

**EFFECT OF INNOVATIVE FINANCING SOLUTIONS ON THE SUSTAINABLE
GROWTH OF SMALL AND MEDIUM ENTERPRISES IN KENYA**

BY

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MASTER OF SCIENCE IN COMMERCE (FINANCE)

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**A RESEARCH DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
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OCTOBER 2024

DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged.

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I do hereby confirm that I have examined the master's dissertation of

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And have certified that all revisions that the dissertation panel and examiners recommended have been adequately addressed.

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ABSTRACT

The goal of this research was to evaluate how innovative financing methods impact the sustainable development of small and medium-sized businesses in Kenya. Guided by the specific objectives; to determine the effect of grant funding on the sustainable growth of Small and Medium Enterprises in Kenya, to determine the effect of invoice discounting on the sustainable growth of Small and Medium Enterprises in Kenya, to determine the effect of venture capital on the sustainable growth of Small and Medium Enterprises in Kenya. The theories relevant to this study were the pecking order theory, agency theory, trade off theory and credit rationing theory. The study utilized descriptive research design and focused on 110 SMEs in Kenya audited by Victor O.O & Associates as the firm provided a means to collect unbiased data on SMEs that utilized all the innovative financing solutions and thus an avenue to get balanced data for this study, following regulations under the Companies Act 2015. Interviews were conducted with the owners of the sampled businesses guided by a questionnaire which included questions on their backgrounds and the adoption of innovative financing to facilitate the growth of the business. Information was gathered through semi structured interviews and source documents from third parties such as audited financial statements, customer agreements, funding agreements and participants to guarantee reliability. The information gathered was examined with STATA software using inferential statistics such as regression analysis, hypothesis testing, and confidence intervals. These measurements from the samples were utilized to make conclusions about the broader population of SMEs. Tables and graphs were used to present data and further interpret the results. The regression analysis showed that after taking into account all pertinent factors and assuming no other variables are present, the constant value for the sustainable growth of Small and Medium Enterprises was determined to be 0.5961, which represents the degree of utilization of innovative financing solutions posits that with application of innovative financing the growth of an enterprise measured by ROE will go up by 0.5961. The model showed that holding all other independent variable constant, a one-unit increase in Invoice Discounting results in a decrease in growth of an enterprise by 0.0315, a one-unit increase in Venture Capital results in a decrease in growth of an enterprise by 0.2532 and a one-unit increase in Grant Funding results in an increase in growth of an enterprise by 0.6063. Based on the findings of this study, the pecking order principle seems to stand true i.e. businesses should opt to fund their activities starting with retained profit, then moving on to debt which is usually inexpensive to acquire, and finally resorting to issuing equity shares. Hence this study recommends that when trying to grow small and medium size businesses the owners should first utilize internal funds then seek outside inexpensive funding's such as grants then following the ranking will be inexpensive debt such as invoice discounting when working capital is inadequate and finally issuing equity shares such as venture capital if all other funding solutions become inadequate.

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CHAPTER ONE

1.1. Background of the Study

The Kenyan market has acknowledged the importance of the Small and Medium Enterprises sector for providing goods and services, increasing competition, fostering innovation, creating jobs, and ultimately reducing poverty. Different categories of SMEs based on size include micro SMEs with 1-9 employees, small SMEs with 10-49 employees, and medium sized SMEs with 50-99 employees. A study conducted by the Kenya National Bureau of Statistics found that approximately 1.56 million MSMEs were officially registered by county governments, while 5.85 million unlicensed businesses were identified in households. Excluding Nairobi, micro establishments made up over 90% of all licensed establishments in all counties, with Nairobi having the largest percentage of small establishments at 14.8%. (KNBS, 2016)

In the last three years following the COVID19 pandemic, Kenyan Citizens have experienced lockdowns curfew imposed by the national government and social distancing leading to a general sense of fear. The finances of small and medium enterprises suffered greatly, leading to a heightened requirement for creative funding options. According to a report by UNDP (Kiarie & Ndedda, 2021) approximately 67.9% of businesses stated that their operations were significantly impeded after the COVID-19 outbreak. Roughly 15% of small and medium-sized enterprises experienced a decrease in operations, with around 13.4% of them facing complete shutdowns due to various issues like market closures, lockdowns affecting supply chains, staff reductions, and decreased work hours caused by cash flow problems. Nevertheless, 3.6% of companies indicated that their business operations were either unchanged or had actually improved. This encompassed businesses focusing on COVID-19 related products like soap, hand sanitizers, face-masks, and PPE, as well as those embracing technology to adapt to market shifts.

A paper by (Erdin & Ozkaya, 2020) stated that small and medium-sized enterprises play a crucial role in both developed and developing countries as they possess greater flexibility in production compared to larger corporations, allowing them to quickly adjust to shifts in demand and achieve full competitiveness. Therefore, they play a role in boosting national income, creating jobs, increasing productivity, and providing training for entrepreneurs. Hence, small and medium-sized enterprises are viewed as crucial for meeting the government's goals for growth and employment. The sustainable expansion of small and medium enterprises is essential not just in Kenya, but also globally.

Small and medium-sized businesses are essential in promoting economic growth and creating jobs in numerous countries globally. Nevertheless, these companies encounter significant challenges in securing funding, particularly during periods of crisis. Clearly, the funding of small business ventures poses a crucial question: what factors are essential for the continued sustainability of these companies? (Benkraiem, 2016).

Small and medium-sized businesses are significant in modern economies and their impact on economic growth is acknowledged. The recognition of the SME sector as a significant focus for an economy stems from its social and economic contributions. For the growth agenda to be successful, governments must fully commit to empowering the private sector for growth and entrepreneurship. Economic policies that promote healthy, sustainable, and inclusive growth by fostering competitiveness in economies. These kinds of policies play a significant role for businesses of various sizes, especially for the numerous small and medium enterprises (SMEs) operating in worldwide markets. Participating in global value chains is crucial for promoting global trade and investment, as well as enhancing productivity and innovative capabilities (Bayraktar & Algan, 2019).

1.1.1. Innovative Financing Solutions

Innovative finance, as defined by the International Labor Organization, involves financial solutions and mechanisms that efficiently direct private funds from global financial markets and public resources to address urgent issues. Innovative financing enhances development by linking financing to results, redistributing risk, boosting working capital availability, and utilizing technology to improve effectiveness and efficiency. Innovative finance is not a uniform collection of initiatives, mechanisms, or solutions; rather, it can be classified based on specific technical characteristics and objectives.

Obtaining funding is essential for small and medium-sized enterprises. Compared to big companies, small businesses usually have lower and less consistent profits, making it challenging, if not impossible, to depend on profit as a reliable funding source. Entrepreneurs should have a solid plan for securing external funding as it is frequently necessary. The decision between debt (peer-to-peer online lending, loans from friends, bank loans, etc.) and equity financing (angel financing, own funds, venture capital, equity-based crowdfunding, etc.) is the most important issue. By taking on more debt, a business obligates itself to make regular payments according to a set timeline. It is usually a challenge for the majority of small and medium-sized enterprises to sustain this. Equity, on the other hand, necessitates founders to relinquish some of the control of the company. New funding options like crowdfunding and token offerings have become more prevalent in the past few years. In some instances, they can be viewed as a type of debt or equity funding, while in other instances they vary greatly from conventional financing methods (Miglo, 2022).

Innovative financing methods are building momentum for Africa's transformation. Typically operating through collaborations between development finance institutions, private

investors, technology companies, governments and other businesses, innovative financing is rallying new resources, correcting institutional barriers or introducing new financing solutions into new markets. Innovative financing mechanisms correct traditionally high of costs serving the SMEs among financial institutions, or reduce the high risk of doing so. They are also helping to provide large-scale investments by bringing together public and private investments. Finally, innovative financing mechanisms are dispelling the misplaced perceptions of risk by showing commercially attractive returns that will bring in more private capital over time (Dalberg, 2015).

According to the United Nations policy brief (United Nations Economist Network) innovative funding is vital for small and medium-sized enterprises. Compared to big companies, small businesses usually have low profits or irregular patterns, making it challenging, if not impossible, to depend on profits as a reliable funding source. Entrepreneurs often need to depend on external funding and should have a well-thought-out plan for obtaining it. The primary decision is whether to choose between debt (such as peer-to-peer online lending, loans from friends, bank loans, etc.) or equity financing (including angel financing, own funds, venture capital, equity-based crowdfunding, etc.). By taking on more debt, a company obligates itself to adhere to a specific payment plan. It is usually difficult for many SME businesses to sustain this. Equity, on the other hand, necessitates founders relinquishing some of the company's authority. New types of funding like crowdfunding and token offerings have become more prevalent in recent times. In some instances, they can be a type of debt or equity funding, while in other cases they vary greatly from conventional financing methods.

This study focused on three innovative financing solutions i.e. grant funding, venture capital and invoice discounting. According to (Houston, 2024) Small business grants in the entrepreneurial world can be compared to hitting the jackpot. These financial incentives are just

one of the many methods used by the government and various organizations to encourage and promote business growth and creativity. Grants provide a special benefit compared to loans, as they are essentially free funds for your business, usually without needing to be repaid. Grants can provide access to resources, networking opportunities, and professional mentorship, enhancing your business beyond just financial assistance. The bottom line is that obtaining a grant for a small business may be a lengthy and tiresome process, but the end result is incredibly fulfilling. Small business grants offer more than just monetary support. They symbolize acknowledgment of your company's capabilities and a contribution to its expansion.

Invoice discounting is a comprehensive financial solution that includes working capital funding, credit protection, accounts receivable management, and collection services. Invoice discounting is widely recognized as essential, particularly for the financial requirements of small and medium-sized businesses and start-ups. Invoice discounting serves as an alternative to traditional bank loans, with the key benefit being the ability for companies to receive immediate cash for their outstanding debts. Therefore, invoice discounting is an uncomplicated funding method that relies on invoices, eliminating the need for collateral. By providing instant payment, SMEs can enhance their cash-flow without raising their level of debt as a financing option. This indicates that they are able to focus on growing their business and gain a competitive edge. (Vasilescu, 2010).

The study by (Gikomo, 2013) whose aim was to investigate the effect of venture capital financing on the growth of SMEs in Kenya discovered a strong and favorable correlation between growth in small and medium-sized enterprises and funding from venture capital. The research found that venture capital has a significant impact on the growth of small and medium-sized enterprises (SMEs), with increased financing leading to improvements in credit ratings, marketing

and distribution networks, technical expertise, and management skills, ultimately driving growth in these companies. By effectively combining management skills and technical knowledge, companies can strategically leverage available information and resources to develop sound business expansion plans while minimizing risks.

1.1.2. Growth of SME's

According to (North, 2016) Finding the financial resources required to support working capital during a significant development time for the firm is seen as a crucial component of sustainable growth, since the financial system, despite its diversity, operates with high interest rates and demands specific guarantees. Availability of a competent labor is another factor to consider while looking for business growth. Since human capital is the primary source of competitive advantage and is in short supply due to increased demand for highly qualified workers, entrepreneurs must now more than ever make significant investments in personnel retention and training programs.

The World Bank 2018 Enterprise Survey Report indicated that Small businesses in Kenya were negatively impacted by limited market access for locally produced goods. Due to insufficient consumer demand, the majority of small enterprises had to close. Lackluster marketing abilities, unreliable distribution, restricted availability of market data, and insufficient funding for business expansion have all contributed to restricted access to markets, both domestically and globally. (Thuranira & Nyaramba, 2023). Fortunately, in April 2023, the Strategic Trade and Investment Partnership (STIP) second round of talks between the governments of Kenya and the United States of America was successfully concluded. In order to increase the market for Kenyan commodities, the engagements seek to create legally enforceable bilateral agreements. Additionally, small enterprises will be in a better position to sell their goods as a result of participation in local,

regional, and worldwide trade shows and exhibitions (African Growth and Opportunity Act, 2023).

(Ogunyemi , 2020) states that a The key factor that sets apart SMEs in terms of success is their dedication to making decisions that enhance and boost business performance. Having an entrepreneurial mindset is a strong indicator of small and medium-sized enterprises' success, as individuals who aspire to expand their business are more likely to thrive compared to those without growth aspirations. Profit for the business and its owner is the primary result of entrepreneurial activity, whether the business is a startup or already well-established. In order to remain in operation, business owners need to increase in size and make a profit.

Small and medium-sized enterprises are essential for achieving fairer globalization and growth, as they are key in meeting sustainable development objectives, promoting inclusive and sustainable economic growth, generating employment, fostering innovation, and decreasing income disparities on a global scale. The growth of SMEs can contribute to economic variety and adaptability, which is vital for resource-dependent nations exposed to changes in commodity prices. Due to the knowledge economy, small and medium enterprises have played a greater role in innovation dynamics in the last ten years. Their importance in shifting towards more sustainable production and consumption patterns is vital for economic progress (Bayraktar & Algan, 2019).

1.1.3. Small and Medium Enterprises

In Kenya, small and medium-sized enterprises are classified based on the number of employees, with micro enterprises having one to nine employees, small enterprises having ten to forty-nine employees, and medium enterprises having fifty to ninety-nine employees. According to a study conducted by the Kenya National Bureau of Statistics, approximately 1.56 million micro, small, and medium enterprises (MSMEs) were officially registered by county governments, with an

additional 5.85 million unlicensed businesses identified within households. In every county except Nairobi, over 90% of licensed establishments were classified as micro-sized. Nairobi County had the largest percentage of small businesses at 14.8% (KNBS, 2016).

The categorization of SMEs by the European Union is determined by factors like number of employees and annual revenue in euros (EUR). An organization with less than 10 employees and revenue under EUR 2 million is classified as a micro enterprise, while a business with 10-49 employees and a turnover of EUR 10-49 million falls under the small enterprise category, and a company with 50-250 employees and revenue of at least EUR 50 million is considered a medium enterprise. These are active definitions for SMEs followed by various European economies (Gijo, Jiju, & Vinodh, 2016).

Nigerian SMEs are classified as businesses with a workforce of 11 to 100 employees or a total expenditure of at least 50 million Nigerian naira, covering operating expenses but not land expenses. Libyan SMEs are defined as companies with 50 to 250 employees, generating revenue between 2 to 12 million Libyan dinar with 1 to 8 million Libyan dinar on their balance sheet. South African SMEs are businesses that meet one or more of these criteria: fewer than 200 employees, annual turnover below 64 million South African rand, capital assets under 10 million South African rand, and direct managerial participation by owners (Gijo, Jiju, & Vinodh, 2016).

1.2. Statement of the Problem

Small and Medium-Enterprises are crucial to the economy of Kenya as they provide jobs and help sustain the well-being of individuals and families. SMEs are believed to hire more than 15 million individuals and make up roughly 30% of the GDP. However, small and medium enterprises still encounter significant obstacles, with the primary one being the restricted availability of funding which hinders their expansion mostly due to financiers' insufficient knowledge about the

functioning of SMEs. As this obstacle persists, it keeps hindering the growth of small and medium enterprises (Kiplangat , Mulindi, & Tiriongo, 2021).

According to (Familiar, 2023) The global pandemic, ongoing conflict in Ukraine, continued turmoil in various nations, and other issues have led to high levels of debt for many countries. Given the increasing size of financing and the emergence of new obstacles, it is essential to promote and increase the flow of private capital into nations. The growing demand for innovative financial options for small and medium enterprises makes it even more necessary. If small and medium-sized enterprises (SMEs) receive inadequate services from financial institutions (FIs), it can hinder their growth, potentially harming the overall economy of a country. (Kasule, Kibe, & Odongo, 2016).

(Nelima & Sindani, 2018) conducted a study to determine the effect of funding methods on the growth of SMEs in Kakamega County only therefore creating a contextual gap that this study addressed by covering a wider scope of SMEs at a national level i.e. Kenya. Also the study by (Gikomo, 2013) whose aim was to investigate the effect of venture capital financing on the growth of SMEs in Kenya focused only on the Top 100 Mid-sized companies (2012) in Kenya therefore creating a methodological gap which this study addressed by covering a random sample of 110 SMEs in Kenya.

A study by (Memba, Gakure, & Karanja, 2021) confirms the tangible and actual influence of venture capital on the growth of small and medium-sized enterprises. This study confirms the correlation between SME growth and the innovative funding solution and confirms there has been a significant observed and quantified impact on growth. This is contrary to the findings of this paper that confirmed the opposite that venture capital had no significant impact on business growth.

Contemporary literature has highlighted numerous cases of grant funding, invoice discounting and venture capital as business financing ideas. However, previous studies have not examined extensively how they have impacted the growth of small and medium size enterprises. Moreover, any evidence presented thus far has been primarily focused on accessing these financing solutions and this leaves an important outcome like business growth. Lack of funding is a significant challenge for the dominant small and medium-sized enterprises in the Kenyan markets. Access to funding is vital for the growth of small and medium-sized enterprise, although they typically face greater financial constraints and challenges than their larger counterparts. Exploring solutions to assist SMEs in obtaining funding for their businesses was necessary. This study aims to investigate how innovative financing utilizing grant funding, invoice discounting and venture capital can help grow small and medium-sized enterprises in response to the significant problem of inadequate access to business funding faced by SME's not only in Kenya but around the globe as well.

1.3. General Objectives

This study's general objective points to the effects of innovative financing solutions on the sustainable growth of Small and Medium Enterprises in Kenya. Below are the specific objectives;

- i. To determine the effect of grant funding on the sustainable growth of Small and Medium Enterprises in Kenya
- ii. To determine the effect of invoice discounting on the sustainable growth of Small and Medium Enterprises in Kenya
- iii. To determine the effect of venture capital on the sustainable growth of Small and Medium Enterprises in Kenya

1.4. Research Questions

The questions answered in this study are;

- i. How does grant funding affecting the growth of Small and Medium Enterprises in Kenya
- ii. In what manner does invoice discounting affect the growth of Small and Medium Enterprises in Kenya
- iii. How does venture capital affect the growth of Small and Medium Enterprises in Kenya

1.5. Significance of the Study

1.5.1. Entrepreneurs

This study will be beneficial to both current, new and potential entrepreneurs. It will offer perspective on alternative funding sources with relatively lower costs as compared to traditional finance sources (e.g. bank loans, share issues) and how their application will affect business growth.

1.5.2. Investors

This study will be useful to both currents and future investors in that it will provide an insight on the impact of different financing solutions on business growth. Thereby enabling the investor to make an informed decision on the nature of funding to offer.

1.5.3. Financing Institutions and Policy Makers

Financing institutions and their policy makers will find this study useful since the research's findings will give insight that will assist in policy creation for business funding of SME's and give the financial institutions a research backed basis for decision making.

1.5.4. Scholars and academicians

Scholars and academics will benefit from this study as it will offer them ideas for choosing topics, as the study will suggest areas for future research. It will also offer real-world literature on funding sources and expansion that will enhance their research.

1.6. Scope of the Study

The research focused on examining how innovative financing solutions impact the sustainable growth of small and medium-sized enterprises in Kenya. This study focused on the country Kenya, located in the continent of Africa, in terms of geographical scope. The study focused on small and medium enterprises in Kenya as the target population for the research topic. The variables that were not dependent were: funding from grant and invoice discounting. The growth of small and medium enterprises in Kenya was the variable of interest.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

This chapter explores the theories relevant to this research. It examines prior studies conducted by other researchers on various sources of financing such as grant funding and invoice discounting and their impact on the sustainable growth of SMEs. It also includes the theoretical framework and operationalization of variables.

2.2. Theoretical Review

The aim of theoretical literature review is to assess existing theories related to a specific concept. This portion assesses four distinct theories regarding funding sources and decisions and how they impact a firm's growth. The theories include trade off theory, pecking order theory, credit rationing theory, and agency theory.

2.2.1. Pecking Order Theory

The pecking order theory was derived from the capital structure theory created by Modigliani and Miller in 1958. The conceptual framework of pecking order theory pertains to companies that must adhere to a specific financing ranking. When faced with a difficult decision, a small business owner will opt for keeping profits rather than taking on debt, but will turn to debt instead of seeking equity when in need of outside funding. Small business owners who exhaust their internal resources turn to outside sources for funding. Access to factoring can determine whether a business thrives or fails in the long run. The theory of pecking order provides the most satisfactory explanation of capital structure choices in reality. It suggests that companies, when confronted with financing requirements, adhere to a specific hierarchy of funding. Majluf and Myers pointed

out that companies must use internal sources of funding like retained earnings instead of debt. Once firms exhaust their internal funds, they may opt for debt instead of equity as a final option (Majluf & Myers, 1984). Internal sources of funding are considered more important in the financing hierarchy than external sources of finance. According to the pecking order theory, firm managers prefer to use internal funds like retained profit over external sources of capital, emphasizing the significance of profitability in financing decisions.

The Pecking Order Theory was created based on the imbalance of information between internal stakeholders (such as owners and managers) and external suppliers of the company. Business executives implement a financial strategy to reduce costs related to uneven information, particularly adverse selection, and favor using internal funds rather than external funds. This theory suggests that a business leader prioritizes self-financing, followed by non-risky debt issuance, risky debt issuance, and equity issuance as a last option. This behavior avoids a decrease in the firm's stock prices by limiting dividend distribution, increasing cash flow, and minimizing access to loans to lower the cost of capital. Therefore, successful companies have greater access to internal funds. The issue of debt over equity should be influenced by asymmetric information. The board's decision to issue debt indicates their belief in the profitability of an investment and the undervaluation of the current stock price. Raising equity indicates doubt in the board's confidence due to a perceived high share price. An equity problem would result in a decrease in the value of the shares. Nevertheless, this might not be relevant to intangible assets (Adair, Adaskou, & McMillan, 2015)

According to (McLaney, 2009) the pecking order theory state that businesses prefer to fund their activities starting with retained profit, then moving on to debt which is usually inexpensive to acquire, especially in the form of a term loan, and finally resorting to issuing equity shares. The

pecking order theory may be viewed as a strict opposition to the trade-off theory, however, they could potentially complement each other. For instance, companies might generally adhere to the trade-off theory principles but opt to steer clear of issuing new shares and, possibly, depend more on debt financing than what is strictly prescribed by the trade-off theory.

(Jahanzeb, Rehman, Bajur, Karami, & Ahmadimousaabad, 2014) Believed the pecking order theory to be an alternate theory to trade-off theory where the company follows a well-structured financing decision hierarchy. According to the pecking order theory, the company prioritizes using internal funds like retained earnings, followed by debt issuance, and reserves equity as a final option. This theory describes how firms make financial decisions by correctly anticipating profit impacts and predicts that firms will not reach an optimal capital structure, but will instead follow a principle and use external financing once their debt capacity is reached.

Sources of financing for small and medium enterprises are restricted to banking and nonbanking options. If SMEs follow the pecking order theory in relation to capital structure, they will prioritize internal financing before seeking external financing to meet their funding requirements. SMEs primarily rely on equity funds and bank loans for financing when initiating a business or funding the growth and expansion of their company. Entrepreneurial start-ups are more inclined to utilize external debt in their financial structure if they possess a higher amount of tangible assets that can be used as collateral and have a legal entity established in the merger. Entrepreneurs with greater access to human capital are less inclined to hold external debt and more inclined to utilize internal funding. Internal equity contributions are more probable to fund activities carried out at home. Entrepreneurs with advanced education levels utilize a greater amount of external debt and draw in a larger number of investors (Sulistianingsih & Santi, 2023).

2.2.2. Agency Theory

Agency expenses are likely to have a higher impact on small enterprises where heightened agency problems occur due to increased information asymmetries and agents having incentives for risky behavior over the interests of funders. The distinctive features of SMEs elevate the likelihood of agency costs and bring about different forms of agency issues. These characteristics consist of different organizational structures, lack of stocks available for public trading, entrepreneurial willingness to take risks, restricted personal finances of company owners, and shortened anticipated lifespan of the company (Bhairst, 2010).

According to (Bhairst, 2010) the application of agency theory in the small and medium-sized enterprise (SME) industry has led to a significant amount of literature, which highlights the connection between business owners and providers of external funding. The potential conflicts between firm owners and debt providers differ from those between firm owners and equity providers, as do the methods used to address these conflicts. Private equity suppliers use various methods throughout the investment process to reduce potential agency issues. In the beginning, venture capitalists thoroughly investigate before investing in a company.

The agency model is viewed as one of the most ancient theories in management and economics literature. Agency theory addresses issues that arise within firms because of the disconnect between owners and managers, and focuses on minimizing this problem. This concept assists in applying different governing mechanisms to regulate the behaviors of agents in corporations with multiple owners. Contemporary corporations with widely spread ownership result in the disconnect between ownership and control. Ownership in a joint stock company lies with individuals or groups through stock, with shareholders giving authority to managers to run

the business, but the main concern is whether managers are acting in the best interests of owners or for themselves (Daily, Dalton, & Rajagopalan, 2003).

2.2.3. Trade Off Theory

This theory was originally proposed by (Myers, 1984) who stated that the ideal debt level for a company is typically seen as established by balancing the advantages and disadvantages of taking on debt, while maintaining the company's assets and investment strategies unchanged. The company is depicted as weighing the benefits of interest tax shields against different bankruptcy or financial embarrassment expenses. Naturally, there is debate over the worth of tax shields and the significance of financial embarrassment costs, but these disputes mainly revolve around the same topic. The company should exchange debt for equity, or equity for debt, to increase the firm's value to its maximum potential. Therefore, the balance between debt and equity.

The trade off theory aligns with the research introduced by Modigliani and Miller, assuming ideal capital markets with no taxes, agency costs, or transaction costs, and shows that the company's value is unaffected by its financial structure. Modigliani and Miller later extend their analysis to incorporate taxes, abandoning the neutrality axiom. They conclude that the value of a leveraged firm equals the value of an unleveraged firm plus the tax shield from debt, minus the costs associated with financial distress. Therefore, firms are motivated to utilize debt over equity due to the tax benefits of deducting interest from taxable profits. The leveraged firm's worth increases because tax rebates benefit only the business, not personal income. Small and medium-sized enterprises currently benefit from a reduced tax rate which ultimately caps any potential use of leverage strategies tied to receiving a discount on interest expenses. The presence of expenses related to bankruptcy leads to a trade-off between the firm's value and tax advantages, which

results in an ideal debt level where the benefits from tax deductions are balanced with the costs of bankruptcy related to leverage (Adair, Adaskou, & McMillan, 2015).

According to (Jahanzeb, Rehman, Bajur, Karami, & Ahmadimousaabab, 2014) firms achieve the best capital structure by balancing the advantages and disadvantages of debt and equity. One of the main advantages of using debt is the debt tax shield. The drawbacks of debt, especially when a company takes on excessive debt, may outweigh the benefits of potential financial distress on the flip side. The primary advantage of debt is the ability to deduct interest payments from taxes, which encourages the use of debt.

A key assumption of Modigliani and Miller's propositions is that debt is risk free. There is a balancing act between the advantages of tax deductions from debt and the risks of financial difficulties. An ideal point is achieved when the current value of tax savings from additional borrowing is equal to the current value of distress costs. The tradeoff theory acknowledges that optimal debt levels can differ between companies. Companies with substantial tangible assets and enough taxable income should aim for high target ratios, while unprofitable companies with risky intangible assets should mainly focus on equity financing. (Bhaired, 2010).

According to (Bhaired, 2010) trade off theory studies focused on the SME sector, but the importance of the debt-tax shield may not be as significant for SMEs compared to publicly listed companies. The explanation might involve looking at two key factors of trade-off theory; namely, profit and financial hardship. Smaller companies are not as financially successful as larger companies, therefore, companies with lower profitability do not benefit as much from debt tax shields. Tax advantages are not as beneficial for small businesses because they usually require less capital. Smaller firms use flexible production technologies to compete with larger companies that

have lower costs, allowing them to quickly adjust to changes in demand. Smaller firms find the debt-tax shield less valuable due to their lower capital expenditure.

2.2.4. Credit Rationing Theory

Stiglitz and Weiss (1981) provided the initial theoretical backing for credit rationing. Credit rationing theory is relevant in situations where some loan applicants who appear to be equal are granted credit while others are denied. Credit rationing occurs when financial institutions restrict or refuse to provide credit to individuals based on their creditworthiness. Small entrepreneurs frequently encounter strict credit limits despite their willingness to accept a higher rate of interest. Companies with strong finances aim to secure a larger portion of institutional loans due to the fact that small business owners lack enough collateral. Smaller and younger businesses consistently face greater challenges when it comes to obtaining financing. Credit rationing plays a significant role in the success of SMEs as a result of the information asymmetry in the evolving Ghanaian banking sector, restricting credit availability for micro and small businesses. In the UK, Harrison and Baldock (2015) suggested that there were still limitations on the access to credit for SMEs. The Basel II regulation for small and medium-sized enterprises in Turkey has caused significant challenges in accessing loans (Nabwanda, 2018).

(Jaffee & Stiglitz, 1990) define credit rationing as a scenario where there is a surplus of requests for loans due to loan rates being lower than the market equilibrium levels. Various credit rationing types exist based on the definition of excess demand, its temporariness, and the factors leading to low loan rates. Because of the numerous potential variations, definitions of credit rationing have frequently caused confusion in literature, leading to the listing of multiple common definitions of credit rationing. The first being interest rate (or price) rationing which occurs when a borrower is granted a loan with a smaller amount than requested at a specific loan rate; in order

to secure a larger loan, the borrower must agree to a higher rate. Followed by divergent views rationing where certain businesses are unable to access loans at an interest rate they view as appropriate given their perceived risk of default. Followed by redlining which occurs when a lender refuses to approve a loan to a borrower due to the perceived risk of default, as the lender may not achieve their desired profit at a specific interest rate. Lastly, pure credit rationing which refers to situations where some businesses are able to secure loans while others, who meet the same criteria, are denied funding.

According to (Ghosh, Mookherjee, & Ray, 1999) credit rationing is still widespread and can be seen in two main forms: micro credit rationing, where borrowers are given less credit than they ideally need, and macro credit rationing, where some borrowers are completely denied access to credit. The other form includes unequal treatment of agents who are otherwise identical. They demonstrate that both types of rationing could exist simultaneously, serving complementary yet separate functions. It is evident that the second type of rationing increases in significance when there is a lack of information flow among lenders, allowing defaulters to potentially go unnoticed. Both the debt burden and enforcement narratives highlight the significant impact of the distribution of bargaining power between lenders and borrowers on credit rationing, effort levels, and efficiency. In both scenarios, increased bargaining power for the lender results in decreased credit availability and efficiency.

The research by (Jin & Zhang, 2019) details how credit rationing develops in small and medium-sized enterprises (SMEs) through analyzing the disparities in project success rates and capital growth capabilities compared to larger enterprises, resulting in the development of an inclusive credit rationing model based on enterprise size. By examining banks' screening criteria both pre and post loan approval, the researchers systematically studied the internal process of credit

rationing in SMEs and found that the primary obstacle for SMEs in accessing credit in established markets is their inability to showcase their risk levels due to smaller asset sizes at start-up. Additionally, lending to SMEs presents higher risks to banks because loan sizes are typically below the minimum threshold.

2.3. Empirical Review

The empirical literature review examines studies backed by empirical evidence. This part discusses previous research relevant to our present study. This focuses on the subject of research, goals to be identified, methodology employed, and the results. Different research has been conducted on different types of funding such as grant financing and invoice discounting.

2.3.1. Grant Financing and the Growth of Small and Medium Enterprises

According to Women Enterprise Fund Strategic Plan 2023-2027 the bottom-up economic transformation agenda amplifies this reality through the MSME economy pillar and Women Agenda with financial inclusion of women as a critical factor for meaningful women participation. It aims to enhancing funding for women MSMEs; building the capacity of women and their enterprises; promoting domestic and international trade; and linking women MSMEs to large enterprises. Women form a substantial number of the SMEs with 31.4 percent of the SMEs in Kenya female owned and 17% co-owned by both men and women. These statistics the government commitment to grow the Fund from the KSh 4.5 billion to KSh 13.5 billion in the next 5 years to enable 100 per cent access to affordable finance for women a strategic investment.

According to (Srhoj, Bruno, Radas, & Walde, 2021) it will be challenging to sustain very high levels of grant funding in the future years. The unique aspect of this research is that the grant size is too insufficient to be used for capital or labor investments to improve business performance. The monetary value of the grants is inadequate, and they do not specifically cater to investment

projects that could positively impact company performance by promoting growth. Instead, the grant acts as a motivation for entrepreneurs to reevaluate the financial status of the company or potential investment options. Grants slightly increase the likelihood of firm survival for young entrepreneurs with limited capital. An evaluation of the grant program's cost-effectiveness was done using basic, rough calculations in both the near and distant future. In the immediate future, the annual rewards are greater than the subsidy for seasoned entrepreneurs. The long-term benefits for veteran entrepreneurs remain consistent over time. The advantages surpass the overall expenses of the grant for entrepreneurs with greater experience. The cost-benefit analysis of this research demonstrated benefits (and therefore cost efficiency) comparable to those seen with business development grants for new companies, small and medium-sized enterprises, and exporters. In conclusion, this research highlighted multiple key findings. Initially, it offers strong proof of the beneficial effects of grants for small business development targeting entrepreneurs. The advantages of the grant program exceed its expenses. It also demonstrated that a grant program aimed at supporting entrepreneurs is especially beneficial for those with more experience. Finally, a portion of the favorable business outcomes came from taking advantage of banking options where financial demand was raised.

Business development grants generally have a significant positive impact on capital stock, bank loans, intermediate inputs, and value added. However, there is little to no empirical proof of a positive impact on productivity measures, sales, employment, average wage, and inventories. Nevertheless, the important discoveries are based on the beneficial impacts of smaller companies. Theoretically, business development grants have a greater positive impact on smaller firms' capital, bank loans, employment, value added, sales, and labor productivity compared to larger firms because the grant amount is specifically designed to alleviate the capital constraints of smaller

firms. Reflections on the operation of the grant program indicate that its primary impact has been to provide companies with increased access to capital. Firms that receive the strong certification effect tend to secure an even larger bank loan, on average, than what was initially approved in the grant. In conclusion, this research demonstrated that small firms do not experience significant impacts from business development grants granted in small amounts. More research is required to provide more accurate information on the minimum level of funding needed for grants to be effective. Findings suggest that the size of a company and the amount of the grant received are important for achieving growth with business development grants. Policy makers rely heavily on the specific structure of the grant program for driving economic growth (Walde, Lapinski, & Srhoj, 2020).

According to (Houston, 2024) Small business grants in the entrepreneurial world can be compared to hitting the jackpot. These financial incentives are just one of the many methods used by the government and various organizations to encourage and promote business growth and creativity. Grants provide a special benefit compared to loans, as they are essentially free funds for your business, usually without needing to be repaid. Grants can provide access to resources, networking opportunities, and professional mentorship, enhancing your business beyond just financial assistance. The bottom line is that obtaining a grant for a small business may be a lengthy and tiresome process, but the end result is incredibly fulfilling. Small business grants offer more than just monetary support. They symbolize acknowledgment of your company's capabilities and a contribution to its expansion.

The aim of the study by (Domenella, Jamison, Safir, & Zia, 2021) was to investigate the impact of a significant shock on both demand and supply on micro and small businesses in a developing country, and if interventions like business grants and/or business development services

can help lessen negative effects. They conducted this within the backdrop of the COVID-19 crisis and a research project involving young entrepreneurs in Kenya. The outcomes indicate that recipients of \$360 business grants (with or without BDS) are much less likely to experience a decrease in income, up to twice as likely to keep their business running, report higher sales and profits, and have higher levels of life satisfaction and confidence.

Business Grants are a great option for entrepreneurs and business owners to secure funds and enhance their startups. These grants are specifically for African entrepreneurs who own businesses or startups, offering financial assistance to help their enterprises progress to the next stage of growth. The Business provides grants and funding opportunities to African Entrepreneurs including individuals, firms/companies, businesses, or corporations for scaling up or expanding their business, paying employees, and advertising. African entrepreneurs can receive business grants, including SME grants, to help boost their businesses without the need for repayment, in contrast to loans that require repayment, possibly with interest. Many people applying for SME grants are encountering common difficulties like incomplete registration, fierce competition for grants, and a lack of important documentation. (Business Grants, 2019).

The study by (Mueller, 2023) explores how the outcomes of grant financed startups, the development of business plans for projects, the abilities of founders, the level of networking, and the acquisition of external funding change during the grant period. A comparison group design based on pipelines was used to generate evidence of the effects on these variables. Results show that the initial funding significantly aids in the advancement of products and business planning for startups, somewhat enhances networking and acquiring external funding, and slightly boosts the skills of the founding team throughout the funding phase. Multiple tests of reliability, including a

duplicate using a different research method, such as a before-and-after analysis, provide strong validation for the results. Therefore, it was concluded that it is highly probable that the grant funding program supports the progress of startups in their growth and thus leads to future prosperity.

According to the Youth Enterprise Development Fund a state corporation under the Ministry of Public Service, Youth and Gender. It was officially commenced on 8th December 2006 and later converted into a State Corporation on 11th May 2007. The Fund is a key initiative of Vision 2030, part of the social pillar. The main emphasis is on fostering enterprise growth as a critical approach to enhancing economic prospects and involvement of Kenyan Youth in nation building. The goal of the Fund is to increase employment options for youth by promoting entrepreneurship and inspiring them to become creators of jobs rather than seekers of jobs. This is accomplished by offering accessible and cost-effective financial and business development assistance to young people interested in launching or growing businesses. YEDF has distributed a total of 12.8 Billion Kenya Shillings across the country to date.

2.3.2. Invoice Discounting and the Growth of Small and Medium Enterprises

(Nabwanda, 2018) conducted a case study examining methods SME owners utilize to access and secure invoice discounting financing for business funding. The research utilized information from organizational papers and partially structured discussions with three small and medium-sized enterprise (SME) proprietors' perspectives on the tactics they utilize to obtain invoice discounting for financing their enterprises. The study reached saturation when the data became exhaustive and repetitive, providing no new information. Three main points were identified in the examination of the coded information, which I was able to connect to both the literature and the theories of pecking

order and capital rationing. The research results indicate that small and medium-sized business owners' qualifications for funding were influenced by factors such as keeping accurate financial records, having financially reliable customers, and establishing relationships with government officials, impacting their access to invoice factoring for business financing.

A study by (Nelima & Sindani, 2018) conducting a bivariate regression findings showed a significant and positive connection between funding methods and the growth of SMEs, indicating a rejection of the null hypothesis and acceptance of the alternative. This means that if funding practices increase, SMEs growth will also increase. The research found that invoice discounting Financing Practices impact the growth of SMEs in Kakamega County, Kenya on their own, without considering other variables. This can be clarified through the bivariate regression analysis, which showed a significant and positive impact. The research results indicate that the utilization of AR financing significantly contributes to the development of SMEs in Kakamega County, Kenya. The research suggests SME owners should maintain AR financing for steady growth. Moreover, small and medium-sized enterprise owners should make an effort to utilize financing techniques in order to access the funds that are currently tied up in Accounts Receivables. The funding of workshops and training for SMEs owners and employees should be increased by the Government.

Invoice discounting is a comprehensive financial solution that includes working capital funding, credit protection, accounts receivable management, and collection services. Invoice discounting is widely recognized as essential, particularly for the financial requirements of small and medium-sized businesses and start-ups. Invoice discounting serves as an alternative to traditional bank loans, with the key benefit being the ability for companies to receive immediate cash for their outstanding debts. Therefore, invoice discounting is an uncomplicated funding

method that relies on invoices, eliminating the need for collateral. By providing instant payment, SMEs can enhance their cash-flow without raising their level of debt as a financing option. This indicates that they are able to focus on growing their business and gain a competitive edge. Even a start-up with a viable business and growth potential can benefit from this type of financing, as the invoice discounting company looks at the client's business plan rather than just conducting a financial analysis to make the financing decision. Therefore, by utilizing invoice discounting, the company will receive comprehensive services including debt collection, consulting, legal assistance with commercial contracts, and managing debt risks. Despite being highly specialized institutions, almost all major banks now have invoice discounting subsidiaries. This has allowed the industry to effectively advertise its services and cater to businesses of all scales. Invoice discounting is now a common practice in emerging nations, especially in highly industrialized ones. Invoice discounting has seen significant growth in Asian countries, while financial institutions in Latin America are increasingly participating in the industry. Equivalent expansion has taken place in Central Europe, the Baltics, and the Middle East (Vasilescu, 2010).

A study by (Farag, 2013) indicates that invoice factoring is a crucial finance method that should be better placed in the market. It also requires more creative methods to decrease its expenses in order to boost its competitive edge. This study also indicated that Factors may lean towards partnering with commercial banks to help manage non-performing and low credit score accounts in line with Factors' willingness to take on greater credit risks.

According to (Salaberrios, 2016) there are multiple reasons why small businesses do not succeed. Small business owners often fail due to a lack of education and knowledge in business finance, especially when it comes to funding. All small business owners rely on funding sources, and selecting the appropriate one is crucial for the success of a small business. While there are

numerous funding options available for a business, certain funding options are more preferable than others. With the increase in market demand for accounts receivables funding, more small business owners are turning to factoring as their main source of funding for their businesses. The research indicated that small businesses are significantly impacted by owner eligibility, profit margin, and a third-party relationship when they rely on factoring for funding.

Understanding that factoring and invoice discounting are forms of financing that rely on trade debtors is crucial, as they are specifically tailored to assist rapidly growing companies with their financial requirements. The reason for utilizing factoring and invoice discounting is to receive quick cash based on a company's unpaid invoices. It enables a company to access funds based on its sales invoices prior to the customer making payment. In order to achieve this, the company obtains a loan from a bank or financial institution using a portion of the sales ledger as security, with the outstanding sales invoices acting as collateral for the loan. Invoice discounting is distinct from debt factoring as it solely involves the invoicing company and the finance company or bank, with no third party (Zhanga & Thomas).

The research by (Irungu, Kibuine, & Muhoho, 2019) showed that relying solely on invoice discounting can harm company performance, so company managers should focus on minimizing credit and performance risk by implementing risk mitigation strategies to avoid negative impacts on business risk. This is significant because invoice discounting takes place in an unfunded environment, and if accounts receivables are dishonored, it can lead to losses for the private finance company. They need to keep their portfolio balances in check to distribute scarce resources to the appropriate interest-bearing invoice discounting product with a manageable level of risk exposure. The research also suggests that it is necessary to improve collection procedures in order to decrease the expenses and time involved in receiving payments from clients, as this impacts revenue and

diminishes the funds that rightfully belong to small and medium-sized enterprise (SME) suppliers. Assessing the credit worthiness of procurement entities and invoice discounting customers is a fundamental and essential administrative function that every private finance institution must include in its operations. This is intended to determine the financial health of both the borrower and the third party who is anticipated to make payment at the conclusion of the credit duration.

The study by (Martinović, Nedović, & Balaban, et al) main factor influencing the success of small and medium enterprises is access to funding from inexpensive sources. Restricted availability of external funding from money and capital markets, particularly in terms of cost and conditions, is likely the primary feature and major issue faced by these businesses. Invoice discounting has deep roots in the history of international trade. In the early 2000s, invoice discounting had emerged as a funding option for creative and fast-growing businesses that do not have good credit. Invoice discounting also allows for quicker rotation of funds, which ensures that small and medium enterprises can thrive and expand in a competitive setting. Using invoice discounting as a financial option becomes an important way to boost liquidity during crises by using accounts receivable as collateral to obtain financing. Global patterns suggest that there is a consistent rise in invoice discounting volume each year, estimated to increase by around twenty percent.

The market for invoice discounting saw consistent expansion in the time frame analyzed, with volumes rising each year except for 2013 and 2019. The most significant increases in growth were seen from 2010 to 2012, as well as in 2015 and 2016, showing a rising need for invoice discounting services in those years. In 2021, FMCG is the most prominent sector with a 19.5% weight and 592.5 million euros volume. Following is the category labeled "metals, chemicals, water, recycling" with 527 million euros receivables and a 17% market share. Next is "vehicles,

machines, equipment" with a 14% share, then Electronics, IT&C with a 392 million euros volume and a 13% share. The companies, in response, became more accountable, they began to carefully consider their investment strategy and investment decisions. Globally, there is an increasing curiosity in invoice discounting solutions. Small and medium-sized companies can more easily obtain short-term financing by transferring liquid and payable receivables to invoice discounting companies, whether they are banks or non-banking financial institutions. Regarding the Factor, who assumes the risk of non-payment, there is a rise in caution when evaluating the creditworthiness of debtors in uncertain economic conditions caused by the pandemic and political factors. During the 2020-2021 period, invoice discounting companies have implemented risk management strategies for their current portfolios, with a decreased interest in acquiring new business compared to previous years. The invoice discounting market is evolving, potentially leading to increased growth in the future as businesses become more knowledgeable about invoice discounting services and financiers have become more willing to offer such services in the nation (Marcuta & Gorgon, 2023).

2.3.3. Venture Capital Financing and the Growth of Small and Medium Enterprises

A study by (Memba, Gakure, & Karanja, 2021) confirms the tangible and actual influence of venture capital on the growth of small and medium-sized enterprises. This study confirms the correlation between SME growth and reducing poverty. There has been a significant observed and quantified impact on economic growth. The research has shown that utilizing venture capital can be lucrative in Kenya despite a challenging political and economic environment. The influence affected both economic and socio-economic aspects. SMEs have experienced economic benefits from venture capital in terms of increased sales, profit, assets, and better management of financial and other resources. From a venture capital standpoint, the social effects include the job

opportunities generated, leading to enhanced quality of life and reduced poverty for workers. Employees commonly participate in cooperatives that assist in easing cash flow issues. The higher profits mean more tax revenue collected for government spending. In addition to providing funds, venture capitalists also contribute value to SMEs by not only offering financing but also motivating entrepreneurs to drive economic growth. Venture capital participation has shown that the collaboration inherent in equity capital is just as vital as the funding, and that these two elements of the partnership strengthen each other. Venture capital not only provides funding to SMEs but also plays a crucial role in shaping their internal operations, particularly in policy development. Thus, venture capital has proven the viability of investing in small and medium-sized enterprises. Supporting them during important stages of their growth and building the groundwork for a new wave of big businesses owned by local individuals. Many managers are worried about losing control of their businesses as 50% of SMEs have seen exits by venture capitalists. Venture capital is the financial resource used to increase equity capital within a business.

According to (Kato, 2021) many corporate finance researchers and practitioners see venture capital financing as the most suitable patient capital for the survival and success of small and medium enterprises in developing countries. The literature that has been reviewed shows that venture capital funding has a positive impact on the growth of venture capital supported companies in terms of sales growth, job creation, and increased investment returns. Nonetheless, most scholars agree that there is a lack of research on venture capital funding in developing countries, leading to entrepreneurs being unaware of new financial tools that could help fill the funding gap. Furthermore, the majority of venture capital investment in Africa is concentrated in South Africa, Nigeria, and Kenya, making up more than 75% of the total market on the continent. Countries such as Ghana, Uganda, and Egypt provide limited figures when it comes to venture capital due to the

relatively small and fragmented nature of their venture capital markets compared to countries like Brazil. This can be explained by the lack of comprehensive literature reviews and theoretical frameworks that analyze the impact of venture capital financing on the growth of small and medium enterprises in emerging economies. Although foreign venture capital firms are showing more interest in Africa, the venture capital industry in the region is still relatively young and there is limited information available on the performance of venture capital financing. Moreover, access to venture capital data is restricted, making it challenging for researchers and potential entrepreneurs to obtain the necessary information. In general, research has shown that venture capital funding greatly affects the growth of firms receiving it; policymakers and industry professionals must develop a supportive environment for the growth of the venture capital sector in emerging economies for startups to succeed.

Venture capital has specific traits when it comes to choosing investments and fostering the growth of small and medium-sized enterprises. Initially, venture capitalists favor investing in medium-sized businesses that have steady operations, minimal debt percentage, low ownership concentration, and consistent profits. Additionally, venture capital can enhance the technological innovation, profitability, and development capability of small and medium-sized enterprises. Thirdly, venture capital does not have a notable effect on the solvency of small and medium enterprises. This study offers recommendations for small and medium-sized enterprises seeking financial backing from venture capital to fuel their expansion. Initially, entrepreneurs need to create a well-structured and consistent management system and set up an internal structure with defined roles in small and medium-sized enterprises, following the principles of contemporary corporate governance. In order to safeguard their rights and interests, entrepreneurs must raise the portion of business income allocated to venture capitalists in order to lure venture capital

investments. Additionally, certain measures need to be taken to incentivize venture capitalists to get involved in the administration of SMEs, with the aim of enhancing the level of value-added service provided by venture capital. Furthermore, it is important for venture capitalists to thoroughly educate themselves on laws regarding financial investment, enterprise management, and operations, as well as recognize the significant growth opportunities presented by small and medium enterprises (SMEs). It is essential to establish a suitable venture capital investment plan to support the fast development of small and medium enterprises in technology, management, etc. Additionally, regulators need to implement effective financing policies and scientific credit supervision mechanisms to ensure returns for venture capitalists. To enhance the profitability of small and medium enterprises (SMEs) and boost the investment returns of venture capital firms, a range of favorable policies like investment subsidies, price subsidies, tax credits, and R&D support should be implemented. An establishment with government funding as its core should be formed to bring venture capital into the high-risk and high-return small and medium enterprises (Junjuan & Cai, 2020).

Venture capital is linked to some of the most rapidly expanding and powerful companies globally. In May 2020, seven of the top eight publicly traded firms globally had received support from venture capital before going public. These companies include Alphabet, Apple, Amazon, Facebook, and Microsoft in the US, as well as Alibaba and Tencent in China. Venture capital has experienced substantial growth in the last ten years, fueled by fresh investment possibilities and increased accessibility to capital for this type of asset. There have been numerous appealing investment opportunities on the demand side. Numerous startups supported by investors have concentrated on creating innovative methods for utilizing information technology and the broad adoption of mobile communications (Lerner & Nanda, 2020).

Research conducted by Biney, 2018 revealed that small and medium-sized enterprises that obtain venture capital funding demonstrated improved sales and employment growth outcomes. This is likely due to the fact that, along with the venture capital funds, they also benefit from added value services like technical knowledge, networks, and support in marketing and management provided by venture capitalists. The additional services provided in conjunction with the funding received from venture capitalists help boost the business performance of SMEs through increased sales revenue and growth in employment. This research found that many small and medium-sized enterprises (SMEs) struggle to secure venture capital due to their distance from venture capital companies. Therefore, by dispersing the venture capital funding process, rural SMEs can connect with fund managers. Their findings also indicated that gender, experience, location, business strategy, social connections, and interest rates play a crucial role in small and medium-sized enterprises securing venture capital. The age, marital status, educational level, size, age, legal status, and sector of SME owner and/or managers do not affect SMEs' ability to secure venture capital funding. The research also found that women-led businesses had lower chances of receiving venture capital funding compared to businesses led by men, experienced entrepreneurs secure venture capital funding earlier in their company's growth, and SMEs near these funding firms are more likely to obtain venture capital similar to urban-based firms compared to their rural counterparts.

The study by (Gikomo, 2013) whose aim was to investigate the effect of venture capital financing on the growth of SMEs in Kenya and focused on the Top 100 Mid-sized companies (2012) in Kenya. Inferential statistics were used to analyze the data, utilizing a regression model. The research discovered a strong and favorable correlation between growth in small and medium-sized enterprises and funding from venture capital. The research found that venture capital has a

significant impact on the growth of small and medium-sized enterprises (SMEs), with increased financing leading to improvements in credit ratings, marketing and distribution networks, technical expertise, and management skills, ultimately driving growth in these companies. By effectively combining management skills and technical knowledge, companies can strategically leverage available information and resources to develop sound business expansion plans while minimizing risks. The research suggests that small and medium enterprises should acknowledge the benefits of seeking external equity funding from corporate entities. Corporate investors can be crucial assets for SMEs in terms of financial and strategic support, offering tangible and intangible resources that contribute to the growth of small businesses. The government and venture capital fund managers both have the ability to further promote venture capital investment. The eligible venture capital finance companies supporting SMEs should receive credit and equity financing from the government.

On average, companies funded by venture capital exhibit higher levels of innovation and experience faster growth in terms of employment and sales revenue compared to other companies. Nonetheless, the variations in innovation performance, measured by the portion of new products and services in sales revenue, are found to be due to pure selection effects rather than the direct causal influence of venture capital funding on innovation. In simpler terms, venture capital funds typically invest in companies that already have high levels of innovation, rather than actively making those companies more innovative. From the perspective of individual companies, this observation does not have an additional impact beyond what is already accounted for by the specific financing function. Though, when considering the overall economy, it shows proof of the selection mechanism, indicating the effectiveness of venture capital in directing resources to creative companies, thus promoting structural transformation and progress (Peneder, 2010).

According to (Gompers & Lerner, 2001) Venture capital has become a crucial link in financial markets, offering funding to companies that may struggle to secure investment otherwise. These companies are usually small and new, facing significant uncertainty and substantial discrepancies in knowledge between entrepreneurs and investors. Furthermore, these companies generally have minimal physical assets and function in industries with quickly shifting landscapes. Venture capital firms fund these risky projects with potential for high returns by acquiring ownership or ownership-linked shares before the companies go public.

Early-stage start-ups face barriers such as financial gaps, limited human capital management skills, high uncertainty in product and market, volatile development processes, and weak partnership connections, all of which hinder innovation and commercialization efforts. It has been concluded that venture capitalists play a crucial role in bridging financial gaps and offering additional services such as financial, technological, managerial support, and networking. There are empirical findings that link venture capital funding to quicker company expansion and a speeding up of the innovation and commercialization process. (Girdauskiene, Savaneviciene, & Venckuviene, 2015).

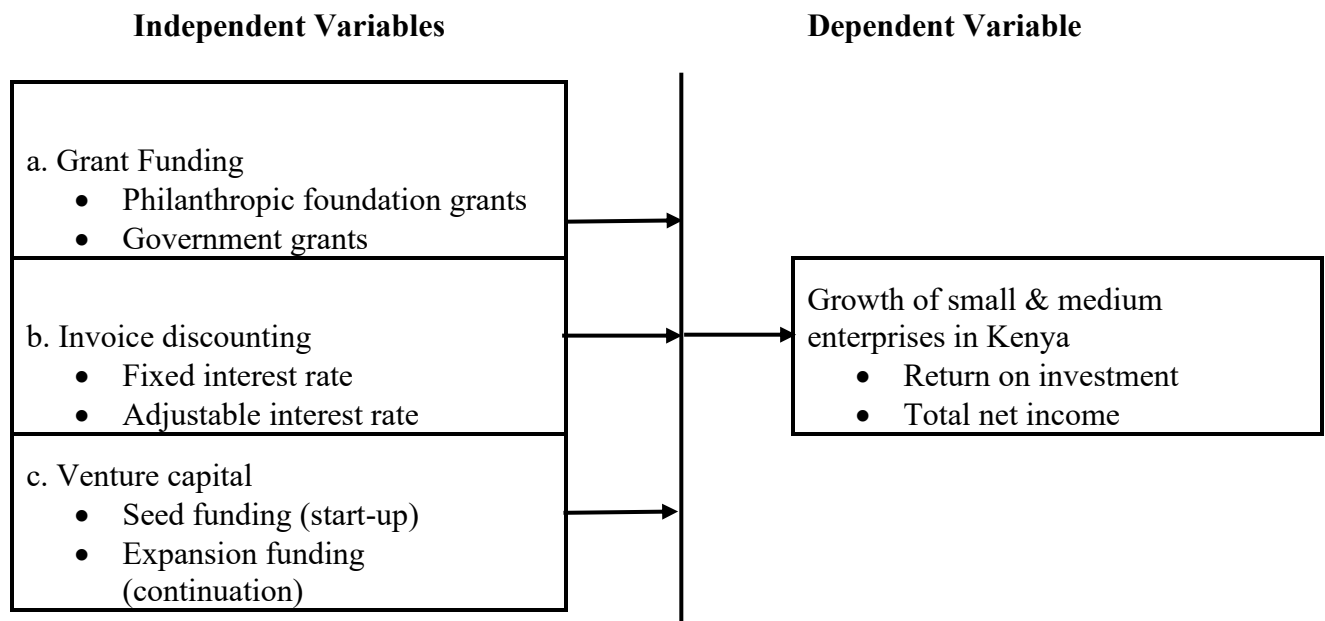
According to (Zider, 1998) large institutions like pension funds, financial firms, insurance companies, and university endowments are the common investors in venture capital funds. Each of them invests a small portion of their overall funds in high-risk ventures. They anticipate receiving an annual return of 25% to 35% throughout the investment's duration. Due to the minimal percentage these investments take up in institutional investors' portfolios, venture capitalists have a high degree of freedom. These institutions are driven to invest not by the particular investment, but by the firm's overall history and their trust in the partners.

2.3.5. Research Gap

Past studies analyzing the growth of SME's have mainly focused on the conventional and traditional methods of funding business growth like bank loans, issue of shares, pooling from friends and family to only name few. There is an empirical gap in that there is very little researchers who have covered business funding for growth using non-conventional methods such as grant funding, venture capital and invoice discounting. Although there are studies covering these aspects the available research has left a contextual gap since the solution of grant funding is majorly covered in form of government funding and there is very little on private funding, invoice discounting is majorly covered for larger organizations and very little on small and medium sized enterprises and venture capital as a whole doesn't have a lot of researchers due to investors wanting to keep their investments private. Other studies done question the impact and value that these traditional funding methods have on the growth of SME's and claim that there might be little to no long term positive impact on business growth. The studies have however failed to offer alternative sources of funding that would have a great impact in facilitating business growth. This study seeks to fill this knowledge gap by offering innovative financing solutions that impact sustainable growth of SME's in Kenya.

2.4. Conceptual Framework

The conceptual framework to be used in this study is as shown below;



2.5. Operationalization of Variables

Variable	Type of Variable	Measurement	Type of Scale of Measurement
Invoice Discounting	Independent	Debt-to-EBITDA Ratio = Total Debt / Earnings Before Interest Taxes Depreciation & Amortization (EBITDA)	Ratio
Grant Funding	Independent	ROI = Net Income / Cost of Investment	Ratio
Venture Capital	Independent	ROI = Net Income / Cost of Investment	Ratio
Growth of SME's	Dependent	ROE = Total net income/Shareholders' equity	Ratio

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

Research methodology refers to a systematic approach for addressing the research issue. It can be interpreted as the scientific study of how research is conducted. The text explores the steps commonly taken by researchers when studying their research problem, as well as the rationale behind these steps. (Patel & Patel, 2019).

3.2. Research Design

A research design is a systematic approach employed by researchers to effectively tackle questions. It is extremely unbiased and accurate. Usually, the research design dictates the type of analysis necessary to achieve the desired outcomes. It is defined as a researcher's chosen system of strategies and methods to blend various research elements in a cohesive manner in order to effectively tackle the research problem. It provides direction on how to conduct research using a particular method (Khanday & Khanam, 2019).

The research utilized descriptive research design which is beneficial for outlining the specific traits of the sample under investigation. It examines the qualities of a group of individuals; recognizes issues within a specific group, company, or community; or examines differences in qualities or customs among establishments or nations (Caruth, 2013). This ensures that the problem is examined from different perspectives, revealing and understanding multiple aspects of the phenomenon. The descriptive research design was used to explore the effects of innovative financing solutions on the sustainable growth of SME's.

3.3. Target Population

The target population for this study was small and medium sized enterprises registered in Kenya and regulated under the Companies Act 2015. The researcher targeted these firms to understand the impact innovative financing solutions had on their growth and how its sustaining the business in general. The study sought responses mainly from the owners of 110 SMEs over the past 5years that have been audited by Victor O.O & Associates as the firm provided a means to collect unbiased data on SMEs that utilized all the innovative financing solutions and thus an avenue to get balanced data for this study.

3.4. Sample Size and Sampling Procedure

This study applied simple random sampling which is a method of probability sampling that allows researchers to randomly select participants for their study without any bias. It is beneficial and helpful for research, offering unbiased representation with each sample having an equal chance of being chosen, and mitigating the influence of both known and unknown factors on the study population (Noor & Golzar, 2022).

3.5. Research Instrument

This study used semi-structured interviews guided by a questionnaire and organization documents that participants provided to collect data. The organization documents that were relied on are audited financial statements, accounting books and agreements with third parties in relation to the innovative financing solutions. According to (Mashuri, Rasak, Alhabsyi, & Syam, 2022) semi-structured interviews are considered more effective than other interview types as they enable researchers to gather detailed information and evidence from respondents, while also focusing on the study's main objectives. Many researchers believe that semi-structured interviews allow them to keep their studies on track while also being able to ask interviewees questions in a flexible and

adaptable manner. The organization documents were used to validate the interviewee's responses and further justify the impact of the innovative financing solutions on the organization's growth.

3.6. Validity and Reliability of Research Instrument

3.6.1. Reliability of Research Instrument

Sharing study results with the participants was used as a way to conduct member checks and ensure the reliability of data from semi structured interviews. In order to confirm the researcher's comprehension of the participant's conversation is correct, researchers must present the participants with the analysis of the data for validation. Hence, phone conversations and concise discussions of research findings were conducted with participants in order to verify the accuracy and alignment with their experiences. (Nabawanda, Small and Medium-Size Enterprise Owner Strategies for Invoice Factoring Financing, 2018). The integrity of organization documents is not really in question since they are maintained by third parties and used by various stakeholders like revenue authorities, investors, customers among others hence they are well maintained and reliable.

3.6.2. Validity of Research Instrument

Assessing the validity of a research instrument involves determining how well the instrument measures its intended purpose. The level of accuracy of the results is what matters. Research involves a researcher using specific methods to verify the accuracy of the research results (Haradhan, 2017). Data triangulation was employed to determine the validity of the research instrument used in this study by identifying areas where findings align and where they differ. Points where things differ offer chances to discover more profound significance in the information.

Data triangulation is the practice of collecting data from various sources about the same topic (Salaberrios, 2016).

3.7. Data Collection Procedure

Data was collected using semi-structured face to face interviews using a predefined questionnaire with owners who have an in-depth understanding of the innovative financing solutions applied by the institution and its impact on growth of the institution and organization documents that will be relied on are audited financial statements, accounting books and agreements with third parties in relation to the innovative financing solutions. According to (Mashuri, Rasak, Alhabsyi, & Syam, 2022) semi-structured interview is seen as more beneficial compared to other interview types as it enables researchers to gather detailed information and evidence from interviewees, all while carefully focusing on the study's objectives. Researchers find that the semi-structured interview allows them to monitor their research progress and have the freedom to ask different questions to participants. While the organizational documents will be collected from the third related parties and employees who gate keep those documents.

3.8. Data processing and Analysis

Panel data collected was coded and analyzed using STATA computer software and through methodological triangulation qualitative and quantitative data was combined to enhance analysis of the data. According to (Bekhet & Zauszniewski, 2012) The use of methodological triangulation has been shown to offer validation of results, a more thorough collection of data, greater credibility, and improved insight into the phenomenon being studied. Triangulation allows researchers to combine two research methods in order to mitigate the limitations of each method and enhance the findings of the study.

3.8.1. Statistical Model

The study applied STATA a statistical software to conduct a multivariate regression analysis, Spearman correlation and a Chi-square test of independence at 95% confidence level to establish quantitative data in order to estimate the following, in line with the study's objectives:

The estimated model to be used is as below:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \varepsilon$$

Where:

Y_{it} = Growth of SME's

β_0 = Constant term

X_{1it} = Invoice Discounting

X_{2it} = Grant Funding

X_{3it} = Venture Capital

B_1 = regression coefficients for X_{1it}

B_2 = regression coefficients for X_{2it}

β_3 = regression coefficients for X_{3it}

ε = the error term

3.8.2. Test of Significance

A significance test is a method used to measure the strength of inductive evidence and determine the level of significance of a hypothesis. It assigns high significance to evidence that makes the hypothesis highly unlikely. A significance test will be carried out to determine if the observed difference is statistically significant. According to statistical theory, the F-test is a common method that can determine the most suitable model for a specific dataset by comparing the variances of two models at a 95% significance level (Bull & Zhang, 2021).

Diagnostic Tests

During data analysis, the following diagnostic tests will be carried out;

3.8.3. Multicollinearity Test

Multicollinearity happens when a multiple linear regression analysis involves several variables that are highly correlated with both the dependent variable and with each other. Multicollinearity causes certain significant variables in the study to become statistically insignificant (Shrestha, 2020). Multicollinearity was evaluated by utilizing the variance inflation factor (VIF). In general, multicollinearity is indicated when VIF values are higher than 10.

3.8.4. Heteroscedasticity Test

When the linear regression model's assumptions are accurate, ordinary least squares method offers effective and unbiased parameter estimates. Heteroscedasticity happens when the variance of the residuals differs among observations. When errors exhibit heteroscedasticity, the ordinary least squares estimator stays unbiased, but loses efficiency. More significantly, the typical methods for testing hypotheses are no longer suitable. Since heteroscedasticity frequently occurs in cross sectional data, it is crucial to use techniques that address this issue in order to conduct proper data analysis (Long & Ervin, 1999). In this study, the Breusch–Pagan test was employed to assess the degree of heteroscedasticity exhibited by the linear regression model.

3.8.5. Autocorrelation Test

Autocorrelation is observed when data appears to exhibit a consistent pattern over a period of time. In this instance, the data show similarities in the rates of change over different time periods. Models showing autocorrelation imply that they are well specified, indicating that crucial variable(s) are not included in the model. An autocorrelation test was performed to assess whether the data violates the assumptions of Ordinary Least Squares (OLS), leading to incorrect results in

hypothesis testing (Kariuki, 2023). In this study the Wooldridge test was utilized to identify if there was serial correlation in the model. The Wooldridge test is based on minimal assumptions, is simple to put into practice, and exhibits superior power and size characteristics.

CHAPTER FOUR

RESEARCH FINDINGS AND ANALYSIS

4.1. Introduction

This chapter showcased the results of the semi structured interviews. This part of the chapter consists of general information sections, containing demographic data and response rate. The section also highlights the importance of descriptive and inferential statistics with regards to the research goals.

4.2. Response Rate

Semi structured interviews using a predefined questionnaire were carried out to gather the views of the target population on sustainable growth in Kenyan small and medium sized enterprises (SMEs). Ninety five interviews based on the sample and were carried out with the owners of the chosen small and medium enterprises (SMEs), of which seventy-two were successfully completed and returned for analysis.

The response rate was 76% as the seventy-two owners were very forthcoming during the interviews and answered all the questions asked and provided all the information needed. According to (Baruch, 1999) researchers are generally deemed to be successful if they attain a response rate between 30% and 40% on average. Nevertheless, researchers should aim for a response rate of around 70% to improve the credibility and dependability of their studies. This indicates that the study's response rate is considered appropriate.

4.3. Demographic Characteristics

Demographic data offers a quick look at the attributes of the participants. This data aids in characterizing the population being studied and serves as a foundation for analyzing and

interpreting the data with respect to these demographic factors. The participants shared details about their experience, professional credentials in relation to their contributions, and highest educational attainment. The primary assumption of this research was that people's demographic traits influenced their perspectives on the subject under scrutiny.

4.3.1. Gender of the Respondents

The participants were asked to identify their gender. From the data collected, it was discovered that every participant was classified as male. There were no female respondents as all the seventy-two owners of the sampled SMEs were male. This means that there is probably a very low number of female entrepreneurs who are actively seeking to implement innovative financing solutions to grow their businesses.

4.3.2. Age of the Respondents

The research aimed to determine the ages of the participants in the study. Age is strongly connected to the individual's position in their life cycle and the associated landmarks, duties, and goals. Various age groups might have varying requirements, ambitions, and obstacles depending on their stage in life. Having knowledge of the ages of the respondents is important because a person's age could impact their responses during the interview. The age group of the respondents were between 45 and 55.

4.3.3. Highest Level of Education

The participants were expected to communicate their highest education level as this may also have an impact on the responses to the interview. Based on their response the individual with the highest level of education possessed a PhD in Chemical Engineering and the respondent with the lowest level of education had a technical diploma in Information Communication Technology (ICT).

Overall, the research discovered that each participant had received a formal education, allowing them to answer without needing extensive interpretation.

4.3.4. Years of Experience with the Firm

The participants were asked to indicate the duration of time they had owned the business. The time spent with a company can be a good indicator of their knowledge of internal processes, abilities, and achievements. All the respondents had been with businesses for more than 10 years. With some having inherited the business from their parents and have been working there since their teenage years, some having started the business on their own after finishing their schooling and the others having started the business from scratch after a few years working for other companies.

4.4. Descriptive Statistics

Descriptive statistics are used to display the study findings. Summary statistics included mean, standard deviation, as well as minimum and maximum values. Analyzing the data descriptively was done to identify the statistical characteristics of the data in the research. Descriptive statistics were used to analyze each variable in the present study.

TABLE 4.1
Descriptive Statistics of Study Findings

Variable	Obs	Mean	Std. Dev.	Min	Max
Grants	360	0.0694	0.2631	-1.5128	2.3779
Invoice Discounting	360	3.0781	3.7915	-1.4114	21.3255
Venture Capital	360	0.0131	0.0658	-0.3782	0.5904
Growth of SME	360	0.5379	1.1683	-0.5766	8.9297

4.4.1. Grant funding on the sustainable growth of Small and Medium Enterprises in Kenya

Table 4.1 displays the descriptive statistics calculated from data collected from a group of seventy-two participants. The study's results showed the average, highest, lowest, and standard deviation figures related to the use of innovative financing solutions on the sustainable growth of small and medium enterprises in Kenya. The average grant funding obtained by small and medium enterprises, as determined by the return on investment was 0.0694, with a standard deviation of 0.2631. The ROI ranges from -1.5128 to as high as 2.3779. A low standard deviation indicates that the return on investment from grant funding is relatively similar to the average of 0.0694.

4.4.2. Invoice discounting on the sustainable growth of Small and Medium Enterprises in Kenya

Table 4.1 displays the descriptive statistics calculated from data collected from a group of seventy-two participants. The study's results showed the average, highest, lowest, and standard deviation figures related to the use of innovative financing solutions on the sustainable growth of small and medium enterprises in Kenya. The average invoice discounting obtained by small and medium enterprises, as determined by the Debt-to-EBITDA (Earnings before interest tax depreciation and amortization) Ratio was 3.0781, with a standard deviation of 3.7915. The Debt-to-EBITDA ratio ranges from as low as -1.4114 to as high as 21.3255. A low standard deviation indicates that the Debt-to-EBITDA ratio from invoice discounting is relatively similar to the average of 3.0781.

4.4.3. Venture Capital on the sustainable growth of Small and Medium Enterprises in Kenya

Table 4.1 displays the descriptive statistics calculated from data collected from a group of seventy-two participants. The study's results showed the average, highest, lowest, and standard deviation

figures related to the use of innovative financing solutions on the sustainable growth of small and medium enterprises in Kenya. The average venture capital funding obtained by small and medium enterprises, as determined by the return on investment was 0.0131, with a standard deviation of 0.0658. The ROI ranges from -0.3782 to as high as 2.3779. A low standard deviation indicates that the return on investment from grant funding is relatively similar to the average of 0.5904.

4.4.4. Sustainable growth of Small and Medium Enterprises in Kenya

Table 4.1 displays the descriptive statistics calculated from data collected from a group of seventy-two participants. The study's results showed the average, highest, lowest, and standard deviation figures related to the use of innovative financing solutions on the sustainable growth of small and medium enterprises in Kenya. The average return on shareholder's equity obtained by small and medium enterprises was 0.5379, with a standard deviation of 1.1683. The return on shareholder's equity ratio ranges from as low as -0.5766 to as high as 8.9297. A low standard deviation indicates that the return on shareholder's equity ratio is relatively similar to the average of 8.9297.

4.5. Diagnostic Tests

Various tests were conducted to determine if panel data met the necessary conditions for classical linear regression analysis. The tests conducted were linearity tests, multicollinearity test, and heteroscedasticity test. When the assumptions were not met, the necessary corrective measures were implemented.

4.5.1. Multicollinearity Test

A test for multicollinearity was performed to determine if there is a strong correlation among any of the independent variables in the regression model. Multicollinearity is indicated when the variance inflation factor values are higher than 10. Table 4.2 below shows the outcome of the test using variance inflation factor (VIF).

TABLE 4.2
Multicollinearity Variance Inflation Factor

Variable	VIF	1/VIF
Grant Funding	1.43	0.6971
Venture Capital	1.43	0.6976
Invoice Discounting	1.00	0.9969
Mean VIF	1.29	

The results shown in table 4.2 suggest that the variance inflation factor for grant funding, venture capital and invoice discounting were below 10 hence there was no risk of multicollinearity and as a result, a regression analysis was carried out to evaluate how the independent variables of grant funding and invoice discounting affected the dependent variable.

4.5.2. Heteroscedasticity Test

Heteroscedasticity occurs when the standard deviations of a predicted variable vary across different values of an independent variable or time periods. In cases of heteroscedasticity, the key indicator by looking at the residual errors is that they will fan out gradually over time. The study utilized the Breusch-Pagan test, with the test's null hypothesis being that error terms exhibit constant variance, also known as Homoscedasticity. The outcomes below suggest that the error terms exhibit heteroscedasticity, as the p-value of 0.0000 is lower than 5%, indicating a breach of the ordinary least squares assumption of constant residual variance.

F (2, 157)	=	12.80
P > F	=	0.0000

4.5.3. Autocorrelation Test

The Wooldridge test was utilized to identify if there was serial correlation in the model. The Wooldridge test is based on minimal assumptions, is simple to put into practice, and exhibits

superior power and size characteristics. The null hypothesis states that there is no first-order autocorrelation in the model. A p-value below 0.05 indicates the existence of serial correlation in a model. As shown below after analysis, a p-value higher than 0.05 indicates acceptance of the null hypothesis. The research, therefore, suggests the lack of first-order autocorrelation in the model since the p-value was 0.3603 which is greater than 0.05. The results below clearly demonstrate that the model estimation provides superior estimates.

F	=	0.8480
P > F	=	0.3603

4.6. Analysis of Variance

Analysis of variance (ANOVA) is a statistical test of significance for Identifying disparities in group means with one parametric dependent variable and one or multiple independent variables.

4.6.1. Grant funding on the sustainable growth of Small and Medium Enterprises

Based on the results shown in the given TABLE 4.4, the p value linked to the F value of 1.5 was established to be 0.0033 which is below the pre-set significance threshold of 5%. This finding shows that grant funding is statistically significant at a 5% significance level.

TABLE 4.4
Grant Funding Test of Significance

Source	Sum of Squares	df	Mean Square	F	Prob > F
Between groups	297.6224	182	1.6353	1.5	0.0033
Within groups	192.3623	177	1.0868		
Total	489.9847	359	1.3649		

4.6.2. Invoice discounting on the sustainable growth of Small and Medium Enterprises

Based on the results shown in TABLE 4.5 below, the p value linked to the F value of 9160.52 was established to be 0.0000 which is below the pre-set significance threshold of 5%. This finding shows that invoice discounting is statistically significant at a 5% significance level.

TABLE 4.5
Invoice Discounting Test of Significance

Source	Sum of Squares	df	Mean Square	F	Prob > F
Between groups	489.9761	309	1.5857	9160.52	0.0000
Within groups	0.0087	50	0.0002		
Total	489.9847	359	1.3649		

4.6.3. Venture Capital on the sustainable growth of Small and Medium Enterprises

Based on the results shown in TABLE 4.6 below, the p value linked to the F value of 1.19 was established to be 0.1538 which exceeds the pre-set significance threshold of 5%. This finding shows that venture capital is statistically insignificant at a 5% significance level.

TABLE 4.6
Venture Capital Test of Significance

Source	Sum of Squares	df	Mean Square	F	Prob > F
Between groups	136.1564	88	1.5472	1.19	0.1538
Within groups	353.8284	271	1.3056		
Total	489.9847	359	1.3649		

4.7. Regression Analysis

The main aim of the research was to investigate innovative financing solutions on the sustainable growth of small and medium enterprises in Kenya. In order to reach the goal, the research utilized a panel regression analysis with fixed effects. Panel Least Squares Method was utilized due to its ability to provide reliable estimations. The STATA software was used to examine panel data for

72 companies, which represented a population of 110 companies over a period of 5 years. Table 4.7 shows the findings of the regression analysis on the sustainable growth of small and medium enterprises in Kenya, in relation to grant funding and invoice discounting. The findings of the regression analysis of innovative financing solutions were displayed in Table 4.7 below.

TABLE 4.7
Regression Analysis of Innovative Financing Solutions

Growth of SMEs	Coefficient	Err.	z	P> z
Invoice Discounting	-0.0315	0.0208	-1.5200	0.1300
Grant Funding	0.6063	0.1442	4.2100	0.0000
Venture Capital	-0.2532	0.5002	-0.5100	0.6130
Constant	0.5961	0.1388	4.3000	0.0000

estimation equation $Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \varepsilon$ was fitted as below;

$$Y = 0.5961 - 0.0315X_1 + 0.6063X_2 - 0.2532X_3$$

Where:

Y_{it} = Growth of SME's

β_0 = Constant term

X_{1it} = Invoice Discounting

X_{2it} = Grant Funding

X_{3it} = Venture Capital

β_1 = regression coefficients for X_{1it}

β_2 = regression coefficients for X_{2it}

β_3 = regression coefficients for X_{3it}

ε = the error term

After taking into account all pertinent factors and assuming no other variables are present, the constant value was determined to be 0.5961, which represents the degree of utilization of innovative financing solutions posits that with application of innovative financing the growth of an enterprise measured by ROE will go up by 0.5961. The model showed that holding all other independent variable constant, a one-unit increase in Invoice Discounting results in a decrease in growth of an enterprise by 0.0315 with a P-value of 0.1300 which is above the pre-set significance threshold of 5%. This regression finding shows that invoice discounting is statistically insignificant at a 5% significance level, a one-unit increase in Venture Capital results in a decrease in growth of an enterprise by 0.2532 with a P-value of 0.6130 which is above the pre-set significance threshold of 5%. This regression finding shows that Venture Capital is statistically insignificant at a 5% significance level and a one-unit increase in Grant Funding results in an increase in growth of an enterprise by 0.6063 P-value of 0.0000 which is below the pre-set significance threshold of 5%. This regression finding shows that Grant Funding is statistically significant at a 5% significance level.

4.7.1. Grant funding regression analysis

The STATA software was used to examine panel data for 72 companies, which represented a population of 110 companies over a period of 5 years. Table 4.8 shows the findings of the regression analysis on the sustainable growth of small and medium enterprises in Kenya in relation to grant funding.

TABLE 4.8
Regression Analysis of Grant Funding

Growth of SMEs	Coefficient.	Err.	z	P>z
Grant Funding	0.5840	0.1346	4.3	0.0000
Constant	0.4973	0.1229	4.1	0.0000

$$Y = 0.4973 + 0.5840X_1$$

After taking into account all pertinent factors and assuming no other variables are present, the constant value was determined to be 0.4973, which represents the degree of utilization of innovative financing solutions posits that with application of grant funding the growth of an enterprise measured by ROE will go up by 0.4973. The model showed that holding all other independent variable constant, a one-unit increase in grant funding results in an increase in growth of an enterprise by 0.5840.

4.7.2. Invoice Discounting regression analysis

The STATA software was used to examine panel data for 72 companies, which represented a population of 110 companies over a period of 5 years. Table 4.8 shows the findings of the regression analysis on the sustainable growth of small and medium enterprises in Kenya in relation to invoice discounting.

TABLE 4.9
Regression Analysis of Invoice Discounting

Growth of SMEs	Coefficient.	Err.	z	P>z
Invoice Discounting	-0.0333	0.0214	-1.56	0.1200
Constant	0.6403	0.1449	4.42	0.0000

$$Y = 0.6403 - 0.0333X_1$$

After taking into account all pertinent factors and assuming no other variables are present, the constant value was determined to be 0. 6403, which represents the degree of utilization of innovative financing solutions posits that with application of grant funding the growth of an enterprise measured by ROE will go up by 0. 6403. The model showed that holding all other independent variable constant, a one-unit increase in invoice discounting results in a decrease in growth of an enterprise by 0.0333

4.7.3. Venture Capital regression analysis

The STATA software was used to examine panel data for 72 companies, which represented a population of 110 companies over a period of 5 years. Table 4.8 shows the findings of the regression analysis on the sustainable growth of small and medium enterprises in Kenya in relation to venture capital.

TABLE 5.0
Regression Analysis Venture Capital

Growth of SMEs	Coefficient.	Err.	z	P>z
Venture Capital	0.5233	0.4813	1.09	0.2770
Constant	0.5310	0.1227	4.33	0.0000

$$Y = 0.5310 + 0.5233X_1$$

After taking into account all pertinent factors and assuming no other variables are present, the constant value was determined to be 0.5310, which represents the degree of utilization of innovative financing solutions posits that with application of grant funding the growth of an enterprise measured by ROE will go up by 0.5310. The model showed that holding all other independent variable constant, a one-unit increase in venture capital results in an increase in growth of an enterprise by 0.5233

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

This chapter will give an overview, make conclusions, and suggest recommendations according to the objectives. The suggestions were aimed at policymakers, investors, business owners, financiers, and academics. The summary explains how the dependent variable is related to independent factors.

5.2. Summary of Findings

This section gives a brief summary of the research results in connection to the specified objectives. The model summary demonstrates that the two independent variables are key in explaining the sustainable growth of small and medium enterprises in Kenya. The data analysis showed that the model summary had a significant impact. The chapter also covers the results of each research objectives and provides responses to the research questions.

5.2.1. Grant funding on the sustainable growth of Small and Medium Enterprises in Kenya

The first objective was to investigate whether grant funding had an effect on the sustainable growth of Small and Medium Enterprises in Kenya which was measured using return on investment (ROI) ratio. From the descriptive statistics in chapter four above the average grant funding obtained by small and medium enterprises, as determined by the return on investment was 0.0694, with a standard deviation of 0.2631. The ROI ranges from -1.5128 to as high as 2.3779. A low standard deviation indicates that the return on investment from grant funding is relatively similar to the average of 0.0694. From the interviews it was also deemed necessary that most financiers wanted to see that the business venture is adding value to society in general and not just beneficial to the

individual business owner. Also the findings further stated that audited financial statements and total compliance to all statutory regulations e.g. Income Tax Act, Employment Act to only name few were a requirement before finance was offered to any business. Grant funding was found to be statistically significant to the sustainable growth of the business. Similarly, the regression analysis showed that Grant funding had a positive beta coefficient and a significant p-value meaning that it does contribute significantly to sustainable growth of the business.

5.2.2. Invoice discounting on the sustainable growth of Small and Medium Enterprises in Kenya

The second objective was to investigate whether invoice discounting had an effect on the sustainable growth of Small and Medium Enterprises in Kenya which was measured using the Debt-to-EBITDA Ratio. From the descriptive statistics in chapter four above the average invoice discounting obtained by small and medium enterprises, as determined by the Debt-to-EBITDA (Earnings before interest tax depreciation and amortization) Ratio was 3.0781, with a standard deviation of 3.7915. The Debt-to-EBITDA ratio ranges from as low as -1.4114 to as high as 21.3255. A low standard deviation indicates that the Debt-to-EBITDA ratio from invoice discounting is relatively similar to the average of 3.0781. From the interviews it was also deemed necessary that most financiers need to have clear visibility on each discounted customer's payment terms based on a contract signed by both parties i.e. the customer and the business seeking funding. Also the findings further stated that audited financial statements and total compliance to the Income Tax Act were a requirement before finance was offered to any business. Invoice discounting was found to be statistically significant to the sustainable growth of the business. Similarly, the regression analysis showed that Invoice discounting had a negative beta coefficient

meaning that it does contribute significantly to sustainable growth of the business but in a negative manner, meaning that it actually lowers the growth rate of a business.

5.2.3. Venture Capital on the sustainable growth of Small and Medium Enterprises in Kenya

The third objective was to investigate whether venture capital had an effect on the sustainable growth of Small and Medium Enterprises in Kenya which was measured using return on investment (ROI) ratio. From the descriptive statistics in chapter four above the average venture capital funding obtained by small and medium enterprises, as determined by the return on investment was 0.0131, with a standard deviation of 0.0658. The ROI ranges from -0.3782 to as high as 2.3779. A low standard deviation indicates that the return on investment from grant funding is relatively similar to the average of 0.5904. From the interviews it was also deemed necessary that most financiers wanted to see that the business venture had a positive cash flow projection for the either the business as a whole or for the project seeking funding. Also the findings further stated that audited financial statements and total compliance to all statutory regulations e.g. Income Tax Act, Employment Act to only name few were a requirement before finance was offered to any business. Venture Capital was found to be statistically insignificant to the sustainable growth of the business. Similarly, the regression analysis showed that venture capital had a negative beta coefficient meaning that it does not contribute significantly to sustainable growth of the business.

5.3. Conclusion

The objective of this study was to investigate the effects of innovative financing solutions on the sustainable growth of small and medium enterprises in Kenya. Employing panel data analysis, this study examined how well the specific objectives of grant funding, venture capital and invoice discounting affect the growth of a business. The results were as explained below.

5.3.1. Grant funding on the sustainable growth of Small and Medium Enterprises in Kenya

Grant funding was found to be statistically significant to the sustainable growth of the business. Similarly, the regression analysis showed that Grant funding had a positive beta coefficient and a significant p-value meaning that it does contribute significantly to sustainable growth of the business. Grant funding was found to have a positive effect on the sustainable growth of small and medium size enterprises, and resulting in increasing value of the business and hence facilitated the growth rate of the business in general.

5.3.2. Invoice discounting on the sustainable growth of Small and Medium Enterprises in Kenya

Invoice discounting was found to be statistically insignificant to the sustainable growth of the business. Similarly, the regression analysis showed that Invoice discounting had a negative beta coefficient meaning that it does contribute to sustainable growth of the business but in a negative manner, meaning that it actually lowers the growth rate of a business. Invoice discounting was found to have a negative effect on the sustainable growth of small and medium size enterprises, and resulting in the devaluation of the business and hence lowered the growth rate of the business in general. According to (Salaberrios, 2016) research indicated that small businesses are significantly impacted by owner eligibility, profit margin, and a third-party relationship when they rely on invoice discounting for funding. Concluding that invoice discounting on its own is not statistically significant.

5.3.3. Venture capital on the sustainable growth of Small and Medium Enterprises in Kenya

Venture Capital was found to be statistically insignificant to the sustainable growth of the business. Similarly, the regression analysis showed that venture capital had a negative beta coefficient meaning that it does not contribute significantly to sustainable growth of the business. Venture

capital was found to have a negative effect on the sustainable growth of small and medium size enterprises, and resulting in the devaluation of the business and hence lowered the growth rate of the business in general. According to (Kato, 2021) most scholars agree that there is a lack of comprehensive research on venture capital funding in developing countries. The venture capital industry in the region is still relatively young and there is limited information available on the performance of venture capital financing. Moreover, access to venture capital data is restricted, making it challenging for researchers and potential entrepreneurs to obtain the necessary information. Which points as to why the impact of venture capital on business growth seems statistically insignificant.

5.4. Recommendation

Based on the findings of this study, the pecking order principle seems to stand true i.e. businesses should opt to fund their activities starting with retained profit, then moving on to debt which is usually inexpensive to acquire, and finally resorting to issuing equity shares. Hence this study recommends that when trying to grow small and medium size businesses the owners should first utilize internal funds then seek outside inexpensive funding's such as grants then following the ranking will be inexpensive debt when working capital is inadequate and finally issuing equity shares if all other funding solutions become inadequate.

5.5. Suggestion for Further Studies

Based on the aforementioned findings, it is recommended that further research be conducted on the combination of innovative financing solutions and the traditional methods of business finance such as bank loans, equity issues etc. to ascertain the impact of a combination of these will have on the business. Further study can also be done on the effect of innovative financing solutions on large companies and/or companies listed in the Nairobi Securities Exchange.

5.6. Limitation of the Study

The study only focuses on Kenya, despite using data from SMEs across various areas within the region. Therefore, it is important to be careful when analyzing our results and to limit their scope to our research participants. Additionally, our research is affected by an issue with how the sample is distributed, brought on by the data accessibility. It is expected that conducting research on the effect of innovative financing solutions on the sustainable growth of small and medium enterprises in a developing country like Kenya could present such a challenge. Despite the preference for a balanced sample distribution, our sample size was unbalanced due to the reluctance of many SMEs utilizing innovative financing solutions to share critical information, particularly regarding financial disclosure. Due to the small number of businesses in the population and the rare utilization of these innovative funding solutions there is a possibility that the results may not fully represent the viewpoints of every small and medium size enterprise in Kenya involved the use of innovative financing solutions therefore, limiting the ability to apply these findings to other small and medium sized businesses.

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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

26th September 2024

Ref: letter of introduction of researcher to respondent

Dear Sir/Madam,

My name is Lydia Oluoch, a student from KCA University. I am conducting academic research on the Effect of Innovative Financing Solutions on the Sustainable Growth of Small and Medium Enterprises in Kenya. I kindly ask for your cooperation so I can collect the required information. I guarantee that your opinions will be kept confidential and the study will not be utilized for any monetary benefits. Participation in this interview is entirely optional and confidential. If you need to end the interview, please do so but remember that your participation is valued. I ask for your presence in this interview through a meeting in person or over the phone within a few days of receiving this. Please keep in mind that this research is beneficial to society as it encourages increasing awareness and advocacy.

Yours sincerely,

Justin Lydia Oluoch

APPENDIX II: LIST OF PILOTED SME

No.	Company Name.
1	Orbit Products Africa Ltd
2	Colour Packaging Ltd
3	Orbit Agro Chemical Ltd
4	Ab Consultants
5	Integra Ltd
6	Flair Kenya Limited
7	Iris Properties Ltd
8	Stellar Manufacturing Ltd
9	Stellar Investment Ltd
10	Fairmead Ltd
11	Tripac Limited
12	Insta Products Ltd
13	Manuchar Kenya Ltd
14	Megvel Cartons
15	Zen Garden Limited
16	Dream Cabs Limited
17	Nairobi Plastics Ltd.
18	Majestic Printing Works Ltd.
19	Shreeji Chemicals Ltd
20	Nikesh Minimart
21	Maisha Minerals And Fertilisers Limited
22	Techvana Technologies Limited
23	Icolo Limited
24	Pestline Services Limited
25	Falcon Environs Company Limited
26	Calla Ltd
27	Gelx Industries Limited
28	Jewel Logistics Limited
29	Wanson Enterprises
30	Megapack (K) Ltd
31	Alpha Milan Logistics
32	DPL Festive Ltd
33	Diversey Eastern And Central Africa
34	The Clorox Company
35	Maz International Ltd
36	Plastic Products Co.Ltd
37	Spectra Chemicals (K) Ltd
38	Megvel Cartons Ltd

- 39 Shalimar Flowers Kenya Ltd
- 40 Pwani Oil Products Ltd
- 41 General Plastics Ltd
- 42 Pramukh Cash & Carry
- 43 Eighteen Holdings Limited
- 44 H.C Processing And Contracting Ltd
- 45 Supersleek Limited
- 46 Sokowatch Limited Kenya
- 47 Chyulu Scrap Metal Enterprise
- 48 Mac Spring Foods Ltd
- 49 Joseph Muema & Son Investments
- 50 Rinz Products Limited
- 51 Girmay Hailu Hagos
- 52 Kapa Oil Refineries Ltd
- 53 Euro Industrial Chemicals Ltd
- 54 Kobian Kenya Limited
- 55 Trojan Fire Security Ltd
- 56 ASL LTD - Chemicals Division
- 57 Papyrus (A) Ltd
- 58 Proto Energy Limited
- 59 Thames Electricals Ltd
- 60 Rentoline Limited
- 61 Repelectric (K) Ltd
- 62 Q-Ways Limited
- 63 Motion Industrials Ltd
- 64 Ponsel Enterprises (K) Ltd
- 65 Safety Guard Technologies Limited
- 66 Getech Maxnav Transport & Manufactu
- 67 Seacom Kenya Limited
- 68 Polythene Industries Limited
- 69 Calltronix Kenya Limited
- 70 Healthcare Direct (K) Ltd
- 71 Ashut Plastics Limited
- 72 Outserve Technologies Ltd

APPENDIX III: DATA COLLECTION SHEET

SME	ID	Year	Net Income	EBITDA	Invoice Discounting	Grant received	Shareholders' Equity

APPENDIX IV: INTERVIEW QUESTIONNAIRE

This questionnaire is intended to gather information solely for academic reasons. The research aims to Effect of Innovative Financing Solutions on the Sustainable Growth of Small and Medium Enterprises in Kenya. All data will be handled with utmost confidentiality.

Ask all questions as indicated and record response by either filling in the blank or ticking the option that applies.

Section A: Background of Respondents

1. What is your gender?

- i. Male []
- ii. Female []

2. What is your age?

- i. Below 30 years []
- ii. 30 - 39 years []
- iii. 40 - 49 years []
- iv. 50 - 55 years []
- v. Over 55 years []

3. What is your highest level of education?

- i. Diploma []
- ii. Bachelor's []
- iii. Master []
- iv. PhD []

4. What is your position in the SME?

- i. Owner []
- ii. Managers []

5. How many years have you been in SME sector?

i. Less than 5 years []

ii. 5 - 10 years []

iii. Above 10 years []

Section B: Invoice Discounting Queries

How frequently do you discount your invoices?

What are the requirements to access invoice discounting?

What challenges do you face with regards to invoice discounting?

What benefits do you derive from invoice discounting?

Would you recommend other small and medium size enterprises to adopt invoice discounting?

Section B: Grant Funding Queries

How frequently do you receive grant funding?

What are the requirements to access grant funding?

What challenges do you face with regards to grant funding?

What challenges do you face when applying for grant funding?

What benefits do you derive from grant funding?

Would you recommend other small and medium size enterprises to adopt grant funding?

BOARD OF POSTGRADUATE STUDIES

KCAU/BPS/.24

28 September 2024

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: LYDIA OLUOCH - REG NO: 15/00965

It is my distinct pleasure to introduce to you Lydia Oluoch, who is a student in our institution pursuing a

Master of Science in Commerce (Finance) degree in the School of Business.

Lydia is conducting a research on a topic titled: *“Effect of innovative financing solutions on the sustainable growth of small and medium enterprises in Kenya”* which is part of the requirements of the program she is pursuing. The research as well as the data procured thereof shall be used for academic purposes only.

Any assistance accorded to her is highly appreciated.

In case of further inquiry, do not hesitate to contact the undersigned.

Yours faithfully,

Dr. Jackson Ndolo

Director, Board of Post Graduate Studies

