives and corporate fraud makes agency costs be a cost to the firm (Jensen, 2000). Agency costs result when the principals use a combination of incentives, punishment, bonding and managerial processes in order to monitor the actions of their agents; so as to minimize the chances that the agents will pursue their interests rather than those of the principals (Chrisman, Chua & Litz, 2004). Costs of structuring, monitoring among others are various examples of agency costs (Fama & Jensen, 1983).

Agency costs' main function is the mitigation on the impacts of agency problems. According to Baker and Powell (2005), challenges that managers face in all attempts to ensure that funds are not expropriated on poor projects is what is termed as agency costs. Proxy for revenues loss associated with asset utilization, and direct agency costs, are the two measures of agency costs. Expenses are standardized by annual sales to facilitate carrying out of cross-sectional comparisons. Difference in efficiency ratio, the margin of revenues lost between a firm with a sole equity owner and a firm

whose manager owns not more than 100 percent of equity are the various ways in which agency ratios can be measured (Ang, Cole, & Lin, 2000).

### **1.1.2 Operational Efficiency**

This is the firm's ability to minimize waste and maximize resource capabilities so as to deliver quality products and services to the clients (Kalluru & Bhat, 2009). It involves the identification of wasteful resources and processes that affects productivity and growth of organizations profits. The main concern of operational efficiency is redesigning new work processes that improves productivity and quality (Darrab & Khan, 2010). Charnes, Rhodes and Coopers (1978) defines operational efficiency as the ratio of weighted outputs to the weighted inputs.

The real measurement of operations efficiency is ratio of the actual productivity to the maximum productivity that can be attained. The highest possible attainable productivity is described as the desired productivity. According to Hackman (2008), the process of analyzing productivity and efficiency is linked with economies of production which answers basic question such as what is the firm's efficiency in the utilization resources during the production process and its efficiency during scaling operations.

There are several ratios of measuring operational efficiency. To begin with, we can use the total asset turnover ratio which measures the ability of the company to produce sales considering its investment in total assets. The formula for the ratio is dividing net sales by average total assets. Secondly we can use the fixed-asset turnover ratio which is analogous to total asset turnover ratio except that the only factor taken into account is the fixed assets turnover. Fixed-asset turnover is derived

by dividing net sales by average net fixed assets. Another ratio for measuring operational efficiency is revenue turnover. This ratio measures the ability of a company to spend given its investment in generating revenue. It is derived as the ratio of total expenditure to average total revenue. These ratios shows whether the firm is managing operational cost efficiently which will ultimately have an influence upon its performance (Rao & Lakew, 2012). The current study will use revenue turnover as a measure of operational efficiency.

### **1.1.3 Relationship between Agency Costs and Operational Efficiency**

As noted by Mills and Moberg (1982) during the provision of knowledge intensive professional services, the costs of both metering and monitoring are high. Agency costs arise as a consequence of processes, systems, structures and resources expended by the principals in order to monitor and align their interests with those of the agents (Chrisman et al., 2004). According to agency theory, without the incurrence of agency costs, agents who are not owners and therefore neither bear the full costs nor reap the full benefits of their actions would not act in the best interest of the principals. They would be less committed, repetitively shirk and engage in the consumption of perks (Ross, 1973, Jensen & Meckling, 1976). The result would be poor long term operational efficiency.

Some scholars however believe that firms with lower agency costs, (e.g. owner managed firms) are more efficient than agent managed firms (Schleifer & Vishny, 1997). The processes, systems, structures and resources expended by principals in order to monitor and align their interests with those of the agents result in expenses which lower the net income. Agency costs lead to residual loss when the agents

cannot make decisions which would maximize the welfare of the principals as a result of restrictions imposed on them by the principals (Jensen & Meckling, 1976).

Several studies carried out have shown that firms managed by outside professionals rather than owners perform better than those managed by their owners (Wall, 1998; Lauterbach & Vaninsky, 1999; Perez-Gonzalez, 2001). In order for these firms to perform well, their owners must have incurred agency costs as they monitored the hired professionals. It is also argued that often times, boards may not act in the interest of the owners but in their own interests, fixing numerous meetings not for the welfare of the firm but for the anticipated benefits such as honorarium. The end result is that an increase in directors' costs (as they monitor management) may not necessarily lead to improved efficiency. Holding everything constant, the incurrence of agency costs should improve efficiency if the benefits from controlling agency problems are higher than the costs (Chrisman et al., 2004). The benefit can however be negated if the costs are higher than the benefits.

#### **1.1.4 Non- Governmental Organizations in Kenya**

Kenya has become a nation of non-governmental corporations. The activities of nongovernmental organizations in this nation have gained increased momentum because of the failure of government institutions and for revenue firms to achieve their missions and purposes, comprising the accomplishment of their obligations to their stakeholders, consumers and beneficiaries (Nobusue, 2002). Non-governmental corporations have appeared as a substitute solution to the needs of the community. The pursuits of the non-governmental organizations arise from the economic development and the reduction of poverty through the creation of employment opportunities, micro-credit and the elimination of diverse gender disparities.



Additionally, the non-governmental organizations spearhead the schooling, social construction and protection of human rights and advocacy of their conservation, social and environmental progress, marginally positioned and the defense on outreach communities' where these organizations have achieved huge success (Hossain & Khoda, 2007).

Kenya has experienced a tremendous growth in the number of both local and international NGOs that are engaged in various sectors such as education, economic development, agricultural research, poverty eradication, water, health and sanitation. The number of NGOs has increased to more than 6,000 up from 125 in 1974 (KNBS, 2016). It is also evident that nongovernmental organizations in Kenya play a significant role in providing some of the services that the government does not have the full capacity to provide. In this case, the NGOs do not take over the role of the government but rather try to subsidize whatever the government does.

The government of Kenya also realizes the important role that is played by the NGOs in the country. The government understands that NGOs have assisted in the provision of services to the poor and poorest of the country in the most equitable and transparent manner while being accountable to both the donor agencies and societies in which they operate. The government also acknowledges that for it to achieve its objectives on accelerated economic growth there should be equal distribution of national income and reduction of poverty. The government came up with the NGO regulation framework in 2006 based on the understanding that NGOs are increasingly getting involved in complementing the government in all manners (GoK, 2006). Overseeing the management of the NGO is a responsibility of all the directors who give out

responsibility of to a team of officials are usually elected (NGO Coordination Board, 2009).Accountability and better management of resources in the custodies of NGOs in Kenya is poor due to the fact that NGOs in Kenya have not developed a self-regulating mechanism. In the context of NGO's, the agent is the management and the principal is the donor agencies funding the organizations, represented by the Board of Trustees in most cases.

## **1.2 Research Problem**

The causal nexus between agency costs and operational efficiency has received considerable attention from academicians where studies have used data from both developed and developing countries. Jensen and Meckling (1976) suggests that costs arise from conflicts of interest between stakeholders, which are borne by the shareholder in order to keep managers focused on pursuing shareholders interest, with the hope that the firm will be more efficient. According to agency theory, without the incurrance of agency costs, agents who are not owners and therefore neither bear the full costs nor reap the full benefits of their actions would not act in the best interest of the principals. They would be less committed, repetitively shirk and engage in the consumption of perks (Ross, 1973, Jensen & Meckling, 1976). The result would be poor long term operational efficiency. Some scholars however believe that firms with lower agency costs, (e.g. owner managed firms) are more efficient than agent managed firms (Schleifer & Vishny, 1997).

Even though NGOs are dedicated to doing well, the fact that they are non-commercial entities implies that most of them lack the bottom line and so there is need for organization leadership, accountability, performance and results (Drucker, 1999).

Gatere (1998) established that NGOs are accountable to themselves as there are no effective mechanisms to follow up on resource utilization. The shareholder's interest of maximizing wealth and stock adding value does not exist in an NGO setup thus checks on excessive compensation may be lacking. The absence of competition for market share and the lack of measure of business success, profit for commercial entities, may also lead to compromise on efficiency. The society has over the past few years been concerned on the management of NGOs and use of community as 'rubber stamp' to mobilize finances and other resources that end up benefiting the management alone. Some NGOs have been deregistered for non-compliance while others appear but do not stay operational for long.

Empirical evidence is largely inconsistent and quite varied on the influence of agency costs on operational efficiency. The researcher notes that past studies on agency costs and operational efficiency have yielded mixed results. Whereas some reported evidence of a negative relationship (Vafeas, 1999; Xiao & Zhao, 2009; Moustafa, 2005; Murage, 2010), others reported evidence of a positive relationship (Lauterbach & Vanisky, 1999; Langat, 2006; Mutisya, 2010). The results are thus inconclusive and further study into this area would add more knowledge into the existing studies.

Locally, studies usually examine the relationship of agency costs and different variables such as Nyamboga (2008) sought to determine whether there exists a correlation between capital structure and agency costs for firms listed in the NSE, while Mwisywa (2007) focused on the relationship between agency costs and the prices of stock public companies quoted at Nairobi Securities Exchange. Asuke (2009) sought to establish whether dividend policies have a relationship with the amount of agency related cost from a sample of companies quoted in the Nairobi

Securities Exchange. In addition, most of the local studies have addressed the relationship between agency costs and financial performance and have considered different contexts. Manal (2014) studied the relationship between the two variables among listed firms at NSE. The results of the study indicated that a positive association exists between agency costs and the financial performance of a firm. Njenga (2012) studied the relationship between the two variables among SACCOs and concluded that agency costs alone do not have a notable effect on the SACCOs' financial performance but that interplay between a combination of factors within the SACCOs determine their ultimate financial performance.

Although several studies on the relationship between agency costs and operational efficiency have been carried out in the developed countries, the studies have produced mixed results. Local studies done on agency costs have considered its impact on other variables apart from operational efficiency while several other studies have addressed the relationship between agency costs and financial performance in different contexts. This study intends to fill this research gap by examining the association between agency costs and operational efficiency of NGOs in Kenya. The study intends to answer the following the research question; what is the relationship between agency costs and operational efficiency of NGOs in Kenya?

### **1.3 Research Objective**

To establish the relationship between agency costs and operational efficiency of non-governmental organizations in Kenya

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

Academicians will benefit from this study based on the fact that they will be able to use the various results of this study as a basis of future research on topics related to this study. Gaps and limitations identified in this study will form a background for future research.

Findings of this study may also be used by the government, donor agencies and other policy making bodies as a guideline in formulation and development of policies that are concerned with the sector in the economy. The government being the regulator will benefit with the findings of this study as it will be enlightened on the effects of agency costs on operational efficiency of non-governmental organizations in Kenya.

The findings of the study can be useful to owners of NGOs in Kenya. The findings can provide useful information intended to sensitize owners on the importance of ensuring that good corporate governance is exercised for the sake of ensuring operational efficiency of organizations. They will also understand how agency costs determine the returns on their investments.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents the theoretical framework applied in the study and reviews previous studies done on this topic. It contains the theoretical review, determinants of firms' operational efficiency, empirical review, conceptual framework and summary of literature review.

#### **2.2 Theoretical Framework**

This a review of the relevant theories on agency costs and operational efficiency. The theories covered are; agency theory, stewardship theory and stakeholders' theory.

##### **2.2.1 Agency Theory**

Jensen and Meckling (1976) coined the agency theory that explains association between the between the principals (shareholders) and their agents (managers). Shareholders are the owners of the company who delegate the day to day operations to managers but retain the oversight function. The origin of this theory is based on the notion that the managers and executives of an organization are working on behalf of and in the interest of shareholders who on most occasions are absent. However, the interests of the executives may not be aligned to that of shareholders resulting to agency problems. As a result managers may engage in activities for their own benefit rather than owners of the firm. The theory portrays employees in agency problem as individualistic whose priority focuses on rewards and benefits. Some of the remedial

measures that can be instituted to avert the potential and real agency problem and align the interests of the shareholders to that of management include: management incentive compensation plans and employee share ownership schemes. Nambiro (2008) states that the firm's managers and executives will more often than not act in their own self-interest which conflicts with the interests of the owners.

This theory further notes the inadequate information regarding interests, the defined duties of the agent and relationships results in adverse and moral hazards. The impact of moral hazard and adverse selection on the agent's output occurs in two forms; Lack of the required knowledge regarding what needs to be done as opposed to what the agent recruited you to do. The assumption of this theory is that the agents and principals adopt contracting as a form of wealth maximization. The acquisition of additional information by the principal enhances the internal control to the principal since he can gain better understanding about the agent, that is, the management which results in the reduction of information asymmetry and reduces risks attributed to investments (Jensen & Meckling, 1976). This theory is relevant to this study as agency costs arise as a result of the relationship between the principal and the agent.

### **2.2.2 Stewardship Theory**

Davis, Schoorman and Donaldson (1997) define stewardship theory as a situation where a steward is tasked with the duty of protecting and maximizing the shareholders' wealth through the performance of the firm, which results to the maximization of the of the stewards utility function The steward is regarded as a person who is out to do quality good work as a trusted steward of corporate assets of the organization (Donaldson & Davis, 1991). This theory puts fully trust in managers and attaches significant value to their reputation (Fernando, 2009).

Stewardship theory stresses on the top management's role of being stewards thereby integrating these roles to be part of the organization. This theory recognizes the structures are important in that they empower the stewards thereby giving them maximum control which builds the stewards trust and eventually minimizes monitoring costs. Executives and directors will work in such a manner as to maximize financial performance by increasing the wealth and profits of the shareholders so as to ensure their reputation is protected as organizations decision makers of (Daily et al., 2003). In doing this, they aim at being seen as stewards who are effective of their organization thereby protecting their careers (Fama, 1980).

### **2.2.3 Stakeholders Theory**

The stakeholder theory was developed gradually by Freeman (1984) who advocated the inclusion corporate accountability to the different types of stakeholders. In essence, stakeholder theory views the firm as an input-output model by involving the various stakeholders of a firm such as employees, suppliers, customers, dealers, governmental bodies and the larger society into the mix. Stakeholder theory has been defined a stakeholder as a group or individual whose actions can affect the attainment of the firm's objectives or can affect the achievement of those objectives (Fernando, 2009).

Managers in organizations have relationships with: the suppliers, employees and business partners to whom they are responsible and affect their activities both internally and externally. These groups of relationships are of greater importance than owner-manager employee relationship as suggested by agency theory (Freeman, 1999). Sundaram and Inkpen (2004) noted that the theory addressed the wider range of stakeholders that require management's attention as opposed to just the



shareholders. Clarkson (1995) found that an organization is a system composed of many stakeholders. In addition, wealth creation is the major focus for the firm. Freeman (1984) argues that the relationship of the firm with the various groups of stakeholders affects the decision making process as this theory is focused on the nature of these relationships for the outcome of the firm activities.

### **2.3 Determinants of Operational Efficiency**

The operational efficiency of firms can be influenced by elements either external or internal to the organizations that define the level of output. The internal factors are different for each organization and determine its operational efficiency. These factors result from managerial decisions together with the Board. The internal factors include agency costs, firm size, liquidity, management efficiency, capital, market power among others. External factors are not within the control of management. They are factors that the firm does not have control over them but rather they need to develop strategies to deal with them. The presence of many international NGOs intensifies the competition for funding and thus forces domestic NGOs to cut cost in order to improve efficiency (Athanasoglou, Brissimis, & Delis, 2005).

#### **2.3.1 Agency Costs**

According to agency theory, without the incurrance of agency costs, agents who are not owners and therefore neither bear the full costs nor reap the full benefits of their actions would not act in the best interest of the principals. They would be less committed, repetitively shirk and engage in the consumption of perks (Ross, 1973; Jensen & Meckling, 1976). The result would be poor long term operational efficiency.

Some scholars however believe that firms with lower agency costs, (e.g. owner managed firms) are more efficient than agent managed firms (Schleifer & Vishny, 1997). The processes, systems, structures and resources expended by principals in order to monitor and align their interests with those of the agents result in expenses which lower the net income. Agency costs lead to residual loss when the agents cannot make decisions which would maximize the welfare of the principals as a result of restrictions imposed on them by the principals (Jensen & Meckling, 1976).

### **2.3.2 Liquidity**

Liquidity is defined as the degree in which an entity is able to honor debt obligations falling due in the next twelve months through cash or cash equivalents for example assets that are short term can be quickly converted into cash. Liquidity results from the managers' ability to fulfill their commitments that fall due to creditors without having to liquidate financial assets (Adam & Buckle, 2003).

According to Liargovas and Skandalis (2008), liquid assets can be used by firms for purposes of financing their activities and investments in instances where the external finance is not forthcoming. Firms with higher liquidity are able to deal with unexpected or unforeseen contingencies as well as cope with its obligations that fall. Almajali et al., (2012) noted that firm's liquidity may have high impact on efficiency of firms; therefore firms should aim at increasing their current assets while decreasing their current liabilities as per his recommendation. However, Jovanovic (1982) noted that an abundance of liquidity may at times result to more harm.

### **2.3.3 Management Efficiency**

Management efficiency is a key internal factor that qualitatively measures and determines the operational efficiency of a firm. The ability of the management to efficiently utilize the resources of the firm, their ability to maximize funding and their ability to efficiently allocate those funds are some of the ways of assessing the management efficiency.

Management efficiency is a qualitative measure and determinant of operational efficiency and it can be assessed by looking at the quality of the staff, the effectiveness and efficiency of the internal controls, the discipline within the organization and the effectiveness of the management systems (Athanasoglou, Sophocles, & Matthaios, 2009). The quality of the management has an influence on the level of operating expenses which affects the bottom line of a firm hence management efficiency significantly affects the operational efficiency of firms (Kusa & Ongore, 2013).

### **2.3.4 Capital Structure**

The international prudential regulation defines capital ratio as a vital tool for the assessment of capital adequacy and must examine the firms' safety and soundness. This compels the high capitalized firms to reduce their funding costs which has a positive implication on their safety. Alternatively, highly capitalized firms are less concerned with the external funds, which positively affects its efficiency. According to the conventional risk return hypothesis, firms operating under low capital ratios have higher efficiency compared to those operating under large sums of capital. According to Bourke (1989), a positive and significant association exists between capital structure and efficiency.

### **2.3.5 Firm Size**

The firm policy is mainly seeks to ascertain the firm size that maximizes the firm's efficiency. The impact of increasing the size of the firm on efficiency has been observed to bring a positive impact. This effect of could however be negative for large firms as a result of bureaucracy among other reasons. Hence, the size efficiency association could be non-linear. We use the firms' assets (logarithm) and their square in order to capture this possible non-linear correlation (Yuqi, 2007).

Burca and Batrinca (2014) asserts that the relationship existing between size and financial performance is positive in the sense that more resources are available in larger firms, better risk diversification strategies, complex information systems and are able to manage expenses well compared to small firms. This may have an impact on the financial performance of insurance companies in different ways for example large firms may be advantaged compared to smaller firms as they can be able to exploit economies of scale and scope; as such they are more efficient in their operations and as a result reap higher level of profits.

### **2.3.6 Age of the Firm**

According to Sorensen and Stuart (2000), company's age may have an effect on firms' efficiency. They further noted that older firms may have organizational inertia which tends to make them inflexible which may result to their inability to appreciate the changes that occur in changing environment. However, Liargovas and Skandalis (2008), noted that older firms may have more skills because they have been in operation longer thus have more experience having enjoyed the benefits that come from learning and aren't easily prone to the liabilities that result from newness, therefore they tend to have performance that is superior as compared to newer firms.

According to Loderer, Neusser, and Waelchli (2009), the relationship that exists between the age of a company and efficiency is positive. However, it has also been observed that a firm's efficiency may at times decline as companies grow older due to the fact that old age may lead to knowledge, abilities and skills being obsolete thereby resulting to decay in organizations. Agarwal and Gort (2002) this may explain why some older companies are usually taken over.

### **2.3.7 Macro-Economic Factors**

Several of studies have been conducted to ascertain the effect of macroeconomic factors on efficiency of companies. The factors are monetary aggregates, rate of interest, investment level in the economy, consumer price index, producer price index, GDP growth, inflation, financial depth and the degree of market efficiency. Kwon and Song (2011) carried out a research on mergers in the Korean market. He found out that the global financial crisis has a significant negative impact on the cumulative abnormal returns of the acquiring company when a merger announcement is made. He also stated that it may be possible that investors are more averse to large cash outflows during a period of crisis. Flannery and Protopapadakis (2002) pointed out that inflation and money supply are well documented as the two macro-economic factors that have a significant effect on firm efficiency.

### **2.4 Empirical Review**

There are numerous empirical studies both locally and internationally to support the relationship between agency costs and operational efficiency, but these studies have produced mixed results.

### **2.4.1 Global Studies**

Byrd (2010) in his study on the effect of financial policies of oil firms on the agency costs of free cash flows, he established that a conflict exists between managers' and shareholders' interests on the aspect of how cash flows are to be spent. According to the findings, there exists a negative correlation between leverage and agency cost. In addition the researcher established that the firm's value capital structure and dividend policies for controlling the free cash flow problem is stressed by the free cash flow theory. From the findings, there is a tendency of creating higher agency costs by unlevered firms as compared to the levered.

Pouraghajan (2012) studied how agency costs and free cash flow affect the performance of listed companies in Tehran Stock Exchange. The researcher made use of a sample size of 140 companies which were chosen in the period between 2006 and 2011. Agency costs were measured using efficiency ratios whereas cash flows were measured using Len and Paulsen model. F-Limer and Hausman tests were used. There exists an insignificant relationship between free cash flows and firm performance. While, the correlation between total asset turnovers with measures of firm performance is positive. Operating income volatility with measures of firm performance exhibited a weak negative relationship.

Rakesh and Lakshni (2013) provide empirical evidence for the agency theory by conducting multivariate tests based on twenty top listed companies in India for the years 2011 and 2012. Agency costs proxy was represented by operating expenses divided by sales (OETS) and the capital structure by debt to asset ratio, with log of sales and return on assets as control variables. In the multivariate tests, the negative relationship between leverage and agency costs is confirmed. The results suggest that

the inverse relationship is significant. In addition, firm size is negatively related to agency costs significantly and firm performance is related to agency costs but insignificantly.

Zheng (2013) finds that there is no significant influence between the agency costs and capital structure on 775 firms listed at the Shanghai and Shenzhen stock markets in China for period 2010 to 2012. Zheng (2013) ordinary least squares (OLS) and panel data were the two econometrics methods used in analyzing data. He asserted that debt-to-asset ratio and long-term liability rate is what is used to calculate capital structures. From the findings, he asserted that there is a slight negative correlation to debt-to-asset ratio when related to agency costs and a positive and insignificant correlation between long-term liability rate and agency costs.

#### **2.4.2 Local Studies**

Njenga (2012) studied on the association between agency costs and financial performance of SACCOs with FOSA in Githunguri district. Under methodology of the study, the researcher adopted descriptive research design. The targeted population was four SACCOs with FOSA in Githunguri district. The study used secondary data. According to the findings of the study, there existed an insignificant correlation between the SACCOs' financial performance and agency costs when only agency costs were used as the independent variable. However the results indicted a significant relationship after both size and expenditure on marketing were added into the model.

Manal (2014) carried out research on the correlation between agency costs and financial performance of firms listed at the Nairobi Securities Exchange. Descriptive study was applied; the target population was all the companies in the NSE that traded

continuously within the period of 5 years for the year 2008 to 2012. A census was used for the firms. 52 companies were analyzed since the rest were suspended from trading at the NSE. The study was a research which utilized secondary. Multiple regression analysis and correlation analysis was used to establish correlation between agency costs and financial performance at the NSE. The results of the study indicated that agency costs and financial performance are positively correlated.

Kwaye (2015) researched to ascertain the causality between managerial ownership and agency costs among the NSE in Kenya. The study analyzed data using SPSS and F-test applied to test for the association between the variables under study. Applying the correlation research design on sixty four NSE listed companies, the study found a positive influence of managerial ownership on agency cost and that the relationship was statistically significant on the sixty four companies under investigation. Specifically, the study revealed that a unit acceleration in managerial ownership led to a 25.03 increase in agency cost when all other factors were held constant.

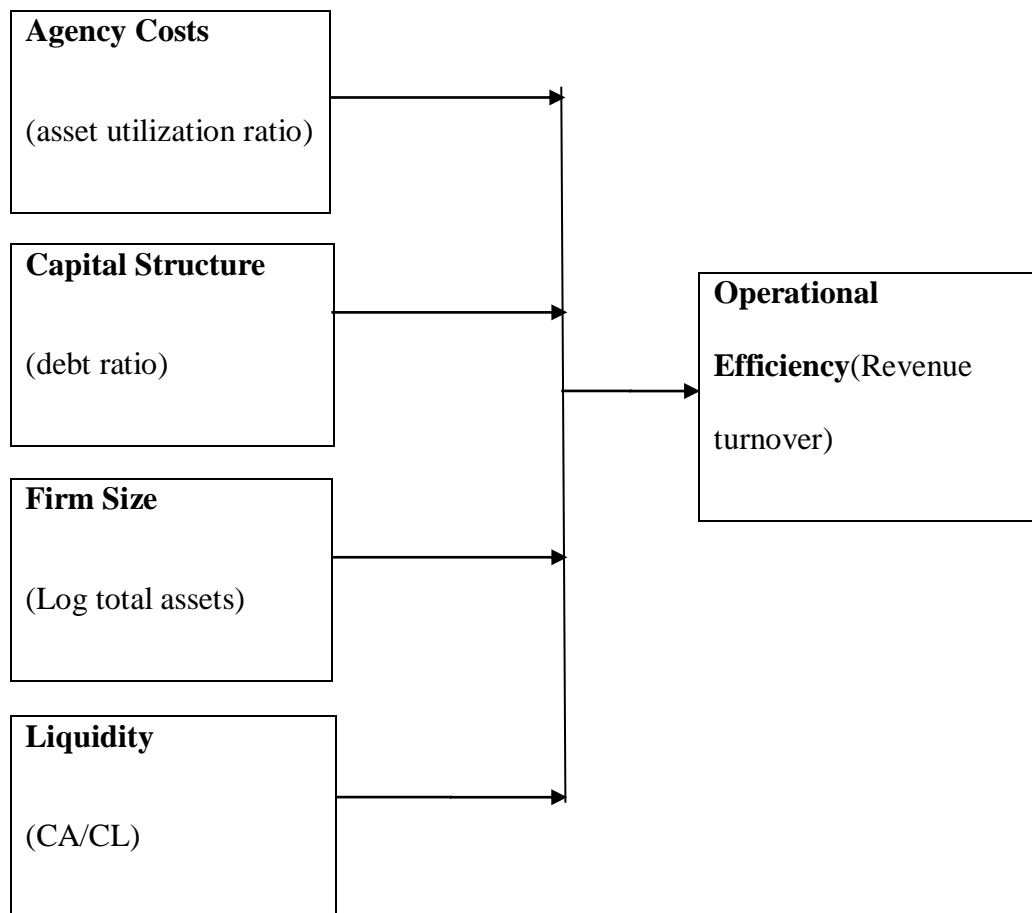
Maranga (2015) researched to ascertain the impact of capital structure on agency costs of the firms listed at the NSE in Kenya. Descriptive survey design was used for this study whereby the researcher used quantitative data. The population of interest comprised of all the 61 firms listed on the NSE in Kenya for the period 2009-2014, a period of six years. Secondary data from the published audited financial statements of the companies studied was made use of. The Multivariate regression analysis was employed. The findings established that 61.4% of the variations in agency costs were accounted for by capital structure, profitability, size and growth of the firms.



## **2.5 Conceptual Framework**

The conceptual model developed below portrays this expected relationship between the study variables. The factors characterized here are agency costs and operational efficiency. The independent variable is agency costs as measured by asset utilization ratio. The control variables are capital structure as measured by debt ratio, firm size as measured by natural logarithm of total assets and liquidity as measured by the current ratio. Operational efficiency is the dependent variable which the study seeks to explain and it will be measured by revenue turnover.

**Figure 2.1: The Conceptual Model**



**Independent variables**

**Dependent variable**

**Source: Researcher (2017)**

## **2.6 Summary of the Literature Review**

This section of this study explored the various theories advanced for agency costs including the agency theory, stewardship theory and stakeholders' theory. This chapter further delineates the various determinants of operational efficiency. The chapter also presented empirical studies of the research done by other scholars on the

topic area of agency costs and operational efficiency both at the local and global scene.

Although several studies on the correlation between agency costs and operational efficiency, they have been carried out in the developed countries and the studies have produced mixed results. Local studies done on agency costs have considered its impact on other variables apart from operational efficiency and addressed different contexts. In addition, the findings of the local studies on the relationship between the variables have been inconsistent. This study intends to fill this research gap by investigating the correlation between agency costs and operational efficiency of NGOs in Kenya.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter describes methods of research that was applied to objectively establish the relationship between agency costs and operational efficiency of NGOs in Kenya. It also shows the population of study, research design, criterion employed in data collection and analysis.

#### **3.2 Research Design**

This describes the procedures adopted by the researcher in examining the association between dependent variables and independent variables, is what is termed as research design (Khan, 2008). Descriptive cross sectional design was adopted for the study. A descriptive study involves a description of all the elements of the population. It allows estimates of a part of a population that has these attributes. Identifying relationships among various variables is possible, to establish whether the variables are independent or dependent. Cross-sectional study methods are done once and they represent summary at a given timeframe (Cooper & Schindler, 2008).

#### **3.3 Target Population**

The population of this study involved the 150 nongovernmental organizations that have their headquarters in Nairobi. According to the nongovernmental organizations council, there are 150 NGOs that have their headquarters in Nairobi. These 150 NGOs formed the target population for the study.

### **3.4 Sampling Design and Sample Size**

This study involved purposeful sampling technique in selecting the NGOs that were included in the study. Mugenda and Mugenda (2003) argues that at least 10% of the target population is adequate for a sample size. The researcher selected 10% of the total number of NGOs that have their headquarters in Nairobi to participate in the study. This translated to a total of 15 NGOs as the sample size (see appendix 1).

### **3.5 Data Collection**

Data was exclusively collected from a secondary source. Annual data for ten years (January 2007 to December 2016) was collected and analyzed. Audited financial statements for the nongovernmental organizations selected were used, thus increasing the reliability and validity of the findings and conclusion. The data that was collected was in the form of total net income, value of equity, total fixed assets, total assets, revenue, expenses and total debts.

### **3.6 Diagnostic Tests**

Linearity show that two variables X and Y are related by a mathematical equation  $Y=c+bX$  where c is a constant number. The linearity test was obtained through the scatterplot testing or F-statistic in ANOVA. Normality is a test for the assumption that the residual of the response variable are normally distributed around the mean. This was determined by Shapiro-walk test or Kolmogorov-Smirnov test. Autocorrelation is the measurement of the similarity between a certain time series and a lagged value of the same time series over successive time intervals. It was tested using Durbin-Watson statistic (Khan, 2008).

Multicollinearity is said to occur when there is a nearly exact or exact linear relation among two or more of the independent variables. This was tested by the determinant of the correlation matrices, which varies from zero to one. Orthogonal independent variable is an indication that the determinant is one while it is zero if there is a complete linear dependence between them and as it approaches to zero then the multicollinearity becomes more intense (Burns & Burns, 2008).

### **3.7 Data Analysis**

Analysis of the collected data was made using both descriptive and inferential statistics. The SPSS version 21 computer software was used in the analysis since it's more user-friendly. The data was inputted into the SPSS and examined using descriptive, correlation and regression analyses. In descriptive statistics, the study used mean and standard deviation. In inferential statistics, the study used multivariate regression analysis to determine the relationship between the dependent variable (operational efficiency) and independent variables: agency costs, size of the firm, and liquidity of the firm and debt structure of the firm.

#### **3.7.1 Analytical Model**

Using the collected data, the researcher performed a regression analysis to establish the extent of the association between agency costs and operational efficiency of NGOs in Kenya. The study applied the following regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon.$$

Where;

Y= Operational efficiency of NGOs as measured by revenue turnover

$\beta_0$  = Constant Term

$\beta_i$  = Beta Coefficient of variable i which measures the change Y to change in i

$X_1$  = Agency costs as measured by asset utilization ratio (revenue to total assets)

$X_2$  = Firm size as measured by natural logarithm of total assets

$X_3$  = Liquidity, as given by current assets divided by current liabilities

$X_4$  = Debt Structure as given by total debts divided by book value of total assets

$\varepsilon$  = Error term

The equation that was used to calculate agency costs was:

$X = \text{Revenue for the year} / \text{Total assets for the year}$

### **3.7.2 Tests of Significance**

To test the statistical significance the F- test and the t – test were used at 95% confidence level. The F statistic was utilized to establish a statistical significance of regression equation while the t statistic was used to test statistical significance of study coefficients.

## **CHAPTER FOUR**

### **DATA ANALYSIS, FINDINGS AND INTERPRETATION**

#### **4.1 Introduction**

This chapter focused on the analysis of the collected data from NGO's to establish the relationship between agency costs and operational efficiency of NGO's in Kenya. Using descriptive statistics, correlation analysis and regression analysis, the results of the study were presented in table forms as shown in the following sections.

#### **4.2 Response Rate**

This study targeted 15 NGO's in Kenya. Data was obtained from 12 out of the 15 NGO's representing a response rate of 80%. From the respondents, the researcher was able to obtain secondary data on operational efficiency, agency costs, firm size, liquidity and debt structure.

#### **4.3 Diagnostic Tests**

The study looked for data that would be able to meet the objectives of the study. The data collected from the NGO's was cross checked for errors to test the validity of the data sources. The research assumed a 95 percent confidence interval or 5 percent significance level (both leading to identical conclusions) for the data used. These values helped to verify the truth or the falsity of the data. Thus, the closer to 100 percent the confidence interval (and thus, the closer to 0 percent the significance level), the higher the accuracy of the data used and analyzed is assumed to be.

The researcher carried out diagnostic tests on the collected data. The null hypothesis for the test was that the secondary data was not normal. If the p-value recorded was



more than 0.05, the researcher would reject it. The results of the test are as shown in Table 4.1.

**Table 4.1: Normality Test**

Operational Efficiency	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Agency Costs	.149	320	.300	.857	320	.853
Liquidity	.156	320	.300	.906	320	.822
Firm Size	.172	320	.300	.869	320	.723
Leverage	.165	320	.300	.880	320	.784
a. Lilliefors Significance Correction						

**Source: Research Findings (2017)**

Both Kolmogorov-Smirnova and Shapiro-Wilk tests recorded o-values greater than 0.05 which implies that the research data was normally distributed and therefore the null hypothesis was rejected. The data was therefore appropriate for use to conduct parametric tests such as Pearson’s correlation, regression analysis and analysis of variance.

#### **4.4 Descriptive Analysis**

Descriptive statistics gives a presentation of the average, maximum and minimum values of variables applied together with their standard deviations in this study. Table 4.1 below shows the descriptive statistics for the variables applied in the study. An analysis of all the variables was obtained using SPSS software for the period of ten years (2007 to 2016). Revenue turnover which was the dependent variable in this

study had a mean of .9894049 and a standard deviation of .08131274. Agency costs had a mean of 3.2891284 with a standard deviation of 6.08479206. Size resulted to a mean of 16947637.8 with a standard deviation of 41981034.64. Liquidity recorded a mean of 3.086968 with a standard deviation of 3.9604249. Debt structure had a mean of .158519 and standard deviation of .3305751.

**Table 4.2: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Revenue Turnover	120	.75385	1.42026	.9894049	.08131274
Agency Costs	120	.36180	39.04370	3.2891284	6.08479206
Firm Size	120	45746.000	194229717.00	16947637.8	41981034.64
Liquidity	120	.0000	27.3988	3.086968	3.9604249
Debt Structure	120	.0000	3.1119	.158519	.3305751
Valid N (listwise)	120				

**Source: Research Findings (2017)**

#### **4.5 Correlation Analysis**

Correlation analysis is used to establish if there exists a relationship between two variables which lies between (-) strong negative correlation and (+) perfect positive correlation. Pearson correlation was employed to analyze the level of association between operational efficiency of NGO's in Kenya and the independent variables for this study (agency costs, liquidity, firm size and debt structure).

The study found out that there was a negatively and statistically insignificant correlation ( $r = -.050$ ,  $p = .590$ ) between agency costs and operational efficiency. The study also found out that there was a negative and significant correlation between liquidity and operational efficiency of NGO's as evidenced by ( $r = -.203$ ,  $p = .026$ ). Firm size was found to have a weak negative but insignificant association with operational efficiency as evidenced by ( $r = -.084$ ,  $p = .360$ ). Debt structure was found to have a weak negative but significant association with operational efficiency as evidenced by ( $r = -.195$ ,  $p = .033$ ). Although the independent variables had an association to each other, the association was not strong to cause Multicollinearity as all the  $r$  values were less than 0.70. This implies that there was no Multicollinearity among the independent variables and therefore they can be used as determinants of operational efficiency in regression analysis.

**Table 4.3: Correlation Analysis**

		Revenue Turnover	Agency Costs	Firm Size	Liquidity	Debt Structure
Revenue Turnover	Pearson Correlation	1	-.050	-.084	-.203*	-.195*
	Sig. (2-tailed)		.590	.360	.026	.033
	N	120	120	120	120	120
Agency Costs	Pearson Correlation	-.050	1	-.101	-.240**	-.053
	Sig. (2-tailed)	.590		.272	.008	.563
	N	120	120	120	120	120

Firm Size	Pearson Correlation	-.084	-.101	1	.008	-.086
	Sig. (2-tailed)	.360	.272		.935	.351
	N	120	120	120	120	120
Liquidity	Pearson Correlation	-.203*	-.240**	.008	1	-.125
	Sig. (2-tailed)	.026	.008	.935		.174
	N	120	120	120	120	120
Debt Structure	Pearson Correlation	-.195*	-.053	-.086	-.125	1
	Sig. (2-tailed)	.033	.563	.351	.174	
	N	120	120	120	120	120
*. Correlation is significant at the 0.05 level (2-tailed).						
**. Correlation is significant at the 0.01 level (2-tailed).						

**Source: Research Findings (2017).**

#### **4.6 Regression Analysis**

Operational efficiency in Kenya was regressed against four predictor variables; agency costs, liquidity, firm size and debt structure. The regression analysis was undertaken at 5% significance level. The study obtained the model summary statistics as shown in table 4.4 below.

**Table 4.4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.344 <sup>a</sup>	.119	.088	.07765172	2.181

a. Predictors: (Constant), Debt Structure, Agency Costs, Firm Size, Liquidity

b. Dependent Variable: Revenue Turnover

**Source: Research Findings (2017).**

R squared, being the coefficient of determination indicates the deviations in the response variable that is as a result of changes in the predictor variables. From the outcome in table 4.4 above, the value of R square was 0.119, a discovery that 11.9 percent of the deviations in operational efficiency are caused by changes in agency costs, liquidity, firm size and debt structure of the firms. Other variables not included in the model justify for 88.1 percent of the variations in operational efficiency of NGOs in Kenya. Also, the results revealed that there exists a weak relationship among the selected independent variables and operational efficiency as shown by the correlation coefficient (R) equal to 0.344. A durbin-watson statistic of 2.181 indicated that the variable residuals were not serially correlated since the value was more than 1.5.

**Table 4.5: Analysis of Variance**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.093	4	.023	3.871	.005 <sup>b</sup>

	Residual	.693	115	.006		
	Total	.787	119			

a. Dependent Variable: Revenue Turnover

b. Predictors: (Constant), Debt Structure, Agency Costs, Firm Size, Liquidity

**Source: Research findings (2017)**

The P value was 0.005 which was less than the conventional 0.05. This implies that the model was statistically significant in predicting how agency costs, liquidity, firm size and debt structure affects operational efficiency of NGO’s in Kenya.

The researcher used t-test to determine the significance of each individual variable used in this study as a predictor of operational efficiency of NGO’s in Kenya. The p-value under sig. column was used as an indicator of the significance of the relationship between the dependent and the independent variables. At 95% confidence level, a p-value of less than 0.05 was interpreted as a measure of statistical significance. As such, a p-value above 0.05 indicates a statistically insignificant association between the dependent and the independent variables. The results are as shown in table 4.6

**Table 4.6: Model Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.026	.012		84.995	.000

Agency Costs	-0.002	.001	-0.138	-1.520	.131
Firm Size	-0.00227	.000	-0.117	-1.328	.187
Liquidity	-0.005	.002	-0.266	-2.918	.004
Debt Structure	-0.060	.022	-0.246	-2.762	.007

a. Dependent Variable: Revenue Turnover

**Source: Research Findings (2017)**

From the above results, it is evident that liquidity and debt structure produced negative and statistically significant values for this study (high t-values (-2.918 and -2.762),  $p < 0.05$ ). Agency costs and firm size produced negative but statistically insignificant values for this study as evidenced by ( $t = -1.520$ ,  $p = .131$ ) and ( $t = -1.328$ ,  $p = .187$ ) respectively.

The following regression equation was estimated:

$$Y = 1.026 - 0.002X_1 - 0.00227X_2 - 0.005X_3 - 0.060X_4$$

Where,

Y = Operational efficiency

X<sub>1</sub> = Agency costs

X<sub>2</sub> = Firm size

X<sub>3</sub> = Liquidity

X<sub>4</sub> = Debt structure

On the estimated regression model above, the constant = 1.026 shows that if selected dependent variables (agency costs, firm size, liquidity and debt structure) were rated zero, operational efficiency of NGO's in Kenya would be 1.026. A unit increase in agency costs would lead to a decrease in operational efficiency of NGO's in Kenya by 0.002. A unit increase in liquidity would lead to a decrease operational efficiency of NGO's in Kenya by 0.005 while a unit increase in firm size and debt structure would lead to a decrease in operational efficiency of NGO's in Kenya by 0.005 and 0.060 respectively.

#### **4.7 Discussion of Research Findings**

The study sought to determine the relationship between agency costs and operational efficiency of NGO's in Kenya. Agency costs as measured by asset utilization ratio, liquidity as measured by current ratio, firm size as measured by natural logarithm of total assets, and leverage as measured by debt ratio were the independent variables while operational efficiency of NGO's in Kenya as measured by revenue turnover was the dependent variable. The effect of each of the independent variable on the dependent variable was analyzed in terms of strength and direction.

The Pearson correlation coefficients between the variables revealed that a weak negative correlation exists between agency costs and operational efficiency. The relationship between liquidity and operational efficiency was found to be weak and negative. The study also showed that there exist a weak negative relationship between firm size and operational efficiency while debt structure was found to have a weak and insignificant negative relationship with operational efficiency of NGO's in Kenya.

The model summary revealed that the independent variables: agency costs, firm size, liquidity and leverage explains 11.9% of changes in the dependent variable as



indicated by the value of  $R^2$  which implies that there are other factors not included in this model that account for 88.1% of changes in operational efficiency of NGOs in Kenya. The model is fit at 95% level of confidence since the F-value is 3.871. This confirms that overall the multiple regression model is statistically significant, in that it is a suitable prediction model for explaining how the selected independent variables affect operational efficiency of NGOs in Kenya.

The findings of this study are in line with Njenga (2012) who studied on the relationship between agency costs and financial performance of SACCOs with FOSA in Githunguri district. Under methodology of the study, the researcher adopted descriptive research design. The targeted population was four SACCOs with FOSA in Githunguri district. According to the findings of the study, there existed an insignificant correlation between financial performance of the SACCOs and agency costs when only agency costs were used as the independent variable. However the results indicated a significant relationship after both size and expenditure on marketing were added into the model.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter summarizes the findings of the previous chapter, conclusion, limitations encountered during the study. This chapter also elucidates the policy recommendations that policy makers can implement to achieve the expected operational efficiency of NGO's in Kenya. Lastly the chapter presents suggestions for further research which can be useful by future researchers.

#### **5.2 Summary of Findings**

The study sought to investigate the relationship between agency costs and operational efficiency of NGO's in Kenya. The independent variables for the study were agency costs, firm size, liquidity and debt structure. The study adopted a descriptive cross-sectional research design. Secondary data was obtained from NGO's website and was analyzed using SPSS software version 21. The study used annual data for 12 NGO's operating in Kenya and had their headquarters in Nairobi.

From the results of correlation analysis, a weak negative correlation exists between agency costs and operational efficiency of NGO's in Kenya. The relationship between liquidity and operational efficiency was found to be weak and negative. The study also showed that there exist a weak negative relationship between debt structure and operational efficiency while firm size was found to have a weak and insignificant negative relationship with operational efficiency of NGO's in Kenya.

The co-efficient of determination R-square value was 0.119 implying that the predictor variables selected for this study explains 11.9% of changes in the dependent variable. This means that there are other factors not included in this model that account for 88.1% of changes in operational efficiency of NGO's in Kenya. The model is fit at 95% level of confidence since the F-value is 3.871. This confirms that overall the multiple regression model is statistically significant, in that it is a suitable prediction model for explaining how the selected independent variables affects operational efficiency of NGO's in Kenya.

The regression results show that when all the independent variables selected for the study have zero value, operational efficiency of NGO's in Kenya would be 1.026. A unit increase in agency costs would lead to a decrease in operational efficiency of NGO's in Kenya by 0.002. A unit increase in liquidity would lead to a decrease operational efficiency of NGO's in Kenya by 0.005 while a unit increase in firm size and debt structure would lead to a decrease in operational efficiency of NGO's in Kenya by 0.005 and 0.060 respectively.

### **5.3 Conclusion**

From the study findings, the study concludes that operational efficiency of NGO's in Kenya is significantly affected by liquidity and debt structure of the firms. The study found that agency costs had a negative and insignificant effect on operational efficiency of NGO's in Kenya. The study therefore concludes that agency costs leads to a decrease in operational efficiency though not to a significant extent. The study found that liquidity had a negative and significant effect on operational efficiency of NGO's in Kenya and therefore it is concluded that higher levels of liquidity leads to an decrease in operational efficiency. Debt structure was found to have a negative but

statistically significant relationship with operational efficiency and this means an increase in debt structure leads to a decrease in operational efficiency. Firm size was found to have a negative but statistically insignificant effect on operational efficiency and therefore this study concludes that firm size does not significantly influence operational efficiency of NGO's in Kenya.

This study concludes that independent variables selected for this study agency costs, liquidity, firm size and debt structure influence to a large extent operational efficiency of NGO's in Kenya. It is therefore sufficient to conclude that these variables significantly influence operational efficiency of NGO's in Kenya as shown by the p value in ANOVA summary. The fact that the four independent variables explain 11.9% of changes in operational efficiency of NGO's in Kenya imply that the variables not included in the model explain 88.1% of changes in operational efficiency of NGO's in Kenya.

This finding concurs with Njenga (2012) who studied on the relationship between agency costs and financial performance of SACCOs with FOSA in Githunguri district. Under methodology of the study, the researcher adopted descriptive research design. The targeted population was four SACCOs with FOSA in Githunguri district. According to the findings of the study, there existed an insignificant correlation between financial performance of the SACCOs and agency costs when only agency costs were used as the independent variable. However the results indicted a significant relationship after both size and expenditure on marketing were added into the model.

#### **5.4 Recommendations**

The study found out that a negative relationship exists between operational efficiency and liquidity position. This study recommends that a comprehensive assessment of NGO's immediate liquidity position should be undertaken to ensure the company is operating at sufficient levels of liquidity that will lead to improved operational efficiency of firms. This is because a firm's liquidity position is of high importance since it influences the firm's current operations.

Debt structure was also found to have a significant negative effect on operational efficiency of NGO's in Kenya. The study recommends that when firms are setting their capital structure they should strike a balance between the tax savings benefit of debt and bankruptcy costs associated with borrowing. High levels of debt has been found to reduce operational efficiency of NGO's in Kenya from the findings of this study and so firm managers should maintain debt in levels that do not impact negatively on operational efficiency of NGO's in Kenya to ensure the goal of maximizing society's welfare is attained.

#### **5.5 Limitations of the Study**

The scope of this research was for ten years 2012-2016. It has not been determined if the results would hold for a longer study period. Furthermore it is uncertain whether similar findings would result beyond 2016. A longer study period is more reliable as it will take into account major happenings not accounted for in this study.

One of the limitations of the study is the quality of the data. It is difficult to conclude from this research whether the findings present the true facts about the situation. The data that has been used is only assumed to be accurate. The measures used may keep

on varying from one year to another subject to prevailing condition. The study utilized secondary data, which had already been obtained and was in the public domain, unlike the primary data which is first-hand information. The study also considered selected determinants and not all the factors affecting operational efficiency of NGO's in Kenya mainly due to limitation of data availability.

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

### **5.6 Suggestions for Further Research**

This study focused on agency costs and operational efficiency of NGO's in Kenya and relied on secondary data. A research study where data collection relies on primary data i.e. in depth questionnaires and interviews covering all the 150 NGO's in Kenya is recommended so as to compliment this research.

The study was not exhaustive of the independent variables affecting operational efficiency of NGO's in Kenya and this study recommends that further studies be conducted to incorporate other variables like management efficiency, growth opportunities, corporate governance, industry practices, age of the firm, political stability and other macro-economic variables. Establishing the effect of each variable on operational efficiency of NGO's in Kenya will enable policy makers know what tool to use when maximizing efficiency of firms.

The study concentrated on the last ten years since it was the most recent data available. Future studies may use a range of many years e.g. from 2000 to date and this can be helpful to confirm or disapprove the findings of this study. The study limited itself by focusing on operational efficiency of NGO's in Kenya. The recommendations of this study are that further studies be conducted on other firms operating in Kenya. Finally, due to the shortcomings of regression models, other models such as the Vector Error Correction Model (VECM) can be used to explain the various relationships between the variables.

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## **APPENDICES**

### **Appendix 1: Non-Governmental Organizations with Headquarters in Nairobi**

1. ACORD- Agency for Cooperation and Research in Development
2. Action Aid International - Kenya
3. Action Aid International
4. African Agricultural Technology Foundation
5. African Economic Research Consortium
6. Concern Worldwide
7. Equality Now
8. Handicap International
9. International Aid Services
10. International Committee of the Red Cross (ICRC)
11. International Medical Corps
12. International Rescue Committee
13. International Livestock Research Institute (ILRI)
14. Mercy Corps Scotland
15. Norwegian Refugee Council (NRC)