

**EFFECT OF WORKING CAPITAL MANAGEMENT ON
FINANCIAL SUSTAINABILITY OF NON-GOVERNMENTAL
ORGANIZATIONS WITH INCOME GENERATING
ACTIVITIES IN KENYA**

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DECLARATION

This research paper is my novel work and has not been presented for a degree in any other institution of learning.

Signed



Date: 06/09/2021

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D61/5015/2017

This research project has been submitted to be examined with my consent as University Supervisor.

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DEDICATION

I dedicate this research study to the NGO industry to aid them in their quest for financial sustainability.

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I am indeed grateful to our Almighty God for making it possible and strengthening me to achieve this milestone and successful completion of my thesis. Secondly, I sincerely thank my Supervisor Dr. Winnie Nyamute for offering valuable evaluations and commendations on my project that greatly aided me towards completion of my research. I am also thanking my colleagues for their support in any other way during the project. Finally, my gratitude goes to my family and friends for encouraging and supporting me all through the years as I studied.

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LIST OF ABBREVIATIONS

ACP	Average Collection Period
AIDS	Acquired Immunodeficiency Syndrome
AR	Acid Ratio
CR	Cash Ratio
CR	Current Ratio
HIV	Human Immunodeficiency Virus
ICT	Information Communication and Technology
IMF	International Monetary Fund
NGO	Non-Governmental Organization
NGOs	Non-Governmental Organizations
OSR	Operating Surplus Ratio
SD	Standard Deviation
SPSS	Statistical Package for Social Science
USAID	United States Agency for International Development

ABSTRACT

The study's objective was to establish the effect of working capital management on financial sustainability of NGOs with income generating activities in Kenya. The paper had operating surplus ratio as the dependent variable and average collection period, current ratio, acid ratio and cash ratio as the independent variables. Descriptive and cross-sectional design was used and with a populace of 33 NGOs in Kenya while utilizing Secondary data. Mode of statistical data with the aid of SPSS was Descriptive statistics and inferential statistics. The study found out that that Average Collection Period, Current Ratio as well as Acid Ratio and Cash Ratio had a 92.6% impact on the financial sustainability of NGOs with income generating activities in Kenya depicting a strong relationship and that working capital management is vital in influencing the financial sustainability of NGOs with income generating activities in Kenya. The results also showed that the P value was 0.000. This exhibited that the regression model was substantial and the model was fit. It was also evident that the financial sustainability of NGOs with income generating activities depend 0.004 of average collection period. Importantly, at 95% confidence level, the financial sustainability of NGOs with income generating activities had a level of significance of less than 0.05 with Average Collection Period at 0.000 level of significance indicating that it influences Financial Sustainability. Current Ratio at $0.225 > 0.05$ level of significance, Acid Ratio at $0.447 > 0.05$ level of significance and Cash Ratio at $0.860 > 0.05$ level of significance did not influence Financial Sustainability of Income generating activities NGOs. This led to a conclusion that Average Collection period influences Financial Sustainability while Acid Ratio, Current Ratio and Cash Ratio did not influence Financial Sustainability of NGOs with income generating activities. Further, the researcher came to a conclusion that ACP, current ratio and acid ratio have an effect on operating surplus ratio and recommended that the state ought to implement policies to alleviate the adverse effects of financial sustainability among NGO's. Additionally, the outcome prompted a conclusion that ACP, current ratio, acid ratio and cash ratio have 92.6 % impact on financial sustainability of NGOs with income generating activities in Kenya meaning that 7.4% is as a result of other factors hence a recommendation to do more research involving all factors affecting financial sustainability. Also, the research recommends that further studies to consider the use of primary data sources to help to give in-depth information and reliable data in determining the bearing of working capital management on financial sustainability of NGOs with income generating activities in Kenya.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Any organization's long-term survival and operational effectiveness is eminently determined by its financial sustainability. There is a thin line in the difference between financial sustainability and financial self-sufficiency concepts and hence they are usually examined together (Leon, 2001). An organization is said to be financially sustainable when it survives in the longest time possible. On the other hand, it is financially self-sufficient when it manages its operations without having to be assisted financially. The organizational financial strength determines its sustainability. However, this alone is not sufficient and the organization's overall capacities need to be developed over time as the assistance from donors, well-wishers and financiers is not required for a sustainable organization to generate its own income and hence survive in the long run (Nganga and Kibati 2016). This is because when an organisation is sustainable, it responds strategically and effectively to the constantly changing environment where organizations operate in.

In addition, financial sustainability can be seen as how an organization manages its revenues, expenses and assets. In accordance to Meyer (2002), the financial sustainability concept incorporates getting funds at market rates and resource mobilization from the local sources. Therefore, if an organization is able to cover the cost of funds which are required, then it is said to have achieved financial sustainability. It can continue to meet the primary stakeholders' needs, the beneficiaries and supporters, and therefore accomplish its objective (Malvern, 2002). It can continue to meet the main stakeholders' needs which are the beneficiaries and the supporters and through this its mission is achieved (Malvern, 2002). The process of generating resources for financial sustainability purposes through governing the use of assets in an

efficient manner should get support from the whole organization which includes all the staff, including senior managers and the board of directors (Johnson G & Scholes K.2007). Financial sustainability not an end to itself but a process. This is because continuous evaluation of the sustainability strategies of an organization is critical for it to be kept abreast in achieving its objectives.

Organizations can assess and compare their performance in relation to others by use of financial sustainability measures through analysing indicators such as operating surplus ratio, assets' sustainability ratio, interest cover ratio as well as net financial liabilities ratio (LGA, 2006). This is supported by Christensen *et al.* (2007) in which it was postulated that these measures of performance focus on the future direction of an organization and the resources which are required for it to be sustainable. The net income of an organization; liquidity and solvency can also be used to gauge the financial sustainability. Capital to asset and operating expenses to loan portfolio ratios which enable organisations to meet all its current costs, costs for growth, if expansion is done to its operations, financial costs adjusted with costs of inflation influences financial sustainability (Gibson, 2012). Furthermore, financial sustainability is indicated by an entity's ability to generate enough revenues to cover the costs of its program as postulated by Onyuma et al. (2005).

1.1.1 Working Capital Management

The variance between existing Liabilities and Current Assets is termed as the Working capital while working capital management means short term investment management and organizational financing. It is about planning existing assets and present liabilities and controlling them in that, on one hand, eradicates the likelihood of failure as a result of short-term obligations while, on the other, optimally investing in these assets (Darker, Nortey, Asare-Kumi & Asare, 2019). This means that the focus is on the

management of current assets and liabilities within one year. This is an old concept as it originates from the corporate finance field which has been there from the onset of the 20th century (Firth, 1976 & Smith, 1979).

The profitability, liquidity and financial stability objectives pursued by organizations have made working capital management very important. Working capital management enables organizations to achieve these objectives because it directly affects them. These objectives need proper attention because of their significance and importance in any organization. There needs to be a balance between profitability and liquidity when organizations carry out the daily operational activities. An entity's liquidity and profitability can be greatly affected by the level of the amount's organizations invest in working capital. Therefore, an optimal working capital level to work with is imperative so as to maximize their value. This calls for a sufficient provision of working capital to facilitate the purchasing of raw materials, turning them to finished products and sell them as well as settle the obligations when they are demanded. Hence, the firm can come to a dead end if working capital is not sufficient and if it overlooks profitability its survival can be greatly affected and on the other hand if liquidity is not taken care of bankruptcy and insolvency will come in. It plays an important role as it determines the downfall or success of a firm because it influences its growth and profitability.

This is a wide concept whose effective execution entails managing and coordinating many tasks within the organisation which include managing short-term investments, giving credit to customers and collecting the receivables, managing what is payable to other individuals or organizations and managing inventory. In addition, effective working capital management requires that cash forecasts are done in a reliable manner, as well as having information on transactions and bank balances which is current and accurate.

1.1.2 Financial Sustainability

NGOs are said to be sustainable when their overall capacity is improved to have implementation of activities among target population continue over a long period of time, have financial vulnerability minimized, diversify sources of funding, and providing impactful quality interventions (USAID, 2012). Financial sustainability is achieved when an organization has an ability to continue to a foreseeable future (Leibson 2005, Helen & Samujh, 2011)

According to Dhandapani & Ganesh (2013), better financial performance leads to financial sustainability and this measure in monetary terms the policies of the firm and its operations results. These are indicated in performance measures of an organization like return on assets as well as return on investment. In addition, the financial health of a firm and how stable it is over time is measured by its financial performance. A firm can improve its financial sustainability by doing internal reconstruction. This can entail altering and reducing the share capital, writing off the assets which are lost and improving the working capital management through cash, inventory and credit management which will improve the liquidity position as well as administrative management and in turn lead to reducing the cost of production and carrying out the firm's operations (Dhandapani & Ganesh, 2013).

Lennon (2006) carried out a study on the national local government financial sustainability in Australia. In this study, an analysis of financial ratios was conducted using a survey of 100 councils and sustainability results based on each state were extrapolated. The findings of the study depicted that 10 to 30% of councils in the whole nation had sustainability challenges. This was exhibited by revenue growth which was minimum and/or negative, revenue growth which was exceeded by the cost and increased involvement providing services which were not core. In addition, there were

operating deficits and this led to deferring or under-spending on infrastructure renewal and in particular the infrastructure of the community which created a backlog by being always repeated. Also, financial and asset management skills which are important in recognizing the problems in sustainability, having optimum expenditures as well as revenue streams increased were not easily accessible.

According to Lennon (2006) two broad approaches that significantly could improve financial sustainability were identified and these were the internal reforms which were to a large extent controlled by the individual councils making them efficient and effective and also reforms in intergovernmental funding in order to have their sustainability improved. Sontag-Padilla et al. (2012) reviewed extensively the literature on the non-profit organizations' financial sustainability. Through this study it was revealed that most studies on not-for-profit organizations focussed on the outcome of programs and not on the processes in the organization and aspects influencing the organization's impact and studies such as these seldom follow the "gold standard" of research which entails representative studies which are in large scale which synthesize the results in many organizations.

Again, Sontag-Padilla, et al. (2012) posit that there are numerous challenges faced by non-profit organizations to establish and define long term financial sustainability during the economic downturn coupled with an increase of mission impact and accountability expectations. In order for the non-profits to overcome the challenge to establish the long term and short-term sustainability, it ought to come up with a clear strategic plan whose programs and collaborative partnerships are closely aligned with their mission. Hence, the process of establishing the financial sustainability for the non-profits should be considered dynamic and continuous.

In order for an organization to be financially sustainable, its cash flow requirements have to be maintained optimally. Hossan & Habib (2010) assessed a company dealing with pharmaceuticals and postulated that how an organization's performance is dependent on good management of its assets, liabilities, shareholders equity well as expenses and revenue. From numerous studies, it has been revealed that one of the best tools to evaluate how well the companies utilize their assets to earn profit is via analysing the financial ratios. According to (LGA,2006), financial analysis of operating surplus, net financial liabilities and operating surplus ratio, net financial liabilities ratio, interest cover ratio and asset sustainability ratio being the comparison how the assets wearing out are being replaced as well as asset consumption ratio is carried out to measure an organization's financial sustainability. Further, (Bowma, 2011), financial sustainability of non-profits can be measured using the following metrics; the equity ratio and return on assets.

1.1.3 Working Capital Management and Financial Sustainability

Azinfar & Khalili (2013) established that managing of working capital influences a firm's profitability and liquidity and therefore is an important area in organization's financial management. As such, monitoring of working capital is a requirement for all organizations. This is always linked to higher current asset ratio, less liquidity, based on the debt taken for a short-term and changes on cash flow Rehn (2012) found out that management of working capital effectively will substantially boost many firms' profitability.

Rehn (2012) analysed how working capital management influences the profitability of public companies from Finland and Sweden. This study entailed analysing the panel data for 13 industries for the period 2002-2010. To carry out this study, the industry in which the company operates was taken into account because working capital

requirements of companies are completely different. From this study, it was concluded statistically that working capital management affects significantly the corporate companies' profitability. Also, it was established that net trade cycle, cash conversion cycle has an indirect relationship with profitability. Further, capital intensive industries such as wood products, retail and machinery exhibited an inverse correlation between profitability and efficiency of working capital.

According to Padachi et al. (2012) in which a survey of SMEs in Mauritian manufacturing entity's conducted Working Capital Management (WCM) and financial management operating in different sectors, it was established that firms highly preferred to finance the start-ups by use of own savings and short-term borrowings. There were diverse grades of difficulty in the ability of the firm to meet the requirements in working capital depending on whether the financing of its current needs was via retained profit (internally generated funds) or bank overdrafts and bank loans (short-term borrowings). This is because firms' requirements are met differently depending on how big they are, the operational life cycle stage and the variables of their credit terms. The firms that are financially constrained are usually affected by the trade credit variables.

1.1.4 Non-Governmental Organizations (NGOs) with Income Generating Activities in Kenya

Based on the NGO Coordination Act (1990) of the Kenyan Laws, a Non-Governmental Organization (NGO) is a privately formed group of persons or associations either at national or international level who have come together voluntarily by organizing themselves to benefit the public through provision of essential amenities and services but not for neither profit making nor for any commercial purposes. In the 1970s and

1980s, NGOs mushroomed in Kenya. They were formed to address emergencies which come as a result of drought, alleviate famine effects and give alternative development delivery approaches. This was owed to the failure of programs that directly receive aid which came as a result of bureaucracy in government and corrupt practices. Privatization and trimming of roles, functions; manpower and resources in the public sector followed as was encouraged by the IMF and the World Bank which made NGOs sprung up at an increased speed (Muleri, 2001).

The number of organizations registered under the NGOs Co-ordination Act of 1990 in Kenya has in the last ten years grown eminently. This is as a result of globalization and having the democratic space in Kenya opened. According to the (Kenya NGO co-ordination Board), there has been a spread of these organizations throughout the country varying from local small organizations to international ones with programmes at the regional level. The key principle of NGOs is that of fostering their financial responsiveness so as to uphold their function of serving people's welfare socially and economically through resources which are consistent and available.

According to the NGO coordination board 2018-2019 annual NGO Sector Report, 4 percent of the total revenue during the year which amounted to Kshs 1 billion came from NGOs which are engaged in income generating activities. This is a revelation that there are potential opportunities available for NGOs to creatively come up with income generating activities which can supplement their sources of funds and hence become financially sustainable.

1.2 Research Problem

Non-Governmental Organizations' economic sustainability has been a major challenge in Kenya and other similar developing economies. It has become a catchword for NGOs

within the development arena. It explains the ability of the NGOs to work to meet their objectives and being in a position to provide the society's needs even after the stopping of external support. Attaining financial sustainability is very important component of an NGO for its stability and growth purposes. Financial sustainability enables provision of larger and more complex services by NGOs. Goods and services are not solely provided by the government because demands by the citizens on the government have immensely increased. It is crucial for NGOs to be sustainable so as to realize their potential and manage their activities efficiently.

In the recent past, the level of donor funding has been reducing from period to period due to the tough economic times facing the world. This has greatly impacted on the operations of NGOs in Kenya leading to failure in achieving their objectives. In addition, there has been an increase in the complaints by state, local and international donors and the community regarding economic sustainability of NGOs. This study is therefore important because it will establish how management of working capital relate with financial sustainability of NGOs with income generating activities so as to help NGOs know how they can enhance their financial sustainability through the best way of working capital management

Initial studies exhibit that NGOs have not achieved financial sustainability due to poor financial management. León (2001) postulated that for financial sustainability to be enhanced, a trust or endowment fund can be created and this can enable it generate its own revenues. The trust fund enables an organization to benefit from the interest that capital generates. This will lead to a better management of working capital in which the capital remains un-utilized. However, its value has to be enhanced over time. Here, the company is required to legally establish the endowment fund as a matter of

organizational policy to enable it to include under indirect costs (overhead) a percentage which constitutes a surplus earmarked for an endowment or trust fund.

Jordan, Okorley and Nkrumah (2012) sought to ascertain the organizational factors impacting sustainability of homegrown NGOs and the study noted that factors such as top management skills, the availability of resources and the workforce diversity were among the influencers of financial sustainability of the NGOs in that region. The researchers also noted that consideration of working capital is important in managing NGOs operations. However, this study was done in Jordan and it may not apply in the current Kenyan environment. Another study by Golini, Kalchschmidt and Landoni (2015) on the analysis of adopting practices of project management and their bearing on global development projects of NGOs noted that project factors and variables must be considered in the analysis of the NGOs operations. The study also confirmed that working capital determines the financial stability of NGOs. The study concluded that NGOs must consider effective management of working capital for their success. However, this study adopted case study method and its findings may not apply to current study.

Raheman *et al.* (2010) focused on working capital influence on organisation's performance (period between 1998 to 2007) in Pakistan. The study was carried out on 204 manufacturing organizations enumerated on Karachi Stock Exchange. The findings from this research revealed that the cash conversion cycle, net trade cycle and inventory turnover in days significantly affect the firms' performance. In addition, the financial leverage, the growth of sales and the firm's size also significantly affect profitability of the firm. The argument was that there exists an inverse correlation between net operating profitability and inventory turnover for the whole manufacturing industry. On the other hand, ratios of gross working capital turnover and that of current assets to

total assets were found to be positively correlated to profitability. Furthermore, there is positive correlation between sales growth and profitability because growth which is a pointer of the firm's business opportunities is key in allowing the firm to enjoy higher profits (Raheman *et al.*, 2010). Further, there was a clear indication that there is need for effective policies' formulation for the components of working capital so as to have financial sustainability improved.

According to Ogalo (2011), there are limited finances to support working capital. There is an estimate by the Food and Agriculture Organization of the United Nations that incremental investments in a year totalling to \$ 83 billion will enable the food security needs to be met by a developing country agriculture in 2050. This gap cannot be filled by these evolving countries because they have a limited capacity. Due to minimal Commercial banks assistance, there has been a fall in the portion spent by the public in the sector of agriculture in evolving countries which has posed a risk of unsustainability. Another local study by Ibrahim (2012) conducted a case study of sister's maternity home (SIMAHO) with the aim of determining the influencers of sustainable funding of NGOs in Garissa. The study noted that working capital is amongst the main drivers that regulate Kenyan NGOs' sustainability, especially in the county of Garissa. This is because the working capital determines the current assets that the NGOs have and how they can manage their funds for success. The author concluded that all NGOs must adopt effective management of their working capital to promote their success and performance in the long run.

Additionally, Onsongo (2012) determined the practices implemented by NGOs to attain financial sustainability in Kenya while Musau (2014) evaluated the bearing working of capital management had on performance of Kenyan Colleges and Universities and

noted that working capital management is vital in promoting performance of Universities and Colleges in Kenya. However, the study fixated on Universities and Colleges in Kenya, while the current research will target the NGOs with income making operations in Kenya.

From the analysis of the past studies, the researcher noted the fact of the financial sustainability challenges faced by the NGOs and that the studies which have been carried out on this area of study were carried long time ago or in countries outside Kenya or in a different context. Thus, this paper aimed at answering the query-What is the impact of working capital management on financial sustainability of NGOs with income generating activities in Kenya?

1.3 Research Objective

The anchoring objective was to ascertain how working capital management impacts financial sustainability of Kenyan NGOs with income generating activities.

1.4 Value of the Study

The results will be extremely valuable to the government as a guide in developing policies that are beneficial in terms of NGOs' financial viability. This will help to achieve the Sustainable Development Goals and Vision 2030, which aim to eradicate poverty and promote equitable economic development.

Furthermore, finance and program managers, the society and other management commissions will be informed on ways which financial sustainability can be enhanced through working capital management by NGOs and hence achieve their objectives effectively and efficiently.

In addition, the research findings will enhance further research by academicians and other researchers on financial sustainability of NGOs.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This segment outlines theoretical review and studies carried out in the past on financial sustainability with reference to NGOs. Books, journals as well as web articles have been used as the major sources of literature in this chapter.

2.2 Theoretical Review

This research was steered by the capital structure theory that determines the capital framework in an organization, the resource-based theory that view resources as important factors in promoting performance of organizations as well as the stakeholder theory that consider the needs and different organizational stakeholders' interests and behavioural finance theory that consider behaviours of capital and how to manage capital in the organization. The study also included the agency theory that helps determine the relationship between the principals and the agents in an organization.

2.2.1 Capital Structure Theory

The theory of Capital structure gives a synopsis on how organisational financing is done. This has been a very critical issue in many organisations in establishing what would be the best applicable financial framework model. It has been severally argued that it is a big challenge to determine the ideal capital structure for an organization. In accordance with the theory of Modigliani and Miller on capital structure, there has been debate on how the best capital structure composition for an organization can be established. Anshu & Kapil (2014) stated that the worth of unlevered entity equals to that of levered organization and that it is self-determining. The equity and debt distribution in a firm informs how to structure the composition of the capital structure

of the organization. The profitability and riskiness of the firm is to a great extent influenced by its capital structure.

In order for the companies to be stable, there has been a struggle for many years on what the capital structure composition should look like (Anshu & Kapil, 2014). Mujahid & Akhtar (2014) conducted a study to evaluate how the capital structure of firm impacted its financial sustainability as well as the shareholders' value in the Pakistan textile sector in which a sample from 155 firms from the textile industry for the period 2006 to 2011 was analysed by use of regression. The Outcome revealed that the capital structure and the financial sustainability and shareholders' wealth are positively correlated. To measure this impact, the Return on Assets (ROA), Return on Equity (ROE) and Earnings per Share (EPS) ratios for the overall textile sector was used.

Also, in accordance to Velnampy & Niresh (2012) the firm's profitability depends on the decisions made on capital structure. Abor (2005) also performed research which evidenced the existence of substantial correlation between total debts and overall assets which comprise the capital structure. This suggested that firms are financed more by debt hence influencing their financial sustainability. On the other hand, Gupta et al. (2010) mentioned studies exhibiting contradicting results on the correlation between financial performance and enhanced use of debt in the structure of capital. Ghosh et al. (2000) and Berger & Bonaccorsi (2006) affirmed a favourable association between financial performance and leverage, whereas Gleason et al. (2000) and Simerly & Li (2000) revealed unfavourable association between leverage level and financial performance. Likewise, Zeitun & Tian (2007) established that the level of is inversely associated to financial performance.

The theory is relevant to the study as the optimal capital structure an organization wants to achieve, greatly affects the working capital management strategies to be implemented.

2.2.2 Agency Cost Theory

Agency Cost theory centres on the agency conflict between the organizational stakeholders and managers. It looks at the necessary factors that cause a conflict between the holders of equity and their managers and also the conflict that arises between the owners of the firm and managers. Markets concentrate much on how any organization performs and therefore the interested investors get concerned about any decision made by the management of a firm on behalf of the owners of investment (Ahmadabadi et al., 2013). Shareholders focus on organizational financial performance and this makes them to invest their funds in the organization, which will subsequently increase the value and wealth of the firm and enhance the sustainability financially.

Anshun & Kapil (2014), stated that the agency theory impacts the capital structure of the firm. It is argued that managers prefer to use a lot of debt to finance projects of high risk while shareholders would like to optimize the return on investment. Therefore, the intrinsic risks and conflict arising from decisions on investment make managers to avoid making the investment. Gatsi (2016) in his study on debt structure confirmed the agency cost theory theoretical summary in which it was argued that there are two types of agency problems facing firms; conflict between management and owners and conflict between financiers and owners. In the conflict between stockholders and managers, managers tend to overspending or operate on a low leverage and this seems not to benefit the stockholders therefore the financial sustainability is affected. Agency

theory gains relevance in aligning the firm's management performance. Innocent (2016) postulated that debt use by a firm enhances the cost efficiency of the firm in the long run.

Corporate capital structure has dynamic and static trade-off theories. In accordance to Chen & Hammes (2005), static trade-off theory states that the trade-off between benefits and costs of borrowings determines the optimal debt-to-equity ratio, with the firm's investment and assets plan remaining unchanged. The benefits of the borrowings are interest tax shields whereas the borrowing costs are the increased likelihood of insolvency or financial distress. Costs associated with financial distress can be direct and/or indirect in which direct costs come as a result of the company going through the bankruptcy procedure and this includes the legal and administrative costs, operations shut-down costs as well as the asset disposal costs. On the other hand, indirect costs result from conflicts of interest between owners and debt holders and they are shifting risk and/or not investing optimally. As a result of this, there is also an incentive by the shareholders to force managers to invest in riskier projects because they have minimal losses in the event of project failure.

Other indirect costs can come as a result having liquidation on customers, employees and suppliers of the firm (Myers, 2003). Therefore, in accordance corporate capital structure inert trade-off theory, management of the entity chooses firm's the leverage by likening bankruptcy likelihood to the interest tax shields. An optimal leverage is attained when new debt-to-equity ratio results in no adjustment in costs hence leading to maximizing the shareholder's value. This theory is vital in this study because the conflict which arises between the various stakeholders in an organization will affect the decisions in establishing the optimal working capital management strategy which in turn affects the organization's financial sustainability.

2.2.3 Behavioural Finance Theory

This is a modern theory that explains the cognitive factor and emotional issues which influence the way an individual or a group makes a decision. It is based on the inability to have the empirical patterns of the traditional theory framework explained, while the traditional theory assumes a rational decision-making process which is not biased and that it is consistent with profit maximization which does not hold always. In this theory, the decisions are not completely rational but are based on behaviour biasness. It is the impact that psychology has on behaviour of financial practitioners and market long-term effects (Sewell, 2007). In accordance to traditional finance, it is assumed that economic agents are rational, meaning they are efficient and they process without bias the relevant information and they make decisions in consistency with utility maximization (Barberis & Thaler, 2003).

Behavioural finance can also be applied in corporate finance decisions analysis. According to Sewell (2007), the incorporation of behavioural ideas in corporate finance has led to two distinctive dimensions. Firstly, the investors are viewed to be less than completely rational. In this analysis, the management corporate financing decisions are made in response to the investors' behaviours, meaning the rational managers make decisions in response to the mispricing of securities by investors who are biased behaviourally. Secondly, corporate managers can be affected by the behavioural biases and this influences some of transactions undertaken relating to corporate finance.

Psychology is likely to affect perceptions of managing the risk which greatly affects investment decisions. Shiller (2003) argues that overconfidence and over-optimism can

result in underestimating the risk by individuals and this is one of the implications of behavioural biases. The risk perception is influenced by the complexity of the risk at hand. Furthermore, Shiller (2003) postulated that risk management becomes more appealing when it is described by outlining the gains and losses as outcomes and may also affect the appetite of risk, which is evidenced by the fact that individual's behaviour to take risk in the realm of losses. The theory is significant to the study since just like any other decision, working capital management decisions can also be biased and hence not made rationally.

2.2.4 Resource-Based Theory

Kay (2005) pioneered the resource-based theory which is anchored on the notion of economic rent and that an entity is endowed with competences. He noted that this theory has logic and an integrative role which gives it an upper hand over other mechanisms of strategic decision making. This theory offers deep and paramount revelations into reasons why firms perform in a more superior manner if they have valuable and well-organized resources than when do not have (Barney, 1995). According to this theory, it is the firm's internal capabilities or features which determine its strategic plans and performance.

The theory is applicable to the research due to the of the economic nature of NGOs as a result of using the scarce resources to produce valuable goods and services. In addition, for them to provide value to society which is superior there is need for a reliable flow of revenue to be used in financing their mission hence be financially sustainable as much as they are classified as non-profit making organizations.

2.2.5 Stakeholder Theory

According to Freeman (2008), the stakeholders need not to be harmed by the interest of the stockholders. Similarly, the stakeholders' interests can be enhanced minus having the interest of its wider stockholders damaged. This theory emerged from the economic theory of the firm. It is managements duty to offer to stakeholders NGOs' operations reports. The spending plans of NGOs have also to be justified (Haber, 2004).

The relevance of the theory to this study is because the financial sustainability of the NGOs is made possible by stakeholders (Onyango, 2002). In addition, they also ensure financial stability of NGOs and that all activities are aligned to the organizational goals. In addition, it is management that ensures that the NGOs operate in an optimal manner so as to have the shareholders' profits maximized and to ensure they are financially sustainable.

2.3 Determinants of Financial Sustainability

2.3.1 Average Collection Period

The total number of days taken to receive cash from account receivables is termed as Average Collection Period and is calculated by dividing account receivables by Sales and multiplying the outcome by 365. Nyaga (2011) investigated the impact of receivables management on the financial performance of Technical, Industrial, and Entrepreneurship Training (TIVET) organizations. The outcome exposed an affirmative correlation between receivables management and financial performance. Furthermore, according to Mbula, Memba, and Njeru (2016), there is a direct correlation between accounts receivable management and the financial success of Kenyan enterprises that receive financing from government venture capital.

From the above studies, it is evident that when the average collection days are shortened, its financial sustainability is enhanced because cash is available to facilitate

activity implementation and/or operations of organizations. On the other hand, increasing the average collection period will tie cash which could otherwise help in enhancing financial sustainability of organizations.

2.3.2 Liquidity Ratios

These ratios essentially focus on cash flows which usually indicate how capable an organization meets its obligations as and when they arise. According to (Robinson et., 2015), liquidity management is accomplished by effectively using assets. Current Ratio (CR) is the liquidity ratio which measures the organization's capability to settle its interim obligations which include accounts payables and short-term loans. It is gotten by dividing the current assets by current liabilities. In accordance to the study by Sofyan (2009:301), higher current ratio of current assets in comparison with current liabilities, signifies the entity's capability to pay her obligations with ease. On the other hand, when the ratio decreases under 1, this indicates a deficit in liquidity and a section of the fixed assets funded by intermediate debt. Liquidity shortage leads to a decrease in the entity's muscle which might in turn impact its profitability and hence the financial sustainability is also affected. If the current ratio is equal to current liabilities, then the ratio is 1 (Robinson et al., 2015)

Acid Ratio (AR) takes into consideration the most liquid assets to the current liabilities. The more the value of this ratio the higher the liquidity. In accordance to (Sinha, 2012), prepaid expenses and inventory are excluded from this ratio. Cash Ratio (CR) is the ratio which is dependent only on short-term marketable investment and it's the one which is attributed to current liabilities (Gibson, 2009).

Several researches have been done to establish how liquidity ratios affect pointers of financial performance or profitability of organizations (Lartey, et al., 2013) studied the

association between liquidity and profitability of listed banks in Ghana between the periods 2005-2010 in which the outcome revealed a decline in profitability of listed banks when liquidity ratios declined, hence a weak direct relationship between liquidity and profitability.

In addition, Zygmunt (2013), explained the critical function of liquidity ratios in the performance of the company in which there was a substantial influence of the liquidity ratios on profitability in ICT listed Polish entities. Based on Wiyono and Se (2012), liquidity ratio positively impacts the gross profit margin in Indonesian Islamic bank. From the above studies, it is vivid that liquidity ratios impact the financial performance of organizations which will in turn affect their financial sustainability.

2.4 Empirical Review

Maintaining an optimal cash flow requirement is another crucial part of operating a organisation which is sustainable financially.

This section looks at the empirical studies with an aim to identify objectives, findings, limitations and research gaps. Ngoe (2012) examined the actors affecting financial sustainability of youth enterprises funded by Youth Enterprise development fund in County of Mombasa. The study established that strategic financial planning, the administration and financial procedures and controls adopted by organizations, record keepings systems, financial reporting and reinvestment determine how sustainable they become financially. However, from the study it was recommended that further research be carried out establish what other factors can affect the financial sustainability of the enterprises mentioned. Ngoe (2012) proposed a replication of the research in other counties. The research gap which will be addressed by my study is to carry out the study

in the NGOs sector because what applies to youth enterprises may not necessarily apply in the NGO's sector.

Rao (2013) investigated the impact that sources of funds have on the financial sustainability of Organisations in the Kenyan water industry. It is postulated that source of funds influences the organizations' financial sustainability in which ratio analysis exhibited a robust optimistic correlation between funds generated internally and financial sustainability of Kenyan water sector institutions. There were a number of limitations from this study. There was no enough evidence that findings from the study can be used universally to argue how organization's funding sources affect its financial sustainability. In addition, it was difficult to inform whether the results are simply as a result of the nature of the used data in terms of quality or whether there was a true reflection of the situation. This because it was assumed that the data which was used was captured accurately and well maintained (Rao, 2013). The research gap to be addressed by my study is to address the data quality limitations by getting data from the NGO coordination Board which has data which can be trusted because it is based on audited financial statements filed by NGO annually as required by law. Moreover, the research's focus will be on the impact of another factor on financial sustainability because it likely that it not only funding sources which can affect the financial sustainability of financial institutions.

Nyabayo (2013) investigated the financial sustainability difficulties encountered by non-governmental groups in the county of Busia in Kenya. The study discovered that non-governmental organizations face obstacles in achieving financial sustainability due to focusing on the organization's mission statement, their leadership, making contacts with diverse entities with identical aims, and customers and societal involvement. According to the report, NGOs ought to be directed by their statements' mission in

raising funds for their operations, managers ought to uphold accountability and transparency to diverse investors, formation of strategic partnerships, and customer and employee satisfaction should be prioritized. The research gap to be addressed by my study is that after establishing how working capital management affects financial sustainability, the NGO's will know where to specifically focus so as to address the challenge of attaining financial sustainability instead of viewing challenges from a general perspective.

Onsongo (2012) researched on strategies NGOs in Kenya adopt so as to be sustainable financially. The study established that financial sustainability in these organizations is attained through strategic financial management, having good governance systems, internally generate financial sources, and having proper strategic alliances and organizational structure. Onsongo (2012) recommended that quantitative study is carried out on strategies organizations in Kenya can employ to attain sustainability. The study by Onsongo focussed on qualitative research and this study focused on the quantitative research by analysing the data from the NGO Coordination Board quantitative reports.

Karanja & Karuti (2014) majored o factors which influence the financial sustainability of NGOs working in Isiolo, Kenya. Descriptive design was employed and established that NGOs' financing is a major task and its smooth running is to a large extent interfered by policies put in place by the government. As such, it was recommended that policies put in place by the government should enhance the NGOs financial sustainability as well as ascertain that the management of NGO's participates in drafting policies that will have an impact on their financial sustainability. The research gap to be addressed by this study is that after establishing the how working capital management affects financial sustainability, the NGO's will know where to specifically

focus so as to address the challenge of attaining financial sustainability instead of viewing challenges from a general perspective.

Ng'ang'a (2016) evaluated the factors that determine the financial sustainability of mid-level colleges that are privately owned in Nakuru in Kenya in which the specific emphasis was how capital structure and resource allocation impact financial sustainability. It was established financial sustainability is significantly influenced by the capital structure and resource allocation. Further, it was concluded that the private middle level colleges' capital structure in the county of Nakuru in Kenya comprised of debt, owners' equity and retained profits. As such, it was inferred that the way resources are allocated was essential in achieving financial sustainability. A further recommendation was that other cost effective and sustainable ways to finance their operations should be sought by these colleges. The research gap to be bridged by this study is that it will focus in the NGO sector other than the middle level colleges sector whose contextual circumstances could be different.

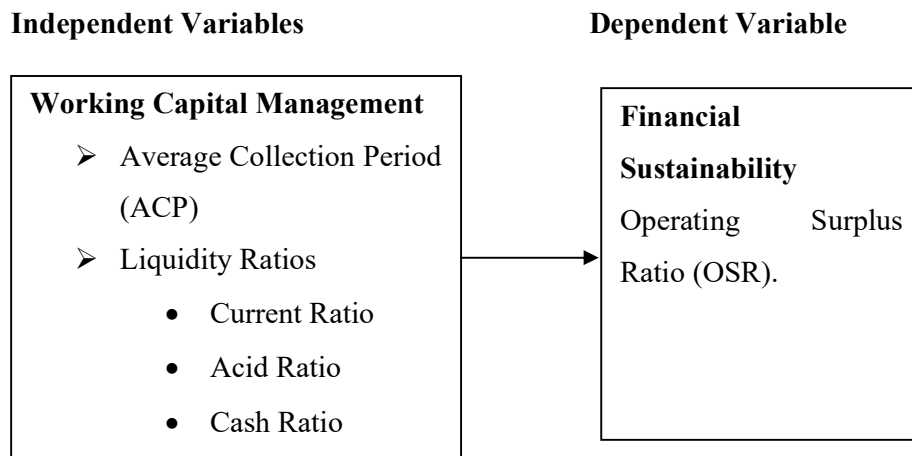
2.5 Summary of the Literature Review

The reviewed literature has revealed a broad and overall conceptualization of research carried out on influencers of financial sustainability. On how financial management affects financial sustainability, the focus has been on long-term financial management method and none on the short-term financial management. In addition, the studies which have been carried out on financial sustainability were done a long time ago broadly focussing on the what determines the financial sustainability in different types of organizations. Therefore, this study will be undertaken to establish how working capital management affects the financial sustainability of NGOs which are

engaging in income generating activities so as determine the optimal working capital which will boost their financial sustainability.

2.6 Conceptual Framework

Figure 2. 1 Conceptual Framework



Source: Author (2021)

The conceptual framework is a pictorial representation illustrating how the independent and dependent variables under the research relate. The independent variables in this study are operationalization of working capital management which entails average collection period and liquidity ratios comprising the current ratio, acid ratio and cash ratio. Financial sustainability of Non-Governmental Organizations (NGOs) is the dependent variable and was operationalized by their Operating Surplus Ratios (OSR).

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This segment looked at the roadmap employed in the research which entails the design, the population, sample size, and data gathering and analysis methods.

3.2 Research Design

Research design outlines the process for gathering and analysing data in a way relevant to the study aims and has the purpose achieved in an economical way. In accordance to Kothari (2004), the research design is an outline of how to carry out the research process which is aimed at enhancing efficiency and hence get information with minimal spending within a short time and with less effort. The study used a correlational design. William (2011) observed that the relationship between two or more variables can be examined through correlational design. Therefore, this was the preferred study design since this research will establish how working capital management and financial sustainability of NGOs with income generating activities in Kenya relate.

3.3 Population

A collection of persons, objects or items from where the researcher will take samples so as to make inferences from the study is called the target population. This study targeted the NGOs with income generating activities in Kenya. According to the NGO Sector Annual Report for the period 2018-2019 by the NGOs Co-ordination board, 1.7 percent (approximately 50 NGOs) of a total 3028 who submitted their annual reports, generated their own income from undertaking various activities which included rent

from own buildings, consultancy fee from consultancy services offered in their area(s) of expertise, commercial farming, running social amenities like schools and hospitals among others.

3.4 Sample

In this study, the researcher adopted simple random sampling method. This is because it was easy to use and it gave an accurate representation of the larger population. However, the study sample size was reached upon after the use of the Yamane (1967) formula and the formula was found to be appropriate for descriptive studies involving large population sizes due to its simplicity. The formula was as subsequently indicated;

$$n = \frac{N}{1 + N(e^2)}$$

Where;

n = sample size

N = population size

e = the level of accuracy, set at 10% for this study in line with stipulations by Nsubuga (2006) and Denscombe (2014) and who asserted that 10% was an acceptable error margin in social studies.

After using the formulae, the researcher found out that the study's sample size was;

N=50

50

1 + 50(0.1)²

= 33

n = 33

Hence, the study sample size was 33 NGOS in Kenya with income generating activities.

3.5 Data Collection

The chief source of the data was secondary data obtained from the audited financial statements filed at the NGO Coordination board by the targeted NGOs. Financial data on annual operating surplus ratio of the NGOs and the total net current assets, current ratios, acid ratios and cash ratios were obtained from the financial statements for the periods 2016 to 2019. This provided a good timeline to analyse how working capital management correlated with financial sustainability of NGOs with income generating activities in Kenya.

3.6 Data Analysis

Descriptive and inferential statistics was used to analyse data by the use of Statistical Package for Social Sciences (SPSS) version 23. Tables were used in data presentation. This enabled meaningful presentation of data and hence allowed easy interpretation of the same so as to deduce the characteristics of the larger population. Analysis was done on cash management practices as well as receivables and payables management practices.

William (2011) observed that the relationship between two or more variables can be examined through correlational design and since the paper establishes the association of working capital management on financial sustainability of NGOs with income generating activities in Kenya, this was the preferred study design. As such, correlation analysis was employed to ascertain the connection between working capital management and financial sustainability. The use of regression analysis helped in

figuring out how the independent variables and dependent variable relate to each other. In addition, beta values at 5% significance were interpreted by means of the t-test of significance in which the testing of the significance of the model was done using F statistic. In explaining the variance in the model, R^2 was interpreted.

The analytical model for the study was:

Operating Surplus Ratio (OSR) =f (ACP, CR, AR, CR)

This is a modified model from Teruel and Solano (2007) who examined how working capital management and profitability of Spanish SMEs relate. The variables relevant in the NGO sector have been included in this model resulting to the following empirical model:

$$OSR_{it} = \beta_0 + \beta_1 (ACP_{it}) + \beta_2 (CR_{it}) + \beta_3 (AR) + \beta_4 (CR) + e_{it} \dots (1)$$

Under this model, financial sustainability for the sample of NGOs was measured using OSR and this formed the dependent variable. The independent variables for purposes of the paper were the measures of working capital management (ACP, CR, AR, and CR).

Operating Surplus Ratio (OSR) for the sample NGOs was calculated by dividing expenses by the Income of each of the NGOs which will be got their financial statements for the periods 2016 to 2019

Average Collection Period (ACP) is the overall numbers of days accounts receivable are transformed into cash and is calculated by dividing account receivables by Sales and multiplying the result by 365.

Current Ratio (CR) is the liquidity ratio which measures the organization's capacity to pay its intermediate commitments. The calculation of this is by dividing current assets by current liabilities

Acid Ratio (AR) is a liquidity ratio which uses more liquid assets in which prepaid expenses and inventory are excluded. Usually, Acid Ratio=Current liabilities

Cash Ratio (CR) is the ratio which is only dependent on short-term marketable investment and its which is attributed to current liabilities (Gibson, 2009) and is computed by summing the organization's reserves of cash and near-cash securities and dividing the sum by its total current liabilities

β_0 Beta of the firm at time t ; $i=1,2,\dots,33$ NGOs

β_1,β_4 Coefficients of different independent variables for working capital management of NGO i at time t

t Time = 1,2....., 4 Years

e is an error term

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSION OF RESULTS

4.1 Introduction

The results of the data analysis, as well as their interpretations and debate of the outcome are presented in this chapter.

4.2 Descriptive Statistics

The analysis of the descriptive statistics and summary of results done in the study indicated that operating surplus ratio, average collection period, current ratio, cash ratio as well as acid ratio influence the financial sustainability of NGOs with income generating activities in Kenya at different levels. This is illustrated in the table 4.1.

Table 4. 1 Summary Statistics

	Mean	Std. Deviation	N
Operating Surplus Ratio	.381127	.1865275	132
Average Collection Period	60.310491	29.2057270	132
Current Ratio	3.095214	2.0776544	132
Acid Ratio	2.623680	2.1916849	132
Cash Ratio	1.944059	1.8277173	132

Source: Research Data (2021)

From table 4.1, it is apparent that different working capital variables influence the financial sustainability of NGOs with income generating activities in Kenya at different mean and standard deviation values. For example, the operating surplus ratio influences the financial sustainability of NGOs with income generating activities in Kenya at a mean of 0.381127 and a Standard Deviation (S.D) of 0.1865275, while the Average Collection Period influences the financial sustainability of NGOs with income generating activities in Kenya at a mean of 60.310491 and a S.D of 29.2057270. However, the current ratio influences the financial sustainability of NGOs with income generating activities in Kenya with a mean of 3.095214 and S.D of 2.0776544, while the Acid Ratio influences the financial sustainability of NGOs with income generating activities in Kenya at a mean of 2.623680 and S.D of 2.1916849. Finally, the results indicated that Cash ratio influenced the financial sustainability of NGOs with income generating activities in Kenya at a mean of 1.944059 and a S.D of 1.8277173. Based on above results, it can be postulated that effective working capital management is substantial and influential in meeting financial sustainability of NGOs with income generating activities in Kenya.

4.3 Correlation Analysis

The researcher sought to ascertain how the study variables relate. Correlational analysis was performed to achieve this. Pearson's correlation coefficient was employed to determine the correlation or associations and table 4.2 exhibitions the result.

Table 4. 2 Relationship between variables

		Operating Surplus Ratio	Average Collection Period	Current Ratio	Acid Ratio	Cash Ratio
Pearson Correlation	Operating Surplus Ratio	1.000	.916	.865	.809	.778
	Average Collection Period	.916	1.000	.726	.637	.593
	Current Ratio	.865	.726	1.000	.976	.965
	Acid Ratio	.809	.637	.976	1.000	.993
	Cash Ratio	.778	.593	.965	.993	1.000
Sig. (1-tailed)	Operating Surplus Ratio	.	.000	.000	.000	.000
	Average Collection Period	.000	.	.000	.000	.000
	Current Ratio	.000	.000	.	.000	.000
	Acid Ratio	.000	.000	.000	.	.000
	Cash Ratio	.000	.000	.000	.000	.
N	Operating Surplus Ratio	132	132	132	132	132
	Average Collection Period	132	132	132	132	132
	Current Ratio	132	132	132	132	132
	Acid Ratio	132	132	132	132	132
	Cash Ratio	132	132	132	132	132

Source: Research Data (2021)

From table 4.2, it is clear that there is correlation between different working capital variables such as Operating Surplus Ratio, Current Ratio, Cash Ratio, Average Collection Period and Acid Ratio. The variables relate at different values with the highest correlation between Cash Ratio and Acid ratio at 0.993. However, the values with the lowest correlation are between Cash ratio and Average Collection Period at 0.593. Therefore, it was concluded that the indicated outcome of Operating Surplus

Ratio exhibited a strong and positive relationship with Acid Ratio, Current ratio and Cash ratio.

Table 4. 3 Analysis of Variance (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.222	4	1.056	399.717	.000 ^b
	Residual	.335	127	.003		
	Total	4.558	131			

a. Dependent Variable: Operating Surplus Ratio

b. Predictors: (Constant), Cash Ratio, Average Collection Period, Current Ratio, Acid Ratio

Source: Research Data (2021)

In accordance to Ronald Fisher, a statistician, the ANOVA statistical mode is used to test significance of all variables in which it analyses the variances of group means (Anova, 2002).

The results of regression in table 4.3 show significance value of 0.000 for the P value which is less than 0.05 and F value of (399.717).

Results for the predictors were given by the table above and the significance results affirms that all the predictors had a significant correlation at confidence level of 95%; (P = 0.000 <0.05)

Table 4. 4 Model summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.963 ^a	.926	.924	.0513895	1.063

a. Predictors: (Constant), Cash Ratio, Average Collection Period, Current Ratio, Acid Ratio

b. Dependent Variable: Operating Surplus Ratio

Source: Research Data (2021)

Coefficient of determination or R-square shows the variation in the outcome variable occasioned by a variation in the predictor variable. As per Table 4.4, R square value was 0.926 meaning that 92.6% variation in the dependent variable (the financial sustainability of NGOs with income generating activities in Kenya) was attributed to variations in the independent variables (Average Collection Period, Current Ratio as well as Acid Ratio and Cash Ratio). Hence, 7.4% of variation in the financial sustainability of NGOs with income generating activities in Kenya was due to other factors that were not part of the model and those that were not focused on in the current research.

Table 4. 5 Regression coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.034	.011		3.126	.002
Average Collection Period	.004	.000	.647	14.553	.000
Current Ratio	.016	.013	.174	1.218	.225
Acid Ratio	.016	.021	.188	.762	.447
Cash Ratio	.004	.023	.040	.177	.860

a. Dependent Variable: Operating Surplus Ratio

Source: Research Data (2021)

From Table 4.5 the following regression equation was derived

$$Y = 0.034 + 0.004 X_1 + \varepsilon$$

From the regression equation, when Average Collection Period is at constant 0.00, influence on the financial sustainability of NGOs with income generating activities in Kenya would be 0.034 and also a unit rise in average collection period would result to

0.004 increases in the financial sustainability of NGOs with income generating activities.

At 5% significance level (or 95% level of confidence), the financial sustainability of NGOs with income generating activities had a level of significance of 0.002, average collection had 0.000 level of significance. This means that Average Collection Period positively and significantly influenced financial sustainability of NGOs with income generating activities as corroborated by a P value of less than 0.05. Current Ratio had 0.225>0.05 level of significance, Acid Ratio had 0.447>0.05 level of significance while Cash Ratio had 0.860>0.05 level of significance. This means that Current Ratio, Acid Ratio and Cash Ratio had no influence on financial sustainability of NGOs with income generating activities as evidenced by a P value of more than 0.05. Of all the variable, only Average Collection was the significant ($p < 0.05$) factor that influenced Financial Sustainability of NGOs with income generating activities. It can thus be concluded that Average Collection Period influenced Financial Sustainability while Cash Ratio, Acid Ratio, and Current Ratio had no influence on financial sustainability of NGOs with income generating activities.

4.4 Interpretation of Findings and Discussion of Results

From the analysis of the results, it is evident that different working capital variables influence the financial sustainability of NGOs with income generating activities in Kenya at different mean and standard deviation values. The operating surplus ratio had

a mean of 0.381127 and a S.D of 0.1865275 with Average Collection Period having a mean of 60.310491 and a S.D of 29.2057270. The current ratio had a mean of 3.095214 and S.D of 2.0776544 with the Acid Ratio having a mean of 2.623680 and S.D of 2.1916849. With high values of standard deviation, it is true that working capital management influences the financial sustainability of NGOs with income generating activities in Kenya.

The study also noted the existence of association among the variables. In the model, it was evident that R-square of 0.926 provided 92.6% variation in the outcome variable, especially occasioned by variations in the predictor variables such as Average Collection Period, Current Ratio as well as Acid Ratio and Cash Ratio. Using the regression equation model, it was confirmed that Average Collection Period at constant 0.00, influence on financial sustainability of NGOs with income generating activities in Kenya would be 0.034 and when average collection period increases by one unit, financial sustainability of income generating NGOs increases by 0.004.

Importantly, at 95% confidence level, the financial sustainability of NGOs with income generating activities had a level of significance on only the Average Collection Period at 0.000 level of significance. Current Ratio at $0.225 > 0.05$ level of significance, Acid Ratio at $0.447 > 0.05$ level of significance and Cash Ratio at $0.860 > 0.05$ level of significance indicate that they did not influence Financial Sustainability as observed from their respective P values of above 0.05. From the results, a mixed correlation was exhibited between different independent variable and dependent variable as it was observed that Cash Ratio, Acid Ratio and Current Ratio did not influence Financial Sustainability while Average Collection Period influenced financial sustainability of NGOs with income generating activities.

These results are both affirmative and contradictory as compared to the literature and previous studies that have been done. For example, the study results were to Sinha (2012) who stated that the bigger the value of acid ratio the bigger the liquidity and hence the entity will be able to pay its short-term obligations. Cash ratio was noted to have a negative correlation with OSR leading to an inverse association between the variables. Nevertheless, Lartey et al., (2013) ascertained that there was a decline in profitability of listed banks when liquidity ratios declined, hence a feeble direct correlation between liquidity and profitability.

Moreover, the outcome also confirmed the studies done by Guay, Doha and Sinclair (2004) who noted that working capital is vital in achieving financial sustainability of NGOs. Karanja and Karuti (2014) who evaluated the influencers of financial sustainability of NGOs in Isiolo contradicts the results as they noted that working capital variables such as Cash Flow, Acid Ratio and Current Ratio exhibited a huge bearing on the financial sustainability of NGOs operating in Isiolo. The outcome also contradicts that of Sarriot et al. (2004) who noted that the financial sustainability of NGOs within the healthcare sector depends on their management of working capital including their assets and current ratios.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter included an overview of major data results, as well as conclusions formed from the findings and recommendations made in response to them. The conclusions and recommendations reached are aimed at answering the study question or accomplishing the study objectives. Limitations and suggestions for additional research is also conferred.

5.2 Summary of Findings

The research's purpose was to establish the effect of working capital management on financial sustainability of NGOs with income generating activities in Kenya. Operating surplus ratio was the dependent variable and average collection period, current ratio, acid ratio and cash ratio were the independent variables. Descriptive and a cross-sectional design using secondary data was used with a populace of 33 NGOs in Kenya. The mode of statistics embraced inferential and Descriptive statistics. In summary, the study noted that different working capital variables influence the financial sustainability of NGOs with income generating activities in Kenya at different mean and standard deviation values. The operating surplus ratio had a mean of 0.381127 and a S.D of 0.1865275 and Average Collection Period contained a mean of 60.310491 and a S.D of 29.2057270.

The current ratio exhibited a mean of 3.095214 and S.D of 2.0776544, with Acid Ratio influencing the financial sustainability of NGOs with income generating activities in Kenya at a mean of 2.623680 and standard deviation of 2.1916849. With high values of standard deviation, it is true that working capital management influence the financial sustainability of NGOs with revenue making operations in Kenya.

Moreover, the findings of study noted that Average Collection Period, Current Ratio as well as Acid Ratio and Cash Ratio had a 92.6% impact on the financial sustainability of NGOs with income generating activities in Kenya. The results also presented a P value of below 5% ($0.000 < 0.05$). This affirms that the regression model was sufficient and fit.

Importantly, at 95% confidence level, the financial sustainability of NGOs with income generating activities had a level of significance on only the Average Collection Period variables at 0.000 level of significance which was less than 5% (0.05). Current Ratio at $0.22 > 0.05$ level of significance, Acid Ratio at $0.447 > 0.05$ level of significance and Cash Ratio at $0.860 > 0.05$ level of significance were found not to influence financial sustainability of NGOs with income generating activities as evidenced by their respective P values of greater than % (0.05).

5.3 Conclusions

The research's purpose was to ascertain the bearing of working capital management on financial sustainability of NGOs with income generating activities in Kenya. Operating surplus ratio was the dependent variable and average collection period, current ratio, acid ratio and cash ratio were the independent variables. It was concluded that working capital management has a strong correlation with financial sustainability of NGOs with income generating activities in Kenya because Average Collection Period, Current

Ratio as well as Acid Ratio and Cash Ratio had a 92.6% impact on financial sustainability of NGOs with income generating activities in Kenya. This means that working capital management is important in determining the financial sustainability of NGOs with income generating activities in Kenya. Additionally, it was concluded that all the independent variables had a significant association with the independent variable because at 95% confidence level, P value was 0.00 which is less than 0.05. This means that the regression model was significant and that it was fit.

Also, on the other hand, at the individual level of the independent variables, it was concluded that ACP had a significant influence on financial sustainability at significance level of 0.000 which is less than 0.05 while Current Ratio, Acid Ratio and Cash Ratio had no significant influence on financial sustainability of NGOs with income generating activities in Kenya based on their P values of bigger than 5% thus the significance level was more than 0.05. It is thus concluded that working capital management is partially imperative in influencing the financial sustainability of NGOs with income generating activities in Kenya.

5.4 Recommendations

It is recommended that NGOs adopt Working Capital Management as a way of influencing their Financial Sustainability. This is because Working Capital Management has been established to positively and substantially influence Financial Sustainability among NGO's. Additionally, the study's outcome concluded that ACP, current ratio, acid ratio and cash ratio have 92.6 % impact on financial sustainability of NGOs with income generation activities in Kenya meaning that 7.4% is as a result of other factors hence a recommendation to do more research involving all factors affecting financial sustainability.

5.5 Limitations of the study

In this study, some barriers and limitations were researcher met. For example, conceptually, the study was limited to working capital management as an influencing factor of financial sustainability and thus other factors were not factored in. In addition, the study length considered was 4 years and thus the outcome attained only elaborates the effects of working capital management during the research period. Obtaining data was challenging as not all financial statements were readily accessible and it required certain consents to obtain them. Secondary data was used and this is associated with unreliable sources and this was a limitation. However, the researcher ensured that the majority of data collected were from reliable sources.

5.6 Suggestion for Further Research

The researcher suggests more research to be carried out using different concepts that may affect financial sustainability of NGO's. This is because this study only focussed on working capital variables. Further study should be done to determine how other variables not associated with working capital influence the financial sustainability of NGOs with income generating activities in Kenya. It is suggested that additional studies be carried out to have a lengthier time period so as to undoubtedly discover the impact of working capital management on financial sustainability within the adjusted studied period. Respondents and custodians of data should also make the data readily available so as to aid researchers carry out their work seamlessly and without having to pay or get consent to obtain information.

The study also suggests the need for further studies to consider the use of primary data sources and focus on one NGO with income generating activities in Kenya. This will help to give in-depth information using a single entity. The researcher suggests that a study be done to establish the reason for the variations in different working capital management strategies. This is due to the fact that it has been established that other variables (Average Collection Period) influence Financial Sustainability while others (Current Ratio, Acid Ratio and Cash Ratio) do not influence financial sustainability.

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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION



**UNIVERSITY OF NAIROBI
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
SCHOOL OF BUSINESS**

Telephone: 020-8095398
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsities
Our Ref: D61/5015/2017

Tel: 020 8095398
Nairobi, Kenya
DATE: 24th November, 2020

TO WHOM IT MAY CONCERN

The bearer of this letter, **Joash Omache Onchieku** of Registration Number **D61/5015/2017** is a Master of Science in Finance (MSc) student of the University of Nairobi.

He is required to submit as part of his coursework assessment a research project report. We would like the student to do his project on **Effect of working capital management on financial sustainability of non-governmental organizations with income generating activities in Kenya**. We would, therefore, appreciate if you assist him by allowing him to collect data within your organization for the research.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organization on request.

Thank you.

PHILIP NGIGI

FOR: DEAN, SCHOOL OF BUSINESS



APPENDIX II: DATA COLLECTION FORM: FINANCIAL SUSTAINABILITY

NAME OF THE ORGANIZATION:.....

Variable	Measure	2019	2018	2017	2016
Financial Sustainability(OS R)	Expenses/Income				
Average Collection Period(ACP)	(Accounts Receivable/Sales)*365				
Current Ratio(CR)	Current Assets/Current Liabilities				
Acid Ratio(AR)	(Current Assets-Inventory+Prepaid expenses)/Current Liabilities				
Cash Ratio(CR)	(Cash reserves+Near Cash Securities)/Current Liabilities				

APPENDIX III: LIST OF SAMPLED NGOs

1. WOMENS EMPOWERMENT LINK
2. WEZESHA WATOTO WA KENYA
3. GLOBAL ONE 2015 KENYA
4. ROZY NANAA FOUNDATION
5. SUSTAINABLE HEALTHCARE FOUNDATION
6. AFRICAN BRAILLE CENTRE
7. CANA FAMILY LIFE EDUCATION HIV/AIDS PROGRAMME
8. ASSOCIATION ON THE WAY TO PEACE KENYA (ASSOCIAZIONE VIA PACIS ONLUS)
9. DAVID SHELDRIK WILDLIFE TRUST
10. HUMANITARIAN INITIATIVE JUST RELIEF AID
11. VISIONARY EMPOWERMENT PROGRAMME
12. SOCIAL ECONOMIC MOBILIZATION AGENCY
13. RHINO ARK- KENYA CHARITABLE TRUST
14. DESERT-OASIS RESIDENTS EMPOWERMENT PROGRAMME
15. TUMSHANGILIENI MTOTO
16. WOMEN ECONOMIC MOBILIZATION AGENCY
17. SOCIAL EMPOWERMENT PROMOTIONAL PROGRAMME
18. YOUNG WOMEN CAMPAIGN AGAINST AIDS
19. MUNDU AGRICULTURAL ENVIRONMENTAL EDUCATIONAL ORGANISATION
20. ALPHA SUPPORT DEVELOPMENT PROGRAMME
21. JISAIDIE DEVELOPMENT NETWORK
22. VISION SELF HELP PROGRAMME
23. THE FATHER'S DAUGHTER ORGANIZATION

24. AFRICA INITIATIVE FOR RURAL DEVELOPMENT
25. EMAYIAN INTERGRATED DEVELOPMENT ORGANIZATION
26. KUMBATIO KENYA
27. OUR LADY OF PERPETUAL SUPPORT FOR PEOPLE LIVING WITH
HIV/AIDS AND ORPHANS
28. ALLIANCE OF LOCAL COMMUNITIES IN HARDSHIP AREAS
29. GAI NEEDY STUDENTS PROJECT
30. PACEMAKER INTERNATIONAL
31. MOYO CHILDREN CENTRE
32. AMAZING GRACE INTERNATIONAL INC-KENYA CHAPTER
33. HUMANITARIAN INITIATIVE JUST RELIEF AID