



Electronic Theses and Dissertations

2024

Impact of development financing on financial performance of Nairobi County MSMEs.

Jama, Wolde Hage
Strathmore Business School
Strathmore University

Recommended Citation

Jama, W. H. (2024). *Impact of development financing on financial performance of Nairobi County MSMEs* [Strathmore University]. <http://hdl.handle.net/11071/15582>

Follow this and additional works at: <http://hdl.handle.net/11071/15582>

**IMPACT OF DEVELOPMENT FINANCING ON FINANCIAL PERFORMANCE
OF NAIROBI COUNTY MSMES.**

WOLDE HAGE JAMA

REG NO: 137197

**A RESEARCH DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MSC IN
DEVELOPMENT FINANCE OF STRATHMORE UNIVERSITY BUSINESS
SCHOOL.**



JUNE 2024

DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the proposal contains no material previously published or written by another person except where due reference is made in the thesis itself.

Hage Jama Wolde

[Name of Candidate]

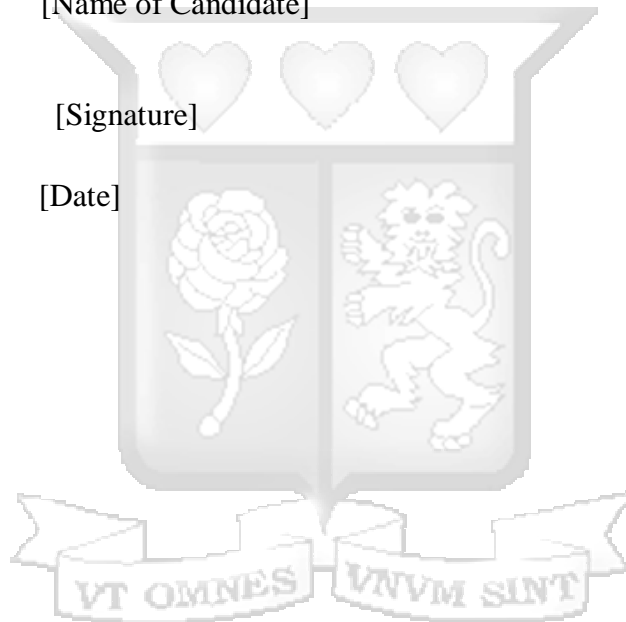
..... 

[Signature]

17th October 2023

[Date]

.....



Approval

The Research Proposal of Hage Jama Wolde was reviewed and approved by the following:

Name of Supervisor: ...Dr. David Mathuva..... 

Faculty Affiliation: ...Senior Lecturer..... 

Strathmore University

ABSTRACT

This study sought to assess impact of development financing on financial performance of Nairobi County MSMEs. MSMEs are crucial to Kenya's economy, driving employment, GDP output, and inclusive growth. However, they face significant challenges such as insufficient financing, costly credit, and limited financial literacy. The study specifically aimed to address the following objectives: (i) examine the effect of E-lending on financial performance of MSMEs in Nairobi County, Kenya; (ii) assess the influence of collateral-free credit on the financial performance of MSMEs in Nairobi County; and (iii) determine the effect of business grants on the financial performance of MSMEs in Nairobi County. This research sought to understand the financial performance of MSMEs and assess the impact of DFIs to address these challenges. The study's insights can help policymakers and financial institutions develop tailored solutions to foster MSME growth and recovery, especially in the post-COVID-19 context. The study was anchored on Financial Intermediation Theory which helped demonstrate how financial intermediaries like Development Finance Institutions (DFIs) reduce transaction costs and enhance financial access for MSMEs. E-lending, collateral-free credit, and business grants illustrate the theory by facilitating efficient fund transfers, lowering financial barriers, and supporting MSME growth. It was also supported by Innovation Diffusion Theory. The research found that electronic lending, collateral-free credit, and business grants enhance financial access and promote business growth for MSMEs. The adoption of these financial solutions by DFIs illustrates the spread of these innovations, significantly increasing transaction volumes and reducing financing barriers in Kenya. A descriptive research design underpinned and guided the study. The target population comprised registered MSMEs in Nairobi County, with a study sample size of 120 participants. The primary research tool used was a structured questionnaire, while SPSS software supported the analysis of descriptive and inferential statistics.

E-lending emerged as a significant contributor to SME financial performance, facilitating easier access to financing and improving profitability, as evidenced by studies in various contexts such as Nakuru CBD and Kyushu city. Collateral-free credit also played a vital role in enhancing MSME performance by removing financing barriers, leading to improved profitability and business expansion. Additionally, business grants were found to be crucial for SME growth, particularly for newer firms,

although their effectiveness varied among different types of businesses. To optimize their impact, it was essential for grant providers to refine distribution systems, targeting support towards start-ups and younger enterprises while ensuring efficient resource allocation.

Keywords: E-lending, collateral-free credit, business grants, MSMEs, financial performance, Development Finance Institutions, Nairobi County, financial access, innovation adoption, financial intermediation, GDP output, inclusive growth, COVID 19.



TABLE OF CONTENTS

DECLARATION	ii
ABSTRACT	iii
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ABBREVIATIONS/ACRONYMS.....	xi
DEFINITION OF TERMS	xii
DEDICATION.....	xiii
ACKNOWLEDGEMENTS.....	xiv
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Study	1
1.1.1 Financial Performance of MSMEs in Nairobi County.....	3
1.1.2 The Concept of Development Finance Institutions.....	5
1.1.3 Development Finance Institutions and Financial Performance of MSMEs	8
1.2 Statement of the Problem	9
1.3 Research Objectives	11
1.3.1 General Objective.....	11
1.3.2 Specific objectives.....	11
1.4 Research Questions	11
1.5 Scope of Study	11
1.6 Significance of the Study.....	12
1.6.1 Scholars and Researchers.....	12
1.6.2 MSME Owners, managers, and general public.....	12
1.6.3 Government and Policymakers	13
CHAPTER TWO: LITERATURE REVIEW.....	14
2.1 Introduction.....	14
2.2 Theoretical Review	14

2.2.1 Financial Intermediation Theory	14
2.2.2 Innovation Diffusion Theory	15
2.3 Empirical Review	16
2.3.1 Effect of E-Lending on the Financial Performance of MSMEs.....	16
2.3.2 Effect of Collateral-free Credit on Financial Performance of MSMEs.....	17
2.3.3 Effect of Business Grants on Financial Performance of MSMEs.....	17
2.4 Summary of literature and research gaps	18
2.5 Conceptual framework	21
2.5.1 Operationalization of Variables	22
CHAPTER THREE: RESEARCH METHODOLOGY.....	24
3.1 Introduction.....	24
3.2 Research Philosophy	24
3.3 Research Design.....	24
3.4 Population of the study.....	25
3.4.1 Population	25
3.4.2 Sample Size and Sample Design.....	25
3.5 Data Collection Method.....	27
3.6 Data Analysis	27
3.7 Research Quality	28
3.7.1 Research Validity	28
3.7.2 Reliability of the Research Tool	28
3.8 Ethical Issues in Research	29
CHAPTER FOUR: RESEARCH FINDINGS.....	31
4.1 Introduction.....	31
4.1.1 Response Rate	31
4.2 Respondents' Demographics	32
4.3 Descriptive Statistics	37

4.3.1 The effect of E- lending on the financial performance of micro, small, and medium-sized enterprises in Nairobi County.	37
4.3.2 The influence of collateral-free credit on the financial performance of micro, small, and medium-sized enterprises in Nairobi County.	39
4.3.3 The effect of business grants on the financial performance of micro, small, and medium-sized enterprises in Nairobi County.	40
4.3.4 Financial performance of micro, small, and medium-sized enterprises in Nairobi County.	42
4.4 Factor analysis.....	43
4.5 Correlation analysis.....	44
4.6 Inferential Statistics.....	45
4.6.1 Multiple Regression.....	46
4.7 Chapter Summary.....	48
CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS.....	50
5.1 Introduction.....	50
5.2 Summary of Findings.	50
5.3 Discussion.....	51
5.3.1 The effect of E- lending on the financial performance of MSMEs.....	51
5.3.2 The influence of collateral-free credit on the financial performance of MSMEs. .	52
5.3.3 The effect of business grants on the financial performance of MSMEs.	53
5.4 Conclusions.....	55
5.5 Recommendations	56
5.5.1 Recommendations for Management.....	56
5.5.2. Recommendation for policy makers/regulators	57
5.6 Areas of further research	57
5.7 Limitations of the study.....	57
REFERENCES	58
APPENDICES	63

APPENDIX A: INTRODUCTION LETTER TO THE PARTICIPANTS..... 63

APPENDIX B: QUESTIONNAIRE..... 64

APPENDIX C: LIST OF KENYAN PUBLIC DEVELOPMENT FINANCE
INSTITUTIONS..... 71

APPENDIX D: CONSENT FORM..... 72

APPENDIX E: PARTICIPANT INFORMATION SHEET 74

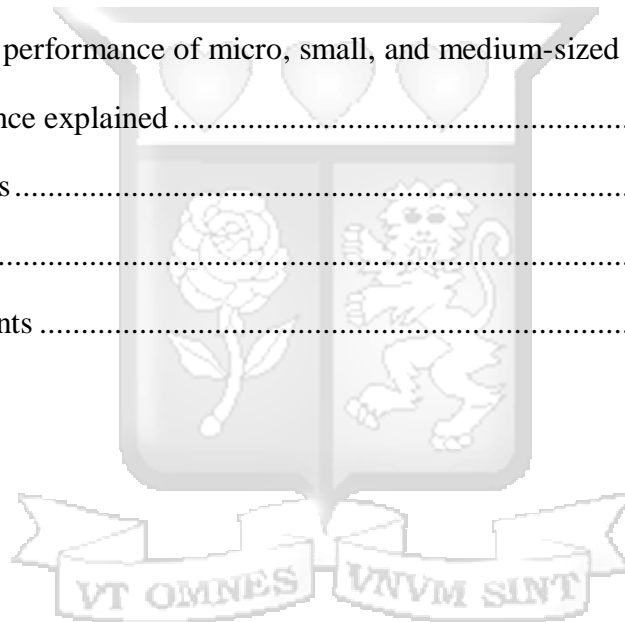
APPENDIX F: DEBRIEF FORM 75

APPENDIX G: BUDGET 76



LIST OF TABLES

Table 2.1: Summary of Research Gaps	19
Table 2.2: Operationalization of Variables	22
Table 3.1: Item-Total Statistics.....	29
Table 4.1: Response Rate	31
Table 4.2: Sample Demographic characteristics.....	32
Table 4.3.1: Effect of E-lending on the financial performance of MSMEs	37
Table 4.3.2: Effect of collateral-free credit on the financial performance of MSMEs	39
Table 4.3.3: Effect of business grants on the financial performance of MSMEs	41
Table 4.3.4: Financial performance of micro, small, and medium-sized enterprises	42
Table 4.4: Total variance explained	43
Table 4.5: Correlations	44
Table 4.6.1: ANOVA	47
Table 4.6.2: Coefficients	48



LIST OF FIGURES

Figure 1.1: Comparison of direct DFI investment and financial intermediary investment 7

Figure 2.1: Conceptual Framework 22



LIST OF ABBREVIATIONS/ACRONYMS

CGS	Credit Guarantee Scheme
DFI	Development Finance Institution
FSD	Financial Sector Deepening,
GDP	Gross Domestic Product
IFC	International Finance Corporation
KNBS	Kenya National Bureau of Statistics
LPG	Liquefied Petroleum Gas
MSMEs	Micro, Small, and Medium Enterprises
ODA	Official Development Assistance
RBV	Resource-Based View
SDG	Sustainable Development Goal
USDFC	US International Development Finance Corporation
WBG	World Bank Group



DEFINITION OF TERMS

- CGS** Credit Guarantee Scheme - gives confirmation on credits to borrowers by covering a piece of the default opportunity of the credit (Attridge, 2021).
- FSDK** Financial Sector Deepening Kenya – An independent trust spread out in mid-2005 to help the improvement of far-reaching financial business areas in Kenya (Natalie, 2021).
- ODA** Official Development Assistance – an administration help that advances and explicitly focuses on the financial turn of events and government assistance of emerging nations (Bhandari, Dasgupta & Gangopadhyay, 2018).
- DFIs** Development Finance Institutions - are specific improvement banks or auxiliaries put in a position to help private sector advancement in non-developed nations (Natalie, 2021).



DEDICATION

This work is dedicated to my loving family and supportive friends who have been my pillar of support throughout this journey.



ACKNOWLEDGEMENTS

I start by thanking God, who has blessed me with good health, strength, and daily guidance throughout my research journey. I am grateful to Strathmore Business School for their exceptional support during my academic pursuit. Additionally, I would like to express my appreciation to my supervisor for their valuable time, effort, and guidance, which were instrumental in this study.



CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

A report by World Bank Group (2019) shows that micro, small, and medium-sized businesses (MSMEs) drive over 80% of employment in Africa and are the most important stimulants of inclusive growth, innovation, and job creation (Dickinson, 2018), yet MSMEs trade participation in Africa does not currently reflect domestic importance (Bhandari et al., 2018). This is due to various impediments such as lack of access to financing, lack of skills & capacity and lack of access to innovative technology, limited information channels, and weak processing infrastructure (Yaron, 2016). The International Finance Corporation (IFC) estimates that 65 million, or 40% of MSMEs in developing countries, have an unmet financing need of \$5.2 trillion every year, which is equivalent to 1.4 times the current level of global MSME lending (Masira, 2019). East Asia and Pacific accounts for the largest share (46%) of the total global finance gap and is followed by Latin America and the Caribbean (23%) and Europe and Central Asia (15%) (Ayyagari et al., 2021). The gap volume varies considerably from region to region (Calice, 2017). According to Lyons and Kass-Hanna (2021), Latin America and the Caribbean and the Middle East and North Africa regions have the highest proportion of the finance gap compared to potential demand, measured at 87% and 88%, respectively.

Access to finances is critical for the growth and sustainability of micro, small, and medium-size enterprises (MSMEs) (Chittenden et al., 2018). Financing is one of the ways of empowering MSMEs whereby borrowers borrow funds directly from the financial market without using a financial intermediary (Bilal et al., 2020). This allows MSMEs to innovate, improve efficiency, expand to new markets, and provide millions of jobs in the developed economies as well as developing economies. Some of the common forms of financing to MSMEs include but are not limited to E-lending, collateral-free credit, and grants among others (Masira, 2019). E-lending offers MSMEs the 'line of credit' which allows them to avail easy access to funding remotely (Dickinson, 2018). Collateral-free credit for MSMEs by DFIs is done through the Credit Guarantee Scheme (CGS) and refers to any loan that doesn't require the backing of an asset, security deposit, or guarantor. Business grant is financial assistance

provided by DFIs, corporations, or private businesses to MSMEs to further their growth (Pandey et al., 2018).

Access to financial services is an important component of an enabling environment that encourages entrepreneurship and a vibrant business sector (Attridge, 2021). Access to finances for MSMEs is also in line with The Sustainable Development Goals (SDGs) especially goal number eight (8) which is about decent work and economic growth (Andersen et al., 2019). SDG 8 aims to promote access to financial services, entrepreneurship, higher levels of productivity and technological innovation, and decent job creation (Dickinson, 2018).

In the Kenyan context, joint program with the government plays a key role in supporting SDG 8 through providing affordable credit, promote financial literacy training and business support service for MSMEs through DFIs. The regulatory framework in Kenya also ensures national policies align with DFI objectives through Collaborations on policy development and review to integrate goals related to job creation, economic growth, and financial inclusion. DFIs are government-backed institutions that invest in private-sector projects in low- and middle-income countries (Lahaye, 2016). They are structured as either multilateral or bilateral organizations seeking to invest in commercially sustainable projects, often in concert with private investors (Natalie, 2021).

Since 2000, DFIs have grown from almost \$12 billion in annual investments to \$87 billion in 2017, an increase of six times (Bruck, 2018). DFI financial support aims to improve the contributions of MSMEs to the generation of decent jobs, employment opportunities, and economic growth (Gyimah et al., 2019). For example, an international group of 20 development finance institutions known as the Coalition for a Sustainable and Inclusive Recovery of the private sector (Moretto et al, 2017), which came together in 2020, committed over USD 5.55 billion in financing to micro, small and medium-sized enterprises in Africa between mid-2020 and end of 2021 (Ayyagari et al., 2021).

Improved access to finance for MSMEs is critically important to boost growth and the prospects of the 450 million young Africans projected to join the labour market by 2050 (Abor, 2018). The Covid-19 crisis put the viability of MSMEs under acute pressure and efforts to expand inclusive financial solutions are crucial for a successful recovery and sustainability of

MSMEs. Micro, small, and medium-sized businesses have always been the lifeblood of most economies, especially in emerging markets such as Kenya. Yet many MSMEs have limited to no access to the financial products required to run and grow their businesses (Attridge, 2021).

Therefore, development finance institutions are paramount to the growth of MSMEs in Africa and they have exhibited strong interest in development interventions in the SME space. This study is underpinned by two theories: The Theory of Financial Intermediation by Franklin Allen, and Anthony M. Santomero in the 1960s (Allen et al., 1997) as well as Diffusion of Innovation (DOI) Theory, developed by E.M. Rogers in 1962. The Theory of Financial Intermediation asserts that intermediaries are introduced to minimize the costs of transactions in mobile lending (DeAngelo et al., 2019). Financial intermediaries are institutions and individual that acts as the middleman in business financial transactions. They act as institutions that offer the channel for the transfer of funds between the funders and the investors. The financial intermediation theory is relevant to the study as it points out the significance of intermediation as a value-creating economic process. DOI originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system (Abor, 2018). The result of this diffusion is that people, as part of a social system, adopt a new idea, behaviour, or product. Adoption means that a person does something differently than what they had previously (that is to say, purchase or use a new product, acquire and perform a new behaviour) (Cortes et al., 2020). According to the theory, the key to adoption is that the person must perceive the idea, behaviour, or product as new or innovative.

1.1.1 Financial Performance of MSMEs in Nairobi County.

Globally, there is no standard definition for Micro, Small and Medium-Sized Enterprises (MSMEs). However, key attributes that are considered when defining them include the number of employees, turnover, and capital. In Kenya, MSMEs are variously defined in different contexts. They are defined as enterprises that have 1-99 employees (Bakang, 2017).

Micro enterprises have less than 10 employees (Pandey et al., 2018); small enterprises have 10-49 employees (Moretto et al., 2017), while medium-sized enterprises have 50-99 employees. Yearly turnover may likewise be utilized to characterize a MSME, with the turnover limit for MSMEs running between US\$ 50 million to 70 million in big time salary

economies, and between US\$ 1 million and 5 million US\$ in lower-pay agricultural nations like Kenya (Kaloki et al., 2018).

MSMEs play a pivotal role in Kenya's economy. Nairobi County was chosen specifically for its high concentration of MSMEs, its status as an economic hub with diverse industries, accessibility to development finance institutions, and its policy relevance, providing a focused study with practical implication for understanding and improving the financial landscape for MSMEs in Kenya. MSMEs contribute to over 90 percent of the total labour force and play a key role in poverty reduction and economic development (Gitau et al., 2019). They are likewise a wellspring of development, intensity, Labor and products, and pioneering abilities. There are over 7.4 million MSMEs utilizing around 14.9 million Kenyans in different areas of the economy (Bakang, 2017). Furthermore, the MSMEs cover a large number of foundations in practically all areas of the economy. It is likewise significant that most MSMEs work casually (Mong'are, 2017). In addition, the significant job of MSMEs in advancing Gross domestic product development and business is underlined in Kenya's Vision 2030, the nation's drawn out advancement plan, and the "Enormous Four" plan under the assembling plan (Bouri et al., 2017).

Despite the critical role they play in the economy, MSMEs are frequently confronted with market imperfections (Michael et al., 2018). They have difficulties in accessing adequate, affordable, and timely credit; face ineffective marketing due to inadequate resources and non-availability of skilled manpower (Michael et al., 2018); and most of them are unable to integrate into large-scale business relationships due to lack of international standards and quality controls (Gitau et al., 2019). Most MSMEs work with practically no sort of certificate, which significantly diminishes their possibilities of growing in reverse linkages with enormous undertakings (Michael et al., 2018). Furthermore, it is critical to take note of that a huge group of writing recognizes admittance to funds as the main test looked by these kinds of undertakings (Wernerfelt, 2016).

According to the Financial Sector Deepening, FSD, 2015, Micro, Small, and Medium Enterprises access credit at a disproportionately higher cost (Wernerfelt, 2016). According to Kenya National Bureau of Statistics, KNBS, (2019) about 9,000 licensed MSMEs in Kenya and about 121,100 unlicensed MSMEs obtained credit from the public decentralized enterprise funds. Bakang (2017) distinguished restricted admittance to sufficient guarantee as a significant justification for the low admittance to supporting. Throughout the long term,

customary wellsprings of funding for MSMEs have spun around private reserve funds, advances from loved ones, and other casual sources (Kaloki et al., 2018). Over 80.6 percent of ventures use family/own assets as the fundamental wellspring of start-up capital while 4.2 percent of MSME proprietors get credits from family and additionally companions to begin their business (Bouri et al, 2017). Banks finance 5.6 percent of MSMEs, chamas 1.4 percent, and cooperatives just 0.4 percent. The Public authority subsidizes 0.1 percent of all MSMEs (Islam, 2017). Based on the foregoing discussion, MSMEs face challenges in raising finances to support their entrepreneurial pursuits and therefore Development Finance Institutions could address the unmet funding demand by closing the financing gap (Gichuki et al., 2017). They also provide platforms for financial literacy to promote efficient use of funds.

1.1.2 The Concept of Development Finance Institutions

Development Finance Institutions are government-backed institutions that invest in private- sector projects in low- and middle-income countries (Masira, 2019). They are structured as either multilateral or bilateral organizations seeking to invest in commercially sustainable projects, often in concert with private investors (Mong'are, 2017). Improvement Money Establishments have openly claimed associations, and countless created nations, including all the G7, own DFIs. Some DFIs are claimed by a few nations like the World Bank's Global Money Enterprise (Ayyagari et al., 2021).

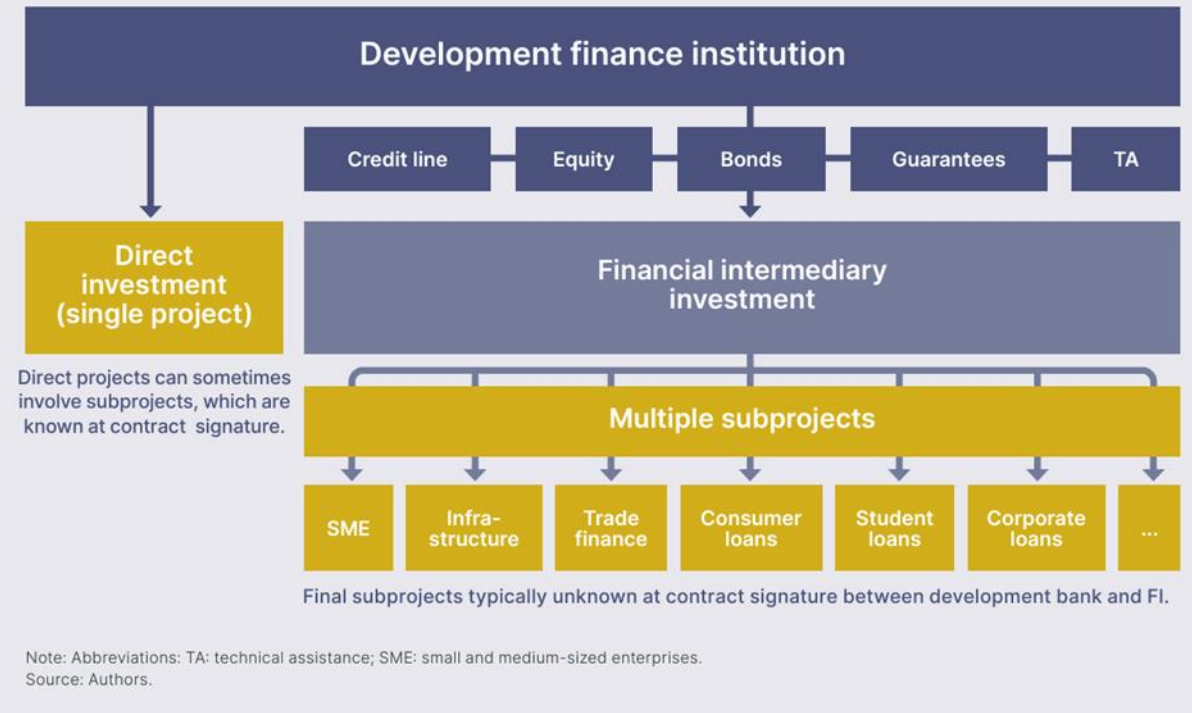
Multilateral and national DFIs are expanding their traditional role of co-financing the provision of technical assistance, finance training, coaching, and business advice to help MSMEs increase their competitiveness, resilience, and ability to scale up their productive and distribution capacities (Lahaye, 2016). Advancement Money Foundations use comparative monetary instruments to other huge confidential establishments in their speculation methodologies, normally depending on value, semi value, ensures, protection, risk the board, credits, or other unique vehicles like collaboration reserves (Islam, 2017).

Generally, there is healthy investment diversification across the globe. However, one common issue remains: the countries with the lowest per capita income receive small investment attention (Zottel et al., 2017), primarily due to lagging existing financial infrastructure, investable deals, and perceived risk (Yaron, 2016). One of the remarkable parts of DFIs is that they will face a more noteworthy business challenge on their ventures than private area

financial backers to help organizations or areas that can have a positive improvement influence (Everhart et al., 2020). This implies DFIs can make interests in organizations in nations that most need monetary help and which are over and over again considered excessively unsafe for private financial backers (Musacchio et al., 2017).

When DFIs consider which businesses to invest in, they look at four things: development impact, financial sustainability, strategic fit, and business integrity. Development Finance Institutions consider the ability of the businesses to achieve a positive impact, whether that's an economic impact like creating jobs, a social impact like ensuring those jobs are inclusive, or an environmental impact, like mitigating climate change (Natalie, 2021). Second, they evaluate business execution and long-haul monetary supportability. Except if a business is monetarily practical, it won't ever have a drawn-out effect, and organizations that develop can accomplish more effect than those that can't put resources into extension (Namusonge, 2018). As a general rule, business and effect achievement are naturally connected (Gyimah et al., 2019). Simultaneously, those monetary returns are significant for DFIs, in light of the fact that they can be reinvested to help different organizations to develop and produce further effect (Lahaye, 2016). Third, Development Finance Institutions ensure that the investment is in line with the organization's strategic priorities. For example, DFIs may only invest in certain regions (Pandey et al., 2018). Fourth, business integrity - when DFIs invest they conduct due diligence to ensure the business fits with their values and complies with national and international regulations (Calice, 2017). Some of the examples of DFIs are listed in Appendix 1.

FIGURE 1 Comparison of Direct DFI Investments and Financial Intermediary Investments



Source: (Researcher, 2024)

Figure 1.1: Comparison of Direct DFI Investment and Financial Intermediary Investment

Figure 1.1 shows that Development Finance Institutions (DFIs) support SMEs (small and medium-sized enterprises) through direct and intermediary investments. Direct investments involve providing funding directly to an SME for a specific project, while intermediary investments involve providing funding to a financial institution, such as a bank, which then lends the money to SMEs. In both scenarios, DFIs facilitate access to the necessary financing for SMEs to grow and develop, which is particularly crucial for those that struggle to secure funding from traditional lenders.

The services provided by DFIs are diverse. They offer loans or guarantees to investors and entrepreneurs, take equity positions in businesses or investment funds, and fund state infrastructure projects. In economies where collateral requirements hinder access to credit from commercial banks, DFIs often lead multiple subprojects. They also support microloans to firms and finance SMEs that are often deemed too risky by private lenders.

Consequently, DFIs frequently gain a first-mover advantage in markets with strong growth potential.

1.1.3 Development Finance Institutions and Financial Performance of MSMEs

Blended finance, which is a strategic use of development finance for the mobilization of additional finance towards sustainable development in developing countries (Namusonge, 2018), is one approach to providing MSMEs with access to the capital needed to grow (Bhandari et al, 2018). Historically, development finance institutions and bilateral donors have focused on direct funding for projects. But with official development assistance (ODA) representing a mere 6 percent of the \$2.5 trillion Sustainable Development Goal (SDG) investment gap, their resources are insufficient (Islam, 2017). Development Finance Institutions invest in private sector businesses such as MSMEs to generate development impact while at the same time delivering a financial return. However, MSMEs in Africa are frequently informal meaning they are not formally registered as businesses, and this makes it difficult for them to access financing (Abor, 2018). Moreover, even those that are formally registered still frequently suffer from a lack of accessibility. This is a significant issue because, without sufficient working capital, MSMEs are unable to invest and grow (Everhart et al, 2020). Only between a third and a fifth of MSMEs in sub-Saharan Africa have access to financing or line of credit. An estimated 28.3 percent of firms in the region are fully finance- constrained (Gitau et al, 2019).

A report by World Bank Group (2021) shows that DFIs collectively increased their investment by 7% in 2020 to help cushion the economic impact of Covid-19. This increase was driven by multilateral DFIs who increased their investment by 21% in the first year of the pandemic. While bilateral DFI investment tailed off in 2020 it bounced back in 2021, re- establishing a trend of relatively fast annualized growth in investment of 7% over the period 2017-2021 (Ayyagari et al, 2021).

According to World Bank Group (2021), this rise was mainly driven by a 28% increase in the US International Development Finance Corporation (USDFC) in 2021 enabled by the significant increase in firepower of the new USDFC created in December 2019 (Everhart et al, 2020). This compares to a smaller annualized growth rate in the investment of 1.1% of

the International Finance Corporation (IFC) and Multilateral Investment Guarantee Agency (MIGA) over the same period (Erden et al, 2018).

The International Finance Corporation is the World Bank's DFI and as one of the largest DFIs in the world, IFC accounted for almost 14 percent of the global DFI commitments in 2017 (Zottel et al, 2017). International Finance Corporation committed over \$18 billion in non-sovereign, private financing tools in 2013. Since then, IFC commitments have dropped by 35 percent in 2017, to reach \$12 billion (Michael & Combs, 2018). In 2017, IFC's geographic focus favoured businesses in Latin America and the Caribbean followed by sub-Saharan Africa (Gichuki et al, 2017), Europe and Central Asia, South Asia, and East Asia in order of commitment level (Erden et al, 2018). Smaller amounts were invested in the Middle East and North Africa (Namusonge, 2018). IFC invested more in only one region in 2017 than in 2013 South Asia and all other regions received fewer commitments in 2017 than in 2013 (Mong'are, 2017).

1.2 Statement of the Problem

In developing economies like Kenya, joint programs with the government and Development Finance Institutions (DFIs) support SDG 8 by providing affordable credit, financial literacy training, and business support for MSMEs. The regulatory framework aligns national policies with DFI objectives to promote job creation, economic growth, and financial inclusion. However, MSMEs face significant challenges, such as insufficient financing, costly credit, and limited financial literacy, leading to high failure rates and unmet funding demands for over 51% of businesses. Despite contributing to over 80% of employment and 25.6% of GDP, these obstacles hinder MSME growth and competitiveness. Neglecting MSMEs in Nairobi's CBD could exacerbate these issues, preventing the development of effective solutions and hampering economic growth, employment, and innovation. This study aims to address these challenges and develop tailored solutions for MSME sustainability.

The persistence of underfinancing issues among MSMEs threatens economic sustainability, particularly given the high proportion of youth in Kenya's population. While DFIs provide funding to address this demand, a substantial portion of MSMEs still lack adequate access to capital for growth. Without sufficient working capital, these businesses stagnate, impeding economic progress.

The performance of MSMEs affects various stakeholders, including local communities, the Kenyan government, and investors. Diminished MSME performance can lead to decreased community development, strain on government resources due to unemployment and reduced tax revenues, and diminished investor confidence.

Past research has highlighted the significant role of DFIs in supporting SME growth, but gaps exist in understanding the specific mechanisms through which DFIs impact MSME financial performance. Existing studies have either overlooked crucial aspects such as E-lending, collateral-free credit, and grants, or have failed to consider the unique context of Nairobi County. In the Kenyan context, studies conducted by researchers like Gitau and Wanyoike (2019), Masira (2019), and Kaloki and Muendo (2018) have demonstrated a one-dimensional focus. These studies tended to singularly investigate either E-lending, collateral, or business grants, thereby neglecting an integrated exploration of all three variables. This approach potentially creates a conceptual gap, as a comprehensive examination of the combined effects of E-lending, collateral, and business grants on the given context may offer a more holistic understanding. The literature review indicates a consensus that the impact of business grants is notably more pronounced for smaller businesses, particularly those with fewer than 20 employees. Additionally, it is evident from existing empirical evidence that there is a gap in studies specifically addressing collateral-free credit. Notable studies, such as Gichuki, Njeru, and Tirimba (2017), Erel and Liebersohn (2020), Ochido (2019), and Kidali (2020), have primarily focused on examining the influence of collateral adequacy on access to credit rather than exploring the effects of credit without collateral requirements.

Existing studies, including those by Gichuki et al. (2017), Erel et al. (2020), Ochido (2019), and Kidali (2020), have primarily explored the relationship between collateral adequacy and credit access, overlooking the direct effects of collateral-free credit provision.

Therefore, this study aims to fill these gaps by comprehensively examining the impact of DFI financing on the financial performance of MSMEs in Nairobi County. By focusing on variables such as E-lending, collateral-free credit, and business grants, the research seeks to inform policy decisions, identify areas for improvement, and contribute valuable insights for fostering economic growth and sustainability in Kenya.

1.3 Research Objectives

1.3.1 General Objective

The study's main objective was to assess Development Finance Institutions and their impact on performance of micro, small, and medium-sized enterprises in Nairobi County, Kenya.

1.3.2 Specific objectives

The following specific objectives guided the study:

- I. To examine the effect of E- lending on the financial performance of MSMEs in Nairobi County.
- II. To assess the influence of collateral-free credit on the financial performance of MSMEs in Nairobi County.
- III. To determine the effect of business grants on the financial performance of MSMEs in Nairobi County.

1.4 Research Questions

The study sought to answer the following research questions:

- I. What was the effect of E-lending on the financial performance of MSMEs in Nairobi County?
- II. To what extent did collateral-free credit affect the financial performance of MSMEs in Nairobi County?
- III. Did business grants affect the financial performance of MSMEs in Nairobi County?

1.5 Scope of Study

The study sought to assess the impact of Development Financing on the financial performance of Nairobi County MSMEs. The target population was the 3.5 million registered MSMEs in Nairobi County. Particularly those who run small tuck shops and kiosks, food and non-alcoholic outlets, alcoholic beverages outlets, Beauty shops, Butcheries, Book Shops, Electronic shops owners, Liquefied petroleum gas (LPG) refilling stations, Grocery and cereal shops, Cosmetics shops, motorcycle repair shops, hardware shops among others. The review will embrace descriptive research plan to figure out the “who”, “when”, “what”, and “by how much”. Primary data was obtained utilizing a closed-ended questionnaire

administered to the MSME owners or managers. The study consisted of cross-sectional data; data was acquired from the various SME owners or managers at one time period. Inferential statistics entailing correlation and multiple linear regression was used in analysing the quantitative data obtained in the study.

1.6 Significance of the Study

The study is beneficial to the following:

1.6.1 Scholars and Researchers

The study will bring about curiosity among scholars and challenge them to carry out more studies on the effect of financing on the financial performance of MSMEs. Similarly, the study will provide resourceful material for future scholars and researchers interested in the subject of access to finance and the financial performance of MSMEs, especially in a developing economy such as Kenya. The current study will also contribute to the existing literature on MSME development and factors that prevent the growth of SMEs. Finally, the current research will aid researchers in developing appropriate research skills in development finance within the SME field.

1.6.2 MSME Owners, managers, and general public

The study hopes to educate the MSME owners and managers as well as the general public on the benefits of DFI financing in ensuring good financial performance. As such, financial entrepreneurs will get to understand the relationship and ways of accessing financing from DFIs as well as the challenges and opportunities surrounding the subject of DFI funding. The current study will develop positive perceptions of practitioners and development financial institutions about the importance of SMEs in economic growth and development.

The findings of the present study will provide valuable information to SME owners and managers, potential SME aspirants, and development financial institutions about the impact of DFIs on the growth of SMEs in Nairobi County, and the entire country at large.

Specifically, the results of this study will serve as a source of information that will highlight context-specific factors that possibly enhance or prevent the growth of SME development in Kenya including strategies on how to mitigate identified challenges.

1.6.3 Government and Policymakers

Similarly, the study will provide empirical findings to the government and other relevant agencies to help guide the formulation and implementation of relevant policies and regulations. Moreover, these findings will not only help highlight financial inclusion gaps in marginalized areas with high inequality but also suggest ways of utilizing DFIs to curb the need for inclusion. Lastly, the findings of this study will help policymakers at the Ministry of Industrialization, Trade, and Enterprise Development as well as the Micro and Small Enterprise Authority (MSEA) to find ways to collaborate with DFIs and other SME financiers to strengthen the financing mechanisms of SMEs countrywide.



CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section presents empirical evidence on the impact of financing by Development Finance Institutions on the financial performance of Nairobi county MSMEs. The chapter begins with a theoretical review, followed by an empirical review section based on the research objectives. A summary of the existing knowledge gaps and conceptual framework after that.

2.2 Theoretical Review

The study is anchored on financial intermediation theory and supported by innovation diffusion theory.

2.2.1 Financial Intermediation Theory

The Theory of Financial Intermediation by Franklin Allen, and Anthony M. Santomero in the 1960s (Allen et al., 1997). This theory asserts that intermediaries are introduced to minimize the costs of transactions in mobile lending (DeAngelo et al., 2019). Financial intermediaries are institutions and individual that acts as the middleman in business financial transactions. They act as institutions that offer the channel for the transfer of funds between the funders and the investors. The financial intermediation theory is relevant to the study as it points out the significance of intermediation as a value-creating economic process. This has been evidenced by the adoption of electronic lending by development finance institutions for example the adoption of M-shwari by commercial banks of Africa aimed at reducing transaction costs (Chen et al., 2018). However, Abor (2018) criticized the financial intermediation theory by arguing that due to the developments in the deepening of financial markets, financial intermediation has become useless. According to DeAngelo et al, (2019) for electronic lending to be successful, transactions should be compatible. Compatibility is the extent to which things can work together without any problem. In the E-lending setting, customers should be able to transact without any difficulties through the mobile platforms. Complexity relates to the energy or effort required to comprehend the technological changes such as the innovation diffusion theory brings out a need for DFIs to adopt to improve the financial access by MSMEs (Abor, 2018).

In the Kenyan context, E-lending exemplifies the Theory by reducing transaction costs and facilitating efficient fund transfers between lenders and borrowers. This digital innovation aligns with the theory's core principles, providing a practical application that expands financial service access and supports MSME growth in developing economies.

Collateral-free credit and business grants further illustrate how financial intermediaries, particularly DFIs, reduce financial barriers and support MSMEs. These tools apply the Theory of Financial Intermediation by facilitating access to finance, lowering transaction costs, and creating economic value, thereby fostering MSME growth and sustainability in developing economies like Kenya.

2.2.2 Innovation Diffusion Theory

Diffusion of Innovation (DOI) Theory, developed by E.M. Rogers in 1962, is one of the oldest social science theories (Allen et al., 1997). It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system (Abor, 2018). The result of this diffusion is that people, as part of a social system, adopt a new idea, behaviour, or product. Adoption means that a person does something differently than what they had previously (that is to say, purchase or use a new product, acquire and perform a new behaviour) (Cortes et al., 2020). According to the theory, the key to adoption is that the person must perceive the idea, behaviour, or product as new or innovative.

New inventions like electronic lending or E-lending have been adapted and become successful in the conducting of business (Chen et al., 2018). Innovation involves the deliberate application of information aimed at the generation of unique ideas (Erel et al., 2020). E-lending is an innovation that came as a need to continue the provision of financial services like lending through mobile applications. The new technology is key to innovation and is influenced by its usefulness, compatibility, complexity, and observability (Danisewicz & Elard). This new technology has increased the number of transactions undertaken by the mobile platform. The e-lending innovation is useful because it speeds up the work by ensuring a maximum number of transactions are achieved. SMEs in Kenya that have adopted mobile lending have posted increased volumes of transactions (Erel et al., 2020).

In the Kenya context, the adoption of electronic lending by development finance institutions is seen as a means to enhance financial access for MSMEs, aligning with the innovation diffusion theory. This technology has notably increased transaction volumes for SMEs in Kenya. Collateral-free credit and business grants on the other hand represent innovative financial solutions that reduce barriers to financing, making them attractive to MSMEs. Their adoption demonstrates the spread of these innovations, highlighting their role in enhancing financial access and promoting business growth.

2.3 Empirical Review

2.3.1 Effect of E-Lending on the Financial Performance of MSMEs

The studies reviewed offer valuable insights into the impact of E-lending on SMEs, highlighting both its benefits and challenges. Chernenko, Erel, & Prilmeier (2019) shed light on how non-bank lenders cater to riskier market segments, potentially enhancing access to finance for SMEs. However, the higher default rates among E-lending borrowers signal potential risks associated with this form of financing. Balyuk et al. (2020) suggest that E-lending competes with traditional bank lending, particularly affecting large/out-of-market banks. This underscores the growing importance of E-lending in the financial landscape. Ogare's (2019) study in Nairobi County reveals mixed perceptions of electronic financial platforms among MSMEs, indicating potential barriers to adoption despite the positive relationship between E-lending and business growth. Similarly, Erel et al. (2020) highlight the benefits of E-lending, such as convenience and speed, but also identify barriers such as high payment costs and limited merchant acceptance. These studies collectively underscore the need for further research to address gaps in understanding the nuanced impact of E-lending on SMEs, including its long-term sustainability, regulatory challenges, and implications for financial inclusion. Additional research could also explore the role of other factors, such as digital literacy and infrastructure, in shaping MSMEs' utilization of E-lending platforms and their overall financial performance.

2.3.2 Effect of Collateral-free Credit on Financial Performance of MSMEs

While the studies reviewed shed light on the impact of financing, particularly from Development Finance Institutions (DFIs), on MSME performance and growth, several gaps warrant attention. Firstly, while Gichuki et al. (2017) and Ndagijimana (2019) emphasize the importance of collateral in accessing credit and SME growth, there is limited exploration of alternative financing mechanisms beyond collateral-based lending. Lakuma, Marty, & Muhumuza (2019) highlight the challenges faced by SMEs in accessing credit due to collateral requirements, but there is a lack of discussion on innovative solutions to address these challenges. Additionally, while Bakang (2017) and Masira (2019) underscore the positive impact of direct financing from DFIs, there is a need for further research to examine the long-term sustainability and scalability of such interventions. Moreover, the studies predominantly focus on access to finance, overlooking other critical factors such as business management skills, market access, and regulatory environment, which also influence MSME performance. Therefore, future research should adopt a holistic approach to understand the multifaceted nature of MSME development and the role of financing within this context.

2.3.3 Effect of Business Grants on Financial Performance of MSMEs

Namusonge (2018) explored the relationship between business grants and SME performance in Uganda, suggesting that grants could mitigate capital market imperfections. However, the study did not delve into specific mechanisms through which grants impact SMEs, leaving a gap in understanding how grants translate into improved performance. Natalie (2021) highlighted a strong positive correlation between business grants and SME success, but the study lacked nuanced analysis on the conditions under which grants are most effective, leaving questions about the contextual factors influencing grant efficacy unanswered. While Lahaye (2016) observed significant benefits of grants for smaller enterprises, the study did not address potential limitations or challenges associated with grant implementation, overlooking important nuances in grant effectiveness. Gyimah & Agyeman (2019), Gitau & Wanyoike (2019), and Bruck (2018) reported mixed or insignificant effects of grants on SME profitability, indicating the need for further research to identify the specific conditions under which grants are most beneficial. Additionally,

Andersen et al. (2019) and Bakang (2017) highlighted challenges in SMEs accessing external financing and bureaucratic hurdles in grant delivery systems, suggesting areas for improvement in grant distribution processes. Ayyagari et al. (2021) demonstrated positive effects of grants on sales, employment, and survival probability in Rwanda, but the study did not explore potential limitations or drawbacks of grant programs, leaving gaps in understanding the full scope of grant impacts. Overall, while existing research indicates the potential of grants to support SME growth, there is a need for more nuanced analyses to identify contextual factors influencing grant effectiveness and address challenges in grant delivery systems.

2.4 Summary of literature and research gaps

The literature review delved into various theories pertinent to the study, notably innovation diffusion theory and financial intermediation theory. Within this scope, there is a consensus among existing literature that E-lending, collateral-free credit, and business grants exert substantial positive influence on the financial performance of Micro, Small, and Medium Enterprises (MSMEs). However, it is notable that studies focusing specifically on E-lending, such as those by Chernenko et al. (2019), Ogare (2019), and Erel et al. (2020), have predominantly emphasized mobile banking, neglecting the nuanced domain of E-lending itself. Similarly, while the literature acknowledges the significant impact of business grants, particularly on smaller businesses with fewer than 20 employees, research on collateral-free credit remains scarce. Existing studies, including those by Gichuki et al. (2017), Erel et al. (2020), Ochido (2019), and Kidali (2020), have primarily explored the relationship between collateral adequacy and credit access, overlooking the direct effects of collateral-free credit provision.

Moreover, studies conducted in the Kenyan context, such as those by Gitau et al. (2019), Masira (2019), and Kaloki et al. (2018), have predominantly adopted a one-dimensional approach, focusing solely on E-lending, collateral, or business grants individually, thereby leaving a conceptual void. Similarly, Gyimah et al. (2019) examined how Development Financial Institutions (DFIs) support SMEs, emphasizing their contributions to growth through funding, advisory services, and capital mobilization. However, the study overlooked the aspects of E-lending, collateral-free credit, or grants, potentially limiting the applicability of its findings to

this study's context. lastly, Masira (2019) investigated DFIs' impact on investment and employment in MSMEs in Nairobi County but failed to consider the financing mechanisms employed by DFIs and their implications on MSMEs' financial performance, thereby presenting both methodological and conceptual gaps.

To address these existing gaps, this study's aim was to evaluate the influence of DFI funding on the financial performance of MSMEs, focusing specifically on three key variables: E-lending, collateral-free credit, and business grants. By adopting a comprehensive approach that considers these interrelated factors, this research endeavors to provide a more holistic understanding of the dynamics between DFI funding and MSME financial performance. The research gaps are summarized in Table 2.1

Table 2.1: Summary of Research Gaps

Author	Title	Gap	The focus of the current study
Ogare (2019)	Impact of computerized monetary admittance to credit on development of little and medium ventures in Nairobi Area, Kenya.	The extension was restricted to SMEs in Nairobi County and the sample size was little which might have introduced examining predisposition.	The study focused on a bigger sample size of MSMEs in Nairobi County in, Kenya.
Erel and Liebersohn (2020)	SMEs reception of E-loaning especially versatile banking in Finland.	The review presents a contextual hole as the setting of the review is not the same as Kenya and in this way the business climate in Finland can't be completely applied to Kenyan setting.	This study looked at the effect of E-lending on performance of MSMEs in Kenya.

Kidali, (2020)	The ramifications of E-loaning exchanges on the productivity of SMEs: an Instance of Nakuru CBD, Kenya.	The review presents a methodological gap since it just centered around SMEs and concentrated entirely on miniature organizations.	The current study focused on MSMEs for conclusive analysis.
Gichuki, Njeru and Tirimba (2017)	Effect of security on the exhibition of MSMEs in Kenya.	The review presents a conceptual gap as its significantly centred around the sufficiency of insurance and focused on non-guarantee supporting.	The focus of this study was on free-collateral credit on the financial performance of MSMEs.
Lakuma, Marty and Muhumuza (2019)	What direct funding meant for SME development in Uganda as well as the difficulties and requirements SMEs face in getting credit.	The review introduced context-oriented holes because business guidelines in Uganda are not quite the same as Kenya and thusly the discoveries may not completely hold in a Kenyan setting.	This study was conducted in Kenya.
Kaloki and Muendo (2018)	The impact of admittance to fund on the development of ladies possessed undertakings in Kitui Province.	This was a contextual investigation of Kitui Region zeroing in on ladies possessed undertakings and subsequently, sampling predisposition	The purpose of this research was to assess the impact of direct financing by DFIs on the financial performance of MSMEs.

might have been available.

Natalie (2021)	The capability of business awards on execution of SMEs.	The review inspected SMEs and concentrated entirely on miniature endeavours, and this might have introduced sampling predisposition.	The focus of this study was MSMEs
Basile, De Kemp, Gotz, Lundsgaarde and Orth (2019)	Impact of business awards on MSMEs development potential and work open doors.	The review presents a conceptual gap on the grounds that the centre was the development capability of SMEs and work open doors.	This study was focused on three variables: E-lending, Collateral-free credit, and business grants.

Source (Researcher, 2023)

2.5 Conceptual framework

The independent variables (E-lending, Collateral-free credit and business grants) in Figure 2.1 below are directly linked with financial performance of MSMEs. The study will use profitability to gauge the financial performance of MSMEs as the dependent variable. To measure E-lending, two indicators will be used: instant credit and ease of access. Collateral-free credit will use unsecured business loans as well as micro loans as the main indicators while business grants will be measured by two indicators: start-up grants and corporate grants.

Independent Variables

Dependent Variables

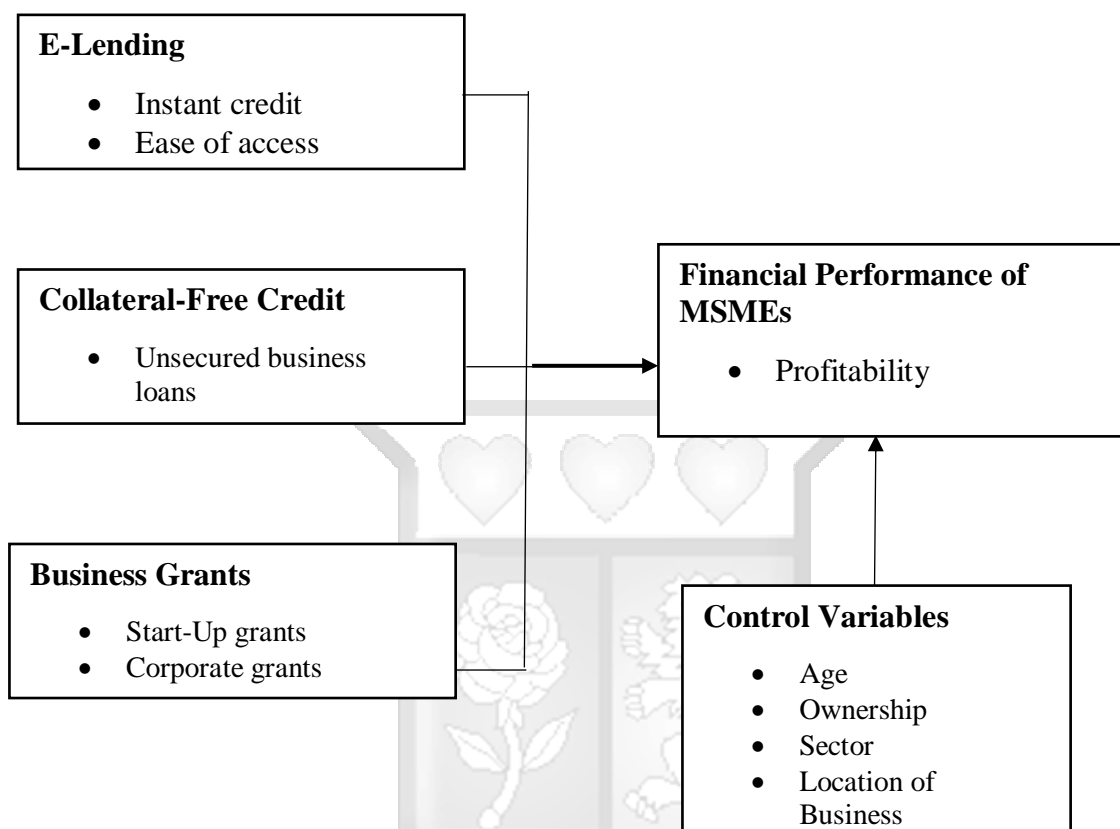


Figure 2.1: Conceptual Framework

Source (Researcher, 2023)

2.5.1 Operationalization of Variables

Table 2.2: Operationalization of variables

Variable	Measure/ Indicator	Measurement scale	Supporting literature
Financial Performance of MSMEs	<ul style="list-style-type: none"> Profitability 	Ratio/Ordinal	Chernenko, Erel, and Prilmeier (2019); Ogare (2019); and Erel and Liebersohn (2020).
E-Lending	<ul style="list-style-type: none"> Instant credit Ease of access 	Ordinal (5-point Likert Scale)	Gichuki, Njeru and Tirimba (2017); Erel and Liebersohn

			(2020); Ochido (2019); and Kidali, (2020).
Collateral-Free Credit	<ul style="list-style-type: none"> • Unsecured business loans • Microloans 	Ordinal (5-point Likert Scale)	Basile, De Kemp, Gotz, Lundsgaarde and Orth (2019); Erel and Liebersohn (2020); Ochido (2019); and Kidali, (2020).
Business Grants	<ul style="list-style-type: none"> • Start-Up grants • Corporate grants 	Ordinal (5-point Likert Scale)	Basile, De Kemp, Gotz, Lundsgaarde and Orth (2019).
Control Variables	<ul style="list-style-type: none"> • Sector of Business • Location of Business • Size of Business 		Basile, De Kemp, Gotz, Lundsgaarde and Orth (2019)



CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the data collection and analysis procedures the researcher used to determine how DFI financing is helping financial performance of MSMEs in Nairobi County. The following subtopics were covered in the chapter: research design, population, sample methodologies and components, data collection and analysis that will be utilized to address the study's research objectives; and lastly is the ethical considerations.

3.2 Research Philosophy

Philosophy is the angle at which a researcher looks at the research problem (Tsoukas et al., 2001). There are two common angles of research philosophy: positivism and interpretivist. Positivists claim there is a single, objective reality that can be observed and measured without bias using standardized instruments (Tsoukas et al., 2001). Interpretivists accept that there is a reality but argue that it cannot be measured directly, but perceived by people differently through the lens based on their prior experience, knowledge, and expectations (Afsar et al., 2017). This study was informed by positivist philosophy to ensure objectivity and measurability. Positivist is a paradigm that relies on measurement and reason, that knowledge is revealed from a neutral and measurable (quantifiable) observation of activity, action or reaction (Afsar et al., 2017). Positivists states that if something is not quantifiable, it cannot be known for certain (Afsar et al., 2017). Based on positivists' philosophy, this study will apply quantitative approach to assess and understand the impact of Development Finance Institutions on the financial performance of micro, small, and medium-sized enterprises in Nairobi County, Kenya.

3.3 Research Design

The research design for the study was descriptive. A descriptive study strategy is a scientific approach that involves observing and describing the behaviour of several participants with little to no outside influence. The research can then determine who, when, what, and by how much (Cooper et al., 2015). This design was appropriate since it contributed to minimizing research bias, ensuring objectivity and increasing reliability of the data collected. Based on this, the study used a quantitative research design to explain and

illustrate how funding by Development Finance Institutions influenced financial performance of micro, small, and medium-sized enterprises in Nairobi County.

3.4 Population of the study

3.4.1 Population

According to Kumekpor (2013), a research population consists of people with different traits and features that a study tries to examine in its examination and analysis. A population is, more specifically, the sum of all the units that make up a phenomenon or a problem that needs to be studied and for which all available observations are comparable. This study's target population was the 3.5million registered MSMEs in Nairobi County (The Kenya National Bureau of Statistics, KNBS, 2022), especially those located in the central business district (CBD) for ease of access.

3.4.2 Sample Size and Sample Design

3.4.2.1 Sampling Frame

This section describes how subjects will be chosen for observation. Therefore, the sampling frame outlines the process to be used to choose the study's sample. According to Cooper & Schindler (2015), a sample frame is a list of components from which the sample is drawn and closely connected to the population being studied. In this study, small tuck shops and kiosks, food and non-alcoholic outlets, alcoholic beverages outlets, Beauty shops, Butcherries, Book Shops, Electronic shops owners, Liquefied petroleum gas (LPG) refilling stations, Grocery and cereal shops, Cosmetics shops, motorcycle repair shops, hardware shops among others made up the sample frame.

3.4.2.2 Sampling Design

Sampling design is the method or practices the researcher would use when choosing the items for the sample (Battaglia et al., 2016). The study's sample were chosen via stratified random sampling. Stratified random sampling, according to Battaglia et al. (2016), is a statistical technique that involves grouping a population into several strata based on distinct shared characteristics. Micro, small, and medium-sized enterprises in Nairobi County were the focus of this study, hence stratification was divided into four strata: retail,

manufacturing, general store and wholesale. This were determined through KNBS annual reports and different DFI data bases. To ensure that each member of the strata is fairly represented, a random sampling process was also implemented. By doing this, sample bias was reduced, and the results' analysis was simpler.

3.4.2.3 Sample Size

Due to accessibility, the sample size was drawn from the MSMEs operating in the Nairobi CBD. To ensure equal representation of the MSMEs, participants were chosen using a purposeful sampling strategy. Purposive sampling is a form of non-probability sampling in which researchers rely on their own judgment when choosing members of the population to participate in their surveys (Cooper et al., 2015). The study will apply the Yamane formula to determine the sample size. A sample size of 10% to 30% of the target population would provide a good representation Mugenda & Mugenda (2003). The formula was as shown below:

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

Were

n = sample size

N = Population

α = margin of error

$$n = \frac{3500000}{1+3500000(0.05)^2} = 400 \times 30\%$$

$$n = 120$$

3.5 Data Collection Method

The primary research tool for this study was a structured questionnaire. To gather quantitative data, closed-ended questions made up the questionnaire. The questionnaire was broken up into components that addressed fundamental data and demographics as well as an assessment of how funding by Development Finance Institutions was helping financial performance of micro, small, and medium-sized enterprises in Nairobi County. The variables relevant to the study's research objectives were explored using interval scale on a five-point Likert scale (1 representing strongly disagree to 5 representing strongly agree), in order to establish respondents' agreement with the concepts under inquiry. Both the close-ended questionnaire and the Likert scale ensured efficient, standardized, and objective data collection.

3.6 Data Analysis

For easy analysis, the raw data was coded according to each research variable. The statistical package for the social sciences (SPSS) software was used to generate descriptive and inferential statistics for this investigation. According to McDaniel et al. (2012), descriptive analysis is the process of converting raw data into tables and charts that include the percentages and frequency distributions that are crucial for comprehending the data. In this study, descriptive statistics like percentages and frequency distribution was used to analyse the participant demographics. Multiple regression was used to assess the connection between financing by Development Finance Institutions and financial performance of MSMEs in Nairobi County, Kenya. Multiple regression analysis, according to Branco (2013), is a statistical technique for figuring out the connections between variables.

The following equation represents the regression model:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_n \sum Z_n + \varepsilon$$

Dependent variables (Y) – Financial performance of MSMEs

Independent variables:

X_1 (E- lending),

X_2 (collateral-free credit),

X_3 (business grants),

Z_n (set of SME controls: age, size, ownership, sector)

$B_0 - \beta_3$ = Coefficients of determination,

ε is the error term denoting there may be a non-linear relationship between the independent and dependent variables which is referred to as “noise”.

3.7 Research Quality

This section presents two key research qualities: validity as well as reliability.

3.7.1 Research Validity

Validity was defined by Bridget & Lewin (2013) as the degree to which the sample of the test items accurately reflects the subject matter. In this study, face validity as well as content validity was used. The supervisor and experts in the field of direct funding as well as DFIs were consulted throughout the face and content validity assessment to make sure the questions are appropriate for measuring and addressing the research variables and to clear up any ambiguity.

3.7.2 Reliability of the Research Tool

Using Cronbach's formula, a reliability test was conducted to determine the internal consistency and accuracy of the questions used in the questionnaire (Blanchard, 2018). In order to accomplish this, a pilot test with 5 questions on a 5-point Likert scale from "strongly disagree" to "strongly agree" was carried out to ascertain whether the questions on the questionnaire accurately measured the same latent variable. The pilot testing involved 12 or 10% of the study sample size. This is consistent with the claim made by Mugenda & Mugenda (2003) that a sample size of between 10% and 30% of the target population is a good representation. Those who participated in the pilot testing did not take part in the main study to avoid sampling bias. The minimum reliable Cronbach's alpha value considered acceptable is 0.7 (Mugenda & Mugenda, 2013).

Cronbach's alpha statistic: $\alpha = (N*r/1+ (N-1) *r)$

Where, N = number of items; and r = average inter-item correlation among the items.

The results of the reliability tests are presented on Table 3.1 below:

Table 3.1: Item-Total Statistics

<i>Variable (V)</i>	<i>Scale Mean if Scale Item Deleted</i>	<i>Variance if Item Deleted</i>	<i>Corrected if Item-Total Correlation</i>	<i>Squared Multiple Correlation</i>	<i>Cronbach's Alpha if Item Deleted</i>
V1	30.40	12.044	.705	.971	.717
V2	30.30	11.344	.560	.941	.782
V3	30.60	10.044	.740	.968	.743
V4	31.00	7.778	.615	.988	.740

Based on the findings in Table 3.1, the average Cronbach's alpha (Cronbach's alpha if item deleted), for the variables was 0.745 which signified a high dependability of the research instrument and a high degree of internal consistency for the research tool that was used in this study. Further, the findings in Table 3.1 shows that the lowest corrected correlation was for variable two (2) which was 0.560 and which could have contributed to a decline in general reliability. The outcomes showed that removal of any variable, with the exception of variable 2, would have brought about a lower Cronbach's alpha. Removal of variable 2 would have prompted a little improvement in Cronbach's alpha (0.782).

3.8 Ethical Issues in Research

To ensure the integrity of the researcher, this study adhered to the necessary ethical standards. The researcher first sought permission from the National Commission for Science, Technology & Innovation (NACOSTI) and Strathmore Business School (SBS) to gather data. Respondents were free to engage or exit at any moment at their discretion without being forced to do so, and they were able to do so without penalty. Further, prior to their involvement in the study, respondents' consent was be gained by fully informing them of the benefits or consequences of

participating. Additionally, in order to acknowledge the use of both published and unpublished publications, data, and ideas in this study, proper citations and references were employed using American Psychological Association (APA) version 7.



CHAPTER FOUR: RESEARCH FINDINGS

4.1 Introduction

This chapter presents the findings of the study regarding the impact of Development financing on the financial performance of Micro, Small, and Medium-sized Enterprises (MSMEs) in Nairobi County. The findings in this chapter were analyzed with reference to responses collected through a questionnaire. The questionnaire served as the primary research tool, enabling the systematic gathering of data pertinent to the study's objectives. The study was divided into three sections: the first section presents the response rate and demographic characteristics of respondents; the second (descriptive statistics) analysed the effect of E- lending; collateral-free credit; and business grants on the financial performance of micro, small, and medium-sized enterprises in Nairobi County. The final section (Inferential statistics) analysed the statistical significance between Development Finance Institutions and financial performance of micro, small, and medium-sized enterprises in Nairobi County.

4.1.1 Response Rate

This section aimed to determine the actual number of respondents who completed the questionnaire response against the sample size that had been set. The number of respondents who successfully answered the items in the questionnaire in the study area is listed in this section (Table 4.1).

Table 4.1: Response Rate

Sample Size	120
Participants available	120
Total response	105
Non – response bias	12.5% (100-87.5)
Usable responses	105
Un – usable responses	15

Usable responses rate**87.5%**

Table 4.1 reveals that all 120 members who expressed an interest in the study were reachable, and 120 questionnaires were administered using Google forms. A total of 105 questionnaires were successfully completed and were used for further inquiry. Based on percentage formula as recommended by Chen, Gully & Eden (2018): $r = \frac{105}{120} \times 100 = 87.5$ (where r is response rate), the response rate was 87.5%. This was considered acceptable based on Mugenda & Mugenda (2013) contention that a response rate of 50% was sufficient for analysis and reporting, a rate of 60% is good, and a rate of 70% or more is exceptional, Further, Rossiter (2018) had suggested that researchers ought to use the quantity of usable replies as the numerator when there is a distinction between returned and usable surveys.

The results of the reliability tests are presented on Table 4.2 below:

4.2 Respondents' Demographics

Age, gender, level of education, number of years the business has been in existence, business sector, annual turnover of the business and type of business were all included while assessing respondents' demographics, as presented below.

Table 4.2: Sample Demographic Characteristics

Category	Frequency	Percent
Age		
18-22 years	9	8.57
23-27 years	11	10.47
28-32 years	30	28.58
33-37 years	33	31.43
38-42 years	22	20.95
<i>Total</i>	105	100
Gender		

Male	43	40.95
Female	62	59.05
<i>Total</i>	<i>105</i>	<i>100</i>

Level of Education

Primary school certificate	2	1.90
Secondary school certificate	7	6.66
Diploma	19	18.10
Bachelor's Degree	62	59.05
Masters	15	14.29
<i>Total</i>	<i>105</i>	<i>100</i>

Number of Years in Business?

Less than 5 years	0	0
5-7 years	4	3.81
8-10 years	18	17.14
11-15 years	73	69.52
Above 15 years	10	9.52
<i>Total</i>	<i>105</i>	<i>100</i>

Annual Turnover

Below Kshs.100,000	23	21.90
Kshs.100,001-500,001	20	19.05
Kshs.500,001-5,000,000	27	25.71
Kshs.5,000,001- 8 million	19	18.10
Above Kshs.8 million	16	15.24

Total	105	100
Industry		
Agribusiness	12.4	12.76
Transport	16	15.24
Beauty/Cosmetics	35.2	34.76
Hotel	27.6	28.19
Manufacturing	9.5	9.05
<i>Total</i>	<i>105</i>	<i>100</i>
Type of Business		
Sole proprietorship	73	69.52
Partnership	18	17.14
Company	10	9.52
Other-specify	4	3.81
<i>Total</i>	<i>105</i>	<i>100</i>

The findings as reported in Table 4.2 reveals that the bulk of the respondents (31.43%) were in the age category of 33-37 years, followed by 28.6% in the age bracket of 28-32 years. While 20.9% of those engaged were between the ages of 38 and 42. Only 8.5% of those interviewed in the research area were between the ages of 18 and 22. This goes to mean that the bulk of the SMEs owners in the research area are young entrepreneurs in their 30s, an age bracket that accounts for 75% of Kenya's overall population (KNBS, 2019). According to the Kenya national population and housing census of 2019, 75% of Kenya's (47.6 million people) are under the age of 35 (KNBS, 2019). Age was important to this study because different age groups have different levels of experience of business performances and this could

have effect on financial performance of micro, small, and medium-sized enterprises in the study area.

Further findings as presented in Table 4.2 revealed that more than half of the respondents (59.05%) in the study area were female while males accounted for 40.9%. This suggests that majority of the entrepreneurs operating MSMEs in the study area during the time of this research were women. This could also imply that women in the study area have embraced entrepreneurship thus breaking the bias by taking up roles that were formerly dominated by men. Gender was particularly important in this study because men and women have varying business as well as financing abilities and this could influence the financial performance of MSMEs.

Education levels on the other hand as presented in Table 4.2, were divided into five groups: Primary, secondary, diploma, bachelor's degree, and master's degree. According to the findings, the majority of respondents in the research area (59.04%) had earned a Bachelor's degree, followed by a Diploma (18.1%). A Master's degree was held by 14.3% of respondents, while secondary school certificate was held by 6.7%. In the study area, only 1.9% of the participants had a primary certificate. The findings suggests that most of the entrepreneurs in the study area had either a university degree or a college diploma which goes to mean that they could relate Development Finance Institutions and the financial performance of MSMEs in the study area. The degree of education was significant in this study because it informed that respondents are better at analyzing information and making substantive decisions, and therefore level of education can influence access to financing and ultimate business performance.

The findings as presented Table 4.2 revealed that more than half (69.52%) of the MSMEs sampled had been in operation for a period between 11-15 years while 17.14% of the businesses had been in existence for a period between 8-10 years. 9.52% of the MSMEs had operated for over 15 years while only 3.81% of the businesses had been in operation for 5-7 years. No business in the study area had operated for less than 5 years. This suggests that most of the MSMEs in the study area have sustained success over time and built on a strong foundation for long-term financial performance and ultimate growth.

Table 4.2 reveals that nearly half of the MSMEs (34.8%) were beauty and cosmetics businesses followed by those in the Hotel industry at 28.2%. This was followed by those in transport industry at 15.24%. Of the businesses sampled, 12.8% were in agribusiness while the least (9 %) were in manufacturing. The findings indicate that majority of the MSMEs were either in beauty/cosmetics or hotel industry. Based on the results, this suggests that the manufacturing sector in the study area is relatively underrepresented or Development Finance Institutions are not committed to the industry.

Based on the results as shown in Table 4.2, majority of the MSMEs 25.7% reported annual turnover of between Kshs.500,001-5,000,000 followed by a relatively sizeable (21.9%) of businesses who reported turnover of less than Kshs.100,000. 19% of the MSMEs reported annual turnover of between Kshs.100,001-500,001 followed by 18.1% of the sampled business with an annual turnover of between Kshs.5,000,001- 8 Million. Only 15.2% of the MSMEs in the study area reported annual turnover of above 8 million during the time of this study. The findings suggest that majority of the business were performing relatively better financially. This could also mean that Development Finance Institutions were making sense to a sizeable number of MSMEs in the study area.

The findings as reported in Table 4.2 reveals that more than half of the MSMEs (69.5%) in the study area were sole proprietorships followed by partnerships at 17.14%. 9.52% of the businesses sampled were registered as companies while 3.8% were others which could not be classified as either sole proprietorship, partnership or a company. The findings suggest that most of the businesses in the study area were either micro or small businesses which aligns with the common association of sole proprietorships with small-scale operations. The results also means that majority of the businesses in the study area were fit for micro financing which could be accessed through E-lending, or could be issued as a collateral-free credit as well as business grant.

The findings from Table 4.2 resonate with the Anchore Theory of Financial Intermediation and the Diffusion of Innovation Theory. The predominance of young entrepreneurs with a high level of education suggests a receptive environment for innovative financing solutions like E-lending, aligning with the concept of financial intermediation as proposed by the Anchore Theory. This theory emphasizes the role of financial intermediaries in bridging the gap between savers and borrowers, particularly by adapting to the needs and

characteristics of different market segments. Additionally, the concentration of businesses in specific sectors indicates opportunities for targeted support through collateral-free credit and business grants, reflecting the principles of the Diffusion of Innovation Theory. This theory posits that innovations spread through social systems over time, with certain sectors or groups adopting them more readily than others. By tailoring financing options to the needs of these sectors, policymakers and funders can accelerate the diffusion of innovative financial solutions, ultimately fostering growth and development in SMEs. Therefore, by recognizing the demographic and sector-specific dynamics highlighted in Table 4.2 and aligning financing strategies accordingly, policymakers and funders can effectively leverage these theories to drive positive outcomes in SME financing and development.

4.3 Descriptive Statistics

The study assessed the impact of Development financing on the financial performance of micro, small, and medium-sized enterprises in Nairobi County. The descriptive statistics specifically the mean scores, frequencies as well as standard deviations were used to summarize the outcome variables in the study. To do this, a 5-point Likert scale was used where respondents were asked to indicate the extent to which they agree or disagree with the indicators provided. The responses were coded, and each instance of agreement or disagreement was rated from 1 to 5: (5-strongly agree, 4-agree, 3-neutral, 2-disagree, and 1 strongly disagree). Descriptive statistics was generated through SPSS version 28 and the output illustrated in tabular form:

4.3.1 The effect of E- lending on the financial performance of micro, small, and medium-sized enterprises in Nairobi County.

The study examined the effect of E- lending on the financial performance of micro, small, and medium-sized enterprises. The respondents rating on the 5-point Likert scales was analysed using the mean scores and standard deviations. The results are presented in Table 4.3.1:

Table 4.3.1: Descriptive analysis of the effect of E- lending on the financial performance of MSMEs.

Indicator	N	Min	Max	Mean	Std. Dev
-----------	---	-----	-----	------	----------

There are no documents required for one to receive financial assistance from DFI.	105	3	5	4.00	0.909
There is grace period accorded to credit defaulters.	105	2	5	3.39	1.197
Ease in applying and approval of short-term loan or overdraft	105	1	5	3.39	1.626
Save costs and time to access the credit facility.	105	1	5	1.95	1.534
E-credit is affordable in terms of user fee and interest rates.	105	1	4	2.59	1.378
E-lending is flexible to borrower needs, especially in restructuring loans.	105	1	5	3.49	1.600
It is adaptive to multiple banks, mobile money and payment gateways.	105	1	5	3.64	1.481
Valid N (listwise)	105				
Valid N (listwise)	105				

The first objective of the study was to examine the effect of E-lending on the performance of MSMEs in Nairobi County. The results from Table 4.3.1, highlights key aspects of E-lending that influence MSMEs' financial performance. The findings indicate that the absence of stringent documentation requirements for accessing financial assistance from Development Finance Institutions (DFIs) through E-lending facilitates direct interaction between MSMEs and lenders, leading to speedy access to financing. Moreover, the adaptability of E-lending to multiple banks, mobile money, and payment gateways underscores its accessibility and convenience for MSMEs, contributing to a positive financial performance trajectory. These results are further supported by previous studies,

including those by Kidali (2020) and Danisewicz and Elard (2018), which emphasize the significant impact of E-lending on enhancing business returns and SME performance. Additionally, the discussion on the influence of fees associated with E-lending services and the availability of monetary resources reaffirms the importance of these factors in driving SME progress. Therefore, the analysis provides comprehensive insights into how E-lending positively affects the financial performance of MSMEs in Nairobi County, Kenya, addressing the objective of the study.

4.3.2 The influence of collateral-free credit on the financial performance of micro, small, and medium-sized enterprises in Nairobi County.

The study assessed the effect of collateral-free credit on the financial performance of micro, small, and medium-sized enterprises. The respondents rating on the 5-point Likert scales was analysed using the mean scores and standard deviations. The results are presented in Table 4.3.2:

Table 4.3.2: Descriptive analysis of the effect of collateral-free credit on the financial performance of MSMEs.

<i>Indicator</i>	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>Std. Dev</i>
There are no collateral requirements for obtaining a credit from DFI.	105	1	5	4.10	1.173
Collateral-free credit comes with a favourable repayment period that enables SMEs to pay all pending loans in time.	105	1	5	3.79	1.357
Collateral-free credit have longer repayment period.	105	1	5	3.84	1.539
The credit is usually processed and issued within a shorter period.	105	1	5	3.10	1.839

Collateral-free credit comes with shorter repayment period that has affected business profitability negatively.	105	1	5	3.27	1.533
Businesses are given grace period before starting to repay the loans.	105	1	5	3.96	1.517
The interest rates are too high.	105	1	5	3.88	1.434
Valid N (listwise)	105				

The second objective of the study was to assess the influence of collateral-free credit on the performance of micro, small, and medium-sized enterprises (MSMEs) in Nairobi County. The findings from Table 4.3.2, highlight key aspects of collateral-free credit that impact MSMEs' financial performance positively. The high proportion of respondents indicating the absence of collateral requirements for obtaining credit suggests that collateral-free credit was widely accessible to MSMEs in the study area. Additionally, the significant number of respondents mentioning the provision of a grace period before loan repayment indicates that MSMEs experienced improved financial performance due to collateral-free credit. These findings align with the study's objective, demonstrating that collateral-free credit enhances business growth and overall financial performance for MSMEs in Nairobi County. Moreover, the reference to Ndagijimana's (2019) research reinforces the observed positive connection between access to credit and MSME development, further supporting the study's conclusions regarding the impact of collateral-free credit. Therefore, the analysis provides valuable insights into how collateral-free credit influences the financial performance of MSMEs in Nairobi County, Kenya, effectively addressing the study's objective.

4.3.3 The effect of business grants on the financial performance of micro, small, and medium-sized enterprises in Nairobi County.

The study determined the effect of business grants on the financial performance of micro, small, and medium-sized enterprises. The respondents rating on the 5-point Likert scales

was analysed using the mean scores and standard deviations. The results are presented in Table 4.3.3:

Table 4.3.3: Descriptive analysis of the effect of business grants on the financial performance of MSMEs.

<i>Indicator</i>	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>Std. Dev</i>
I have not received any development grant since the business started.	105	1	5	4.21	0.805
It takes too long to get a business grant after applying.	105	1	5	3.87	1.119
It is not easy to learn about the availability of business grants.	105	1	5	3.99	1.275
I'm better off in terms of business and entrepreneurship education than I was before the business grant	105	1	5	3.28	1.673
The grant appraisal, approval, post-grant monitoring, and evaluation has enabled me to run a successful business.	105	1	5	3.50	1.249
There has been numerous follow-up and business training after the grant.	105	1	5	3.81	1.387
The business grants have provided me with an upgraded financial performance.	105	1	5	3.28	1.673
Valid N (listwise)	105				

The third objective of the study was to determine the effect of business grants on the performance of micro, small, and medium-sized enterprises (MSMEs) in Nairobi County. The results from Table 4.3.3, sheds light on key aspects of business grants that impact MSMEs' performance. The high proportion of respondents reporting that they have not received any development grant since the business started suggests a potential exclusion of start-up MSMEs from business grant support. Additionally, the significant number of

respondents expressing difficulty in finding out about the availability of business grants implies challenges in accessing these funding opportunities, possibly due to insufficient annual returns to attract such grants. These findings are consistent with Namusonge's (2018) research in Uganda, which highlights the reliance of MSMEs on their financial capacity to attract capital, including business grants. The study underscores the limitations faced by MSMEs in accessing adequate funding for their operational and investment needs, hindering their growth potential. Therefore, the analysis provides valuable insights into how business grants impact the performance of MSMEs in Nairobi County, Kenya, effectively addressing the study's objective.

4.3.4 Financial performance of micro, small, and medium-sized enterprises in Nairobi County.

The study determined the financial performance of micro, small, and medium-sized enterprises. The respondents rating on the 5-point Likert scales was analysed using the mean scores and standard deviations. The results are presented in Table 4.3.4:

Table 4.3.4: Descriptive analysis of financial performance of micro, small, and medium-sized enterprises.

<i>Indicator</i>	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>Std. Dev</i>
As a result of accessing finance from DFI I have increased the monthly revenue of the company.	105	3	5	4.42	0.852
The proportion of incomes has increased as result of receiving funding from DFIs.	105	2	5	4.06	1.223
As a result of accessing funds from DFIs, return on Assets has increased.	105	1	5	4.10	1.454
There is increased efficiency in service delivery.	105	1	5	3.24	1.914

As a result of accessing funds from DFIs, financial liquidity has improved.	105	1	5	3.44	1.544
Cashflow availability by the enterprise has improved.	105	1	5	4.14	1.424
Enterprise profits has increased over the years	105	1	5	4.25	1.292
Valid N (listwise)	105				

Based on the analysis conducted, it was concluded that financial backing from Development Finance Institutions (DFIs) had a significant positive impact on the financial performance of micro, small, and medium-sized enterprises (MSMEs). The highest reported mean indicated expanded monthly revenue and improved cash flow availability, suggesting that DFIs played a crucial role in driving financial growth for the sampled MSMEs. The findings implied that continued support from DFIs could contribute to sustained financial growth and future prosperity for these businesses. Moreover, the consistency of these findings with a report by the World Bank Gathering further strengthened the conclusion, highlighting the broader positive impact of DFIs on MSMEs, particularly amid challenging economic conditions such as the COVID-19 pandemic. Therefore, it was inferred that DFIs played a vital role in enhancing the financial performance and resilience of MSMEs.

4.4 Factor analysis

Table 4.4: Total Variance Explained

Compon ent	Initial Eigenvalues		
	Total	% of Variance	Cumulativ e %
1	2.897	72.435	72.435
2	1.575	14.382	86.817

3	2.341	8.515	95.332
4	2.187	4.668	100.000

Extraction Method: Principal Component Analysis.

Table 4.4 shows that all the four factors had eigenvalues greater than 1. This means that all the factors met the cut-off criterion (extraction method).

4.5 Correlation analysis

Pearson Correlation Analysis was conducted to examine the relationship between the key variables in the study. This statistical method measures the strength and direction of the linear relationship between two variables. This was done by analysing the means of variables x and y to determine how Pearson's (r) varies between +1 and -1; where +1 is a perfect positive correlation, and -1 is a perfect negative correlation. 0 means there is no linear correlation at all while the p-value will give evidence of a statistically significant relationship between the variables. If a p-value is less than 0.05, then there is evidence of a statistically significant relationship between the variables and vice versa.

Table 4.5: Correlations

		E-Lending	Collateral-Free Credit	Business Grants	Financial Performance
E-Lending	Pearson Correlation	1	.592	.709*	.602
	Sig. (2-tailed)		.122	.049	.114
	N	8	8	8	8
Collateral-Free Credit	Pearson Correlation	.592	1	.488	.745*

	Sig. (2-tailed)	.122		.220	.034
	N	8	8	8	8
Business	Pearson				
	Correlation	.709*	.488	1	.655
Grants	Sig. (2-tailed)	.049	.220		.078
	N	8	8	8	8
Financial	Pearson				
	Correlation	.602	.745*	.655	1
Performance	Sig. (2-tailed)	.114	.034	.078	
	N	8	8	8	8

*. Correlation is significant at the 0.05 level (2-tailed).

The results shown in Table 4.8 reveal that Collateral-free credit has a positive and statistically significant relationship with financial performance ($r = 0.745$, $p = 0.034$), E-lending has a positive but not statistically significant relationship with financial performance ($r = 0.602$, $p = 0.114$), and Business grants have a positive but not statistically significant relationship with financial performance ($r = 0.655$, $p = 0.078$). This was interpreted to mean that the more collateral free credit was available for the sampled businesses in the study area, the better the financial performance was likely to be sustained notwithstanding the minimal effect. As for E-lending and business grants, it was interpreted that for these two variables to significantly influence the financial performance of MSMEs, other conditions or variables may need to be at play. These findings are partially consistent with Namusonge (2018) who studied the relationship between business collateral free credit and the performance of SMEs in Uganda. The study noted that MSMEs generally relies upon their financial capacity to draw in capital.

4.6 Inferential Statistics

Inferential statistics was done through multiple regression analysis to determine the statistical significance of DFIs and financial performance of the sampled MSMEs

4.6.1 Multiple Regression

Multiple regression analysis involves examining the relationship between a dependent variable and two or more independent variables. For purposes of this study,

linear Multiple regression analysis is utilized to gauge the relationships between Development Finance Institutions (DFIs) and the financial performance of the surveyed Micro, Small, and Medium Enterprises (MSMEs). This method assesses the strength of these relationships by examining the analysis of variance (ANOVA) and regression coefficients. The ANOVA matrix illustrates the overall significance of the model. Therefore, if p value is less than 0.05- it merits rejection of the hypothesis there is a significant influence of at least one of the predictor variables on the dependant variable (Laub, 2018). Regression coefficient (beta column) shows the relationship between the DFIs and financial performance of the sampled MSMEs. If the beta coefficient is negative/positive, the interpretation is that for every 1-unit increase/decrease in the predictor variable, the outcome variable will decrease/increase by the beta coefficient value. Thus, the linear multiple regression approach is justified because it allows for the examination of the relationship between multiple independent variables (such as E-lending, Collateral-free credit and Business grants) and a continuous dependent variable (financial performance of MSMEs).

The following equation represented the regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_n \sum Z_n + \varepsilon$$

Dependent variables (Y) – Financial performance of MSMEs

Independent variables:

X₁ (E- lending),

X₂ (Collateral-free credit),

X₃ (Business grants),

Z_n (set of SME controls: age, size, ownership, and sector)

B₀- β₃ = Coefficients of determination,

ε is the error term denoting there may be a non-linear relationship between the independent and dependent variables which is referred to as “noise”.

Table 4.6.1: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	895.623	7	437.803	5.699	0.001
Within Groups	7723.383	24	133.141		
Total	8619.006	31			

The analysis of variance test was used to evaluate how well the entire regression model fits the data as predictor of performance. The result as shown in Table 4.7 revealed that, at a significance threshold of 0.001, the $F(7, 31) = 5.699$ and p value < 0.001 was significant. The result demonstrates a statistically significant relationship between the dependent variable (financial performance) and the predictor factors (E-lending, collateral-free credit, & business grants). This is due to the significance value being less than 0.05 ($p = 0.001$).

In Table 4.8, the whole Regression model was displayed as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_n \sum Z_n + \varepsilon$$

Based on the coefficients Table 4.8, the following was deduced:

Table 4.6.2: Coefficients

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Beta			Lower Bound	Upper Bound
	Std. Error					

(Constant)	0.365	0.148		-2.464	0.069	-0.777	0.046
E- lending	0.189	0.035	0.029	0.502	0.642	-0.081	0.116
¹ Collateral-free credit	1.096	0.064	0.933	17.151	0.053	0.919	1.274
Business grants	0.051	0.046	0.039	1.115	0.327	-0.076	0.178

a. Dependent Variable: Effective Strategy Implementation

$$Y = 0.365 + 0.189 (\text{E- lending}) + 1.096 (\text{Collateral-free credit}) + 0.051 (\text{Business grants}) + 0.148$$

The regression coefficients illustrated in Table 4.10 revealed Collateral-free credit $\beta = 0.933$, P value = 0.05. This implies that when other variables are held constant, a one-unit increase in collateral-free credit is associated with a 0.933 unit increase in financial performance.

Further, the regression coefficients illustrated in Table 4.10 showed that business grants $\beta = 0.039$, P value = 0.05. This implied that when other variables are held constant, a one-unit increase in business grants is associated with a 0.039 unit increase in financial performance.

Finally, from Table 4.10, the regression coefficients shows that E- lending $\beta = 0.029$, P value = 0.05. This implied that when other variables are held constant, a one-unit increase in E-lending is associated with a 0.029 unit increase in financial performance.

4.7 Chapter Summary

The chapter has shown that the response rate for the study was 87.5% and that the bulk of the MSMEs owners in the research area were young entrepreneurs in their 30s. It was found that majority of the entrepreneurs operating MSMEs in the study area during the time of this research were women sole proprietors with either a university degree or a college diploma. More than half (73 percent) of the MSMEs sampled had been in operation for a period between 11-15 years, mostly in beauty/cosmetics or hotel industry. Further, majority of the business were performing relatively better financially. The overall regression analysis revealed that among the predictor factors, only collateral-free credit had a

statistically significant relationship with the dependent variable (financial performance), while E-lending and business grants did not show a statistically significant influence. The accompanying chapter examined the discoveries of the review and gave the conclusions as well as the recommendations in light of the particular goals of this review.



CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This was the final chapter of the study. It summarized the findings of the primary study, drew conclusions based on the findings of the study, provided recommendations as well as insight in the areas for further research. The following specific objectives guided the chapter: (i) to examine the effect of E- lending on the financial performance of micro, small, and medium-sized enterprises in Nairobi County; (ii) to assess the influence of collateral-free credit on the financial performance of micro, small, and medium-sized enterprises in Nairobi County; and (iii) to determine the effect of business grants on the financial performance of micro, small, and medium-sized enterprises in Nairobi County.

5.2 Summary of Findings.

A total of 105 questionnaires were successfully completed and were used for further inquiry making the response rate to be 87.5% based on percentage formula as recommended by Chen, Gully & Eden (2018). The study also found that the bulk of the MSMEs owners in the research area were young entrepreneurs in their 30s, an age bracket that accounts for 75% of Kenya's overall population (KNBS, 2019). Further findings revealed that majority of the entrepreneurs operating MSMEs in the study area during the time of this research were women. This meant that women in the study area have embraced entrepreneurship thus breaking the bias by taking up roles that were formerly dominated by men. According to the study, most of the entrepreneurs in the study area had either a university degree or a college diploma which meant that they could relate Development Finance Institutions and the financial performance of MSMEs in the study area.

More than half (73 percent) of the MSMEs sampled had been in operation for a period between 11-15 years while 18 percent of the businesses had been in existence for a period between 8-10 years. This suggests that most of the MSMEs in the study area have sustained success over time and built on a strong foundation for long-term financial performance and ultimate growth. According to the study, majority of the MSMEs were either in beauty/cosmetics or hotel industry. Based on the results, this suggested that the manufacturing sector in the study area was underfinanced or Development Finance Institutions were not committed to the industry. Further, the study revealed that majority

of the business were performing relatively better financially meaning that Development Finance Institutions were proving beneficial to a substantial number of MSMEs in the study area. The study has found that most of the businesses in the study area were either micro or small businesses which aligns with the common association of sole proprietorships with small-scale operations. This meant that majority of the businesses in the study area were fit for micro financing which could be accessed through E-lending, or could be issued as a collateral-free credit as well as business grant.

Based on the descriptive statistics the highest mean = 4.00 (SD = 0.909) revealed that there were no documents required for one to receive monetary help from DFI, meaning that E-lending allows a direct interaction between MSMEs and lenders making speedy access to financing by businesses in the study area which ultimately enhances financial performance. The study revealed that the highest number of the respondents, mean = 4.10 (SD= 1.173) were of the view that there were no security prerequisites for obtaining credit from DFI meaning that collateral-free credit was accessible by a wider range of MSMEs in the study area. However, the results indicated that majority of the respondents, mean =4.21 (SD= 0.805) had not gotten any advancement award since they started their business meaning that MSMEs which may be start-up businesses were often excluded from business grant support. The study also reported that due to financial back up from DFI, the monthly revenue of the MSMEs had expanded meaning that DFIs had a direct positive impact on financial performance of the sampled MSMEs. Finally, the overall regression analysis revealed a statistically significant relationship between the dependent variable (financial performance) and the predictor factors (E- lending, collateral-free credit, & business grants).

5.3 Discussion

5.3.1 The effect of E- lending on the financial performance of MSMEs.

Based on the descriptive statistics the highest mean = 4.00 (SD = 0.909) revealed that there were no documents required for one to receive monetary help from DFI, meaning that E-lending allows a direct interaction between MSMEs and lenders making speedy access to financing by businesses in the study area which ultimately enhances financial performance. The regression coefficients revealed E- lending $\beta = 0.029$, P value = 0.05. This implied that

when other variables are held constant, a one-unit increase in E-lending is associated with a

0.029 unit increase in financial performance. The study is supported by a quantitative study by Kidali, (2020) who investigated the implications of E-lending transactions on the profitability of SMEs: in the Case of Nakuru CBD, Kenya. The objective of the review was to ascertain the implications of E-lending transactions on SME financial success in Nakuru CBD. The exploration results showed that the E-lending stage impressively affected the business returns of the tested SMEs. The discoveries are upheld by a cross-sectional concentrate by Danisewicz and Elard (2018) who focused on the viability of E-lending and the presentation of SMEs in Japan: a contextual investigation of Kyushu city. The review laid out that E-lending detailed a huge impact on the SME business. The review inferred that both the fees associated with E- lending services and the availability of monetary resources significantly influence the progress of Small and Medium-sized Enterprises (SMEs).

In another study, Mayabi (2018) assessed the impact of E-lending (a case of M-shwari) on the growth of SMEs in Kisumu County. The study focused on M-Shwari client knowledge, repayment of microcredit, access to microcredit as well as micro-credit risks. The ease with which SMEs could access micro-credit impacted their development. This score of 3.52 indicates it wasn't sufficient to adequately support SME growth.

Further, Chernenko, Erel, and Prilmeier (2019) analysed the impact of direct loans by non-bank lenders to publicly traded medium-sized firms during the 2010-2015 period. The findings showed that non-bank lenders provide relatively more credit to unprofitable businesses, catering to a riskier market segment than traditional banks. The findings also documented that E-lending platforms improve MSMEs' access to finance by relaxing firms' collateral constraints.

5.3.2 The influence of collateral-free credit on the financial performance of MSMEs.

The study has revealed that the highest number of the respondents, mean = 4.10 (SD= 1.173) were of the view that there were no security prerequisites for getting a credit from DFI which was taken to mean that collateral-free credit was accessible by a wider range of MSMEs in the study area.

The study also found Collateral-free credit $\beta= 0.933$, P value = 0.05. This implies that when other variables are held constant, a one-unit increase in collateral-free credit is associated with a 0.933 unit increase in financial performance.

This is in line with a cross-sectional study by Gichuki, Njeru, and Tirimba (2017) who studied the impact of collateral on the performance of MSMEs in Kenya. Discoveries showed that security and admittance to credit displayed a critical positive effect on MSMEs' exhibition. The investigation likewise discovered that security free credit had a positive and measurably critical connection with the exhibition of MSMEs.

In another study, Ndagijimana (2019) examined the relationship between direct financing and the financial performance of SMEs within the Langata constituency in Nairobi County, Kenya. Findings indicated a clear correlation between collateral, access to credit, and SME growth. Furthermore, the adequacy of owners' collateral positively influenced entrepreneurial expansion. The survey recommended the enactment of policies mandating financial institutions to support SMEs.

A case study was undertaken by Moretto and Scola Gahwiler (2017) to evaluate the impact of credit from DFIs on the performance of SMEs in Morogoro, Tanzania. The study revealed that SMEs receiving loans from development banks experienced improvements across various metrics including profitability, employee engagement, business expansion, sales turnover, assets, and capital.

In order to further bolster the development of SMEs, the review proposed that Development Finance Institutions (DFIs) explore opportunities to enhance funding while also considering the possibility of reducing collateral requirements.

5.3.3 The effect of business grants on the financial performance of MSMEs.

The study found that majority of the respondents, mean =4.21 (SD= 0.805) reported that they have not gotten any advancement award since they started their business and this was taken to mean that MSMEs especially start-up businesses were often excluded from business grant support.

Further, the study revealed that business grants $\beta= 0.039$, P value = 0.05. This implied that when other variables are held constant, a one-unit increase in business grants is associated with

a 0.039 unit increase in financial performance. This was consistent with Natalie (2021) who examined the function of business grants on the performance of SMEs and found a strong positive correlation between business grants and the success of SMEs. The results implied that business grant has a favourable effect on business performance, job creation, and productivity. The review underscores the importance of business grants in addressing the capital needs of smaller enterprises. It suggests that by providing smaller grant amounts, a larger number of recipient firms can be supported. According to Natalie (2021), participation in business support programs has a positive impact on employment, sales, and revenue. These findings align with the research conducted by Musacchio, Lazzarini, Makhoul, and Simmons (2017), who observed that business grants yield significant benefits for SMEs in terms of sales and employment, particularly for firms in their first year of operation. However, firms aged between two and five years show no discernible effects from such programs.

The favourable effect of business grants on growth of SMEs also corroborates with a study by Lahaye (2016) which found a larger positive benefits of business grants for businesses with fewer than 20 employees. Theoretically, according to the study, business grants should have more favourable effects on smaller enterprises' employment, sales, and labour productivity because grant amount is better suited to easing the capital limitations of smaller firms than those of bigger ones. Similarly, findings from a recent study conducted by Gyimah and Agyeman (2019) indicated that business grants generally influence capital stock, bank loans, and value added. However, the review notes the absence of empirical studies supporting any effects on productivity, sales, and employment. Furthermore, Gitau and Wanyoike (2019) observed no significant evidence indicating that small business grants positively impact the profitability of firms in the current financial year compared to the previous year. These findings are consistent with Bruck's (2018) assertion that there are no statistically significant relationships between business grant funding and small business performance. Both studies suggest that while business grants may be beneficial, they are primarily effective for young businesses. Consequently, it remains unclear whether business grants are exclusively advantageous for emerging businesses to achieve positive outcomes in firm performance or if they serve as an intermediary for small firms and their associated loans, the success of which is yet to be determined. The studies recommend that

to ensure SME growth, funders or business grant providers should enhance and refine their distribution systems.

5.4 Conclusions

Supporting evidence from literature indicates that E-lending significantly enhances SME profitability and performance by improving access to finance, though its impact on growth can vary based on contextual factors and service costs. For instance, Kidali (2020) found that E-lending significantly impacts the profitability of SMEs in Nakuru CBD, Kenya, supporting the idea that E-lending platforms can enhance business returns. Similarly, Danisewicz and Elard (2018) reported a significant positive impact of E-lending on SME performance in Kyushu city, Japan, corroborating its beneficial effects. The study concluded that key factors influencing SME success with E-lending include access to sufficient financial resources, costs associated with the services, and the easing of collateral requirements. Further, E-lending platforms may offer financing without requiring high collateral deposits, overcoming a barrier faced by SMEs with traditional banks (Chernenko et al., 2019). Mayabi's (2018) study highlights the need for further exploration of factors like microcredit risk management and client knowledge to optimize E-lending's impact. Overall, E-lending enhances SME financial performance by simplifying funding access and serving riskier market segments.

Regarding collateral-free credit, supporting evidence from literature shows that collateral-free credit significantly enhances MSME performance. Gichuki, Njeru, and Tirimba (2017) found a positive, statistically significant relationship between collateral-free credit and MSME performance in Kenya. Ndagijimana (2019) identified a correlation between collateral, access to credit, and SME growth in Nairobi, noting that adequate collateral supports entrepreneurial expansion. The availability of collateral-free credit is crucial for MSME financial performance and growth, as it removes financing barriers and leads to improvements in profitability, expansion, and overall business performance. In summary, collateral-free credit significantly boosts MSME financial performance and growth, supported by empirical evidence from various studies, and policy initiatives to reduce collateral requirements and enhance funding could further bolster SME development.

Based on the study findings, Business grants play a crucial role in enhancing the performance and growth of SMEs, particularly for smaller enterprises. Research by

Musacchio, Lazzarini, Makhoul, and Simmons (2017) have highlighted significant benefits associated with business grants, including improvements in sales, employment rates, and overall productivity. Grants are particularly advantageous for newer firms, aiding them in expanding operations and contributing to economic growth. They demonstrate greater effectiveness for younger businesses, especially those with fewer than 20 employees. While studies indicate the potential benefits of grants, their effectiveness appears to be more pronounced for emerging businesses. However, the impact of grants on the performance of more established firms remains unclear. To foster SME growth, it's crucial for funders and business grant providers to enhance and refine their distribution systems. This entails targeting grants more effectively towards start-ups and younger businesses, as they may benefit most from such support. Additionally, improvements in the overall effectiveness of grant programs are necessary to ensure that resources are allocated efficiently and have the desired impact on SME development.

5.5 Recommendations

5.5.1 Recommendations for Management

To enhance the growth of MSMEs, E-lending offerings should be customized to meet the specific requirements of borrowers, especially in the context of loan recovery. To achieve this, it is advised that E-lending fees or charges be kept at reasonable levels.

To foster the development of MSMEs, the study recommends that Development Finance Institutions (DFI's) explore avenues to enhance funding accessibility by reducing collateral requirements. Specifically, the study suggests that DFI's transition from a collateral-focused approach to a more client-centered model for financial assistance.

The study recommends that Development Finance Institutions (DFI's) streamline their bureaucratic processes associated with awarding business grants. This streamlining would reduce the lengthy delays often encountered during the application and investment approval phases.

Further, they should also consider a holistic approach to MSME financing, incorporating multiple forms of support (e.g., e-lending, collateral-free credit, and business grants) to maximize potential benefits.

5.5.2. Recommendation for policy makers/regulators

It is recommended that regulators should put their weight on Investing in digital infrastructure and regulatory frameworks that are essential to support efficient and secure e-lending platforms tailored to MSMEs' needs. Regular monitoring and evaluation are also crucial to assess the effectiveness of MSME financing policies and adjust strategies based on evidence of impact.

It is also recommended that Policymakers should incentivize financial institutions to offer collateral-free credit options to MSMEs, ensuring accessibility and affordability and encourage partnerships among stakeholders to leverage resources and expertise, fostering coherence in policy initiatives supporting MSMEs.

5.6 Areas of further research

It is recommended that Future research endeavours should aim for a broader scope to yield more meaningful insights, given that this study concentrated solely on MSMEs in Nairobi County. This can be achieved by examining additional factors beyond those addressed in this study and by utilizing a larger sample size across different geographical locations. Research could focus on emerging trends such as peer-to-peer lending, crowdfunding, and impact investing, and evaluate their potential to address financing gaps for MSMEs.

Furthermore, future research should expand its focus beyond Development Finance Institutions (DFIs) to encompass a wider spectrum of access to finance options. Research could investigate partnerships between government, private sector entities, and civil society organizations to facilitate access to finance and support MSME development.

5.7 Limitations of the study

The absence of prior research works on the subject constituted the main constraint. This study used the few research gaps in the literature despite this constraint and suggested areas for further research on the subject under study in order to remedy this constraint.

REFERENCES

- Abor, J. Y. (2018). *Entrepreneurial finance for MSMEs: A managerial approach for developing markets*. Springer.
- Allen, F., & Santomero, A. M. (1997). The theory of financial intermediation. *Journal of Banking & Finance*, 21(11-12), 1461-1485.
- Andersen, O. W., Basile, I., De Kemp, A., Gotz, G., Lundsgaarde, E., & Orth, M. (2019). *Blended finance evaluation: Governance and methodological challenges*.
- Attridge, S. (2021). *The catalytic effects of DFI investment-gender equality, climate action and the harmonisation of impact standards: An essay series*. ODI Report.
- Ayyagari, M., Juarros, P., Martinez Peria, M. S., & Singh, S. (2021). Access to finance and job growth: Firm-level evidence across developing countries. *Review of Finance*, 25(5), 1473-1496.
- Bakang, M. L. N. (2017). Effects of financial deepening on economic growth in Kenya. *International Journal of Business and Commerce*, 4(7), 1-50.
- Balyuk, T., Berger, A. N., & Hackney, J. (2022). What is fueling FinTech lending? The role of banking market structure. *The Role of Banking Market Structure* (June 27, 2022).
- Bhandari, L., Dasgupta, S., & Gangopadhyay, S. (2018). Development financial institutions, financial constraints and growth: Evidence from the Indian corporate sector. *Journal of Emerging Market Finance*, 2(1), 83-121.
- Bilal, S., Bueno, M., Dembele, F., Fulga, M. S., Lee, N., & Wildschutt-Prins, A. (2020). *The role of DFIs and their shareholders in building back better in the wake of COVID-19*. Tri Hita Karana Working Paper For Development Finance Institutions.
- Bouri, A., Breij, M., Diop, M., Kempner, R., Klinger, B., & Stevenson, K. (2017). *Report on support to SMEs in developing countries through financial intermediaries*. Dalberg. November, 1-48.

- Bruck, N. (2018). Role of development banks in the twenty-first century. *Journal of Emerging Markets*, 3, 39-68.
- Calice, P. (2017). *African development finance institutions: Unlocking the potential*. African Development Bank.
- Chen, B. S., Hanson, S. G., & Stein, J. C. (2018). The decline of big-bank lending to small business: Dynamic impacts on local credit and labor markets (No. w23843). *National Bureau of Economic Research*.
- Chernenko, S., Erel, I., & Prilmeier, R. (2022). Why do firms borrow directly from nonbanks? *The Review of Financial Studies*, 35(11), 4902-4947.
- Chittenden, F., Hall, G., & Hutchinson, P. (2018). Small firm growth, access to capital markets and financial structure: Review of issues and an empirical investigation. *Small Business Economics*, 59-67.
- Cortés, K. R., Demyanyk, Y., Li, L., Loutskina, E., & Strahan, P. E. (2020). Stress tests and small business lending. *Journal of Financial Economics*, 136(1), 260-279.
- Danisewicz, P., & Elard, I. (2018). The real effects of financial technology: Marketplace lending and personal bankruptcy. Available at SSRN 3208908.
- DeAngelo, H., DeAngelo, L., & Whited, T. M. (2019). Capital structure dynamics and transitory debt. *Journal of Financial Economics*, 99(2), 235-261.
- Dickinson, T. (2018). Development finance institutions: Profitability promoting development. Retrieved, 23, 2012.
- Erden, L., & Holcombe, R. G. (2018). The effects of public investment on private investment in developing economies. *Public Finance Review*, 33(5), 575-602.
- Erel, I., & Liebersohn, J. (2020). Does fintech substitute for banks? Evidence from the paycheck protection program (No. w27659). *National Bureau of Economic Research*.

- Everhart, S. S., & Sumlinski, M. A. (2020). *Trends in private investment in developing countries: Statistics for 1970-2000 and the impact on private investment of corruption and the quality of public investment* (Vol. 44). World Bank Publications.
- Gichuki, J. A. W., Njeru, A., & Tirimba, O. I. (2017). Challenges facing micro and small enterprises in accessing credit facilities in Kangemi Harambee market in Nairobi City County, Kenya. *International Journal of Scientific and Research Publications*, 4(12), 1-25.
- Gitau, N. M., & Wanyoike, D. M. (2019). Influence of Kenya industrial estates services to the growth of micro and small enterprises in Kenya. *International Journal of Arts and Commerce*, 3(3), 81-88.
- Gyimah, A. G., & Agyeman, A. S. (2019). A study on how development finance institutions support SMEs: A case study of international finance corporation. *International Journal of Financial Research*, 10(2), 27-35.
- Islam, M. A. (2017). An empirical assessment of the impact of development financial institutions (DFIs) on Malaysian economy. *International Journal of Financial Economics*, 4(4), 176-184.
- Kaloki, J. D., & Muendo, D. (2018). Effect of central bank of Kenya regulations on the financial performance of microfinance banks. *Strategic Journal of Business and Change Management*, 5, 584-623.
- Kidali, F. K. (2020). Access to credit and growth of micro, small and medium-scale enterprises in Kenya (Doctoral dissertation, University of Nairobi).
- Lahaye, E. (2016). Leveraging equity investments to build inclusive financial markets. *Focus note*, (No. 104). World Bank.
- Lakuma, C. P., Marty, R., & Muhumuza, F. (2019). Financial inclusion and micro, small, and medium enterprises (MSMEs) growth in Uganda. *Journal of Innovation and Entrepreneurship*, 8(1), 1-20.

- Masira, S. M. (2019). Development finance and its effects on investment and employment in MSEs in Nairobi County (Doctoral dissertation, University of Nairobi).
- Mayabi, H. K. (2018). Effect of access to credit on growth of small and micro enterprises in Kenya: Case of boutiques in the Nairobi central business district.
- Michael, S. C., & Combs, J. G. (2018). Entrepreneurial failure: The case of franchisees. *Journal of Small Business Management*, 46(1), 73-90.
- Mong'are, C. M. (2017). Factors influencing the growth of small and medium enterprises in Kenya: A case study of Nairobi County (Doctoral dissertation, United States International University-Africa).
- Moretto, L. M., & Scola Gahwiler, B. B. M. (2017). Development finance institutions and financial inclusion: From institution-building to market development (No. 119215, pp. 1-24). *The World Bank*.
- Muhandachi, G. (2020). Adoption of mobile banking and financial performance of micro small and medium enterprises in Bungoma County, Kenya (Doctoral dissertation, University of Nairobi).
- Musacchio, A., Lazzarini, S. G., Makhoul, P., & Simmons, E. (2017). The role and impact of Development Banks. *World Bank Working Paper*.
- Namusonge, G. S. (2018). The role of development financial institutions in the acquisition of technological capabilities by small and medium enterprises in Kenya.
- Natalie, C. (2021). Towards harmonised management and measurement of impact: The experience of development finance institutions.
- Ndagijimana, A. N. (2019). Effect of mobile lending on the financial performance of commercial banks in Kenya (Doctoral dissertation, University of Nairobi).

Ochido, P. (2019). Relationship between credit accessibility and growth of small and medium size enterprises in Nairobi County, Kenya (Doctoral dissertation, University of Nairobi).

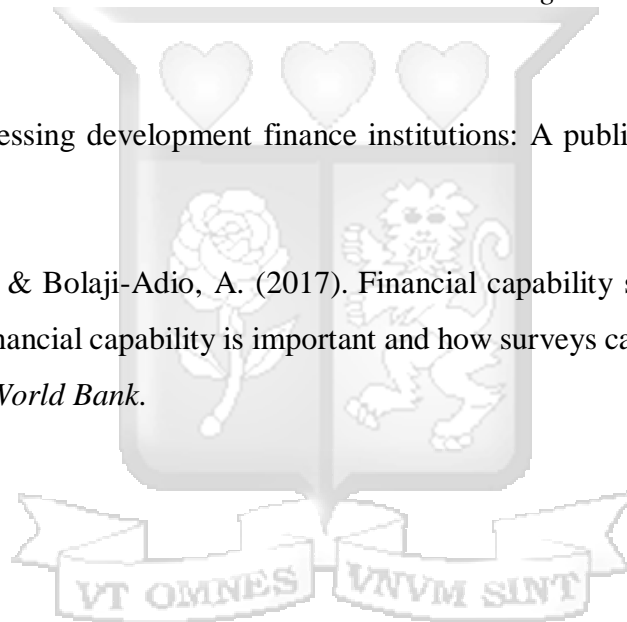
Ogare, H. O. (2019). The effect of electronic banking on the financial performance of commercial banks in Kenya (Doctoral dissertation, University of Nairobi).

Pandey, A., & Gupta, R. (2018). Entrepreneur's performance and financial literacy – A critical review. *International Journal of Management Studies*, 5(3), 1-14.

Wernerfelt, B. (2016). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.

Yaron, J. (2016). Assessing development finance institutions: A public interest analysis. *World Bank*.

Zottel, S., Perotti, V., & Bolaji-Adio, A. (2017). Financial capability surveys around the world: Why financial capability is important and how surveys can help (No. 80767, pp. 1-8). *The World Bank*.



APPENDICES

APPENDIX A: INTRODUCTION LETTER TO THE PARTICIPANTS

To Whom It May Concern

Dear Sir/Madam,

RE: REQUESTING FOR PERMISSION TO CONDUCT ACADEMIC RESEARCH

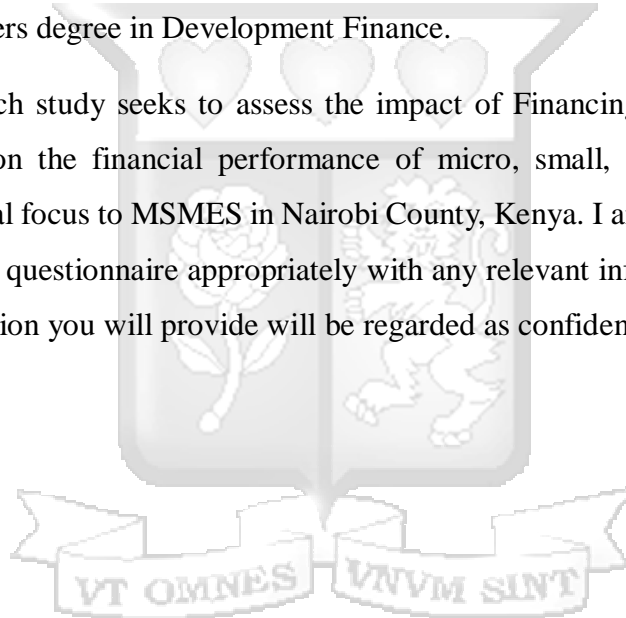
I am Wolde Hage Jama, pursuing a postgraduate degree in Development Finance at Strathmore Business School (SBS), Nairobi. As part of the requirements of my degree, I am supposed to conduct a research study related to Development Finance in order to qualify for the award of Masters degree in Development Finance.

Therefore, this research study seeks to assess the impact of Financing by Development Finance Institutions on the financial performance of micro, small, and medium-sized enterprises with special focus to MSMES in Nairobi County, Kenya. I am writing to kindly request you to fill this questionnaire appropriately with any relevant information you may possess. Any information you will provide will be regarded as confidential. Thank you for your support.

Sincerely

Wolde H. Jama

Strathmore Business School



APPENDIX B: QUESTIONNAIRE

The questionnaire seeks to collect information on the impact of financing by Development Finance Institutions on the financial performance of micro, small, and medium-sized enterprises in Nairobi County, Kenya. The questionnaire is divided into 3 sections. Please answer the questions below as precisely and truthful as possible. Any information provided will be held with strict confidentiality and anonymity. Your answers will be used for academic purposes only.

(Kindly tick your responses against each question in the spaces provided).

SECTION A: PERSONAL INFORMATION

A. General Information

1. Please indicate your age

18-22 years

Above 23-27 years

Above 28-32 years

Above 33-37 years

Above 38-42 years

Over 43 years

2. State your gender

Male

Female

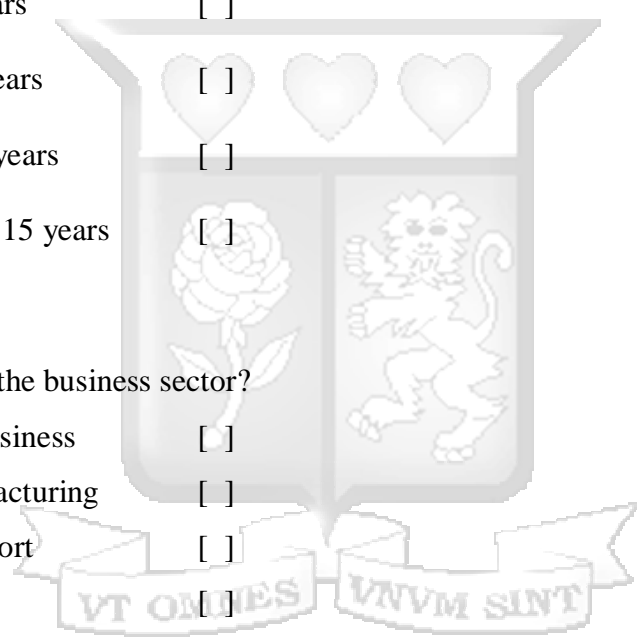
3. Indicate your Education level

Primary school certificate

- Secondary school certificate []
- Diploma []
- Bachelor's Degree []
- Masters []
- PhD []

4. Indicate the age of business?

- Less than 5 years []
- 5-7 years []
- 8-10 years []
- 11-15 years []
- Above 15 years []



5. Indicate the business sector?

- Agribusiness []
- Manufacturing []
- Transport []
- Hotel []
- Health []
- Beauty/Cosmetics []

6. Indicate the annual turnover of the business?

- Below Kshs. 100,000 []
- Kshs. 100,001-500,001 []
- Kshs. 500,001-5,000,000 []
- Kshs. 5,000,001-800million []
- Above Kshs. 800 million []

7. Type of business

- Sole proprietorship []
- Partnership []

Company []

Other-specify []

SECTION B: E- LENDING

8. Kindly indicate your level of agreement or disagreement on the following statements concerning the influence of E-Lending on financial performance of your business on a scale of 1-5: (where: 5- Strongly Agree; 4-Agree; 3-Neutral; 2- Disagree; 1- Strongly Disagree).

<i>No</i>	<i>Indicator</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
1.	There are no documents required for one to receive financial assistance from DFI					
2.	There is grace period accorded to loan defaulters.					
3.	Ease in applying and approval of short-term loan or overdraft					
4.	Save costs & time to access the credit facility.					
5.	E-credit is affordable in terms of user fees & interest rates.					
6.	E-lending is flexible to borrower needs, especially in restructuring loans.					
7.	It is adaptive to multiple banks, mobile money & payment gateways.					

9. What percentage of financial performance can be attributed to E-Lending?

- a) 0-20% []
- b) 21-40% []
- c) 41-60% []
- d) 61-80% []
- e) 81-100% []

SECTION C: COLLATERAL-FREE CREDIT

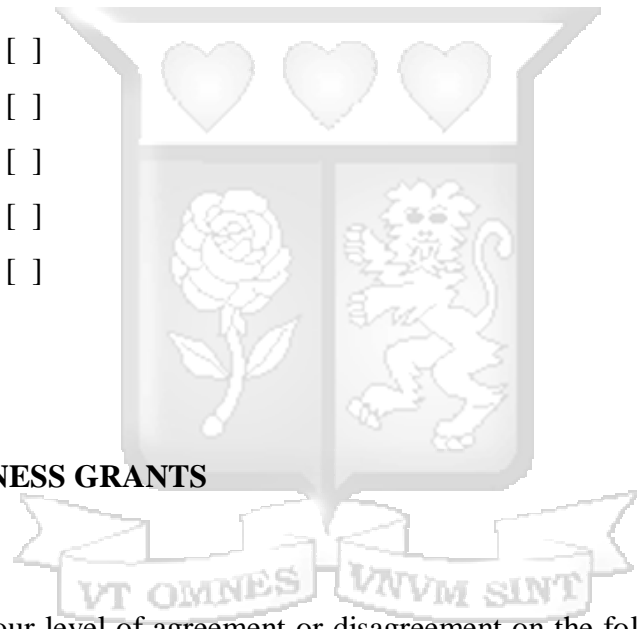
10. Kindly indicate your level of agreement or disagreement on the following statements concerning the influence of collateral-free credit on financial performance of your business on a scale of 1-5: (where: 5- Strongly Agree; 4-Agree; 3-Neutral; 2- Disagree; 1- Strongly Disagree).

<i>No.</i>	<i>Indicator</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
1.	There are no collateral requirements for obtaining a credit from DFI.					
2.	Collateral-free credit comes with a favorable repayment period that enables SMEs to pay all pending loans in time.					
3.	Collateral-free credit have longer repayment period.					
4.	The credit is usually processed and issued within a shorter period.					

5.	Collateral-free credit comes with shorter repayment period that has affected business profitability negatively.					
6.	Businesses are given grace period before starting to repay the loans.					
7.	The interest rates are too high					

11. What percentage of financial performance can be attributed to collateral-free credit?

- a) 0-20% []
- b) 21-40% []
- c) 41-60% []
- d) 61-80% []
- e) 81-100% []



SECTION D: BUSINESS GRANTS

12. Kindly indicate your level of agreement or disagreement on the following statements concerning the influence of business grants on financial performance of your business on a scale of 1-5: (where: 5- Strongly Agree; 4-Agree; 3-Neutral; 2- Disagree; 1- Strongly Disagree).

<i>No.</i>	<i>Indicator</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
1.	I have not received any development grant since the business started.					
2.	It takes too long to get a business grant after applying.					

3.	It is not easy to learn about the availability of business grants.					
4.	I am better off in terms of business and Entrepreneurship education than I was before the business grant.					
5.	The grant appraisal, approval, post-grant monitoring, and evaluation has enabled me to run a successful business.					
6.	There has been numerous follow-up and business training after the grant.					
7.	The business grants have provided me with an upgraded financial performance.					

13. What percentage of financial performance can be attributed to business grants?

- a) 0-20% []
- b) 21-40% []
- c) 41-60% []
- d) 61-80% []
- e) 81-100% []

SECTION E: FINANCIAL PERFORMANCE

14. On a scale of 1 to 5, rate your agreement or disagreement with the following assertions about financial performance of your institution: (In this case, 5-Strongly Agree; 4-Agree; 3-Neutral; 2-Disagree; 1-Strongly Disagree).

<i>No.</i>	<i>Indicator</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
1.	As a result of accessing finance from DFI I have increased the monthly revenue of the company					
2.	The proportion of incomes has increased as result of receiving funding from DFIs					
3.	As a result of accessing funds from DFIs, return on Assets has increased.					
4.	There is increased efficiency in service delivery					
5.	As a result of accessing funds from DFIs, financial liquidity has improved					
6.	Cashflow availability by the enterprise has improved					
7.	Enterprise profits has increased over the years					

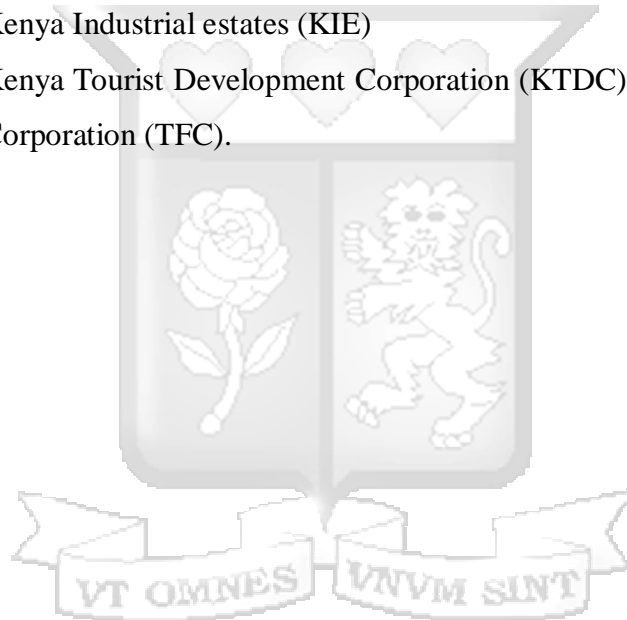
15. What percentage of financial performance can be attributed to direct financing by Development Finance Institutions?

- a) 0-20% []
- b) 21-40% []
- c) 41-60% []
- d) 61-80% []
- e) 81-100% []

THANK YOU FOR PARTICIPATING

APPENDIX C: LIST OF KENYAN PUBLIC DEVELOPMENT FINANCE INSTITUTIONS

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



APPENDIX D: CONSENT FORM

Title of the Research: IMPACT OF DEVELOPMENT FINANCING ION THE FINANCIAL PERFORMANCE OF NAIROBI COUNTY MSMES

Principal Researcher Name: Wolde Hage Jama

School: Strathmore University

Purpose of the Study

The study will seek to assess the impact of Financing by Development finance institutions on the financial performance of micro, small, and medium-sized enterprises with a special focus on MSMEs in Nairobi County, Kenya. 120 participants are expected for this research.

To be eligible for participation in this study, you must meet the following criteria:

- You must be the owner or manager of an MSME in Nairobi County, Kenya.
- Your MSME must have been in operation for at least two years.
- Your MSME must have received financing from a DFI in the past five years

Please be aware that this research does not offer any form of compensation. It is purely an academic and voluntary process. Your participation in this research is entirely voluntary, and you have the option to withdraw your participation at any time without consequence. The discoveries will be presented in an anonymous style in the final report. Except if you agree to be perceived. Your remarks will stay unknown, and members' names are aliases.

If you agree to participate in this study, you will be asked to complete a questionnaire. The questionnaire will take approximately 30 minutes to complete. You will also be asked to provide some basic information about your MSME, such as the number of employees, annual sales, and financial performance.

There are no known risks associated with participating in this study. The potential benefits of participating in this study include:

- You will gain a better understanding of the relationship between DFI financing and MSME financial performance.
- You may be able to identify ways to improve your MSME's financial performance.
- Your participation will help to inform future research on MSMEs in Kenya.

The Strathmore University Institutional Ethics Review Committee (SU-IERC) has given their approval to this study. Please contact ethicsreview@strathmore.edu if you have any queries about your rights as a research participant.

You give your consent to participate in the survey by completing and submitting it.

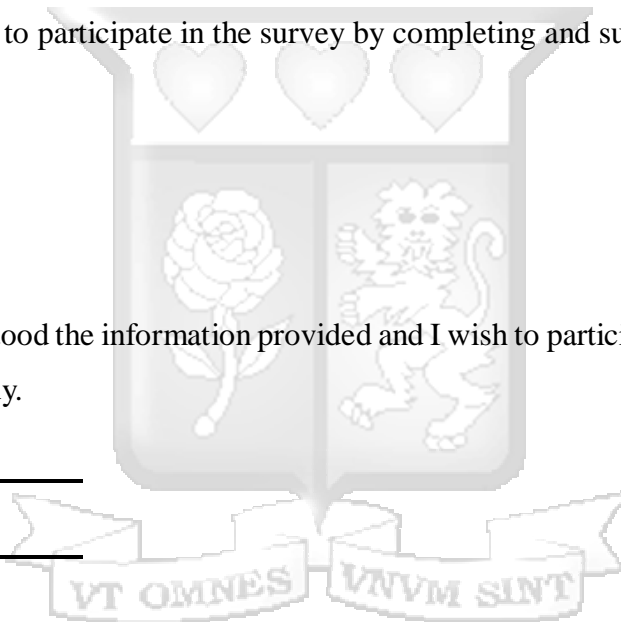
Consent

I have read and understood the information provided and I wish to participate. I voluntarily agree to take part in this study.

Name: _____

Signed: _____

Date: _____



APPENDIX E: PARTICIPANT INFORMATION SHEET

Your participation in this study is voluntary, and your responses to this survey will remain anonymous. Please refrain from providing any identifying information in your survey responses. Participation data will be kept confidential unless the researcher has obtained legal authorization to report specific incidents.

Consent

I have read and understood the information provided and I wish to participate (*Tick appropriately*)

I wilfully consent to partake in this review

I am not willing to participate

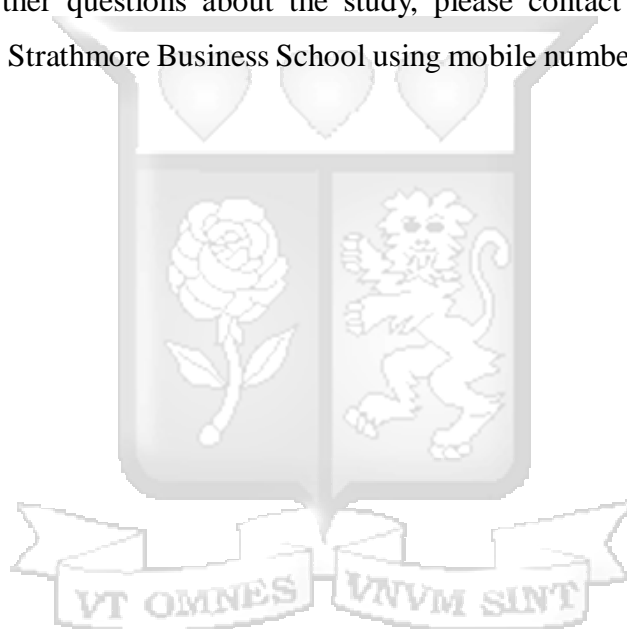


APPENDIX F: DEBRIEF FORM

Thank you for participating in this research study. Your participation will help the researcher to gain more insights into the impact of Financing by Development Finance Institutions on the financial performance of micro, small, and medium-sized enterprises with special focus to MSMES in Nairobi County, Kenya.

In the likely event, you have any kind of distressful reactions to the questions presented to you in this study, you are free to share any concerns with me and I will do my very best to provide necessary feedback on the same.

In case you have further questions about the study, please contact **Wolde H. Jama**, Development Finance, Strathmore Business School using mobile number, **+254 703567772**



APPENDIX G: BUDGET

Item	Unit	Unit Cost (KES)	Amount	Total
Enumerators wages	Man-days	1,500.00	2	3,000.00
Data entry and supervision	Man-days	10,000.00	1	10,000.00
Transport	Lumpsum	2,000.00	1	2,000.00
Purchase of data and printing	Lumpsum	5,000.00	1	5,000.00
<i>Sub-total</i>				20,000.00
<i>Contingency at 10% of total budget</i>				2,000.00
Grand total				22,000.00



27th March 2024

Ms Wolde Hage,
jama.hage@strathmore.edu

Dear Ms Wolde,

RE: Impact of Financing by Development Finance Institutions on the Financial Performance of Micro, Small, and Medium-Sized Enterprises in Nairobi County, Kenya

This is to inform you that SU-ISERC has reviewed and **approved** your above **SU-masters** research proposal. Your application reference number is **SU-ISERC2008/24**. The approval period is from **27th March 2024 to 26th March 2025**.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used.
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 72 hours of notification.
- iv. Any changes anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 72 hours.
- v. Clearance for the export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to the expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days of completion of the study to SU-ISERC.

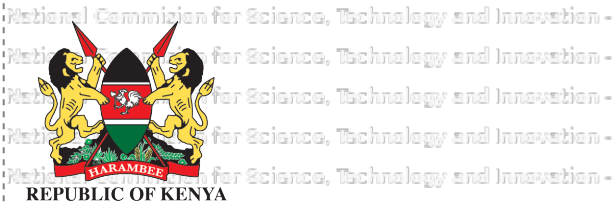
Before commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke/> and obtain other clearances needed.

Yours sincerely,



Mr Ambrose Rachier,
Chairperson; SU-ISERC





REPUBLIC OF KENYA



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 913082

Date of Issue: 13/April/2024

RESEARCH LICENSE



This is to Certify that Ms.. HAGE JAMA WOLDE of Strathmore University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: IMPACT OF FINANCING BY DEVELOPMENT FINANCIAL INSTITUTIONS ON THE FINANCIAL PERFORMANCE OF MICRO, SMALL, AND MEDIUM SIZED ENTERPRISES IN NAIROBI COUNTY, KENYA. for the period ending : 13/April/2025.

License No: NACOSTI/P/24/34492

913082

Applicant Identification Number

Walter Kimani

Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code



NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way;
 - i. Endanger national security
 - ii. Adversely affect the lives of Kenyans
 - iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
 - iv. Result in exploitation of intellectual property rights of communities in Kenya
 - v. Adversely affect the environment
 - vi. Adversely affect the rights of communities
 - vii. Endanger public safety and national cohesion
 - viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. The license any rights thereunder are non-transferable
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
8. The License does not give authority to transfer research materials.
9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

National Commission for Science, Technology and
Innovation(NACOSTI),
Off Waiyaki Way, Upper Kabete,
P. O. Box 30623 - 00100 Nairobi, KENYA
Telephone: 020 4007000, 0713788787, 0735404245
E-mail: dg@nacosti.go.ke
Website: www.nacosti.go.ke