EFFECT OF FUNDING ON FINANCIAL SUSTAINABILITY OF LOCAL NONGOVERNMENTAL ORGANIZATIONS PROVIDING HEALTHCARE SUPPORT IN KENYA

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DECLARATION

This research project is my own original work and has not been submitted for review to any other organization or university but the University of Nairobi.

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DEDICATION

I dedicate this work to my parents: Mr & Mrs Musambaki and Uncle: Mr. Abraham Mendi Walubengo, for believing in me and their relentless support and inspirational encouragement. Your prayers brought me this far.

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LIST OF ABBREVIATIONS

AIDS Acquired Immune Deficiency Syndrome

ANOVA Analysis of Variance

HIV Human Immune Virus

NGO Non-Governmental Organization

SPSS Statistical Package for Social Sciences

VIF Variance Inflation Factors

ABSTRACT

The need for this study arises from the increasing importance of NGOs in the healthcare sector and the imperative to ensure their sustained impact. Financial sustainability is pivotal for these organizations to navigate the complex landscape of healthcare provision effectively. Despite the recognized significance of financial sustainability, there is limited empirical research exploring the specific relationships between funding sources, firm liquidity, financial leverage, and the overall financial sustainability of healthcare NGOs in the Kenyan context. The primary objectives of this study are to examine the effect of funding on the financial sustainability of local healthcare-supporting NGOs in Kenya. Firm liquidity and financial leverage were included as control variables in the study. The study was anchored in resource dependency theory, institutional theory, and stakeholder theory, providing a comprehensive theoretical framework to analyze the multifaceted relationships between the study variables within the non-profit sector. A descriptive research design was employed for this study, utilizing regression analysis to explore the relationships between the dependent variable, financial sustainability, and the independent variables of funding, firm liquidity, and financial leverage. The target population comprised 65 local NGOs providing healthcare support in Kenya, with 49 firms providing complete data sets for the final analysis. The study relied on secondary data collected from the financial reports of the selected NGOs over a 5-year period (2018-2022), leading to 245 observations. Data analysis included descriptive, correlation, and regression analyses to provide a comprehensive understanding of the financial dynamics within the studied NGOs. The findings revealed that funding has a positive and statistically significant coefficient of 0.033 (p = 0.007). Firm liquidity also has a positive and significant coefficient of 0.111 (p = 0.000). However, financial leverage does not show a statistically significant relationship (p = 0.438). The overall model produced an adjusted R square of value of 0.238 which indicates that approximately 23.8% of the variance in financial sustainability can be explained by the three predictors. The study concludes that diversified funding sources and strong liquidity positions are important in ensuring the long-term impact of these organizations. The study recommends that policymakers focus on creating supportive funding environments, and practitioners prioritize strategies that enhance liquidity and secure diverse funding sources. Further research could explore the contextual determinants of financial sustainability, incorporate qualitative perspectives, and adopt longitudinal approaches to capture the dynamic nature of the non-profit sector.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Organizational financial sustainability is significant in the current era of globalization (Wang, Zhang, Ma & Liu, 2021). Wanga (2022) holds that when firms receive adequate funding, they are better able to achieve their goals, maintain their operations, and plan for the future. This, in turn, can increase their overall financial sustainability and ability to continue delivering their services or programs over the long term. However, the relationship between funding and financial sustainability is not always straightforward. For instance, some firms may become overly reliant on a single source of funding, which can be risky if that funding source is cut off. Additionally, firms may face challenges in managing their finances effectively, which can undermine their financial sustainability even if they receive significant funding (Abiddin, Ibrahim & Abdul Aziz, 2022).

This study was founded on three theories namely; the resource dependency theory, institutional theory and stakeholder theory. Pfeffer (1978) resource dependency theory was the anchor theory as it suggests that organizations are dependent on external resources to survive and grow, including financial resources. Firms can invest in their operations, expand their capabilities, and attain greater financial sustainability when financing is enough. According to Meyer and Rowan (1977) institutional theory, organizations must adhere to institutional norms and expectations in order to win the trust and support of outside stakeholders. So, it is possible to consider finance to be a crucial resource for obtaining legitimacy and financial sustainability. According to Freeman (1984) stakeholder theory, firms may need to use funds strategically to

satisfy the demands and expectations of their stakeholders while preserving long-term financial viability.

With high incidence of HIV/AIDS, malaria, tuberculosis, and other illnesses, Kenya faces serious health difficulties. Many individuals lack access to high-quality healthcare services, especially those who live in rural or isolated locations (Kimalu, Nafula, Manda, Bedi, Mwabu, & Kimenyi, 2018). Non-Governmental Organizations (NGOs) are essential in tackling these health issues because they frequently offer services that complement those offered by the government or fill in gaps in the healthcare system. The longevity of these NGOs is not always guaranteed, though. The ability of NGOs to deliver healthcare services in the long run may be compromised by problems with getting funds, managing finances, or creating capacity (Samara, Sweis, Tarawneh, Albalkhy, Sweis, & Alhomsi, 2022). This may lead to a lack of access to healthcare and poor population health outcomes (Mnawe, 2018). It could be possible to find ways to enhance healthcare results by doing research on the financial sustainability and funding of regional NGOs in Kenya that assist healthcare.

1.1.1 Organizational Funding

The term funding describes the financial resources that a person or organization receives from outside sources to support their endeavors or daily operations (Sehl, Cornia, & Nielsen, 2021). Funding may also be defined as the act of giving money to a person, group, or initiative to help it achieve its aims. Funding can originate from a variety of sources, including governmental or private organizations, and can take many different forms, including grants, loans, equity investments, and contributions (Chen & Lu, 2019). NGOs may get money from a range of sources, including

governments, foundations, individual contributors, and international organizations. Salaries, program costs, overhead, and capital expenditures are just a few of the costs that funding may be utilized to pay for (Ye & Gong, 2021).

For organizations to accomplish their goals and missions, funding is essential. It offers them the financial resources they need to conduct their operations and activities. This is crucial for both for-profit businesses creating new goods or services and nonprofit organizations delivering crucial services to disadvantaged populations (Walker, Pekmezovic, & Walker, 2019). Funding helps organizations not only accomplish their objectives but also become stronger and more sustainable. Organizations may increase their efficacy, efficiency, and impact by making investments in things like employee training, infrastructure, and technology. As a result, they may become more resilient to external environmental problems and changes and more sustainable (Sulaiman & Alhaji Zakari, 2019).

Funding has been measured by previous researchers in several ways. The most common measure is the amount of funding, which quantifies the financial resources that an organization has received over a specific period (Chen & Lu, 2019). Another measure is the source of funding, which categorizes the funding sources of an organization, such as government, foundations, private donors, or international organizations. Funding diversity is another measure that examines the distribution of funding across different sources to identify the extent to which an organization is dependent on a single funding source or diversified across multiple sources (Nanthagopan, Williams & Thompson, 2019). The current study operationalized

funding in regards to natural logarithm of amount of funding due to their wider applicability in previous literature.

1.1.2 Financial Sustainability

Financial sustainability as per Mohd Zawawi and Abd Wahab (2019) refers to the ability of an individual, organization, or system to maintain its financial health and viability over the long term. It involves the prudent management of financial resources to ensure that income consistently covers expenses, debts are managed responsibly, and there is a sufficient financial cushion for unforeseen challenges. Achieving financial sustainability requires effective budgeting, investment strategies, and a commitment to responsible financial practices. It is a crucial aspect for businesses, nonprofits, and individuals alike, as it enables them to weather economic uncertainties, pursue strategic goals, and contribute to long-term success and resilience (Wales, 2018).

Financial sustainability is crucial as it underpins the long-term viability and resilience of individuals, organizations, and systems. It ensures that resources are managed prudently, enabling entities to meet their current financial obligations while strategically planning for the future (Missimer & Mesquita, 2022). Financial sustainability provides a foundation for stability, allowing businesses to invest in growth opportunities, nonprofits to pursue their missions effectively, and individuals to navigate life events with financial security. It acts as a safeguard against economic uncertainties and unexpected challenges, fostering adaptability and preventing financial crises (Vargas-Hernández, 2021).

Financial sustainability has been operationalized by previous researchers in a variety of ways, depending on the specific context and objectives of the study (Bateh, Heaton, Arbogast & Broadbent, 2018). Commonly used indicators include the assessment of revenue streams, expense management, liquidity ratios, and debt levels. The evaluation of an entity's ability to generate consistent income, control costs, and maintain a healthy balance between assets and liabilities is often central to these measurements. Additionally, researchers may consider long-term financial planning, risk management practices, and the organization's capacity to withstand economic downturns (Latawiec & Agol, 2017). The current study measured financial sustainability using operating reserve ratio as used before by Ebenezer, Musah and Ahmed (2020).

1.1.3 Funding and Organizational Financial sustainability

Theoretical relationships between funding and financial sustainability have been hypothesized by many researchers in the field. One proposed relationship is that increased funding leads to improved financial sustainability outcomes (Sinha & Ghosh, 2022). This hypothesis is based on the premise that more funding allows organizations to invest in sustainable practices and infrastructure, such as renewable energy sources, eco-friendly technologies, and efficient waste management systems. Additional personnel can be hired, training programs can be offered, and community engagement initiatives can be undertaken by organizations with increased resources, which might result in more sustainable practices (Desiana, Ma'arif, Puspitawati, Rachmawati, Prijadi, & Najib, 2022).

The inverse link, which states that a lack of money results in poorer financial sustainability outcomes, is another theoretical connection between funding and financial sustainability (Tipu, 2022). According to this theory, firms could be obliged to forgo sustainable activities like investing in clean energy sources or effective waste management systems if they lack the financing. According to Appelbaum, Calcagno, Magarelli, and Saliba (2016), this lack of investment may also affect the organization's capacity to hire and retain qualified employees, adopt financial sustainability initiatives, or engage in community outreach activities. All of these factors may have an influence on the organization's financial sustainability.

The non-linear relationship is a third theoretical link between financing and financial sustainability that contends that the effect of money on financial sustainability depends on a number of variables, including the kind of funding, the volume of funding, and the organizational environment (Lozano, 2018). This hypothesis recognizes that improved financial sustainability outcomes may not always result from financing and that the relationship may be more complicated than a straightforward cause-and-effect link. The influence of money on financial sustainability results may also depend on aspects of the organization's culture, leadership, and external environment (De Matos & Clegg, 2018).

1.1.4 Local NGOs Providing Healthcare Support in Kenya

Local NGOs that assist healthcare play a critical role in Kenya's healthcare system and particularly in disadvantaged and marginalized populations. These NGOs are frequently created to address gaps left by the overworked and underfunded public healthcare system (Gee, Vargas, & Foster, 2019). Despite playing a crucial role, many

local NGOs in Kenya encounter considerable obstacles when trying to promote healthcare, such as a lack of funds, a lack of employees, and poor infrastructure. Many NGOs also work in regions with high rates of poverty, insecurity, and political unrest, which can make their problems much worse. Despite these obstacles, Kenyan local NGOs have shown tenacity and creativity in addressing the healthcare needs of their communities (Abiddin, Ibrahim, & Abdul Aziz, 2022).

For Kenyan NGOs that assist healthcare, funding is a crucial concern. To support their operations and projects, many NGOs significantly rely on outside funding sources, such overseas donors (Wanga, 2022). However, the Kenyan NGO financing environment is extremely competitive, and many NGO's find it difficult to obtain money or maintain it over time. Additionally, a lot of financing is project-based, thus NGOs must continuously look for new sources of money to support their operations and activities. Despite these obstacles, some NGOs have been successful in expanding the types of financing they receive and creating long-term fundraising strategies. To generate money and lessen their dependency on outside financing, some NGOs, for instance, have created social enterprises like pharmacies or hospitals. Others have formed alliances with nearby companies or community groups to expand their influence and make better use of their resources (Aseyo, Mumma, Scott, Nelima, Davis, Baker & Dreibelbis, 2018).

The organizational strength and financing of the local NGOs in Kenya that promote healthcare are crucial to their long-term viability. NGOs are more likely to achieve long-term financial sustainability if they can find sustainable funding, form solid alliances, and create efficient management systems (Samara, Sweis, Tarawneh,

Albalkhy, Sweis & Alhomsi, 2022). Building these capabilities is difficult for many NGOs, especially in situations with limited resources. Many NGOs in Kenya are spending money on organizational development and employee training in order to increase financial sustainability. To assess their effect and prove their worth to funders and other stakeholders, they are also creating monitoring and evaluation systems. In order to boost community participation and support, many NGOs are also attempting to forge closer links with the communities they serve (Maringa, 2018). Local NGOs in Kenya are making these efforts in an effort to develop stronger, more enduring groups that can successfully address healthcare issues in their areas.

1.2 Research Problem

In order to solve numerous social, environmental, and humanitarian challenges, non-governmental organizations are essential. They frequently operate outside of governmental oversight and support societal advancement, activism, and service delivery. Understanding the impact of money on an organization's financial sustainability is essential because firms largely rely on financial sources to maintain their activities (Shava, 2019). The Sustainable Development Goals set out by the United Nations offer a worldwide framework for addressing pressing issues including poverty, inequality, climate change, and environmental degradation. However, firms may find it difficult to put long-term plans into action, which would reduce their efficacy and impede the SDGs' development (Alhadhrami & Nobanee, 2019). Firms confront a variety of financial issues, according to Samara, Sweis, Tarawneh, Albalkhy, Sweis and Alhomsi (2022), including ambiguity around the origins, availability, and distribution of money. Their financial sustainability may be affected

by alterations in financing patterns, cuts to or withdrawals from funding, and restricted access to resources.

Kenya has a high illness burden, and many residents lack access to high-quality medical treatment (Ilinca, Di Giorgio, Salari, & Chuma, 2019). Particularly in distant or underserved locations, NGOs are essential in supporting the delivery of healthcare. The longevity of these NGOs is not always guaranteed, though. NGOs could experience difficulties obtaining funding, managing finances, or developing capacity, which could jeopardize their potential to offer healthcare services in the long run. As a result, the population may experience poor health outcomes and gaps in the delivery of healthcare. It may be possible to enhance healthcare results and broaden access to services by looking at the financial sustainability and funding of these NGOs (Bukenya, 2018).

According to Sharmin, Khan, and Belal (2018), money was a crucial component in ensuring the financial sustainability of NGOs providing healthcare services in Bangladesh since it allowed them to extend their services and engage in activities aimed at strengthening their capacity. In a similar vein, a research by Frost, Wilkinson, Boyle, Patel, and Sullivan (2016) revealed that NGOs supporting healthcare in Afghanistan were able to improve their financial sustainability by diversifying their financing sources and forging closer alliances with the public and private sectors. Other research, however, have emphasized the difficulties with funding and its possible harm to financial sustainability. For instance, a research by Pineda and Marie (2019) discovered that NGOs providing healthcare services in Haiti were unable to maintain themselves because of their overreliance on donor financing

and short-term project-based funding. Due to the fact that these studies were carried out in nations with social and economic environments distinct from Kenya, they show a contextual gap.

Locally, Okinda, (2019) found that, increased funding led to improved organizational capacity, greater community engagement, and improved program financial sustainability among NGOs providing healthcare services in Kisumu County, Kenya. However, other studies have highlighted the challenges associated with funding and its potential negative impact on financial sustainability. For instance, a study by Karanja and Karuti (2019) found that overreliance on donor funding led to a lack of ownership and accountability by NGOs, ultimately hindering their financial sustainability. Similarly, a study by Ibrahim (2019) found that NGOs providing healthcare support in Kenya faced numerous challenges related to funding. These studies highlight context-specific nature of the relationship between funding and financial sustainability of NGOs providing healthcare support in Kenya. While numerous studies have explored aspects of NGO funding and financial sustainability, there remains a need for comprehensive research that examines the effect of funding on their long-term financial viability. The current study intended to contribute to this area by answering the research question; what is the effect of funding on financial sustainability of local NGOs providing healthcare support in Kenya?

1.3 Research Objective

The objective of this study was to determine the effect of funding on financial sustainability of local NGOs providing healthcare support in Kenya.

1.4 Value of the Study

The study can help identify strategies to enhance organizational effectiveness, such as diversifying funding sources, improving financial management, or building capacity. The study can provide donors with greater transparency and accountability, helping to build trust and confidence in NGOs' ability to deliver on their mission.

Understanding the funding and financial sustainability of NGOs can inform policy and practice, both at the organizational level and at the national level. For instance, policymakers could use the findings to develop policies and programs that support the financial sustainability of NGOs, while NGOs themselves could use the findings to improve their operations and achieve greater impact.

The research conclusions will also serve as a basis for future studies on funding effect on the financial sustainability of local NGOs providing healthcare support and also enlighten other researchers and academicians who seek to get detailed intuition into the relationship between funding and financial sustainability of local NGOs providing healthcare support and other contexts in general.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter contains the theories that are pertinent to the environmental, social and governance reporting and financial sustainability that form the study basis. The chapter additionally explores on the prior empirical studies, identifies the knowledge gaps, provides a summary of the reviewed literature, gives a conceptual framework and propositions of the anticipated association of the study variables.

2.2 Theoretical Framework

This section covers the theories that anchor the research of funding and financial sustainability. The study focused on the resource dependency theory, institutional theory and stakeholder theory.

2.2.1 Resource Dependency Theory

Pfeffer (1978) came up with the theory which postulates that organizations depend on external resources, such as financial capital, raw materials, and human resources, to survive and thrive. In order to safeguard these resources, firms must manage their interactions with external parties including suppliers, clients, and regulators (Bryant & Davis, 2022). The idea contends that an organization's capacity to accomplish its objectives will depend on the level of control it has over its resource allocation. In order to have more control over their supply chain, the theory also predicts that firms would try to lessen their reliance on outside resources by looking for alternate sources of supply, creating their own resources, or integrating vertically (Ortmann & King, 2017).

The resource dependency idea has come under fire on several occasions throughout the years. According to the idea, external variables, such as the availability of resources and the actions of other entities, have a significant role in influencing organizational behavior (Pfeffer & Salancik, 2023). The idea, according to Hillman, Withers, and Collins (2019), may not pay enough attention to internal aspects like corporate culture and leadership. Furthermore, according to Casciaro and Piskorski (2020), the theory might not adequately capture power dynamics in interactions between organizations and outside parties.

According to this notion, organizations need outside resources to develop and exist, especially financial resources. Particularly NGOs may be highly reliant on funding from outside sources like governments, foundations, or individual contributors. NGOs can invest in their operations, expand their capabilities, and attain greater financial sustainability when financing is enough.

2.2.2 Institutional Theory

Meyer and Rowan (1977) created this theory. The premise of institutional theory is that organizations are shaped by the institutional context in which they function and that, in order to be recognized and legitimate in that environment, they must adhere to institutional norms and expectations. The official and informal laws, rules, and social customs that influence the conduct of organizations and the expectations of individuals within a given setting make up the institutional environment. Institutional theory holds that organizations that successfully traverse the institutional context have a higher chance of being recognized and seen as legitimate in that environment, which increases their chances of succeeding. Institutional theory does, however, contend that

organizations that are overly constrained by institutional norms and expectations may struggle to innovate or adapt to changing conditions, which can eventually cause them to lose their competitive edge (Vadasi, Bekiaris, & Andrikopoulos, 2020).

Institutional theory has drawn criticism from certain academics for being too descriptive and lacking in explanatory capacity. Institutional theory is criticized for failing to clearly explain the underlying mechanisms that propel institutional change and for frequently concentrating on the effects of institutional change rather than its root causes (Willmott, 2019). According to some detractors, institutional theory does not adequately account for the context in which institutions function and may as a result fail to recognize significant variations across various institutional systems (Alvesson & Spicer, 2019).

According to this notion, companies must adhere to institutional norms and expectations to win the trust and support of external stakeholders. To be considered reliable and trustworthy by funders, partners, and the general public, NGOs may need to show that they have enough financing and resources. So, it is possible to consider finance to be a crucial resource for obtaining legitimacy and financial sustainability.

2.2.3 Stakeholder Theory

The origins of the stakeholder theory may be seen in Freeman (1984). According to the stakeholder theory, a company's choices and actions should consider the interests of all of its stakeholders, not just its shareholders. Stakeholders are people or organizations that are interested in or impacted by the company's activities and choices. According to stakeholder theory, a company's duties go beyond maximizing shareholder wealth to take into account the interests of a wider range of stakeholders,

including the environment, the local community, workers, consumers, and suppliers. According to the notion, businesses that consider the interests of all of its stakeholders are more likely to succeed in the long run because they have a larger spectrum of supporters and partners (Fontaine, Haarman & Schmid, 2006).

According to Bridoux and Stoelhorst (2022), organizations that consider the interests of all of its stakeholders are more likely to succeed in the long run because they have a larger spectrum of support and collaboration. The stakeholder theory is also endorsed because it highlights the significance of ethical factors in corporate decision-making and acknowledges that corporations have duties that go beyond generating shareholder profit. Stakeholder theory has been criticized as well, according to Ramoglou, Zyglidopoulos, and Papadopoulou (2023), who contend that it can be difficult to put into reality since the interests of many stakeholders might often clash. For instance, there can be a conflict between employees' and stockholders' interests.

According to this idea, businesses need to strike a balance between the needs and desires of all its stakeholders, including funders, beneficiaries, workers, and others. NGOs may need to deliberately employ funds to satisfy the needs and expectations of their stakeholders while also preserving their long-term financial viability.

2.3 Determinants of Financial Sustainability

Different factors influence financial sustainability. However, this research will focus on four factors which are; funding, firm liquidity and financial leverage.

2.3.1 Organizational Funding

It is generally accepted that financing for non-governmental organizations (NGOs) and their viability are positively correlated. According to the theory, NGOs are better

equipped to accomplish their objectives, sustain their operations, and make future plans when they are provided with appropriate finance (Sinha & Ghosh, 2022). In consequence, this may improve their general financial sustainability and capacity to carry out their services or activities indefinitely. However, there are some complex relationships between finance and financial sustainability (Sehl, Cornia, & Nielsen, 2021).

Without sufficient funds, firms could be obliged to scale down on sustainable practices like spending money on renewable energy sources or effective waste management systems, according to Ye and Gong (2021). This lack of investment may also affect the organization's capacity to hire and retain qualified personnel, carry out financial sustainability initiatives, or engage in community outreach activities, all of which may have an effect on the organization's financial sustainability.

2.3.2 Firm Liquidity

Liquidity is the capability of a firm in settling its short-term financial obligations, like paying bills and loans as they become due. As it enables the firm to gain from investment chances and whether unforeseen financial shocks, sufficient liquidity is essential for a company's financial health and growth (Guerini, Nesta, Ragot & Schiavo, 2020). High levels of liquidity can protect against financial risks and uncertainties from the standpoint of value, enabling a business to continue operations and make money. On the other hand, inadequate cash levels may result in lost opportunities, greater borrowing costs, and even insolvency (Pattiruhu & Paais, 2020).

Excessive liquidity can sometimes hurt a company's financial success. Lowered returns on investment and decreased profitability might arise from holding excessive

amounts of cash or other liquid assets (Sari & Sedana, 2020). Furthermore, certain non-financial organizations could conceal underlying financial issues with excessive liquidity, which might eventually result in lower value. Therefore, although while a link between liquidity and value is typically assumed to be positive, the ideal degree of liquidity might vary depending on a number of variables, such as the sector the firm operates in, its business plan, and its risk appetite (Hacini, Boulenfad & Dahou, 2021).

2.3.3 Financial Leverage

The firm capital structure determines its cost of capital, which is the amount a company must pay in order to obtain funds from investors. The cost of capital can have a substantial impact on a firm's profitability and value, as a high cost of capital can make it more difficult for the company to generate a profit (Brusov & Filatova, 2023). Capital structure plays an important role in managing a company's risk. Debt financing can increase a company's financial risk as it needs to make regular payments on the debt, whereas equity financing can increase the company's operational risk as equity investors have a say in the company's decision-making process (Rusnaeni et al., 2023).

Debt financing according to Sabila (2021) can lower the cost of capital because debt is generally cheaper than equity financing because lenders expect to receive a fixed interest rate on their investment, while equity investors anticipate a huge return to reward for the risk they take. Therefore, companies can lower their overall cost of capital by using more debt financing. This can rise the firm's value, as the lower cost of capital can lead to higher profitability and investment returns (Ater, 2021).

2.4 Empirical Review

The link between funding and financial sustainability has been studied by not only global researchers but also the local researchers. This section discusses the objectives, methodology and outcomes of these studies.

2.4.1 Global Studies

A study by Emmanuel, Kitonga and Ndiga (2021) in the Democratic Republic of Congo found that NGOs that had effective financial management practices were more likely to have greater financial sustainability. The study found that NGOs that had clear financial management policies, regular audits, and financial reporting were more likely to have better financial sustainability than those that did not have such practices. The study also found that NGOs that had dedicated staff responsible for financial management were more likely to have greater financial sustainability. The research gives a contextual gap as it was undertaken in Congo that has a diverse economic setting from Kenya.

In a study conducted by Ebenezer, Musah and Ahmed (2020) in Ghana, the researchers found that access to diverse sources of funding was positively associated with the financial sustainability of NGOs. The study found that NGOs that diversified their funding sources were more likely to have better financial sustainability, as they were less reliant on any one source of funding. The study also found that NGOs that had partnerships with local businesses and government entities had greater financial sustainability than those that did not have such partnerships. The research offers a methodological gap as it made use of content analysis method and therefore need to establish whether the findings hold when a different method is used.

Anwar, Khattak, Popp, Meyer and Máté (2020) in China found that the relationship between funding and financial sustainability was complex and depended on the type of funding received. The study found that NGOs that received government funding were more likely to have better financial sustainability, as government funding was often more stable and predictable than other types of funding. However, the study also found that NGOs that received funding from international donors were more likely to have greater financial resources and better programmatic financial sustainability. The study focused on a developed context and therefore its findings might not hold in a developing context like Kenya. The goal of the current research is to close this gap.

In the United States, Bloodgood and Tremblay-Boire (2018) discovered that the sort of support NGOs got had an impact on their financial sustainability. According to the study, NGOs that depended more on earned money, such as sales of goods or services, were more likely to be more sustainably run than those that just received contributions or grants. The study also discovered that NGOs with a broad fundraising base were less likely to be dependent on any one source of income and were more likely to be more sustainable. This study reveals a contextual gap because it was conducted in the United States, which has a distinct economic and social climate than Kenya.

A study by Tennyson (2017) examined the relationship between funding and the financial sustainability of NGOs in Tanzania. The study found that NGOs that received more funding were more likely to have better financial sustainability, as they were able to invest in their operations and build reserves. However, the study also found that over-reliance on donor funding could lead to financial sustainability

challenges, as NGOs may struggle to sustain their operations if donor funding is reduced or withdrawn. This research indicates a conceptual gap as it measured funding using only one dimension leaving a gap on sources and diversity.

2.4.2 Local Studies

In a study conducted by Oluoch, K'Aol and Kosha (2021) in Kenya, the researchers found that diversification of funding sources was positively associated with the financial sustainability of NGOs. The study found that NGOs that diversified their funding sources were more likely to have better financial sustainability, as they were less reliant on any one source of funding. The study also found that NGOs that had partnerships with local businesses and government entities had greater financial sustainability than those that did not have such partnerships. The research offers a conceptual gap as the focus was on funding diversification leaving a gap on amount of funding and source of funding.

According to a study conducted in Kenya by Karanja and Karuti (2019), NGO's financial sustainability was positively correlated with the amount of its budget. The study discovered that bigger NGOs were more likely to have higher financial sustainability since they could fundraise and expand their activities. The study did discover, however, that smaller NGOs were more likely to be adaptable and sensitive to shifting conditions, which may help ensure their viability over the long term. Because the impact of finance on financial sustainability was not addressed, the research exposes a conceptual gap.

According to a Maringa (2018) study conducted in Kenya, NGOs with good financial management procedures were more likely to be more sustainable. According to the

study, NGOs with transparent financial management rules, frequent audits, and regular financial reporting were more likely to have stronger financial sustainability than those without such procedures. The study also discovered that NGOs were more likely to be sustainable if they had a designated staff member in charge of financial management. The research shows a conceptual gap since money was not taken into account.

The link between funding and long-term viability of NGOs offering educational services in Kenya was examined by Omeri (2017). According to the study, NGOs who got more financing were more likely to have better financial sustainability because they could extend their activities and make investments in their day-to-day operations. However, the study also discovered that an excessive reliance on donor money might pose problems for financial sustainability, since NGOs would find it difficult to continue their activities if donor funding is cut back or withheld. Due to the absence of consideration of NGOs in the health sector, this study has a contextual gap.

According to a research conducted in Kenya by Miriti (2016), the financial sustainability of NGOs was impacted by the sort of financing they got. Because government financing is frequently steadier and more predictable than other forms of income, the study indicated that NGOs who received it were more likely to have higher financial sustainability. However, the study also discovered that overseas funders were more willing to support NGOs that had more substantial financial resources and stronger programmatic financial sustainability. The study has a

conceptual flaw since it only looked at financial sustainability while ignoring other facets of financial sustainability.

2.5 Summary of the Literature Review and Research Gaps

A diverse array of studies has examined the role of funding in the financial sustainability of NGOs, revealing various research gaps. Studies by Emmanuel, Kitonga and Ndiga (2021), and Ebenezer, Musah and Ahmed (2020) in the Democratic Republic of Congo and Ghana, respectively, presented contextual gaps as they explored NGOs in environments with differing economic settings compared to Kenya. These studies, along with the one conducted by Anwar, Khattak, Popp, Meyer and Máté (2020) in China, depicted a complex relationship between funding and financial sustainability, particularly emphasizing the role of effective financial management practices, funding diversification, and partnerships in ensuring financial sustainability. However, there exists a methodological gap in the study from Ghana due to its reliance on content analysis, and the study from China provides an opportunity to explore if findings from a developed context hold in a developing context like Kenya.

Bloodgood and Tremblay-Boire (2018) in the United States and Tennyson (2017) in Tanzania also contributed to the growing body of research on this subject, indicating more contextual gaps due to the differences in economic and social settings between the United States, Tanzania, and Kenya. The studies found that the type and diversity of funding, as well as the reliance on donor funding, significantly affect NGO financial sustainability. Bloodgood and Tremblay-Boire (2018) also revealed that NGOs with earned income and diversified funding bases are likely to exhibit greater

financial sustainability, signifying a need to explore these dynamics within the unique context of Kenyan NGOs.

Local studies within Kenya by Oluoch, K'Aol and Kosha (2021), Karanja and Karuti (2019), Maringa (2018), Miriti (2016), and Omeri (2017) primarily underscored the conceptual gaps, largely focusing on funding diversification, budget sizes, financial management practices, and types of funding received. These studies have shown the impact of diverse funding sources, effective financial management, and government funding on financial sustainability but have left gaps regarding the effect of funding amount and source, and the focus on financial sustainability without considering other aspects of financial sustainability. Specifically, Omeri (2017) research, although carried out in Kenya, neglected NGOs in the health sector, showing a need for more comprehensive studies that address these conceptual and contextual gaps in the local setting, especially regarding healthcare providing NGOs.

2.6 Conceptual Framework

The anticipated link between components is shown in Figure 2.1. Funding was the predictor variable given by amount of funding. Control variables selected for this study were firm liquidity and financial leverage. Financial sustainability was the response variable given by operating reserve ratio.

Independent variable

Dependent variable

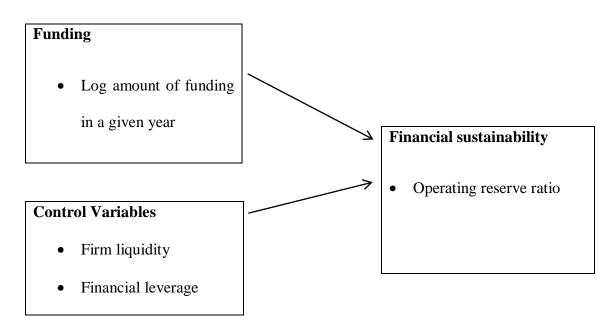


Figure 2.1: The Conceptual Model

Source: Researcher (2023)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This part of the research gives the methodology that directed it, research, gather data, and analyze it. It contains the targeted population, sample design, data analysis, scientific/analytical model, and significance test concerning the study phenomena effects of funding on financial sustainability.

3.2 Research Design

A research design is an organized, clearly defined plan that helps the researcher gather, measure, and analyze data (Cooper & Schindler, 2014). A descriptive approach was used for this investigation. Given that the researcher was primarily interested in the phenomenon's fundamental characteristics, this approach was appropriate (Khan, 2018). It was also effective for defining the phenomena' interconnections. This design also represented the variables precisely and legitimately, yielding sufficient data to answer the research objectives (Cooper & Schindler, 2014).

3.3 Population

This study population was the 65 local NGOs providing health care support in Kenya as at 31st December 2022 (NGO coordination board, 2023). Owing to relatively small population, the research was a census.

3.4 Data Collection

Secondary data, which was derived from yearly disclosed financials of the NGOs providing healthcare support in Kenya from 2018 to 2022 and documented in data collecting forms, was used in this inquiry. The specific NGOs providing healthcare

support in Kenya were the ones from which the reports were derived from their financial publications. Operating reserve ratio, total amount of funding, total debt, total assets, current assets, and current liabilities were among the particular information gathered.

3.5 Data Analysis

Tables were used to quantitatively display the results. Together, the gathered descriptive statistics served as the basis for measurements of central tendency and dispersion for each variable. Both correlation and regression played a role in the construction of inferential statistics. A multiple regression determined the link between dependent and independent variables.

3.5.1 Diagnostic Tests

The diagnostic tests performed are outlined in Table 3.1

Table 3.1: Diagnostic Tests

| Assumption | Description | Type of Tests | Interpretations | Treatment |
|---------------------------|--|---------------------------------|--|---|
| Normality Test | Normally distributed data assumes a bell-shaped curve. It implies that errors should be distributed normally. | J-B test. | p > 0.05 suggest that variables are distributed normally. | Data was transformed using logs and square roots. |
| Autocorrelation test | | Durbin Watson Statistic | Durbin Watson statistic between 1.5 and 2.5 | Data was transformed using logs and reciprocal techniques. |
| Homoscedasticity | A presumption that outcome variable exhibits similar magnitude of variation across entire values of explanatory variables. | Breusch Pagan Test | P > 0.05 implies homoscedasticity | Data was transformed using logs and reciprocal techniques. |
| Multicollinearity test | A situation where the explanatory variables are highly correlated. | Variance Inflation Factor | VIF factor >10 infers presence of multicollinearity. | Obtaining additional data and omitting collinear variables. |
| Stationarity test | To evaluate whether or not a variable has a unit root and whether or not it is stationary | Levin- Liu test | If p values are below 0.05, unit roots exist. | Use Natural log of variables |

3.5.2 Analytical Model

The following regression model was utilized:

$$Y=\beta_0+\beta_1X_1\!+\beta_2X_2\!+\beta_3X_3+\!\epsilon$$

Where: Y= Financial sustainability

 β_0 =y intercept of the regression equation.

 β_1 , β_2 , β_3 , β_4 =are the regression coefficients

 $X_1 = Funding$

 $X_2 = Firm liquidity$

 X_3 = Financial leverage

 ε =error term

3.5.3 Operationalization of the Study Variables

Table 3.2: Operationalization of Study Variables

| Variable | Type | Measurement | Scale | Source |
|--------------------------|-------------|---|-------|---|
| Financial sustainability | Dependent | Ratio of operating reserve to annual operating expenses | Ratio | Ebenezer, Musah and Ahmed (2020) |
| Funding | Independent | Natural logarithm of annual funding. | Ratio | Chen and Lu (2019) |
| Firm liquidity | Independent | Current assets divided by current liabilities | Ratio | Pattiruhu and Paais (2020) |
| Financial leverage | Independent | Ratio of total debt to total assets | Ratio | Ater (2021) |

3.5.4 Tests of Significance

The t-test and F-test were used to test the significance of individual coefficients and overall model fit, respectively. The F-test was used to test the overall significance of the regression model. It compared the variance explained by the model to the variance that cannot be explained by the model. The t-test was used to test the significance of individual coefficients in a regression model.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND

DISCUSSION

4.1 Introduction

This chapter primarily presents the analysis of the data collected, the results and the discussion of findings where the current study findings are related with previous studies. Specifically, the chapter covers the descriptive analysis, diagnostic tests, correlation, and regression analysis conducted to achieve the objective of this research study.

4.2 Descriptive Analysis

Table 4.1 contains summary statistics for the study variables, which are essential for understanding the distribution and characteristics of the data. The data was collected for a 5-year period (January 2018 to December 2022). 49 local NGOs providing healthcare support had complete data set for the study period leading to 245 data points that were considered adequate.

Table 4.1: Descriptive Statistics

| | | | | | Std. |
|--------------------------|-----|---------|---------|--------|-----------|
| | N | Minimum | Maximum | Mean | Deviation |
| Financial sustainability | 245 | .1500 | 36.500 | 9.8157 | 7.7064 |
| Funding | 245 | 6.846 | 11.577 | 9.2813 | 1.1815 |
| Liquidity | 245 | .343 | 11.648 | 2.3010 | 1.8283 |
| Financial Leverage | 245 | .025 | 1.307 | .4988 | .2455 |
| Valid N (listwise) | 245 | | | | _ |

Source: Research Findings (2023)

The descriptive statistics reveal that the financial sustainability ratio ranges from a minimum of 0.1500 to a maximum of 36.500, with a mean of 9.8157 and a standard

deviation of 7.7064 across the 245 observations. This suggests considerable variability in the financial sustainability of the studied NGOs, with some exhibiting relatively low ratios and others demonstrating higher levels of financial resilience.

The data indicates that the funding levels vary, with a minimum value of 6.846, a maximum of 11.577, a mean of 9.2813, and a standard deviation of 1.1815. The use of the natural logarithm suggests that the study recognizes potential diminishing returns or non-linear effects associated with increases in funding. This logarithmic transformation may be a strategic choice to address skewness or to enhance the interpretability of the relationship between funding and financial sustainability.

Descriptive statistics show that liquidity levels range from a minimum of 0.343 to a maximum of 11.648, with a mean of 2.3010 and a standard deviation of 1.8283. This variable provides insights into the NGOs' ability to cover short-term obligations, and the observed variability suggests diversity in liquidity positions across the sampled organizations.

The data on financial leverage exhibits a range from 0.025 to 1.307, with a mean of 0.4988 and a standard deviation of 0.2455. This variable sheds light on the extent to which NGOs rely on debt to finance their operations and projects. The moderate mean and standard deviation indicate a moderate level of financial leverage across the sampled NGOs.

4.3 Diagnostic Tests

The researcher conducted diagnostic tests to ensure that the assumptions of the statistical tests used in the analysis were met. Diagnostic tests helped to identify potential problems such as outliers, multicollinearity, heteroscedasticity, and

normality of residuals, which can influence the validity and reliability of the results.

The diagnostic tests conducted are discussed in this section.

4.3.1 Multicollinearity Test

Table 4.2 contains statistics related to multicollinearity, which is a condition in regression analysis where two or more independent variables in a model are highly correlated with each other. Multicollinearity can lead to issues in regression analysis, making it difficult to determine the individual impact of each variable on the dependent variable.

Table 4.2: Multicollinearity Test for Tolerance and VIF

| | Collinearity Statistics | | |
|--------------------|-------------------------|-------|--|
| Variable | Tolerance | VIF | |
| Funding | 0.511 | 1.957 | |
| Firm liquidity | 0.476 | 2.141 | |
| Financial leverage | 0.685 | 1.460 | |

Source: Research Findings (2023)

The results indicate a moderate degree of correlation between the independent variables in the regression model. While the tolerance values are below 1, suggesting some correlation, the VIF values are also below the commonly used threshold of 5, indicating that multicollinearity is not severe for any of the variables.

4.3.2 Normality Test

Table 4.3 shows the results of the Jarque-Bera normality test for the study. The results of the Jarque-Bera test for normality indicate the goodness-of-fit of the data to a normal distribution. Higher p-values are generally desirable as they suggest that the data does not significantly deviate from a normal distribution. All the variables in the

analysis, have p-values above the common significance level of 0.05. This suggests that there is no strong evidence to reject the null hypothesis that these variables follow a normal distribution.

Table 4.3: Normality Test

| | Jarque-Bera Coefficient | P-value |
|--------------------------|----------------------------|---------|
| Financial sustainability | 3.294 | 0.126 |
| Funding | 3.591 | 0.202 |
| Firm liquidity | 4.431 | 0.406 |
| Financial leverage | 2.765 | 0.417 |

Source: Research Findings (2023)

4.3.3 Heteroscedasticity Test

The results of the Breusch-Pagan/Cook-Weisberg test for heteroscedasticity provide evidence regarding the homoscedasticity assumption in regression analysis. In this case, a higher p-value, such as the one obtained (0.2136), indicates that there is no strong evidence to reject the null hypothesis, suggesting that heteroscedasticity is not significantly present in the regression model. This implies that the variance of the residuals, or errors, across different levels of the independent variables does not differ significantly, which is a fundamental assumption of linear regression.

Table 4.4: Heteroscedasticity Test

| Breusch-Pagan / Cook-Weisberg test for heteroscedasticity | | | | |
|---|---|--------|--|--|
| chi2(1) | = | 0.3874 | | |
| Prob > chi2 | = | 0.2136 | | |

Source: Research Findings (2023)

4.3.4 Autocorrelation Test

The Durbin-Watson statistic is used to detect autocorrelation, which is the presence of serial correlation or dependence among the residuals of a regression model. In this case, the Durbin-Watson statistic has a value of 1.869. The range of possible values for the Durbin-Watson statistic is between 0 and 4. A value close to 2 suggests that there is little to no autocorrelation in the residuals, indicating that the error terms are not systematically related to each other across observations. A value of 1.869 falls within the range of values close to 2, suggesting that there is no strong evidence of autocorrelation in the model's residuals. Therefore, based on this statistic, it appears that the assumption of no autocorrelation is not violated, and the residuals are reasonably independent across observations in the regression model.

Table 4.5: Test of Autocorrelation

Durbin Watson Statistic

1.869

Source: Research Findings (2023)

4.3.5 Stationarity Test

The results of the Levin-Lin Chu unit-root test in Table 4.6 indicate that all the variables tested exhibit stationarity. A p-value of 0.0000 typically suggests strong evidence against the presence of a unit root, which, in turn, implies that these variables are stationary time series. In this context, the results indicate that the variables in question are suitable for analysis without the need for differencing or transformations to make them stationary.

Table 4.6: Levin-Lin Chu unit-root test

| Levin-Lin Chu unit-root test | t | | |
|------------------------------|-----------|---------|--|
| Variable | Statistic | p value | |
| Financial sustainability | 8.2031 | 0.0000 | |
| Funding | 7.8718 | 0.0000 | |
| Firm liquidity | 7.2385 | 0.0000 | |
| Financial leverage | 6.7943 | 0.0000 | |

Source: Research Findings (2023)

4.5 Correlation Analysis

Table 4.7 shows the correlation coefficients between the independent variables and the dependent variable, performance. The correlation coefficient is a measure of the linear relationship between two variables.

Table 4.7: Correlation Analysis

| | | Financial sustainability | Funding | Liquidity | Financial Leverage | |
|---|---|--------------------------|---------|-----------|-----------------------|--|
| Financial sustainability | Pearson Correlation Sig. (2-tailed) | 1 | | | | |
| Funding | Pearson Correlation | .147* | 1 | | | |
| | Sig. (2-tailed) | .021 | | | | |
| Liquidity | Pearson Correlation | .161* | 057 | 1 | | |
| | Sig. (2-tailed) | .011 | .373 | | | |
| Financial Leverage | Pearson Correlation | .155* | 079 | .010 | 1 | |
| | Sig. (2-tailed) | .015 | .217 | .877 | | |
| *. Correlation is significant at the 0.05 level (2-tailed). | | | | | | |
| b. Listwise N=245 | | | | | | |

Source: Research Findings (2023)

For funding, the Pearson Correlation coefficient of 0.147* indicates a positive but weak correlation with Financial Sustainability. The statistically significant p-value of 0.021 suggests that there is evidence to reject the null hypothesis of no correlation.

This implies that as funding levels increase, there tends to be a modest positive association with the financial sustainability of the local NGOs providing healthcare support in Kenya.

For liquidity, the Pearson Correlation coefficient is 0.161*, indicating a positive and slightly stronger correlation with Financial Sustainability. The statistically significant p-value of 0.011 suggests that there is evidence of a positive relationship between liquidity and financial sustainability. This implies that NGOs with higher liquidity, or a greater ability to cover short-term obligations, may also exhibit better financial sustainability.

For financial Leverage, the Pearson Correlation coefficient is 0.155*. The positive correlation suggests that there is a weak positive relationship between financial leverage and financial sustainability. However, the p-value of 0.015 is statistically significant, indicating that this relationship is unlikely to have occurred by chance. This implies that NGOs with higher financial leverage may, to some extent, experience higher levels of financial sustainability.

4.6 Regression Analysis

Regression analysis was conducted to determine the effect of the selected independent variables on the financial sustainability of local NGOs providing healthcare support. The results are as shown in Table 4.8, 4.9 and 4.10.

Table 4.8: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | |
|--|-------|----------|-------------------|----------------------------|--|
| 1 | .497ª | .247 | | 1.4954028 | |
| a. Predictors: (Constant), Financial leverage, Firm liquidity, Funding | | | | | |

Source: Research Findings (2023)

The model summary provides an overview of the overall fit of the regression model. The R value, which is 0.497, represents the multiple correlation coefficient and gives us an idea of the strength of the relationship between the independent variables (Financial leverage, Firm liquidity, Funding) and the dependent variable (Financial sustainability). This suggests that there is a moderate correlation between the predictors and the outcome. The adjusted R square value, represented as 0.238 or 23.8%, implies that approximately 23.8% of the variance in the financial sustainability of local NGOs providing healthcare support can be explained by the three predictors.

Table 4.9: Analysis of Variance

| | | Sum of | | | | | |
|---|-------------------|--------------------|------------|------------------|-------|-------------------|--|
| Model | | Squares | df | Mean Square | F | Sig. | |
| 1 | Regression | 715.972 | 3 | 238.657 | 4.176 | .007 ^b | |
| | Residual | 13774.668 | 241 | 57.156 | | | |
| | Total | 14490.639 | 244 | | | | |
| a. Dependent Variable: Financial sustainability | | | | | | | |
| b. Pred | lictors: (Constai | nt). Financial Lev | zerage. Li | quidity, Funding | | | |

Source: Research Findings (2023)

The ANOVA table tests if the model, as a whole, is statistically significant. The F-statistic (4.176) is significant with a p-value of 0.007, suggesting that the regression

model predicts the dependent variable (financial sustainability) significantly well. In other words, the predictors, as a set, are statistically significant in predicting financial sustainability.

Table 4.10: Model Coefficients

| | | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|--------------------|--------------------------------|------------|---------------------------|--------|------|
| Model | | В | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | -9.758 | 1.343 | | -7.266 | .000 |
| | Funding | .033 | .012 | .158 | 2.704 | .007 |
| | Firm liquidity | .111 | .015 | .435 | 7.434 | .000 |
| | Financial leverage | .003 | .004 | .046 | .776 | .438 |
| a. Dependent Variable: Financial sustainability | | | | | | |

Source: Research Findings (2023)

The coefficients table provides detailed information about each predictor's contribution: the constant term is -9.758 (p = 0.000), representing the estimated financial sustainability when all predictors are zero. Funding has a positive and statistically significant coefficient of 0.033 (p = 0.007), suggesting that an increase in funding is associated with an increase in financial sustainability. Firm Liquidity also has a positive and highly significant coefficient of 0.111 (p = 0.000), indicating a strong positive relationship between liquidity and financial sustainability. However, Financial Leverage does not show a statistically significant relationship (p = 0.438).

The coefficient of regression model was as below;

Financial sustainability= -9.758- 0.033 Funding + 0.111 Firm liquidity

4.6 Discussion of Research Findings

The primary objectives of this study were to examine the impact of funding, firm liquidity, and financial leverage on the financial sustainability of local healthcare-supporting NGOs in Kenya. The study was anchored in resource dependency theory, institutional theory, and stakeholder theory, providing a comprehensive theoretical framework to analyze the multifaceted relationships between financial variables within the non-profit sector. The target population comprises 65 local NGOs providing healthcare support in Kenya, with 49 firms providing complete data sets for the final analysis. The study relies on secondary data collected from the financial reports of the selected NGOs over a 5-year period (2018-2022), leading to 245 observations. Data analysis includes descriptive, correlation, and regression analyses to provide a comprehensive understanding of the financial dynamics within the studied NGOs.

The regression results reveal significant insights into the factors influencing financial sustainability. Funding exhibits a positive and statistically significant relationship with financial sustainability, suggesting that increased financial resources contribute to the overall financial health of healthcare NGOs. Firm liquidity also emerges as a robust predictor, indicating a strong positive relationship with financial sustainability. However, financial leverage does not exhibit a statistically significant impact on financial sustainability in this context.

The current study's findings align with and complement several empirical studies conducted globally and locally, contributing to the growing body of literature on the financial sustainability of non-governmental organizations (NGOs) in diverse

contexts. Globally, Emmanuel, Kitonga, and Ndiga (2021) study in the Democratic Republic of Congo echoes the current findings, highlighting the importance of effective financial management practices for enhanced sustainability. Similarly, Ebenezer, Musah, and Ahmed (2020) study in Ghana supports the present study's results by emphasizing the positive association between diversified funding sources and better financial sustainability. The study by Anwar, Khattak, Popp, Meyer, and Máté (2020) in China complements the findings, emphasizing the complexity of the relationship between funding and sustainability, particularly noting the stability of government funding and the potential resource advantages of international donor support. Additionally, the U.S.-based study by Bloodgood and Tremblay-Boire (2018) aligns with the current findings, emphasizing the impact of the type of support received and the importance of a broad fundraising base for sustainability.

Within the local context, the findings of the current study resonate with research conducted in Kenya. Oluoch, K'Aol, and Kosha (2021) study emphasizes the positive association between funding source diversification and financial sustainability, reinforcing the significance of not relying on a single source of funding. Similarly, Karanja and Karuti (2019) study in Kenya correlates with the current findings, suggesting that the size of an NGO's budget is positively linked to its financial sustainability. The study by Maringa (2018) in Kenya reinforces the importance of good financial management practices for sustainability, echoing the findings of the present study. Omeri (2017) study on NGOs offering educational services in Kenya aligns with the current study's results, emphasizing the positive relationship between funding levels and financial sustainability but highlighting the potential risks associated with an over-reliance on donor funding. Finally, Miriti (2016) research in

Kenya further supports the findings, emphasizing the impact of the type of financing received on NGOs' sustainability.

CHAPTER FIVE: SUMMARY, CONCLUSION AND

RECOMMENDATIONS

5.1 Introduction

This chapter delves into a comprehensive overview of the study's core outcomes and implications. The chapter begins by summarizing the key findings. Next, the study draws insightful conclusions based on the empirical evidence. The chapter also critically assess the study's limitations, acknowledging the boundaries of the research and potential areas for future exploration. The chapter also covers practical recommendations derived from the findings, aiming to guide policymakers and decision-makers in enhancing funding and optimizing financial sustainability.

5.2 Summary of Findings

In this study, the primary objective was to investigate the financial sustainability of local non-governmental organizations (NGOs) providing healthcare support in Kenya, with a focus on understanding the impact of funding, firm liquidity, and financial leverage. To achieve this objective, the study employed a quantitative research design and utilized secondary data collected from the financial reports of 49 NGOs over a 5-year period (2018-2022). The target population consisted of 65 local NGOs in Kenya, and the data analysis encompassed descriptive, correlation, and regression analyses to examine the relationships between financial sustainability and the independent variables of funding, firm liquidity, and financial leverage.

The correlation analysis revealed that funding exhibited a statistically significant positive correlation with financial sustainability (Pearson Correlation = 0.147, p =

0.021), suggesting that as funding levels increased, there was a modest positive association with the financial sustainability of the studied NGOs. Firm liquidity demonstrated a stronger positive correlation with financial sustainability (Pearson Correlation = 0.161, p = 0.011), indicating that NGOs with higher liquidity, or better short-term financial positions, tended to exhibit greater financial sustainability. However, financial leverage did not show a statistically significant correlation with financial sustainability (Pearson Correlation = 0.155, p = 0.015), suggesting a limited impact of debt-related financial leverage on overall sustainability in this context.

The study employed a model with financial sustainability as the dependent variable and funding, firm liquidity, and financial leverage as independent variables. The overall regression model was statistically significant (F = 4.176, p = 0.007), indicating that at least one of the predictors had a significant effect on financial sustainability. Among the individual predictors, funding demonstrated a positive and statistically significant relationship (Beta = 0.158, p = 0.007), reinforcing its importance in contributing to financial sustainability. Firm liquidity also exhibited a positive and highly significant relationship (Beta = 0.435, p = 0.000), highlighting its substantial impact on the financial resilience of healthcare-supporting NGOs. In contrast, financial leverage did not show a statistically significant relationship (Beta = 0.046, p = 0.438), suggesting a limited role in influencing financial sustainability.

5.3 Conclusion

This study investigates the financial sustainability of local non-governmental organizations providing healthcare support in Kenya, focusing on the impact of funding, firm liquidity, and financial leverage. Anchored in resource dependency

theory, institutional theory, and stakeholder theory, the research employs a regression model with financial sustainability as the dependent variable and funding, firm liquidity, and financial leverage as independent variables. Secondary data was obtained from 49 NGOs for a 5-year period (2018 to 2022) and analyzed. This section presents a summary of findings.

The findings reveal that funding and firm liquidity significantly contribute to financial sustainability, indicating that increased funding and higher liquidity levels are associated with greater financial resilience among the studied NGOs. However, financial leverage does not exhibit a statistically significant impact on financial sustainability in this context. The overall model, with an R Square of 24.7%, underscores the partial explanatory power of the selected variables in understanding financial sustainability among these healthcare-supporting NGOs.

The study's regression analysis further elucidates the individual contributions of the predictors. Funding demonstrates a positive and significant relationship with financial sustainability, suggesting that securing more financial resources positively influences the organizations' ability to maintain their financial health. Firm liquidity emerges as a robust predictor, indicating that NGOs with better short-term financial positions are more likely to achieve greater financial sustainability. In contrast, financial leverage does not play a statistically significant role in determining financial sustainability, suggesting that the extent to which these NGOs rely on debt does not significantly impact their overall financial resilience.

5.4 Recommendations for Policy and Practice

For policymakers, the study's findings underscore the importance of fostering a supportive and diversified funding environment for local non-governmental organizations engaged in healthcare support in Kenya. Policies that encourage the diversification of funding sources, including public and private partnerships, grants, and philanthropic initiatives, can enhance the financial resilience of these organizations. Policymakers should also consider creating frameworks that promote transparency and accountability in the allocation and utilization of funds within the non-profit healthcare sector. By facilitating a robust funding ecosystem and ensuring responsible financial management, policymakers can contribute to the sustainability and effectiveness of healthcare NGOs, ultimately benefiting the communities they serve.

Practitioners within healthcare NGOs can use the study's insights to inform strategic decision-making. Given the positive correlation between funding and financial sustainability, practitioners should actively explore and cultivate partnerships with various stakeholders, such as governmental agencies, international donors, and corporate sponsors. Strategies that enhance grant-writing capabilities and demonstrate the impact of their initiatives could improve the organizations' attractiveness to potential funders. Additionally, recognizing the significance of firm liquidity, practitioners should prioritize effective cash flow management and financial planning to ensure the availability of resources for immediate needs. While financial leverage may not be a significant factor, practitioners should remain vigilant about the responsible use of debt, considering the potential implications on long-term financial health.

In practice, capacity-building initiatives could also play a crucial role. NGOs may benefit from training programs focused on financial management, reporting, and sustainability planning. By enhancing the financial literacy and managerial skills of personnel within these organizations, practitioners can contribute to the effective utilization of resources and the overall financial health of healthcare NGOs. Moreover, knowledge-sharing platforms and networks could be established to facilitate the exchange of best practices and lessons learned among healthcare NGOs, promoting a collaborative approach to financial sustainability within the sector.

5.5 Limitations of the Study

One of the main limitations of this study lies in its reliance on secondary data sources, such as the office of the Auditor General, the office of the Controller of the Budget, the Kenya National Bureau of Statistics (KNBS), and reports from the Annual Government Budget Implementation Review Reports (AGBIRR). While these sources are reputable and official, they might not capture the nuances and granular details that primary data collection methods, like interviews or surveys, would provide. There's also the potential of discrepancies or outdated information in secondary data sources, which could influence the study's findings.

The study covers a span of five years, from 2018 to 2022. While this provides a multiyear perspective on the performance of local NGOs providing healthcare support, it might not capture long-term trends or the influence of policies and practices that have longer gestation periods. The relatively short time frame can also be influenced by transient factors, such as political changes, economic fluctuations, or external events, which might not be indicative of the typical behavior or performance of the local NGOs providing healthcare support.

The study focused on funding, firm liquidity, and financial leverage as the primary independent variables influencing county performance. However, the performance of local NGOs providing healthcare support can be influenced by a myriad of other factors not considered in this study. Elements such as leadership quality, infrastructural developments, levels of corruption, external donor funding, and sociocultural factors could also play pivotal roles in determining performance. By not accounting for these potential variables, the study might not provide a comprehensive picture of what drives county performance.

5.6 Suggestions for Further Research

Future research could delve into the specific mechanisms through which funding impacts the financial sustainability of healthcare-supporting non-governmental organizations. Exploring the dynamics of donor relationships, the effectiveness of fundraising strategies, and the allocation of funds within these organizations could provide a more nuanced understanding of how different funding sources contribute to financial resilience. Additionally, investigating the influence of specific types of funding, such as grants, donations, or government subsidies, on financial sustainability could offer targeted insights that inform strategic decision-making for NGOs.

An in-depth examination of the contextual factors that shape financial sustainability in diverse geographical and cultural settings is warranted. Given the potential variability in socio-economic conditions, regulatory frameworks, and healthcare landscapes

across regions, comparative studies involving multiple countries or regions could illuminate the unique challenges and opportunities faced by healthcare NGOs. This approach would contribute to a more comprehensive understanding of the contextual determinants of financial sustainability, allowing for the development of tailored strategies that consider the specific needs and constraints of different locales.

Future research could benefit from adopting a mixed-methods approach, integrating quantitative findings with qualitative insights from key stakeholders. In-depth interviews, focus group discussions, or surveys targeted at NGO leaders, staff, and beneficiaries could provide a more holistic perspective on the financial decision-making processes within these organizations. Qualitative data could uncover nuanced aspects of financial sustainability, shed light on the practical implications of financial strategies, and capture the voices of those directly impacted by the services provided by healthcare NGOs.

Given the dynamic nature of the non-profit sector and the potential impact of external events on financial sustainability, longitudinal studies spanning more extended time frames could offer valuable insights. Examining financial trends and organizational responses to economic fluctuations, global health crises, or shifts in donor priorities over an extended period would enhance the understanding of the long-term sustainability challenges faced by healthcare NGOs. This longitudinal perspective could inform adaptive financial strategies that enable NGOs to navigate evolving landscapes and ensure continued support for their vital healthcare initiatives.

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APPENDICES

Appendix I: Local NGOs Providing Healthcare Support in Kenya

- 1. Centre for Health Solutions-Kenya
- 2. Africa Inland Church Health Ministries
- 3. Africa Mental Health Foundation
- 4. African Palliative Care Association (APCA)
- 5. Africare
- 6. Aga Khan University Hospital
- 7. Aids Healthcare Foundation
- 8. American Refugee Committee
- 9. Amos Trust
- 10. Care International
- 11. Carolina for Kibera
- 12. Catholic Relief Services (CRS)
- 13. ChildFund International
- 14. Christian Aid Kenya
- 15. Doctors Without Borders
- 16. Education Development Trust
- 17. Elizabeth Glaser Pediatric AIDS Foundation
- 18. Family Health Options Kenya (FHOK)
- 19. Food for the Hungry
- 20. Global Communities
- 21. Grameen Foundation
- 22. Handicap International
- 23. HealthRight International
- 24. Hope Worldwide Kenya
- 25. International AIDS Vaccine Initiative (IAVI)
- 26. International Centre for Reproductive Health Kenya
- 27. International Medical Corps (IMC)
- 28. International Planned Parenthood Federation (IPPF)
- 29. International Rescue Committee (IRC)
- 30. IntraHealth International
- 31. Jhpiego Corporation
- 32. Kenya Hospices and Palliative Care Association (KEHPCA)
- 33. Centre for international health, Education and Bio-Security-Kenya
- 34. Mercy Corps Kenya
- 35. Kenya Red Cross Society
- 36. Kenyatta National Hospital
- 37. LVCT Health
- 38. Management Sciences for Health (MSH)
- 39. Marie Stopes Kenya
- 40. Medecins Sans Frontieres (MSF)
- 41. Mothers2mothers
- 42. PATH Kenya

- 43. Penda Health
- 44. PharmAccess Foundation
- 45. Plan International
- 46. Save the Children
- 47. SolidarMed
- 48. Terre des Hommes Foundation
- 49. The African Institute for Development Policy (AFIDEP)
- 50. The African Medical and Research Foundation (AMREF)
- 51. The African Network for the Prevention and Protection against Child Abuse and Neglect (ANPPCAN)
- 52. The Fred Hollows Foundation
- 53. The International Centre for Eye Health (ICEH)
- 54. The Leverage Group
- 55. The Liverpool School of Tropical Medicine (LSTM)
- 56. The Ogra Foundation.
- 57. The Population Council
- 58. Tiba Foundation
- 59. Water Aid Kenya
- 60. World Lung Foundation
- 61. World Neighbors
- 62. World Vision Kenya
- 63. World Wide Fund for Nature (WWF)
- 64. Kenya Conference of Catholic Bishops
- 65. FIND Internationa-Kenya

Source: NGO Coordination Board (2023)

Appendix II: Raw Data

| ID | Year | Financial sustainability | Funding | Liquidity | Financial Leverage |
|----|------|--------------------------|---------|-----------|--------------------|
| 1 | 2022 | 8.26 | 10.630 | 1.766 | 0.513 |
| 1 | 2021 | 11.39 | 10.708 | 2.909 | 0.456 |
| 1 | 2020 | 14.65 | 10.715 | 5.958 | 0.676 |
| 1 | 2019 | 19.45 | 10.567 | 11.648 | 0.745 |
| 1 | 2018 | 17.36 | 10.473 | 7.503 | 0.723 |
| 2 | 2022 | 24.10 | 10.660 | 2.123 | 0.274 |
| 2 | 2021 | 15.90 | 10.528 | 3.237 | 0.325 |
| 2 | 2020 | 6.44 | 10.622 | 1.082 | 0.289 |
| 2 | 2019 | 6.04 | 10.603 | 2.279 | 0.295 |
| 2 | 2018 | 3.10 | 10.634 | 1.303 | 0.275 |
| 3 | 2022 | 2.79 | 9.973 | 1.594 | 0.643 |
| 3 | 2021 | 2.48 | 9.987 | 1.438 | 0.666 |
| 3 | 2020 | 1.39 | 9.954 | 1.013 | 0.664 |
| 3 | 2019 | 0.19 | 9.911 | 0.911 | 0.653 |
| 3 | 2018 | 10.50 | 9.839 | 2.355 | 0.637 |
| 4 | 2022 | 8.40 | 9.519 | 3.047 | 0.116 |
| 4 | 2021 | 13.31 | 9.489 | 3.001 | 0.132 |
| 4 | 2020 | 17.09 | 9.473 | 2.807 | 0.166 |
| 4 | 2019 | 5.74 | 9.404 | 2.973 | 0.147 |
| 4 | 2018 | 12.30 | 9.343 | 2.834 | 0.127 |
| 5 | 2022 | 8.87 | 9.769 | 3.249 | 0.701 |
| 5 | 2021 | 9.37 | 9.704 | 6.252 | 0.691 |
| 5 | 2020 | 9.86 | 9.657 | 2.076 | 0.702 |
| 5 | 2019 | 9.99 | 9.586 | 2.051 | 0.650 |
| 5 | 2018 | 15.14 | 9.469 | 2.674 | 0.538 |
| 6 | 2022 | 6.09 | 9.847 | 1.940 | 0.733 |
| 6 | 2021 | 29.66 | 9.878 | 1.022 | 0.661 |
| 6 | 2020 | 23.23 | 9.923 | 0.721 | 0.595 |
| 6 | 2019 | 22.98 | 9.897 | 0.699 | 0.608 |
| 6 | 2018 | 16.57 | 9.833 | 0.803 | 0.550 |
| 7 | 2022 | 1.05 | 10.437 | 1.052 | 0.383 |
| 7 | 2021 | 5.72 | 10.445 | 2.357 | 0.355 |
| 7 | 2020 | 1.25 | 10.364 | 2.297 | 0.403 |
| 7 | 2019 | 9.12 | 10.196 | 2.681 | 0.573 |
| 7 | 2018 | 1.85 | 10.208 | 2.348 | 0.561 |
| 8 | 2022 | 18.63 | 8.888 | 2.620 | 0.289 |
| 8 | 2021 | 9.50 | 9.035 | 1.316 | 0.551 |
| 8 | 2020 | 15.26 | 9.179 | 1.196 | 0.431 |
| 8 | 2019 | 10.72 | 8.969 | 1.174 | 0.765 |

| ID | Year | Financial sustainability | Funding | Liquidity | Financial Leverage |
|----|------|--------------------------|---------|-----------|--------------------|
| 8 | 2018 | 0.96 | 8.973 | 1.206 | 0.580 |
| 9 | 2022 | 1.75 | 9.759 | 1.228 | 0.248 |
| 9 | 2021 | 0.41 | 9.705 | 1.056 | 0.241 |
| 9 | 2020 | 14.15 | 9.481 | 1.096 | 0.358 |
| 9 | 2019 | 15.48 | 9.586 | 1.112 | 0.228 |
| 9 | 2018 | 16.81 | 9.570 | 1.160 | 0.221 |
| 10 | 2022 | 2.96 | 11.577 | 1.123 | 0.514 |
| 10 | 2021 | 3.82 | 11.565 | 4.511 | 0.530 |
| 10 | 2020 | 4.19 | 11.535 | 6.296 | 0.587 |
| 10 | 2019 | 2.75 | 11.398 | 10.089 | 0.693 |
| 10 | 2018 | 5.70 | 11.276 | 4.258 | 0.607 |
| 11 | 2022 | 16.06 | 11.534 | 1.464 | 0.795 |
| 11 | 2021 | 14.40 | 11.474 | 1.283 | 0.785 |
| 11 | 2020 | 12.19 | 11.440 | 1.168 | 0.697 |
| 11 | 2019 | 9.57 | 11.344 | 1.305 | 0.668 |
| 11 | 2018 | 27.94 | 11.248 | 1.197 | 0.683 |
| 12 | 2022 | 27.88 | 11.165 | 1.161 | 1.307 |
| 12 | 2021 | 10.96 | 11.192 | 1.585 | 1.229 |
| 12 | 2020 | 5.93 | 11.260 | 0.946 | 1.033 |
| 12 | 2019 | 24.38 | 11.172 | 1.085 | 0.810 |
| 12 | 2018 | 12.36 | 11.089 | 1.024 | 0.746 |
| 13 | 2022 | 12.61 | 11.209 | 1.469 | 0.156 |
| 13 | 2021 | 11.69 | 11.202 | 0.984 | 0.174 |
| 13 | 2020 | 8.70 | 11.196 | 1.334 | 0.336 |
| 13 | 2019 | 8.50 | 11.129 | 1.540 | 0.322 |
| 13 | 2018 | 7.69 | 11.110 | 1.259 | 0.377 |
| 14 | 2022 | 6.21 | 9.473 | 1.115 | 0.393 |
| 14 | 2021 | 6.65 | 9.517 | 4.144 | 0.444 |
| 14 | 2020 | 5.15 | 9.574 | 6.657 | 0.384 |
| 14 | 2019 | 2.27 | 9.586 | 7.954 | 0.328 |
| 14 | 2018 | 2.27 | 9.564 | 8.475 | 0.270 |
| 15 | 2022 | 28.37 | 10.120 | 3.345 | 0.142 |
| 15 | 2021 | 0.15 | 10.226 | 0.951 | 0.104 |
| 15 | 2020 | 3.37 | 10.205 | 1.097 | 0.090 |
| 15 | 2019 | 14.02 | 10.174 | 1.422 | 0.188 |
| 15 | 2018 | 8.19 | 9.957 | 1.486 | 0.295 |
| 16 | 2022 | 30.61 | 9.649 | 1.736 | 0.582 |
| 16 | 2021 | 16.85 | 9.644 | 1.237 | 0.529 |
| 16 | 2020 | 29.19 | 9.639 | 0.950 | 0.569 |
| 16 | 2019 | 21.36 | 9.613 | 0.935 | 0.462 |

| ID | Year | Financial sustainability | Funding | Liquidity | Financial Leverage |
|----|------|--------------------------|---------|-----------|--------------------|
| 16 | 2018 | 0.41 | 9.619 | 0.968 | 0.507 |
| 17 | 2022 | 0.41 | 10.580 | 1.224 | 0.437 |
| 17 | 2021 | 11.79 | 10.559 | 1.643 | 0.465 |
| 17 | 2020 | 26.18 | 10.534 | 1.032 | 0.486 |
| 17 | 2019 | 10.30 | 10.512 | 0.923 | 0.495 |
| 17 | 2018 | 13.41 | 10.602 | 0.897 | 0.615 |
| 18 | 2022 | 9.18 | 10.273 | 1.157 | 1.006 |
| 18 | 2021 | 0.45 | 10.277 | 0.502 | 0.797 |
| 18 | 2020 | 5.27 | 10.277 | 0.465 | 0.966 |
| 18 | 2019 | 5.38 | 10.339 | 0.563 | 0.366 |
| 18 | 2018 | 7.37 | 10.377 | 1.400 | 0.446 |
| 19 | 2022 | 2.01 | 10.011 | 0.636 | 0.466 |
| 19 | 2021 | 4.75 | 9.964 | 2.205 | 0.381 |
| 19 | 2020 | 8.79 | 9.938 | 2.524 | 0.383 |
| 19 | 2019 | 12.44 | 9.905 | 3.374 | 0.394 |
| 19 | 2018 | 1.80 | 9.909 | 2.833 | 0.471 |
| 20 | 2022 | 1.80 | 10.054 | 3.020 | 0.279 |
| 20 | 2021 | 16.05 | 10.085 | 4.402 | 0.285 |
| 20 | 2020 | 10.71 | 10.104 | 2.328 | 0.295 |
| 20 | 2019 | 0.45 | 10.077 | 1.771 | 0.266 |
| 20 | 2018 | 2.25 | 10.059 | 1.895 | 0.280 |
| 21 | 2022 | 4.00 | 9.348 | 2.131 | 0.277 |
| 21 | 2021 | 3.97 | 9.347 | 0.955 | 0.240 |
| 21 | 2020 | 4.21 | 9.366 | 1.219 | 0.261 |
| 21 | 2019 | 11.85 | 9.362 | 1.156 | 0.240 |
| 21 | 2018 | 4.68 | 9.420 | 1.116 | 0.216 |
| 22 | 2022 | 6.62 | 10.824 | 1.078 | 0.820 |
| 22 | 2021 | 11.05 | 10.791 | 1.524 | 0.888 |
| 22 | 2020 | 8.00 | 10.826 | 1.488 | 0.801 |
| 22 | 2019 | 4.68 | 10.798 | 1.277 | 0.855 |
| 22 | 2018 | 7.59 | 10.761 | 1.300 | 0.868 |
| 23 | 2022 | 22.83 | 9.978 | 1.285 | 0.239 |
| 23 | 2021 | 22.14 | 9.922 | 1.410 | 0.265 |
| 23 | 2020 | 36.50 | 9.951 | 0.343 | 0.221 |
| 23 | 2019 | 5.61 | 9.932 | 0.672 | 0.229 |
| 23 | 2018 | 1.68 | 9.931 | 2.973 | 0.253 |
| 24 | 2022 | 12.43 | 9.308 | 2.834 | 0.303 |
| 24 | 2021 | 11.45 | 9.331 | 3.249 | 0.294 |
| 24 | 2020 | 13.64 | 9.297 | 6.252 | 0.280 |
| 24 | 2019 | 4.00 | 9.285 | 2.076 | 0.284 |

| ID | Year | Financial sustainability | Funding | Liquidity | Financial Leverage |
|----|------|--------------------------|---------|-----------|--------------------|
| 24 | 2018 | 1.99 | 9.318 | 2.051 | 0.382 |
| 25 | 2022 | 1.11 | 8.418 | 2.674 | 0.283 |
| 25 | 2021 | 28.72 | 8.451 | 2.828 | 0.271 |
| 25 | 2020 | 2.67 | 8.497 | 2.910 | 0.267 |
| 25 | 2019 | 0.35 | 8.530 | 3.463 | 0.236 |
| 25 | 2018 | 15.99 | 8.535 | 3.601 | 0.241 |
| 26 | 2022 | 15.99 | 8.574 | 4.359 | 1.139 |
| 26 | 2021 | 19.66 | 8.579 | 1.766 | 0.939 |
| 26 | 2020 | 26.32 | 8.645 | 2.909 | 0.728 |
| 26 | 2019 | 3.23 | 8.679 | 5.958 | 0.673 |
| 26 | 2018 | 7.06 | 8.682 | 11.648 | 0.587 |
| 27 | 2022 | 10.38 | 10.243 | 7.503 | 0.476 |
| 27 | 2021 | 10.04 | 10.230 | 2.123 | 0.437 |
| 27 | 2020 | 7.73 | 10.199 | 3.237 | 0.388 |
| 27 | 2019 | 7.18 | 10.202 | 1.082 | 0.347 |
| 27 | 2018 | 7.45 | 10.208 | 2.279 | 0.346 |
| 28 | 2022 | 3.65 | 10.139 | 1.303 | 0.348 |
| 28 | 2021 | 6.35 | 10.130 | 1.594 | 0.347 |
| 28 | 2020 | 2.77 | 10.096 | 1.438 | 0.310 |
| 28 | 2019 | 8.82 | 10.123 | 1.013 | 0.357 |
| 28 | 2018 | 3.27 | 10.105 | 0.911 | 0.369 |
| 29 | 2022 | 3.27 | 8.157 | 2.355 | 0.683 |
| 29 | 2021 | 22.84 | 8.191 | 3.047 | 0.679 |
| 29 | 2020 | 32.70 | 8.048 | 3.001 | 0.594 |
| 29 | 2019 | 22.27 | 7.900 | 2.807 | 0.763 |
| 29 | 2018 | 22.10 | 7.654 | 2.973 | 0.754 |
| 30 | 2022 | 22.83 | 9.651 | 2.834 | 1.087 |
| 30 | 2021 | 21.75 | 9.594 | 3.249 | 1.053 |
| 30 | 2020 | 27.15 | 9.587 | 6.252 | 1.011 |
| 30 | 2019 | 28.42 | 9.570 | 2.076 | 0.906 |
| 30 | 2018 | 24.61 | 9.486 | 2.051 | 0.889 |
| 31 | 2022 | 26.92 | 8.147 | 2.674 | 0.530 |
| 31 | 2021 | 31.88 | 8.708 | 2.271 | 0.526 |
| 31 | 2020 | 32.82 | 8.781 | 1.838 | 0.537 |
| 31 | 2019 | 31.34 | 8.712 | 2.358 | 0.452 |
| 31 | 2018 | 6.00 | 8.109 | 2.522 | 0.403 |
| 32 | 2022 | 6.42 | 9.324 | 1.310 | 0.046 |
| 32 | 2021 | 3.83 | 9.304 | 1.175 | 0.075 |
| 32 | 2020 | 4.09 | 9.283 | 1.170 | 0.075 |
| 32 | 2019 | 10.52 | 9.227 | 1.167 | 0.084 |

| ID | Year | Financial sustainability | Funding | Liquidity | Financial Leverage |
|----|------|--------------------------|---------|-----------|--------------------|
| 32 | 2018 | 12.49 | 9.060 | 1.138 | 0.364 |
| 33 | 2022 | 12.03 | 10.251 | 0.448 | 0.560 |
| 33 | 2021 | 23.58 | 10.267 | 1.042 | 0.524 |
| 33 | 2020 | 18.74 | 10.271 | 1.059 | 0.526 |
| 33 | 2019 | 15.96 | 10.261 | 1.112 | 0.555 |
| 33 | 2018 | 12.53 | 10.230 | 1.125 | 0.025 |
| 34 | 2022 | 13.72 | 9.269 | 1.033 | 0.491 |
| 34 | 2021 | 6.61 | 9.271 | 1.271 | 0.492 |
| 34 | 2020 | 7.58 | 8.838 | 1.278 | 0.448 |
| 34 | 2019 | 7.22 | 8.877 | 1.172 | 0.423 |
| 34 | 2018 | 7.95 | 8.836 | 1.166 | 0.437 |
| 35 | 2022 | 7.95 | 8.267 | 1.505 | 0.468 |
| 35 | 2021 | 8.68 | 8.316 | 1.265 | 0.450 |
| 35 | 2020 | 9.40 | 8.354 | 1.287 | 0.442 |
| 35 | 2019 | 2.15 | 8.382 | 1.278 | 0.341 |
| 35 | 2018 | 9.61 | 8.414 | 1.222 | 0.283 |
| 36 | 2022 | 5.62 | 8.267 | 1.047 | 0.400 |
| 36 | 2021 | 8.12 | 8.316 | 1.169 | 0.318 |
| 36 | 2020 | 9.10 | 8.354 | 1.125 | 0.399 |
| 36 | 2019 | 5.07 | 8.382 | 1.100 | 0.400 |
| 36 | 2018 | 7.43 | 8.414 | 1.042 | 0.335 |
| 37 | 2022 | 5.81 | 8.291 | 1.240 | 0.326 |
| 37 | 2021 | 6.50 | 8.343 | 1.198 | 0.338 |
| 37 | 2020 | 5.40 | 8.347 | 1.159 | 0.376 |
| 37 | 2019 | 4.68 | 8.369 | 1.148 | 0.337 |
| 37 | 2018 | 1.38 | 8.399 | 1.081 | 0.460 |
| 38 | 2022 | 1.38 | 8.035 | 2.095 | 0.679 |
| 38 | 2021 | 9.00 | 8.083 | 2.365 | 0.414 |
| 38 | 2020 | 7.00 | 8.164 | 2.520 | 0.737 |
| 38 | 2019 | 6.00 | 8.219 | 2.253 | 0.546 |
| 38 | 2018 | 1.00 | 8.229 | 2.313 | 0.390 |
| 39 | 2022 | 7.98 | 8.484 | 4.950 | 0.202 |
| 39 | 2021 | 6.89 | 8.509 | 2.717 | 0.368 |
| 39 | 2020 | 6.87 | 8.576 | 3.021 | 0.331 |
| 39 | 2019 | 6.60 | 8.670 | 3.247 | 0.308 |
| 39 | 2018 | 5.84 | 8.703 | 3.571 | 0.280 |
| 40 | 2022 | 7.98 | 7.290 | 4.739 | 0.211 |
| 40 | 2021 | 6.96 | 8.043 | 2.174 | 0.460 |
| 40 | 2020 | 7.54 | 8.138 | 2.941 | 0.340 |
| 40 | 2019 | 6.91 | 8.170 | 3.289 | 0.304 |

| ID | Year | Financial sustainability | Funding | Liquidity | Financial Leverage |
|----|------|--------------------------|---------|-----------|--------------------|
| 40 | 2018 | 7.07 | 8.215 | 3.436 | 0.291 |
| 41 | 2022 | 7.00 | 7.609 | 2.967 | 0.337 |
| 41 | 2021 | 7.20 | 7.670 | 2.660 | 0.376 |
| 41 | 2020 | 5.30 | 7.782 | 1.473 | 0.679 |
| 41 | 2019 | 7.10 | 7.001 | 2.415 | 0.414 |
| 41 | 2018 | 7.10 | 7.000 | 1.357 | 0.737 |
| 42 | 2022 | 4.89 | 8.334 | 1.832 | 0.546 |
| 42 | 2021 | 4.85 | 8.377 | 2.564 | 0.390 |
| 42 | 2020 | 4.62 | 8.441 | 2.941 | 0.340 |
| 42 | 2019 | 5.12 | 8.533 | 2.273 | 0.440 |
| 42 | 2018 | 4.13 | 8.579 | 1.656 | 0.604 |
| 43 | 2022 | 8.60 | 8.300 | 2.083 | 0.480 |
| 43 | 2021 | 8.60 | 8.360 | 2.500 | 0.400 |
| 43 | 2020 | 9.70 | 8.451 | 2.941 | 0.340 |
| 43 | 2019 | 8.20 | 8.531 | 4.167 | 0.240 |
| 43 | 2018 | 7.20 | 8.544 | 4.348 | 0.230 |
| 44 | 2022 | 7.00 | 7.670 | 4.950 | 0.202 |
| 44 | 2021 | 7.20 | 7.782 | 2.717 | 0.368 |
| 44 | 2020 | 6.30 | 8.234 | 3.021 | 0.331 |
| 44 | 2019 | 6.40 | 8.298 | 3.247 | 0.308 |
| 44 | 2018 | 6.80 | 8.312 | 3.571 | 0.280 |
| 45 | 2022 | 5.33 | 6.846 | 1.197 | 0.714 |
| 45 | 2021 | 5.90 | 6.895 | 1.161 | 0.833 |
| 45 | 2020 | 6.20 | 7.740 | 1.585 | 0.875 |
| 45 | 2019 | 5.54 | 7.813 | 0.946 | 0.875 |
| 45 | 2018 | 5.19 | 7.815 | 1.085 | 0.875 |
| 46 | 2022 | 5.12 | 6.945 | 1.024 | 0.875 |
| 46 | 2021 | 3.97 | 6.985 | 1.469 | 0.714 |
| 46 | 2020 | 6.30 | 7.010 | 0.984 | 0.714 |
| 46 | 2019 | 6.40 | 7.019 | 1.334 | 0.714 |
| 46 | 2018 | 5.90 | 7.016 | 1.540 | 0.750 |
| 47 | 2022 | 5.65 | 7.014 | 1.259 | 0.875 |
| 47 | 2021 | 4.71 | 7.135 | 1.115 | 0.778 |
| 47 | 2020 | 4.26 | 7.237 | 4.144 | 0.778 |
| 47 | 2019 | 4.62 | 7.301 | 6.657 | 0.778 |
| 47 | 2018 | 4.05 | 7.350 | 7.954 | 0.750 |
| 48 | 2022 | 8.46 | 7.280 | 8.475 | 0.750 |
| 48 | 2021 | 7.89 | 7.293 | 3.345 | 0.750 |
| 48 | 2020 | 7.11 | 7.331 | 0.951 | 0.889 |
| 48 | 2019 | 7.93 | 7.344 | 1.097 | 0.778 |

| ID | Year | Financial sustainability | Funding | Liquidity | Financial Leverage |
|----|------|--------------------------|---------|-----------|--------------------|
| 48 | 2018 | 6.75 | 7.351 | 1.422 | 0.750 |
| 49 | 2022 | 5.69 | 7.664 | 1.486 | 0.909 |
| 49 | 2021 | 5.19 | 7.716 | 1.736 | 0.909 |
| 49 | 2020 | 4.26 | 7.792 | 1.237 | 0.889 |
| 49 | 2019 | 4.23 | 7.834 | 0.950 | 0.875 |
| 49 | 2018 | 3.71 | 7.919 | 0.935 | 0.875 |