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The Impact of the Financial System and its Channels on SMES' Access to Financing: A Nigerian Perspective

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Dedication

To the loving memory of my parents, Buari and Taibat Ademosu, my siblings, nephews, and nieces. To my wife and best friend forever, Toluntola Ademosu (Ife Mi), and our beloved children, Oluwanifemi, Oluwatoni, Oluwatomi, Adora, Funmilayo, and Adewunmi, I thank you all for walking alongside me on this journey. Your tolerance and encouragements were sources of inspiration to me throughout the study. I had always wanted my life to serve as a model of hard work, perseverance, purpose, and the grace of God.

To God Almighty, the Father of our Lord Jesus Christ, I dedicate this work.

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Abstract

Several researchers have studied the catalytic influence of small and medium enterprises (SMEs) on many countries' economies. Its underwhelming impact on the Nigerian economy has also attracted some attention. This research aims to examine the effect of the financial system on SMEs' access to financing and recommend changes to the financial system that will enhance SMEs' access to funding in Nigeria. Thus, the research adopted a mixed-method approach. The quantitative analysis section used 18 years of aggregate national data sourced from the Central Bank of Nigeria (CBN) to determine the relationship between the financial system, the channel of distribution (the financial institutions), and SME access using regression analysis. In addition, 1,590 SMEs registered with the Small and Medium Enterprises Agency of Nigeria (SMEDAN) in the three out of the six geographical zones of the country were surveyed based on density, spread, and randomization. The reliability and validity of the collected data were measured using exploratory Spearman rank correlation and Chi-square techniques. The qualitative analysis involved six semi-structured interviews with financial institution operators and regulators in Nigeria, using NVivo's thematic analytical tools to draw the relationships from the interviewees' perspectives. Metrics such as interest rate spread, bank concentration, bank overheads, credit to the private sector, information asymmetry, and risk perception were tested to establish the influence of the financial system on SMEs' access to funding. The key findings from the empirical evidence include the direct and significant effect of interest rate spread, number of bank branches, and credit to the private sector. SMEs' access to funding inhibiting factors include business collaterals, high lending

rates, and verifiable business financial information. At the same time, the promoters are the length of existence of the business, legal status, turnover or revenue, number of employees, and owners' characteristics. The study shows that policy guidance that provides credit registry, credit guarantee, insurance, movable asset registry, dedicated or re-focused SMEs lending institution, SME ranking will reasonably de-risk SMEs' risk assets portfolio and ameliorate credit rationing effect through the financial intermediation channel of distribution. In addition, financial institutions and SME owners can employ the findings to improve SMEs' risk assets quality and access to funding success, respectively. Consequently, this empirical work establishes the relevance of channel of distribution theory (Levine, 2005) and the effects of credit rationing (Yu & Fu, 2021) on SMEs' access to financing using the bank-based approach from the Nigerian perspective, and the emerging economies in general. The study incorporated the mediating role of financial institutions (Deposit Money Banks – DMBs and Non-Bank Financial Institutions – NBFIs) proxied by current and savings account balances and moderating role of credit rationing measured by borrowing interest rate. The application of this unique theoretical model and the resultant empirical integrated framework should potentially create a new domain of discussion for future researchers into SME funding in emerging markets.

KEYWORDS: SMEs, Credit Rationing, Financial System, Financial Institutions, Channel of Distribution

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CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

Small- and medium-sized enterprises (SMEs) comprise most business operations and play a critical role in financial growth (Kijkasiwat, 2021; Kim & Nguyen, 2021; Lin et al., 2020; Wang et al., 2020). The SME sector has received much interest worldwide due to its rising relevance in generating income, facilitating employment opportunities, eradicating poverty, and contributing to GDP (Bremus & Neugebauer, 2018a; Lin et al., 2020; Wang et al., 2020). Several studies have reported a strong connection between a thriving SME sector and economic growth for any country (Adegboye & Iweriebor, 2018; Beck et al., 2011; Brown & Lee, 2014; Olomi & Mori, 2010; Adalessossi, 2015; Muneer et al., 2017; Osano & Languitone, 2015). SMEs account for over 90% of businesses and more than 50% of job opportunities globally. In emerging economies, formal SMEs account for up to 40% of GDP (World Bank Report, 2020). When informal SMEs are included, the numbers are substantially greater. SMEs generate the most formal jobs, which account for seven out of 10 jobs in developing countries (World Bank Report, 2020). Therefore, in many countries, predominantly developing ones, SMEs are widely regarded as a vital driver of economic growth (Beck & Cull, 2014; Gibandi & Amissah, 2004; Wellalage & Fernandez, 2019; Zhuang et al., 2009).

Though SMEs have a significant impact on the economies of many countries, they are facing enormous challenges, especially in developing countries (Andries et al., 2018; Lee et al., 2015). These challenges include inadequate access to financing, low efficiency, inappropriate managerial competencies, no access to administration and skills, and substantial supervisory encumbrances (Ackah & Vuvor, 2011; Avevor, 2016; Veiga & McCahery, 2019;

OECD, 2017). Consequently, researchers agree that SMEs are not growing at the desired pace in countries where SMEs are facing these challenges (Adalessossi, 2015; Rocca et al., 2010). Although SMEs face many challenges, the lack of financing is crucial, as financing is the foundation of any business management and transgenerational success.

Furthermore, access to financing is very significant for the survival and development of SMEs in general since they are frequently faced with a lack of operating cash flow in the marketplace. According to research conducted by the International Finance Corporation (IFC), developing countries house between 365 and 445 million businesses, with about 85% of these businesses experiencing credit restrictions (Waked, 2016). As a result, governments, scholars, entrepreneurs, and other stakeholders are paying close attention to access of SMEs to reliable financing and a favorable environment to thrive and flourish (Bouazza et al., 2015; Krasniqi, 2010; Moscalu et al., 2019; Quartey et al., 2017; Shinozaki, 2013; Usman et al., 2018). Any business requires funding to get started, grow, and flourish. Financing barriers hamper the efficiency of operations and the expansion of businesses (Dowling et al., 2019; Kijkasiwat, 2021; Wellalage & Fernandez, 2019). Even though SMEs have potentially lucrative investment opportunities, they may lack the necessary resources to pursue them; this is known as the “finance gap” (Fouejieu et al., 2020; Freel et al., 2012).

According to a categorization based on definite business features and financial pressures, financial restrictions suppress organizational productivity in several ways. First, financially restricted businesses relinquish advantageous investment possibilities, particularly ongoing investment initiatives that boost efficiency (Kim & Nguyen, 2021). As businesses suffer financial constraints, access to external capital becomes more complex, borrowing costs increase, and businesses are compelled to make fixed investments with internal capital. Second, liquidity risks are increased because of funding constraints. The

unpredictability in the move from solid deposits to cash flow is the main reason for liquidity risk (Yu & Fu, 2021)

For most SMEs, internal finances are the preferred source of capital throughout the early stages of operations (Dowling et al., 2019; Zubair et al., 2020). However, as the business grows, a project needs enormous investments, and internal funds are insufficient to finance them (Ferrando & Ruggieri, 2018). When the expenses of survival or growth strategies in these businesses surpass the provision of various resources owned and managed by owners/managers, acquiring funds from family, friends, or relatives would not be sufficient; hence, they would then resort to external funding (Bremus & Neugebauer, 2018a; Rupeika-Apoga, 2014), from banks, financial institutions, or venture capitalists (Gupta & Gregoriou, 2018; Lin et al., 2020; St-Pierre et al., 2018; Wang et al., 2020; Zubair et al., 2020). Otherwise, businesses are obliged to cut back on investment, resulting in resource misallocation and a decline in output. Therefore, external financing will become increasingly important as the business grows (Song et al., 2020; St- Pierre et al., 2018).

A sound financial system underpins economic growth and development and is crucial in alleviating poverty and boosting prosperity (Abara, 2021; Forkuoh et al., 2015). The financial system, which comprises the financial markets and the banking system, has been identified as a major factor for determining access to financing by SMEs. SMEs frequently suffer significant financing limitations owing to a shortage of credit information asymmetry or a lack of collateral, making it challenging for them to obtain cash directly from financial institutions (Ullah, 2020; Zubair et al., 2020). A report by World Bank (2017) further states that SMEs tend to suffer from financing issues, due to the fact that most of them are informal, and thus, have lesser publicly available information, higher asymmetry in informtion adf risk, and no access to bank lending.

The size and age of enterprises are significant factors in the degree of financial limitations (Hadlock & Pierce, 2010). In addition, a lack of transparency in terms of information regarding an SME's situation has a significant influence on lenders' financing decisions, especially if they believe they cannot accurately assess the SME's quality based on the perceived value of its activities (Kijkasiwat, 2021; Song et al., 2020).

Several studies indicate that the concept of SMEs differs considerably from country to country, based on factors such as the number of employees, the worth of fixed assets, manufacturing capability, critical aspects of inputs, level of technology utilized, free cash flow, management characteristics, economic growth, and the region of the world in which the firm is based. It is quite challenging to compare SMEs between countries based on this certainty, especially when the index is the economics of the firm's annual turnover and net assets rather than the number of workers (OECD, 2017). Researchers have used various criteria to operationalize the small business, ranging from the number of employees, the size analogy and description, to the position of the number of workers, which would be the size metaphor and description as their unique tool for evaluating SMEs.

In the context of Nigeria, SMEs are defined by the Central Bank of Nigeria (CBN) as firms with a revenue of less than NGN100 million and less than 300 workers (Oyelaran-Oyeyinka, 2020). The problem of SME financing exists in many nations worldwide, even in developed countries with generally strong financial systems. Still, it is prevalent in developing countries, and Nigeria is not an exception.

Though SMEs play a critical role in the Nigerian economy, Nigeria has previously failed to develop a strong SME sector compared to other developing economies (Eniola & Entebang, 2015). Given recent macroeconomic developments in Nigeria, SMEs have tremendous growth potential and, like other developing countries, are expected to account

for a major percentage of GDP shortly (Eferakeya, 2014; Oke & Aluko, 2015). According to the World Bank Report (2020) which said that in other Sub-Saharan Africa (SSA) countries with similar development to Nigeria, SMEs contribute to more significantly to GDP than is currently being observed in Nigeria (Judith & Chijindu, 2017; Michael & Oluseye, 2014; Odiaa & Odia, 2013). For instance, Nigerian SMEs contribute around 50% to the nation's GDP, while the SMEs in Tanzania and Ghana, Nigeria's next door neighbor contribute 60%, and 70% respectively to their nations' GDP (Ussif & Salifu, 2020). Furthermore, South Africa and Rwanda have consistently committed to developing SMEs by implementing access to financing and financial incentives, creating fundamental and technical facilities and an appropriate legal and regulatory framework, and developing domestic expertise (Adegboye & Iweriebor, 2018; Obokoh et al., 2016). The performance of SMEs in Nigeria has not had the expected or intended influence on development progress due to the various problems that SMEs face (Eniola & Entebang, 2015), the greatest of which is associated with obtaining financing or the accessibility to available funds (Lawal et al., 2018; Ogujiuba & Obiechina, 2011; Ujunwa et al., 2012; Usman et al., 2018). Given the significance of SMEs in global economic development, a widening credit gap for SMEs in Nigeria and the magnitude of difficulties posed severe risks to the country's industrialization process and deterred SMEs from playing vital roles in Nigeria (Ogujiuba & Obiechina, 2011; Ololade & Olagunju, 2013; Usman et al., 2018). A large part of the SME sector in Nigeria is informal, making them difficult to participate in formal borrowing activities, to fund their growth (PwC, 2020). Inadequate capital, exacerbated by difficulties in obtaining bank financing, poor business contexts, characterized by a lack of infrastructure, low entrepreneurial skills, and inconsistency in government policies, have hampered SMEs' ability to drive progress in Nigeria (Oladepo & Ajoseh, 2015; Ololade & Olagunju, 2013; Ujunwa et al., 2012).

The Nigerian government has been reported to adopt several steps, through the Central Bank of Nigeria (CBN), which is the apex financial and regulatory institution of the government, and other relevant institutions, to increase financial assistance for SMEs (Oyelaran-Oyeyinka, 2020). Despite the government's attempts to improve and promote SMEs' access to funds, small businesses continue to face difficulty obtaining financing and are either unserved or underserved by the financial organizations (Gibandi & Amissah, 2004; Ogujiuba & Obiechina, 2011; Ujunwa et al., 2012). The study has shed light on the existing gaps in the financial system and the need for changes to develop the SME sector in Nigeria, a critical sector for the nation's desired economic progress now and in the long run.

1.2. Statement of the Problem

Over the years, the Nigerian economy has been craving economic diversification to ensure less reliance on the oil sector. The main sectors of the economy have failed to achieve this task; hence, attention must also be given to the informal sector, which is comprised of Micro, Small, and Medium Enterprises (MSMEs).

According to the SMEDAN (2020) MSME survey, MSMEs account for 96.9% of businesses and 87.9% of jobs and contribute around 50% of Nigeria's GDP. Despite these impressive statistics, the Nigerian economy has witnessed unstable economic growth, and the SMEs failed to maintain and achieve a sustainable growth path. According to Oyelaran-Oyeyinka (2020), a significant challenge confronting SMEs in Nigeria is the availability of affordable and accessible sources of financing. It is emphasized that a strong SME sector can only be built upon a financial system that ensures liberal conditionalities for the SMEs in terms of loan accessibility (Gibandi & Amissah, 2004; Ogujiuba & Obiechina, 2011).

SME growth can be impeded and, in some cases, crippled from attaining sustainable development and exploiting profitable opportunities if they do not have access to financing (Ahmad & Hoffmann, 2011; Erdogan, 2019). The responsibility of funding SMEs in any economy falls mainly on the financial sector. Hence, in most developed countries, the financial system must provide easy access to funds at an affordable cost to the SME sector so that the industry can contribute to economic growth (AfDB, 2020). However, the situation in Nigeria appears to be different, even though the Nigerian financial system consists of institutions like banks, non-bank financial institutions, capital markets, and other financial intermediaries with high rankings among their contemporaries in the world. The SME sector of the country is grossly underdeveloped due to inadequate funding, which limits the contribution of SMEs to the economic growth of Nigeria (SMEDAN, 2020).

However, in the past five years, the Nigerian financial system has continued to produce banks with consistent AAA ratings among their contemporaries in Africa and the rest of the world. For instance, five Nigerian banks were categorized among the first 500 globally, with a stable financial outlook in 2019. Access Bank, Zenith Bank, First Bank, Guaranty Trust Bank, and United Bank for Africa are first-tier money lenders in Nigeria that have continued to maintain favorable ratings from the reports of FITCH and MOODYS in recent years (CBN, 2021). Apart from these financial intermediaries, the financial system in Nigeria includes the Nigeria Exchange Group (NGX Group), which emerged as the top capital market in Africa during the first quarter of 2020, despite the emergence of the COVID-19 pandemic during this period (AfDB, 2020). So, Nigeria seems to have a fair share of respected financial institutions and capital market systems.

It is believed that a good financial system with all these attributes, should at least support the SME sector and rescue them from struggle. According to SMEDAN (2021), as of

2019, 65% of new SMEs in Nigeria die before their fifth year, primarily due to lack of funding, and this percentage has risen to almost 80% in 2020. Compared to the Asian countries where the rate is less than 50% and developed countries such as the UK, where it is less than 20%, it signifies a lack of synergy between the financial system and the SME sector in Nigeria.

The Nigerian government has made several efforts to promote the growth of the SME sector over the years. These include an increase in the number of registered microfinance banks, improvement in funding of development banks such as the Bank of Industry (BOI) and Bank of Agriculture, among others (CBN, 2021). When it was realized in 2018 that, despite the existence of these agencies, some SMEs were still finding it challenging to meet the liberal conditionalities for accessing funds, the CBN came up with various schemes such as the Anchor Borrowers Programs and the Trader Money Schemes, among others (CBN, 2021). Notwithstanding the recent statistics, the performance of the SME sector indicates that all these efforts have yielded little or no commensurate results.

Many scholars have questioned the roles of the market and the financial intermediaries, which provide the following services: allocation of capital and information, corporate governance and monitoring, risk management, pooling savings, and exchange of goods and services, which are the main channels through which the financial system influences the SMEs (Ussif & Salifu, 2020). According to Oyelaran-Oyeyinka (2020), both the financial intermediaries and the capital market have different roles in promoting the real sector of the economy. For instance, the banks are expected to make short- and medium-term funding available to SMEs. In contrast, in most cases, the capital market is expected to provide SMEs with long-term financing to ensure sustainable performance and growth (SMEDAN, 2021). The research seeks to answer a pertinent question of how and whether the channels are performing these roles.

In addition, there are many obstacles to accessing funds by the SMEs in Nigeria, ranging from lack of required collateral to stringent conditionalities and documentation, among others (SMEDAN, 2021). Moreover, the seeming failure of various policies, programs, and efforts of the stakeholders to promote the growth of the SMEs sector in Nigeria has worsened the situation. Notwithstanding, it was discovered that some SMEs in Nigeria still found ways to obtain required funding that has aided their performance despite these obstacles. This signifies that some factors contribute to the funding success of these SMEs (SMEDAN, 2021). Consequently, identifying these factors might shed light on how other SMEs can still achieve funding success and sustainable positive performance, even in Nigeria's current financial system. Besides the fact that improving the financial system may enable SMEs' financing.

However, there might be a missing link between the Nigerian financial system and SMEs. According to AfDB (2020), this might be due to the financial system's current policies, programs, and structure. Naturally, a well-structured financial system will advance policies that will significantly impact the economic agents like the real and service sectors, especially the SME sector being the largest and most potent economic agent in Nigeria (Ogbonna, Mobosi, & Ugwuoke, 2020). Therefore, examining related economic agents' pain points and understanding the financial system to propose changes that can improve the performance of the SMEs through access to funding that enables the sector to contribute to the achievement of a sustainable growth path in Nigeria is one of the major tasks of this research effort. Based on this, the overarching research question of this study is

What is the impact of the financial system on SMEs' access to financing in Nigeria?

1.3. Research Questions

The following are the specific research questions that address the above main question:

1. What is the effect of the financial system channels on SMEs' access to financing in Nigeria?
2. What are the key factors inhibiting SMEs' access to financing in Nigeria?
3. What are the key factors promoting SMEs' access to financing, despite obstacles in the Nigerian financial system?
4. What key changes to the financial system will enhance SMEs' access to financing in Nigeria?

1.4. Objectives of the Study

The main objective of this study, in line with the research question, is to examine the influence of the financial system on SMEs' access to financing and recommend changes to the financial system that will enhance SMEs' access to financing in Nigeria. Thus, the specific objectives are.

1. To examine the effect of the financial system channels on SMEs' access to financing in Nigeria;
2. To identify the main barriers to SMEs' access to financing in Nigeria;
3. To determine the key factors promoting SMEs' access to financing despite obstacles in

   the Nigerian financial system; and
4. To investigate and propose key changes to the financial system that will boost SMEs' access to financing in Nigeria.

1.5. Significance of the Study

The link between the financial system and SMEs generally has enjoyed the patronage of many researchers in the past. The appropriate synergy between the two is important for the overall growth of Nigeria (AfDB, 2020). However, from the background of the study, it has been stated that there are some studies about the financial system but the channels through which the financial system influences the SME sector could be vital to the growth of the sector and its overall impact on the Nigerian economy.

However, the Nigerian economy has one of the most underdeveloped SME sectors among the developing countries. Apart from the poor level of technology, funding remains a recurring challenge, which the Nigerian financial system has invariably failed to address adequately. Consequently, the findings from this study will propose some changes to the financial system that can propel the growth of SMEs through access to needed financing. The need for this study ties in with Oyelaran-Oyeyinka (2020) work, who submitted that an economy's ability to identify the most viable channels in the financial system that accelerate funding into the SMEs sector is crucial to the sustained performance of SMEs in Nigeria.

The findings of this study and recommendations will serve as a practicable guide and a solid basis for developing policies of the Central Bank of Nigeria (CBN) and other financial institutions to help the SME sector flourish in Nigeria.

Generally, the findings in this study will contribute to a broader academic discussion and analysis of SME development and its influence on world economies by examining how distribution channels interact with credit rationing to determine SME funding in a developing

economy. The implication is that the applicability of this embedded approach to SME financing in Nigeria may assist other nations in evaluating its implementation.

Finally, the findings of this study would be helpful to Nigerian financial institutions as a guide and additional consideration for distributing resources to businesses, particularly SMEs, as they move toward fulfilling their developmental functions and returning value to their owners.

1.6. Structure of the Thesis

The thesis consists of six chapters, whose content is briefly outlined below.

Chapter 1 highlights the research background, states the problem of the study and presents the objectives, the research questions, the significance of the study, and the scope.

Chapter 2 describes the theoretical framework of the study. It also includes a review of discussions on the importance of SMEs, factors affecting their access to financing, and the significance of access to funding for SMEs. It further presents an overview of SMEs in Nigeria, their role and importance to the Nigerian economy, the structure of the Nigerian financial system, efforts by Nigerian government agencies to support SMEs, and obstacles faced by SMEs in Nigeria.

Chapter 3 presents the research methodology, hypotheses, and proposition and provides a detailed description of the research design and analysis techniques adopted, including sampling and instruments.

Chapter 4 describes and establishes the relationship between the financial system, intermediation channels, and SME financing in Nigeria by presenting the secondary data and

findings from analysis of the data gathered from the publications and reports of the Central Bank of Nigeria (CBN) and the World Bank.

Using primary data sources, Chapter 5 describes SMEs' access to financing impediments, factors leading to funding success despite barriers, and suggests changes to the financial system to boost SMEs' access to financing in Nigeria. It presents the study data and findings from analysis of primary data gathered from surveys of owners/managers of SMEs and interviews of financial system operators, like Deposit Money Banks (DMBs), Non-Bank Financial Institutions (NBFIs), as well as administrators like Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) and regulators like the Central Bank of Nigeria (CBN).

Chapter 6 discusses the research findings and concludes with a triangulated summary that provides implications for practitioners, financial institutions, entrepreneurs, other government agencies, and researchers. This chapter concludes with the study's limitations and recommendations for future research.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

The literature review extensively focuses on identifying the relationship between the Financial System (FS) and Financial Institution (FI) to assess the effect of financial system channels on the access of SMEs to financing in Nigeria and investigates the factors that constitute the determinants of the success of SMEs at accessing financing from the financial system in Nigeria. The study explored EBSCO, ABI/INFORM, ProQuest, and Google Scholar databases and used a “building blocks method,” in which keywords were typed into the search box to find relevant articles. Each identified literature stream was thoroughly assessed, and peer-reviewed academic publications were chosen for inclusion in the literature review. For up-to-date information, we included research from 2005 to 2021 to get a comprehensive view of SMEs' growth, expansion, and related challenges in Nigeria, to propose key changes to the financial system that will enhance SME owners’ success at accessing financing across the nation.

2.2. Conceptual Literature

This aspect of the literature review discusses conceptual issues on the critical variables in the study. Notably, the SMEs and the financial system are given priority under discussion in the conceptual literature.

2.2.1. SMEs and their importance in the economy

SMEs have long been acknowledged as a driving force behind economic development. As a result, in both developed and developing countries, the SME sector acts as a tool for economic recovery and is one of the most important fields of economic proliferation (Abara, 2021; Isaac & Ph, 2015; Lee et al., 2015). SMEs also account for most business enterprises, create job opportunities, and are widely regarded as primary contributors to economic development in most countries (Veiga & McCahery, 2019; Ye & Kulathunga, 2019). As a result, the significance of SMEs in a country's economic growth and progress is high.

SMEs are the source of employment, competitiveness, market growth, and creativity, contributing to long-term economic development (Avevor, 2016; OECD, 2017; Osano & Languitone, 2015). Therefore, SMEs' financing inclusion is a prerequisite for poverty reduction and long-term economic growth and development (Veiga & McCahery, 2019).

Moreover, the progress and expansion of SMEs can play a dynamic role in attaining Sustainable Development Goals (SDGs), which aim at fulfilling the current generation's social, technological, economic, environmental, and political requirements without compromising future generations' capacity to achieve their financial objectives as claimed by Michael and Oluseye (2014).

Given the potential and prospects of SMEs, there is a growing need to improve the sector's efficiency (Ackah & Vuvor, 2011; Shinozaki, 2013). Business analysts, professionals, legislatures, and international organizations are increasingly concerned about the success of SMEs (Cole, 2013; Hirsch et al., 2018; Mättö & Niskanen, 2019).

Researchers have claimed that the success of SMEs is assessed based on performance criteria, global capitalism, long-term survival efficiency, stability, management approach,

organization development, leveraging of market share, planning the use of human resources, and the quality of products and services (Ioniţă, 2013; Steinerowska-Streb & Steiner, 2014). Berry et al. (2006) measured performance by productivity and proper utilization of resources. Thus, the existing literature signifies that SMEs play a pivotal role in enhancing any country's economic and sustainable development.

However, many factors affect SMEs' access to required financing. The most critical are described below.

2.2.2. Factors affecting access to financing of SMEs

Access to financing for SMEs refers to the obtainability of monetary capital and required financial services of SMEs for its creation, growth, and development (Moreira, 2016; Moro & Fink, 2013a). It could also be regarded as the financial services provided by financial institutions for Small and Medium Scale Enterprises (SMEs) (Ololade & Olagunju, 2013; Rojas-Suarez, 2010).

The financial condition of the state and financial flow opportunities has a vital role in the success of a business. Start-ups require external and internal investors (Godwin-Opara, 2016; Nofsinger & Wang, 2011) to finance the business' initial and growth requirements. Internal investors typically partner with venture capitalists through different social networks. Therefore, they are supposed to know the skills and characteristics of the entrepreneurs (Nofsinger & Wang, 2011). External investors include institutional creditors and individual creditors.

External or institutional creditors include venture capital funds, financial institutions, and government organizations. Institutional investors rely on entrepreneurial experience in

running startups and investor protection efficiency to reduce moral hazards (Moscalu et al., 2019; Watse, 2017). The access to financing depends on the owners' characteristics, the firm's characteristics, and the characteristics of financial institutes (Eniola & Entebang, 2015; Kyei-Boadu, 2017; Muneer et al., 2017; Taiwo, 2016). Thus, the existing literature shows that SMEs require adequate funding access to meet their business objectives, which are further influenced by different variables discussed below.

2.2.2.1. Owners' characteristics

Higher education level, training, and experience of the owner or manager of SMEs are usually appreciated for SME to access financing (Veiga & McCahery, 2019; Ye & Kulathunga, 2019). Nevertheless, due to high-interest rates and the leverage demand of banks for providing loans, access to financing for entrepreneurs is often tricky. Owing to asymmetric information, a business asking for little funds is often more complicated to manage than those needing substantial resources (Krasniqi, 2010). The age and ownership of enterprises are also essential financing requirements (Annalisa & Mulier, 2015). Hence, the business owners and management characteristics help determine their ability to source funds for financing operations.

2.2.2.2. Firm's characteristics

A firm's characteristics are important factors in determining its access to financing. New, creative firms face more trouble than established ones in securing debt finance (Boyer & Blazy, 2014). SMEs have less capability to receive bank loans than big firms; instead, they must depend on internal investment to start and operate their companies first. Companies re-

balance their capital structure in the maturity period by simply replacing debt for existing funds, and preference for retained earnings and debt over equity due to lower cost of financing demonstrates a substantial degree of implementation for companies that have stabilized their business (La et al., 2011; MacKay & Phillips, 2005).

Since it is easier to obtain funding in the maturity stage but difficult in the initial stage, the main financial source of enterprise growth comes from the venture capitalists' individual efforts (Veiga & McCahery, 2019). They usually have a professionally high level of start-up skills, resources, and competencies (Franke et al., 2006).

They are most likely to have a high level of influence in shaping and developing start-up enterprises (Alexy et al., 2012). Venture capital investment is helpful for the growth and subsequent performance of emerging companies because it indicates the possibility of long-term growth. Although venture capital (VC) is one of the most essential funding streams for innovative projects, private equity (PE) funds are a convenient way of financing businesses undertaking capital-intensive and aggressive acquisition approaches (Breuer & Pinkwart, 2018).

2.2.2.3. Characteristics of the financial system and financial institutes

Access to external financing is an important factor for the sustainability and growth of SMEs. Lending decisions of financial organizations, both banks, and non-banks, are crucial to getting the required financing. Companies must seek financial resources to increase the funds required.

Strong ties between a financial organization like a bank and a company appear to be beneficial for loan sanction (Godwin- Opara, 2016; Peltoniemi & Vieru, 2013). SMEs that

meet investors' requirements of trust, relationship, and background have convenient access to loans. Overall, bank reserve is a negligible factor for a bank when deciding to lend to an SME. But the major challenges SMEs face are loan size and investors' requirements fulfillment (Moro & Fink, 2013a). Access to external financing also protects investors against entrepreneurial, opportunistic behaviors. Better investor protection tends to improve external investors' eagerness to finance.

Besides all these factors, the government also has a significant role to play in enhancing access to funds by providing a legislative regime that offers stable lending solutions and straightforward and secure legal redress in default situations and by developing mechanisms to facilitate access to financing for SMEs (Valentin & Wolf, 2013).

Government venture capital (GVC) funds were a successful government program in European countries to resolve financing shortages in early-stage investment promotion. In many counties, governments have credit guarantee schemes that help creditors contribute to small businesses and mitigate the risk of the creditor by ensuring that the debt is partially reimbursed by the government if the borrower defaults. Thus, these GVC funds help to overcome the credit restriction issue. It helps small- to medium-sized businesses to receive the financing they would not otherwise have received (Godwin-Opara, 2016; Valentin & Wolf, 2013). Though all these factors play a critical role in determining an SME's access to financing, the most crucial factor for SME growth is that the financial system should be well-managed to overcome these constraints (Ayyagari et al., 2008).

2.2.3. Importance of Financing to SMEs

SMEs are proven engines of growth in all countries of the world. The performance and expansion capabilities of SMEs depend on investment, reorganization, creativity, market growth, recruitment, sustainability, and encouragement to employees (Wang, 2016). Financial issues determine the growth of SMEs at various phases of their development. As a result, if entrepreneurs do not have adequate financial resources when they first start a firm, they will find it more difficult to penetrate a specific market. Additionally, acquiring a competitive place and reaching a targeted group of clients may take longer in these conditions than it would for a company with adequate financial capital. Possessing sufficient funds during the post-commencement phase of a company's life cycle influences its future development through its growth and expansion. As a result, a fundamental entrepreneurial constraint determining the destiny of SMEs is the inadequate financial resources of SME owners and restricted access to external sources of financing (Beck et al., 2011; Beck & Demirguc-Kunt, 2006).

In research centered in Tanzania, Olomi and Urassa (2008) (cited by Osano & Languitone, 2015) found three critical kinds of barriers to access of SMEs to funding. The first variables were capacity (lack of knowledge and skills), immature company culture, the intermingling of business and private affairs and family, absence of SME credit history, and lack of understanding of accessible financing services. The second set of issues included the scarcity of qualified employees and the SME’s lack of expertise. The third set of variables had the control of the environment in which lenders and borrowers deal, the absence of system identification, and credit reference bureaus (Osano & Languitone, 2015).

New SMEs generally rely on personal funds and the financial backing of unofficial investors. According to the Menon publication of 2010 that consists of studies based on 29 nations, family members provide most of such additional resources at 40%, followed by

neighbors and friends at 29%, colleagues at 11%, other relatives at 8%, outsiders at 8%, and other informal sources at 4% (Maula et al., 2005; Steinerowska-Streb & Steiner, 2014; Szerb et al., 2007). But for expansion, organizations mostly rely on external financing sources like bank loans and equity finance in their business operations.

Access to external financing plays a significant role in supporting investment, reorganization, and creativity for market growth, recruiting, sustaining, and encouraging employees (Ayyagari et al., 2008). Beck and Demirguc-Kunt (2006), in their study on the factors affecting SMEs, identified financing or economic capital as the most substantial impediment to the growth of SMEs and the economy. SMEs are also perceived not to have enough financing as they have a short functioning period and incomplete or inaccurate financial statements (Yoshino & Taghizadeh-Hesary, 2016). Moreover, small-sized start-ups must deal with a presumed high-risk perspective and other factors that are difficult to enumerate (Mazanai & Fatoki, 2012; Steinerowska-Streb & Steiner, 2014). These asymmetry constraints make accessibility of financing and loans difficult for SMEs to obtain from financial institutions. It results in credit rationing, limiting the availability of surplus funding to borrowers who need it, even if they are ready to repay higher interest rates.

Obtaining external financial backing is more challenging for SMEs than large corporations (Mori, 2014; OECD, 2020). The primary reason for this is that banks and other financial institutions need significant guarantees from newly constituted organizations, which SMEs frequently cannot provide (Krasniqi, 2010; Robb & Robinson, 2014; Rocca et al., 2010).

Furthermore, because banks consider SMEs high risk, those who pass the credibility verification/credit check suffer substantial commission rates. Though financial constraints inordinately cripple small businesses, they obtain a strengthened uplift in expansion than larger companies even if financing is made available (Freel et al., 2012; Nofsinger & Wang, 2011).

In the case of most SMEs in European nations, the primary concern for expanding the SMEs sector is finding the entrepreneurs, not financial access (Forkuoh et al., 2015). In contrast, for developing countries, defects in the financial system and market remain an ongoing fundamental structural problem in ensuring access of SMEs to financing (Beck & Cull, 2014; Ye & Kulathunga, 2019). The imperfections can be, to some extent, attributed to uncertainties and information gaps between the entrepreneurs and financial intermediaries of SMEs (Levine, 2004; Nkuah et al., 2013; Pula & Berisha, 2015). Therefore, access to financing for growth and expansion in developing countries is severely limited, with over 50% of SMEs perceiving access to funding as a critical restriction (Beck & Cull, 2014).

The limited access to financing exists because most SMEs lack sufficient understanding of alternative financing solutions that may be utilized (Moro & Fink, 2013b; Quaye & Sarbah, 2014). Another reason is that the cumbersome, structured, and bureaucratic procedures deter entrepreneurs of newly formed SMEs from seeking funding from outside sources. Since it is difficult to fulfill all the relevant business financing standards, most SME entrepreneurs rely on their funds to start a firm (Ayyagari et al., 2008; Steinerowska-Streb & Steiner, 2014).

Again, some SME entrepreneurs who do not have access to highly skilled employees usually choose high-interest debt financing from banks and strive to keep the amount they need to borrow to a bare minimum (Gambetta et al., 2019; Mazanai & Fatoki, 2012; Steinerowska-Streb & Steiner, 2014).

Financial constraints and limited access to financing that SMEs face impact not just their growth and development but also the practical management of their daily operations (Brancati, 2015; Henard & McFadyen, 2012). For example, businesses may be compelled to maintain constant and strict financial discipline, examine expenditures and expenses regularly, and handle their assets efficiently. Therefore, the actions taken by such SMEs cannot be the

same as compared to the SMEs with easy access to financing in terms of growth and efficiency (Bremus & Neugebauer, 2018b; Osano & Languitone, 2015). The contrasts between these two types of businesses will be amplified in the study.

2.2.4. SMEs Financing in the context of Nigeria

Nigeria faces a range of challenges in the growth of SMEs like their counterparts in other parts of the world (Adegboye & Iweriebor, 2018; Eferakeya, 2014). The growth of the owners' skills, attitudes, and expertise are crucial factors for SME development and expansion of a business (Ayyagari et al., 2008; Beck & Demirguc-Kunt, 2006). Most SME owners and managers are not educated enough and lack essential business skills. Therefore, they have failed to adopt the proper strategy and management for growth. Besides, owners' equity or family investment has long been accepted as the primary funding source for SMEs worldwide.

However, the high level of poverty and restraint on the expansion of SMEs in Nigeria has been the scourge of SMEs, necessitating external funds. Lack of sufficient personal equity of the owners before starting the business is another reason for the failure to grow. The scarcity of funds is often attributed to the limitations of such organizations to access affordable funds provided in the capital market due to their inability to fulfill the strict terms and conditions (Nofsinger & Wang, 2011; Osano & Languitone, 2015).

Access to financing is one of the germane factors responsible for the low gross performance of SMEs in Nigeria and many African countries (Adegboye & Iweriebor, 2018; Obokoh et al., 2016). Therefore, access to financial resources regulates the success of SMEs through various phases of their progress. If the business has insufficient financial assets, it will be difficult for such an enterprise to launch products into the market. In a conducive business

environment, receiving adequate funds is determined by the business features, which further affects the development of the enterprise (Obokoh et al., 2016; Steinerowska-Streb & Steiner, 2014).

Consistent with these arguments, empirical evidence suggests that access to formal financing is poor due to the SME's higher risk of default and limited financial facilities (Adegboye & Iweriebor, 2018; Eferakeya, 2014; Ye & Kulathunga, 2019). There is a good favorable association between appropriate funding and SME growth and development and their essential role in the economies of various nations (Ackah & Vuvor, 2011; Avevor, 2016; Gibson & Vaart, 2008). Beck and Cull (2014) claimed that restricted access to loans from formal financial institutions could be attributable, among other things, to Africa's financial systems being tiny, shallow, and expensive, with limited reach.

Therefore, this highlights the need for more credible study into identifying more ways to finance SMEs in developing nations outside of the official banking system by leveraging local customs and cultural norms.

2.2.5. Financial System in Nigeria

The financial system is comprised of financial institutions and capital markets that play a vital role in encouraging economic growth through many routes. The primary purpose of the financial system is to ensure the money flow to facilitate, sustain, and increase economic growth (Lee et al., 2015). A well-functioning financial system creates an atmosphere conducive to financial development and for the economy to flourish.

But financial system development is an assortment of depth (size and liquidity of economic markets), access (the dexterity of individuals to access financial services), and

efficiency (capability of organizations to provide financial services at a low cost and with justifiable revenues, and the activity of capital markets) (Judith & Chijindu, 2017). Financial development can occur when financial instruments, financiers, needs, and financial intermediaries lessen, without essentially eradicating the expenses of gaining data, the fees of performing agreements, and the expenditures of the deal, and, as a result, do better work by offering financial roles (Levine, 2005). It promotes financial stability and allows financial systems with varied tools to cushion the effects of shocks.

This goal of the financial system is achieved through the intermediary activities of financial institutions, which are reinforced by stringent rules that control and govern their activities.

Financial innovation and intermediation contribute to the growth of the financial system. Financial intermediaries collect funds in credits, premiums, and financial assertions, among other things, and convert the money into assets that are appealing to and desired by the general community.

Thus, financial mediators provide the monetary tasks of maturity transition, mitigate risk via diversification, reduce contracting and information processing costs, and facilitate payment mechanisms. These economic activities drive financial development by successfully transferring funds from net savers to entrepreneurs.

The provision of helpful information about accumulating capital and its efficient allocation is critical to SME financing (Forkuoh et al., 2015). Both the money and capital markets encourage improved corporate management and faster capital accumulation and enhance economic growth through better capital allocation. Tagoe et al. (2005) found that risk factors associated with various financing choices, and the attractiveness of available alternatives, are the most important factors influencing SME financing. Other factors found to be pertinent to SME financing are government policy, collateral requirement, SME production

of financial statements, the macroeconomic climate in the country, and the development agenda and plan of the SME within the specific period.

SMEs are essential for economic growth acceleration and raising the people’s living standards. Hence, SMEs employ roughly 40% of the country's population (Racheal & Uju, 2018). In Nigeria, the SME sector is the primary source of capacity building and economic diversification (Dauda & Akingbade, 2010). The SME segment has been a source of work growth and empowerment for Nigerians, accounting for more than 60% of all job opportunities (Dauda & Akingbade, 2010). SMEs may expand to the largest corporations if provided with opportunities; for example, Rimco Nigeria Limited, a large business organization today, started as an SME.

Despite SMEs’ significant role in economic growth, it has been discovered that they are underachieving and that only a meager percentage of them can survive (Adeyonu et al., 2021; Shamsudeen et al., 2015). The non-performance of Nigeria’s SME sector is a significant source of concern for all stakeholders (Eferakeya, 2014; Oke & Aluko, 2015). Realizing the importance of SMEs, the Nigerian government has consistently shown serious concern about reforming, encouraging, and funding the SME sector (Michael & Oluseye, 2014; Racheal & Uju, 2018; Somoye, 2013). For example, the Nigerian government has promoted SMEs through various financial schemes, programs, policies, and institutions since 1970. Some of these policies and measures include the launch of Small Scale Industries Credit Guarantee Scheme (1971); Rural Banking Scheme (1977); Peoples Bank (1989); Bank of Industry (BOI); Nigerian Industrial Development Bank (NIDB); Small and Medium Enterprises Equity Investment Scheme (SMEEIS); Industrial Development Centre (IDC); Microfinance Bank Institutions (MFBIs); and finally, the Small and Medium Enterprises Development Agency (SMEDAN), which was founded in 2004 (Michael & Oluseye, 2014). Other brilliant initiatives

also include the Subsidy Reinvestment and Empowerment Program (SURE-P) in 2012, You-Win in 2012, N-Power in 2016, and Youth Entrepreneurship Support (YES) in 2016 (Odia & Odia, 2013).

Though these initiatives have encouraged Nigerian SMEs, their growth and performance are relatively unimpressive due to various uncontrollable factors. These factors include financial constraints, small and oppressed linkage between multiple segments of the operations, low operational capabilities in terms of skills, expertise, business perceptions, and inappropriate business plans (Adam, 2020).

In a study conducted in Ondo State, Nigeria, Obamuyi (2007) found that regulatory conditions such as Capital Adequacy Ratio (CAR), Reserve Requirements (RR), Liquidity Ratio (LR), Interest Rate Development (IRD), and bank lending policies are the major factors of loan sanctions to SMEs. These determinants have varying degrees of impact on banks' financial availability for lending.

2.3. Theoretical Literature

This section of the literature review focuses on theories and models related to the study and provides an avenue for developing the theoretical framework for the study.

2.3.1. Financial Structure Theory

Financial structure refers to the institutions, technologies, and game rules that govern how the financial activity is organized at any given period within a financial system. It is also recognized as a tool for merging funds, spreading assets across space and time, scope

ambiguity, and managing risk, cost, and information to let the economy implement a decentralized distribution and deal with asymmetric information issues that appear when an organization with a financial transaction has information that the others do not have (Ujunwa et al., 2012). The study of the effect of the financial system of a country on its financial distribution is imperative (Judith & Chijindu, 2017). The bank-based and the market-based financial structures are the two types of financial structures found in most countries. Based on competing theories of financial structure, the relationship between financial structure and long-run growth can be defined.

2.3.1.1 The Bank-Based Theory

The bank-based theory mainly identifies financial institutions as the core source of finance for businesses (Moradi et al., 2016; Yinusa, 2016). The basic principle of the bank-based theory is that banks play an important role in financial intermediation by pooling resources, providing a risk-reducing avenue for firms, facilitating transactions among firms, acquiring information on firms, and providing effective corporate governance control (Moradi et al., 2016). The theory stressed the importance of a strong banking system for economic development. According to the theory, the financial system is the pillar on which the real sector of any economy stands. Provision of capital and efficient capital allocation remains the most crucial role of the banks in the firms' financing (Acharya & Naqvi, 2012). Furthermore, supporters of this theory stress the importance of knowledge on the best financing options for businesses, which is related to the reduction of risk associated with each bank's financing option (The World Bank, 1999). According to the theory, all the roles of the banks in financial intermediation are interwoven, and they are essential to firms' financing, which will eventually facilitate economic growth (Moradi et al., 2016; The World Bank, 1999).

The bank-based theory stresses banks' positive role in development and progress while also emphasizing the flaws of market-based financial systems. It claims that banks can fund development in emerging nations more effectively than capital markets and that market flaws may be overcome, and savings allocated wisely in the case of state-owned banks (Lin et al., 2020).

Banks that are not restricted by regulatory limits can use economies of size and breadth in information gathering and processing. The bank-based perspective emphasizes the role of banks in identifying promising initiatives, mobilizing resources, monitoring managers, and risk management (Rumler & Waschiczek, 2016). Similarly, it emphasizes the shortcomings of market economies. For example, banks are adept at funding projects with significant asymmetric information because of their developed competence in identifying the type of borrowers (Levine, 2005).

Thus, the bank-based perspective emphasizes banks' favorable position in mobilizing resources to take advantage of strategies of balance, managing liquidity risks, resulting in increased investment competence along with substantial economic development, and gathering knowledge about companies and managers (Levine, 2005; Moradi et al., 2016; Rumler & Waschiczek, 2016; The World Bank, 1999).

Bank-based financial systems are more effective at stimulating growth than market-based financial systems, particularly in developing nations (Demirgiu-Kunt & Huizinga, 2000). Indeed, bank-based financial institutions are significantly more equipped to deal with agency issues and short-term periods than market-based systems (Wehinger, 2012). It helps to disseminate information to the public, diminishing the need for investors to seek and acquire it. As a result, information asymmetries are magnified, especially in market-based financial systems rather than bank-based financial systems (Boyd & Prescott, 1986). Banks can mitigate

the effects of asymmetric information by building long-term connections with businesses and, as a result, monitoring moral hazards.

Therefore, bank-based systems are more capable than market-based institutions to promote resource allocation and corporate governance (Ujunwa et al., 2012). Lack of investment in information is a feature of competitive financial markets. So, well-developed financial markets restrain the recognition of innovative ventures and efficient resource allocation (Levine, 2005; OECD, 2009; Wehinger, 2012). Banks may have better incentives to collect information and monitor enterprises, and they may be able to internalize the fixed cost of doing so more efficiently (The World Bank, 1999; Wehinger, 2012).

2.3.1.2 The Market-Based Theory

The market-based view highlights the importance of well-functioning markets in promoting growth by facilitating risk management and risk issues, enhancing corporate governance by making takeovers easier, linking executive compensation to company performance, and providing more incentives to research firms because investing in large, liquid markets offers opportunities to benefit from this information (Demirgiu-Kunt & Huizinga, 2000; Levine, 2005; OECD, 2009).

The market-based theory emphasizes the benefits of well-functioning markets while emphasizing the flaws of bank-based financial systems. Big, liquid, and well-functioning markets, according to market-based approach, stimulate growth and profit incentives, improve corporate governance, and enable risk management (Beck et al., 2011; Levine, 2005). Market-based financial systems are better at improving economic growth and development because they minimize the inherent inefficiencies associated with banks (Wehinger, 2012). Countries

become increasingly market-based as development progresses, using a model that allows for financial structural changes as countries go through different phases of development (Beck et al., 2011).

By focusing on difficulties caused by powerful banks, the market-based approach effectively counters the bank-based system. Banks gain access to information that is not available to other lenders as part of the financing process for businesses (Zhuang et al., 2009). Banks can use such internal information to extort rents from businesses. Banks can have bargaining power over a firm's predicted future profits regarding fresh investments or debt renegotiations. Powerful banks can reap a disproportionately significant revenue, leaving businesses with fewer incentives to take on high-risk, high-profit ventures (Zhuang et al., 2009).

Furthermore, big banks can collaborate with managers against outsiders, stifling competition, corporate controls, new business development, and long-term economic progress (Ujunwa et al., 2012). Markets present a more comprehensive and customized range of risk-reducing instruments (Levine, 2005). Although bank-based systems may offer fundamental risk managing strategies at a low cost for standardized conditions, market-based approaches provide more versatility for customized products (Beck & Maimbo, 2013; Zhuang et al., 2009). As economies develop and require a wider variety of risk management tools and capital-raising vehicles, a regulatory structure that promotes the creation of market-based actions could be beneficial (Ujunwa et al., 2012). Despite all the identified benefits inherent in the market-based theory, some shortcomings were identified in the literature for the theory, which led to many criticisms of the approach.

Information asymmetry is a source of concern in the context of market-based financial systems in developing nations. Researchers have suggested that the complication of up-to-date

economic and corporate activity has substantially improved the number of methods insiders can try to hide a company's performance (Beck et al., 2011; Beck & Cull, 2014; Oke & Aluko, 2015). Although advances in technology, accounting, and legal practice have enhanced detection techniques, on balance, the knowledge asymmetry between fund users and providers has not improved as much in developing nations as it has in industrialized economies; in fact, it may have worsened (Abara, 2021; Beck et al., 2011; Erdogan, 2019; Trovato & Alfò, 2006).

2.3.2. The Channel of Distribution Theory

The evolution of the theory on distribution channels follows more acceptability given to the bank-based theory ahead of the market-based theory in the literature (Levine, 2005). Its basic tenet is that the major role of the financial system in the growth or output process is found in identifying the five channels through which financing impacts output. These five channels are found in the bank-based theory mainly. The theory came up with five distinct channels that transmit the effect of financing on output. These channels are shown in Figure 2. 1.

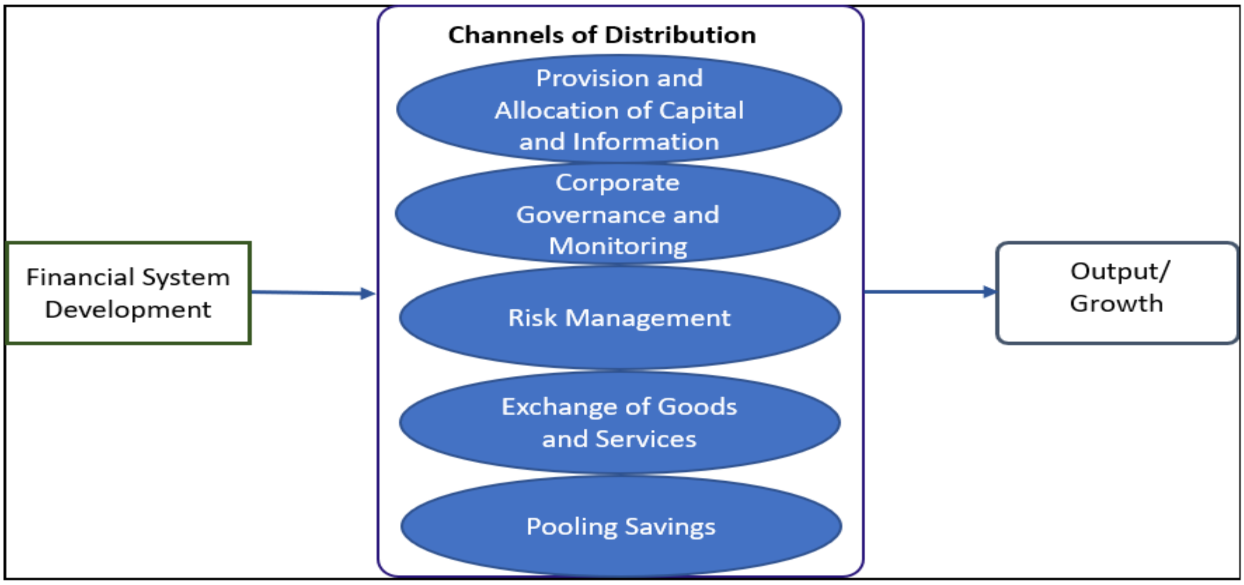


Figure 1: Model of financial system channels and SME financing

Source: Finance Growth Nexus, Levine, 2005

From the findings of Levine (2005), the channels identified are the media through which the effects of financing influence the firms' output. Figure 2.1 presents the model that describes the relationship between financial development and output.

From Figure 1, the first channel identified in theory is capital and information provision and allocation. According to Levine (2005), it is one of the primary channels through which financial development achieves growth, i.e., by providing capital for the firms and guiding them to allocate the capital. In addition, they advise the SME by supplying relevant information of various financing options available and guiding the firms to make the right choice that will promote their growth. The second channel is monitoring and enforcement of corporate governance. The model developed by Diamond (1986) emphasized that financial growth is centered on lowering the cost of monitoring information (Saqib, 2018). It is beneficial for resolving issues concerning the incentives of borrowers and lenders. Capital costs are

segmented into different units to aid in financial institution supervision. This is where interest rate comes into play in the financing of firms. The third channel is risk management. Financial intermediation facilitates economic development by providing a higher rate of return on equity, which allows for better capital allocation and risk reduction.

The fourth channel is the pooling of savings. Financial systems evaluate potential investors and mobilize savings for profitable investments (Coad et al., 2016). This role is germane to growth since it offers productive incentives to the firm in the form of savings mobilization for future investment (Levine, 2005). Finally, the fifth channel involves improving the exchange of goods and services among firms, households, and financial intermediaries.

Among all the five channels identified by the theory, the ones that brought in SME financing are the first and fourth channels: the allocation and provision of capital and information as well as pooling savings (Beck et al., 2011; Beck & Cull, 2014). These channels are positioned in the bank-based theory.

According to the bank-based approach, bank-based financial systems, exclusively in the early stages of economic development, stimulate economic growth more than market-based financial systems (Abdullahi & Fakunmoju, 2017; Lawal et al., 2018). On the other hand, the market-based perspective emphasizes that markets offer critical financial services that endorse innovation and longstanding growth (Ujunwa et al., 2012). The financial services perspective emphasizes the role of banks and markets in analyzing enterprises, exercising corporate control, developing risk management tools, and mobilizing society's savings for the most productive endeavors (Eferakeya, 2014; Isaac & Ph, 2015). This perspective downplays the disagreement between bank-based and market-based financial services and emphasizes the overall financial system's soundness.

2.3.3. Credit Rationing Theory

Post-Keynesian credit rationing is based on the macroeconomic implications of credit disruptions (Wolfson, 1996). Credit rationing is a condition in which some probabilistically comparable loan applicants are approved for getting loans whereas others are revoked, which implies that those who do not get access to loans would not be capable to borrow even if they are ready to pay higher interest rates. In another case, even though the supply of loans is satisfactory, there will still be some borrowers who will not be able to receive funds (Jin & Zhang, 2019). Credit rationing theory has been used in previous studies to explain the financing constrictions of borrowing organizations (Jin & Zhang, 2019; Obokoh et al., 2016; Yu & Fu, 2021; Zhao et al., 2019).

Credit rationing is caused by the adverse selection and moral hazard of asymmetric knowledge, which means that, even if borrowers are eager to pay the non-price, their loan demand would still be denied (Obokoh et al., 2016). Information asymmetry, high expenses, and credit rationing are the key reasons why SMEs have difficulty obtaining loans (Jin & Zhang, 2019). Studies have largely used four indirect approaches to evaluate credit rationing faced by businesses: cash flow, average debt-to-asset ratio, credit score, and the firm's characteristics (Wagner, 2014; Yu & Fu, 2021). Judith and Chijindu (2017) refer to financial development as a combination of depth, access, and efficiency of financial institutions. Intermediaries contribute to financial development through more effective resource allocation rather than investment or saving (Beck et al., 2011). Stock markets have not reported many contributions to economic growth in low-income nations, although banks have a strong positive influence on capital accumulation (Rioja & Valev, 2014). Multilateral lending favors a borrowing country only if it possesses more intellectual capital or if the funds are used to

finance innovative activities (Nemlioglu & Mallick, 2020). Financing limitations greatly restrict the possibility of business innovation activities, and the weakening effect can be greater than 20% (Savignac, 2008). When banks encounter excess demand for funds, they are unwilling or unable to raise their interest rate, so they impose various requirements unrelated to the interest rate to force a few fund demanders out of the bank loan market, removing surplus demand and establishing fund balance. Information asymmetry and moral hazard conduct produce adverse selection, which leads to credit rationing. To prevent major adverse selection issues, banks are hesitant to raise interest rates, resulting in an inability to meet the credit demand of some businesses, leading to credit rationing.

The study of SMEs is primarily predicated on it being an engine of development whose growth is impeded because of institutional and market failure. Beck and Cull (2014) focused on how the financing vehicle helps to surmount the financing constraints of small firms. They stated that_market imperfections and institutional weaknesses impede the growth of SMEs. There still has not been much research on credit rationing in SMEs. The banking sector layout, and the related reforms that influence it, may have a significant effect on access to financing for SMEs (Mehjabeen, 2020). Different factors limiting the accessibility of funds for SME development include banks' perception of SMEs limited operating history, incomplete or inaccurate financial statements, high-risk potential, etc. (Steinerowska-Streb & Steiner, 2014). These challenges result in credit rationing, limiting the supply of additional funding or credit to borrowers who demand it.

The size of the organization is one of the essential indicators for measuring corporate financing issues (Rojas-Suarez, 2010). Broad enterprises have more funds to invest in products or activities that can be scaled up and made profitable through improved access to big markets if they are successful (Halme & Korpela, 2014; Zott & Amit, 2007). On the other hand, SMEs

are more agile, and executives are closer to the organizational level and make more dynamic decisions (Uhlaner et al., 2012; Widya-Hasuti et al., 2018). The smaller the company, the more probable it is to be replenished (Erdogan, 2019). Small firms are more constrained in their operations and growth than large enterprises, and one of the most important limitations is access to financial services (Ayyagari et al., 2008). Again, small businesses have more fundraising challenges than large- and medium-sized firms (Beck & Demirguc- Kunt, 2006).

Moreover, small businesses confront not only financial issues but also suffer more negative consequences because of them. Small business financing challenges have nearly double the impact on growth as those of the large firm (Beck & Demirguc-Kunt, 2006). Therefore, governments and financial institutions in many countries have taken several measures to alleviate the financing issues faced by SMEs (Beck et al., 2011). The effectiveness of these regulations, however, is limited; credit availability for SMEs has indicated the reality that their financing issues in developing countries have still not been satisfactorily handled for more than a decade (Jin & Zhang, 2019).

Studies have found that financing limitations are fewer in nations with more effective legal systems, and financial deregulation relaxes company financing limitations, particularly for smaller enterprises (Zhao et al., 2019). Most SMEs operate in highly competitive industries and are thus subject to market conditions, national policies, and economic cycle changes (Karnani, 2007; Kellogg, 2009). SMEs are typically tiny, recently created businesses with few staff and low initial development funds. Therefore, their productivity is limited, their market competitiveness is feeble, and their risk-resilience is poor (Banerjee et al., 2015; Banerjee & Duflo, 2013). Banks are incapable of effectively evaluating the credit status and functioning threats of SMEs because they lack extensive credit histories. Furthermore, because SME loans have a “small loan scale,” a “short loan length,” and “urgent and frequent loan demand,” banks

incur greater processing costs when lending to SMEs with smaller capital needs (Jin & Zhang, 2019). However, banks can differentiate between large- and medium-sized enterprises and small- and medium-sized enterprises in general and have transaction records for each large- and medium-sized enterprise, allowing them to plan definite credit contracts for large- and medium-sized enterprises, removing the issue of credit rationing in large- and medium-sized enterprises. It has been demonstrated that predicted bank profits on loans to large- and medium-sized firms surpass those on loans to SMEs for certain contract terms.

It is challenging for SMEs to get credit funds in the formal credit market mainly because SMEs are incapable of communicating their threat levels before approving the loan because their initial asset size is usually lower than the critical collateral value, and loans to SMEs cause banks to incur higher costs since their loan size is usually lower than the minimum loan size (Jin & Zhang, 2019). Small businesses also lack tangible possessions as collateral, have a lesser fraction of public property rights, and have more information asymmetry with banks. Furthermore, once the loan is approved, SMEs with poorer standards have a larger incentive to boost current spending at the expense of future investment returns, lowering the borrowing enterprise's projected returns (Judith & Chijindu, 2017; Yu & Fu, 2021). All these considerations make SME loans less profitable for banks; as a result, a bank's logical profit-maximizing decision is to ration credit to SMEs.

2.4. Empirical Literature

There are several studies on the relationship between the financial system and SME performance in Nigeria but with different objectives and directions. These diverse objectives and directions have led to different conclusions about the relationship between the two and the

implications on the Nigerian economy. This section explores some of these studies by reviewing their objectives, methodology, and findings.

To study the relationship between financial systems and the access of SME to financing in Nigeria, Adegboye & Iweriebor (2018) used the World Bank Enterprise Survey (ES) dataset to investigate the role of access to financing in fostering innovation and productivity among Nigerian SMEs. They found that the source of investment funding has a significant impact on innovation as both internal and external sources increase investment in product, operation, and organizational innovation.

Increased access to financing may lead to an increase in productivity. In the same vein, Obokoh et al. (2016) investigated the impact of microfinance lending on access of indigenous SMEs to financing and microfinancing banks (MFBs) intermediation services on the growth of SMEs and found considerable positive impacts of microfinance lending on the growth of small businesses.

Oladepo & Ajoseh (2015), in their study, revealed that using the capital markets to fund SMEs in developing economies is required for the operating environment of the financial system. For the survival of the informal and SME sectors in developing countries, it is also essential to create investment-friendly regulations, maintain a low inflation rate, implement favorable government policies, and maintain a stable macroeconomic environment. According to them, proper planning, organizing, and monitoring of the human resources and capital and coordination help achieve organizational goals and objectives (Beck & Demirguc-Kunt, 2006; Isaac & Ph, 2015; Oke & Aluko, 2015).

Again, Adegboye and Iweriebor (2018), for example, investigated the role of access to financing in promoting innovation and productivity within Nigerian SMEs using the World Bank Enterprise Survey dataset. External and internal financing are the two types available to

finance business organizations. According to the logit estimation technique, the ability to obtain bank credit is the most effective positive force promoting all forms of innovation among SMEs in Nigeria. Similarly, the source of investment funding has a significant impact in terms of how it affects innovation: both internal and external sources increase investment in product, operation, and organizational innovation. Based on this study, increased access to financing may also lead to a drop in productivity among Nigerian SMEs.

Gibandi and Amissah (2004), on the other hand, examine the SMEs in Nigeria and the various financing choices open to them. It was concluded that funding for SMEs in Nigeria is crucial if they play their part in the country's economic growth and development. Furthermore, Obokoh et al. (2016) investigated how existing microfinance lending affects indigenous SMEs' access to financing and how microfinance banks' (MFBs) intermediation services contribute to the growth of SMEs. While there were 800 indigenous SMEs listed, data were obtained from 300 of them through a questionnaire survey conducted in four Nigerian states (provinces) that makes up the oil-rich Niger Delta region. The outcome demonstrates the positive impact of microfinance lending on the growth of small businesses.

Oke and Aluko (2015) focused on the money market by examining how commercial banks financed small- and medium-sized businesses (SMEs) in Nigeria (from 2002 to 2012). For the research, a sample of 10 commercial banks provided individual bank data as well as macroeconomic time series annual data. The results of panel data regression analysis showed that commercial banks have a significant impact on SMEs' financing. This research suggests that commercial banks can help SME development.

Eferakeya (2014) investigated the effect of bank consolidation on credit access and availability to SMEs in Nigeria from 1999 to 2012. The following were the key goals:

1. To evaluate if bank consolidation in Nigeria resulted in further lending to SMEs,

2. To assess the degree of lending risk to SMEs, and
3. To examine if there is a major difference in SME funding before and after the 2005 bank consolidation.

The key variable was commercial bank loans to SMEs as a percentage of total credit, which was collected from the CBN Statistical Bulletin 2012. According to the report, bank consolidation in Nigeria resulted in a dramatic reduction of SME financing to less than 1% (0.37%) on average. The finding of the paper shows the precariousness of bank lending to SMEs has decreased in the post-consolidation period, although there is no noticeable difference in SME funding in the pre-consolidation era. This finding, on the other hand, contradicted the widely held perception that bank consolidation would result in increased SME financing in Nigeria. The study suggested that SME accounting and reporting of their activities should be made more transparent; that the bank relaxes some of its strict lending policies for SMEs; and that the government design policies, which should group SMEs in such a way that they can be properly identified and planned (particularly according to trade and industry). This way, credit facilities can be guaranteed, and prompt repayment can be ensured.

Furthermore, on the bank approach, Okere, Njoku and Nwosu (2020) examined the relationship between SME funding and deposit money banks in Nigeria. The study is pure desk research that made use of materials and data from past works of literature and made inferences from there. The study discovered that the deposit money banks in Nigeria have failed to provide the much-needed credit to the SMEs and the few loans that are made available in the deposit money banks in Nigeria come with stringent conditions and conditionalities that make it extremely difficult for the SMEs to access those credits.

This further underscore the effect of the financial system on SMEs in Nigeria. In a primary data analysis approach, Olawale, Idowu, Akudo, and Yahaya (2019) sampled 250

SMEs and investigated the impact of the financial institution on their performance. The investigation used structured questionnaires and was analyzed using both descriptive and inferential statistics. The result shows that banks have a significant impact on the performance of SMEs in Gusau Metropolis, which is the case study. The study reinstated the proxy of the financial system to the financial institution alone.

In one of the most recent studies, Anga, Sakanko, and Adamu (2021) investigated from another perspective a component of the financial system which is called financial institution and they examined its effect on SMEs secondary data that were used and collected based on credit to the private sector, loan to deposit ratio and deposit to savings which are used to proxy financial inclusion. The ordinary least square estimating technique was applied, and the result showed that financial inclusion has a significant impact on the SMEs while access to finance failed to have a significant impact on SMEs. In a related study, Ademosu and Morakinyo (2021) investigated the effect of the financial system on SMEs' access to financing using the market-based approach. The study used variables exchange rate, interest rate, inflation rate, and other variables that bare bank indicators and stock exchange indicators which were further used in the study. Their result shows that the capital market is more effective in influencing SME performance than the money market. The key financial system channels were not the main focus of the study.

2.5 Gaps in Literature

The review of literature in this study, particularly the empirical literature, has shown that most of the studies focused on the impacts of the financial institution aspect of the financial system alone leaving the capital market (Okere et al., 2020; Olawale et al., 2019). In addition, many of the studies used indicators of the money and capital market as well as macroeconomic

variables (Ademosu & Morakinyo, 2021), whereas according to Bilgin and Lau (2012), it is not the indicators of these markets that are the important component of the financial system, but the channels through which they influence SME financing. This is one of the main reasons this study will be focusing on the channels through which the financial system impacts SME access to funding/financing.

Channels such as allocation of capital and information, corporate governance and monitoring, risk management, pooling savings, and exchange of goods/services, are the means through which mediation happens between the financial system and the real sectors of the economy, in particular, the critical economy agent, the SMEs.

In addition, it has been deduced from the literature that some studies have identified funding as the main challenge of the SMEs in Nigeria (Adegboye & Iweriebor, 2018; Eferakeya, 2014; Nofsinger & Wang, 2011; Osano & Languitone, 2015; Obokoh et al., 2016). However, in a real sense, other factors challenge SMEs, and even SMEs with adequate access to financing are likely to face poor performance. For instance, it is evident from the study of Uzoma et al. (2021), that some SMEs with relative access to financing still struggle with sustainable performance. It is thus expedient for a study to deviate from the previous research which has identified funding as the only challenge to SME performance and investigate other obstacles that might be impeding the success of SMEs in Nigeria.

In the review of the literature, it was also discovered that, despite the snag in the Nigerian financial system, which has been preventing SMEs from accessing funding easily, some SMEs still find ways to access financing and become top performance (Forkuoh et al., 2015; Tagoe et al., 2005; Ioniţă, 2019; Steinerowska-Streb & Steiner, 2014). Previous studies appear not to have investigated the reason behind this scenario. Investigating this can throw more light into avenues that can make SME credit more readily available and affordable. Since

this study will reveal such efforts, other SMEs can learn from these SMEs by adapting their strategies to cope with the seemingly unfavorable financial system environment and still have the required funds to run their businesses.

More interestingly, existing literature has revealed the importance of innovating new structures by the financial system in countries to promote SMEs (Levine, 2005; OECD, 2009; Wehinger, 2012; Ujunwa et al., 2012), for enhancing their suitable economic performance, which in turn, will be beneficial for the nation as a whole (Abara, 2021; Isaac & Ph, 2015; Lee et al., 2015; Veiga & McCahery, 2019; Ye & Kulathunga, 2019). The theoretical literature has shown that both market-based and bank-based approaches are the two main structures of the financial system (Moradi et al., 2016; OECD, 2009). But in Nigeria, studies have failed to access the efficacy of the two objectively. Some studies rely on secondary data only (Ademosu & Morakinyo, 2021) while some used the primary data approach alone (Olawale et al., 2019). Yet both the approaches have their deficiencies. This study adopts both primary data and secondary data, which will provide comprehensive information for investigating the structure of the financial system that will be suitable for the SMEs in Nigeria, thereby correcting the deficiencies in each of the two approaches. Hence, the current thesis aims to fill these gaps in the literature and add value to the current body of knowledge.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Research Design

A research design sets out the framework for collecting data and determining the instruments that should be utilized to analyze it (Jr et al., 2018; Saunders et al., 1997; Slater & Atuahene-Gima, 2004). Several research methodologies have been employed in this research, allowing for a triangulation approach to be used. The research uses a mixed methodological method, in which theoretical components of the concerned issues are addressed alongside practical investigations and data gathered through field studies. This technique enables one to conduct a thorough examination of all relevant theories and the use of procedures for extraction and analysis of empirical qualitative and quantitative data (Molina-Azorín, 2007; Timans et al., 2019). Thus, the mixed-method research approach helps to cover a wide range of topics to elucidate the research findings effectively. The quantitative data have been obtained using aggregate secondary data of the country from reports and publications, and questionnaire-based surveys among registered SME owners. Semi-structured interviews have been used to collect the qualitative data.

3.2. Population of the Study

This research seeks to establish the relevance of the financial system to SME access to financing in Nigeria by looking at the support system, structure, and environment provided to SMEs by the Nigerian financial system. The population for this study is the SMEs registered with the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), and the

national database of all registered SMEs, as released in the 2020 report. SMEDAN has about 617,248 small enterprises and 53,199 medium enterprises members. Of these, about 50.3% of the enterprises are registered. Thus, 337,234 small and medium enterprises are registered and form the population for the research.

3.3. Sample and Sampling Technique

The sample size for the study is computed using the following formula:

$$sample\ size = \frac{\frac{z^2 \times p\ (1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N}\right)}$$

such that z represents the z-score at 95% confidence interval, p signifies the population proportion, N is the population size, and e is the margin of error. Considering the margin of error at 2%, the sample size comes at 2,385.

The current study has employed random sampling, which can be defined as a regulated method that ensures that each population element has a known probability of selection (Gupta, 2020; Taherdoost, 2016). This process eliminates any chance of bias. From the SMEDAN register, about 50% of the total forms of active and registered SMEs, based on random sampling, conducting business activities under its jurisdiction, have been considered as the population proportion in the planned survey. The expected respondents were between 75% to 100% for more proximate locations and 50% for far places. Finally, the survey included 2,000 SME business owners (SME) organizations. A census has been undertaken, and because of the number of registered SMEs (whether currently running or gone into extinction), efforts have been made to cover all of them in sampling, and to enable an accurate measure of the population

(minimal sampling error), reduction of survivorship bias, benchmark data have been obtained for future studies, and detailed information about small sub-groups within the population have been explored.

3.4. Methods of Data Collection

3.4.1. Research Model

The research model considered for testing the research hypothesis is given in Figure 2, as under:

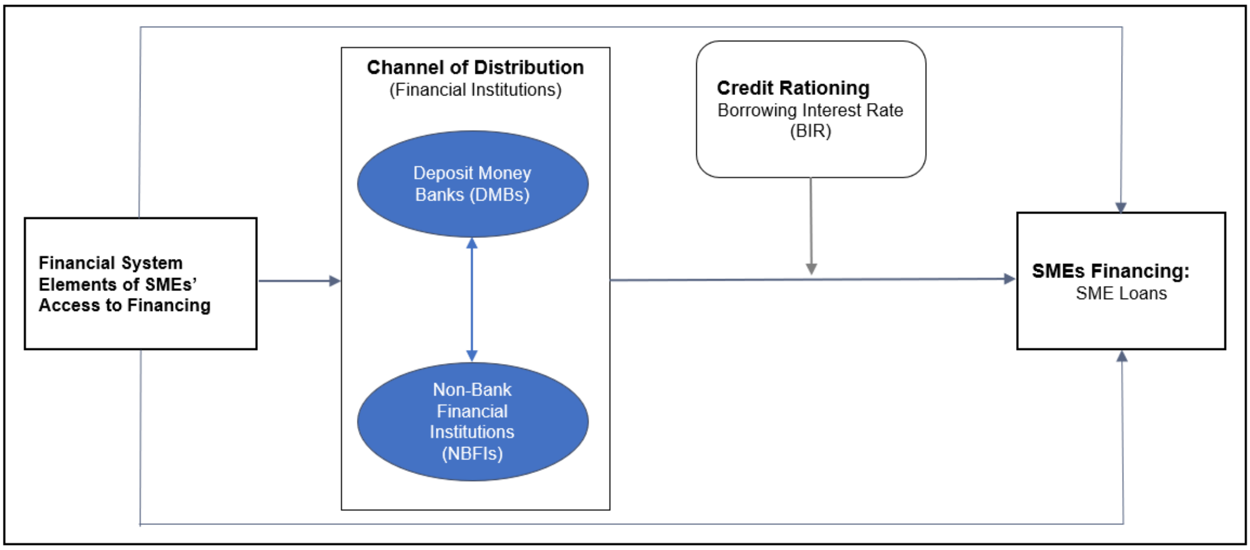


Figure 2: Conceptual model for the research

In Figure 2 above, the independent variables are the financial system elements of SME access to financing, which are measured using market efficiency and market depth. The sub-factors for the independent variable, however, differ for secondary and primary research, which are discussed in the subsequent sections of the chapter. The control or mediating factors in the model are the channel of transmission, which are further categorized as deposit money banks (DMB) and non-bank financial institutions (NBFIs), which consist of pooling savings from

these channels. The moderating factor is credit rationing, measured using the borrowing interest rate (BIR). Finally, the dependent variable is SMEs' access to finance proxies, computed as aggregate loans to formal SMEs.

3.4.2. Secondary Data

The secondary data include collecting 18 years of aggregate national data from the Central Bank of Nigeria (CBN) database. To understand the data variables, the dependent and independent variables are defined, such that the independent variables are financial system development (FSD), measured using market efficiency and depth. The variables for market efficiency are interest rate spread, overhead costs, and bank concentration, while the variable to measure market depth is the private sector credit. The dependent variables used in the study are SME access to financing, which is proxied using aggregate loans to formal SMEs. The model also includes control variables, comprising mediating and moderating factors. The mediating variables include financial channels – financing institutions, deposit money banks (DMBs) and non-bank financial institutions (NBFIs) through its financing instrument of pooling savings proxied by the current and savings account balances of the financial system, and the moderating factor is the credit rationing proxied by borrowing interest rate.

3.4.2. Primary Data

To understand the data variables, the dependent and independent variables are defined, such that the independent variables are perceived as enabling and obstructing factors, comprising interest rate, reputation, owners' characteristics, financial system, and environmental factors. The dependent variables used in the study are SME access to financing

proxies, which is measured using aggregate loans to SMEs. The model also includes control variables, comprising mediating and moderating factors.

The mediating variables include financial channels – financing institutions (deposit money banks (DMBs) and non-bank financial institutions (NBFIs) through its financing instrument of pooling savings, and the moderating factor is the credit rationing measured by borrowing interest rate. The primary data are collected using a quantitative survey among the SMEs in Nigeria, as well as qualitative interviews from three Heads of SMEs or retail businesses in the DMBs, one Head of Enterprise Risk from an NBFI, and two Directors from administration, policy, and regulatory institutions. The questionnaire is applied in this study to elicit information from the target respondents.

3.4.3. Instrumentation

This study ensures that the structure of research questionnaires follows an appropriate and logical sequence to make the survey comprehensible to respondents. The semi-structured interview approach with financial institutions and regulatory authorities and online surveys with SME owners/managers were identified as an effective method of data collection, given the purpose of this research. The questionnaire instrument used in the survey mainly comprised of closed-ended multiple-choice items. In essence, some of the questionnaire's questions were created using the Likert scale that has the benefit of giving responses in a uniform style that can be entered quickly, efficiently, and without mistakes (Navarro-Rivera & Kosmin, 2013). The survey for this research included three sections: demographic information about the organization and its management; internal and external barriers that the organization encountered (business owners, businesses, and business practices variables); and financing access restrictions that SMEs confront. To prepare the survey questionnaire, the study has

looked at many previous questionnaires used in SME studies to see whether there was a link between the goals of the research and the information collected.

The interview questions were semi-structured to get a proper direction, but the respondents were allowed to share their views simultaneously. The goal of the interviews was to collect two sources of data from financial institutions: first, their loan relations with Nigerian SME managers and owners; and second, the grounds for their aversion to funding to the SME sector and the potential repercussions from doing so. The interview questions were based on three key areas related to Nigerian SMEs: access to external financing, which included examining loan policies and procedures for funding of SMEs, as well as the method of assessing loan applications; impediments faced by banks with financial transactions, which included deciding the reasons and events that contribute to SME lending proposals being denied. Designing both questionnaires followed straightforwardness, the use of simple language and minimization of complicated terminology, being reasonable with questions asking personal details, and friendly personal features.

3.5. Methods of Data Analysis

As stated in the previous section, the data collected entail both primary and secondary data, such that the secondary data are quantitative, while the primary data are both quantitative and qualitative. The secondary quantitative analysis is conducted using regression analysis to examine the relationship between SME access to financing, the financial system, and its channels in Nigeria. On the other hand, the primary data contain two components: namely, quantitative, and qualitative analysis.

The quantitative analysis is done by coding the survey responses in Microsoft Excel and exporting them to SPSS, version 28. A total of 1,765 responses were received, which were taken to SPSS. Missing value analysis is conducted, and it was found that out of 1,765 responses, 176 were incomplete, and, thus, were excluded to remove any bias. Some of the analyses used are frequency, cross-tabulation, chi-square, regression, and correlation. Finally, the transcribed interview for the qualitative analysis is taken into NVivo 12. To add the validity and creditability of the qualitative data analysis, triangulation at source is used, such that the interviews are conducted with different stakeholders. Four interviews have been conducted from the Head of SME or Retail business desks or the decision-makers of top financial Institutions, while two are collected from the directors from policy and regulatory institutions – Central Bank of Nigeria (CBN) or SMEDAN (Carter et al., 2014). Moreover, it was found that saturation was achieved after six responses, and thus, more interviews were not conducted. The qualitative data are analyzed with the help of thematic analysis, in light of the research objectives.

Furthermore, the method of data analysis is discussed according to the objectives of the study. This is to enable a clear understanding of the process of data analysis embraced by the study. The study hypotheses have been developed based on the gaps identified in the literature review as well as the broad goal of this study. The set of objectives below will be pursued using the accompanying estimating techniques. The choice of the relevant estimating techniques is informed by:

- their use for similar studies in the past and
- their appropriateness based on sources of data employed and data availability.

3.5.1. Objective 1: To assess the effect of financial system channels on SME access to financing in Nigeria

The estimating technique is the Ordinary Least Squares (OLS) which is represented by the regression equation: Y= f(X), where X is the vector of all independent variables such as *interest rate spread, overhead cost, bank concentration, credit to the private sector, aggregate current and savings accounts balance*, and *lending rate*. Again, Y depicts credit to SMEs in Nigeria. The equation is stated as *Aggregate SMEs Loan Size* = $\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$ +e where X_1 represents the vector of financial system variables such as *interest rate spread, overhead cost, bank concentration*, X_2 represents the mediating vector (financial institutions) which is proxied by the *aggregate current and savings accounts balance* while X_3 represents the moderator, *the borrower's interest rate.* Again, *loan size* is the dependent variable and is a measurement of access to financing by SMEs (Rahman et al.; 2017). Variables have been tested for non-violation of the regression assumptions such as multi-collinearity.

The following represents the hypotheses.

Main Hypothesis: H_1: **Financial System, SME funding, and Channels of Transmission**

Hypothesis:

H_{1a}: The Financial Institution mediates between the Financial System and the volume of loans to SMEs.

3.5.2. Objective 2: To investigate the main factors inhibiting SME access to financing in Nigeria.

In line with Rahman, Rahman, and Belas (2017), who utilized a survey conducted by the World Bank, this study shall utilize a primary data source by conducting a survey of 2,000 SMEs across Nigeria covering dominant SME sectors like trade, manufacturing, agriculture, and services to achieve this objective. The research has explored factors that influence SME access to financing, such as information asymmetry, firm characteristics (such as firm age and size, riskiness, and innovativeness), availability of collateral, borrower characteristics (such as gender), lender characteristics, and bank structure Deposit Money Bank (DMB) or Non-Bank Financial Institution (NBFI).

On the one hand, for the survey of registered SME owners, the estimating technique is the Spearman Rank Correlation $\rho = 1 - \{6 \sum d_i^2 / \text{n}\ (n^2 - 1)\}$

ρ = Spearman's rank correlation coefficient

d_i = difference between the two ranks of each observation

n = number of observations

For this objective, primary data sources via questionnaires administered to SME owners were utilized. Data obtained will specifically focus on the SMEs that are both successful and unsuccessful at accessing loans from financial institutions. As earlier noted, for measuring access to financing, SME performance, owner/business/manager characteristics, and SME traits, Spearman's correlation coefficient and statistical significance (at the 0.05 level) have been computed.

Main Hypothesis: H_2: Obstacles faced by SMEs and access to financing

Hypotheses:

$\boldsymbol{H_{2a}}$: The absence of collateral is an obstacle to access to financing by SMEs.

$\boldsymbol{H_{2b}}$: High lending rate is an obstacle to access to financing by SME owners.

$\boldsymbol{H_{2c}}$: The absence of verifiable business financial information is an obstacle to access to financing by SME owners.

3.5.3. Objective 3: To investigate the factors promoting SME access to financing in Nigeria

For this objective, primary data sources via questionnaires to be administered to SME owners will be utilized. Data obtained will specifically focus on the SMEs that have successfully accessed financing from financial institutions in the recent past.

In line with Rahman et al (2017), who utilized a survey conducted by the World Bank, this study shall utilize primary data sources by administering surveys to 2,000 SMEs across Nigeria covering dominant SME sectors like trade, manufacturing, agriculture, and services to achieve this objective. The research has explored factors that influence SME access to financing, such as information asymmetry, firm characteristics (such as firm age and size, industry, and staff strength), availability of collateral, borrower characteristics (such as gender, educational qualification, age, etc.), lender characteristics, and financial institution structure – Deposit Money Bank (DMB) or Non-Bank Financial Institution (NBFI).

On the one hand, for the survey of registered SME owners, the estimating technique is the chi-square with the equation:

$$\chi_c^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

Where O_i = Observed value, and

E_i = Expected value

There are two types of chi-square tests. Both use the chi-square statistic and distribution for different purposes:

- A chi-square goodness of fit test determines if sample data match a population.
- A chi-square test for independence compares two variables in a contingency table to see if they are related. In a more general sense, it tests to see whether distributions of categorical variables differ from each other. The second type is utilized in this study.

Due to the current COVID-19 pandemic, an in-person survey was not possible; rather, electronic surveys using tools like Qualtrics, Survey Monkey, or Google Forms have been utilized. Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) was contacted to inform their registered members about the surveys through their communication channels. The researcher believes convincing SMEDAN was easier because of the practical contributions of this study to the institution's SME developmental program. The sampling method has been random, weighted in line with the regional density and geographical spread of registered SMEs. To achieve this objective, the direction of the relationships and their significance will form the basis for determining the relevant factors.

Main Hypothesis: H_3: Factors promoting SME access to financing

Hypotheses:

H_{3a}: Availability of adequate collateral promotes access to financing by SME owners.

H_{3b}: Reputation of the SME owner promotes access to financing by SME owners.

H_{3c}: Size and scale of operation promote access to financing by SME owners.

H_{3d}: Structure of financial institution (DMB or NBFI) promotes access to financing by SME owners.

H_{3e}: The age of SME promotes access to financing.

3.5.4. Objective 4: To propose changes to the financial system that will enhance SME access to financing in Nigeria.

This objective will be achieved through primary data sources using surveys of SME owners and interviews of relevant financial system stakeholders. This includes the Central Bank of Nigeria (CBN), Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), Financial Institutions comprising Deposit Money Banks (DMBs), and Non-Bank Financial Institutions (NBFIs).

The result of Objectives 2 and 3 as well as output from interviews of six executives of selected financial system stakeholders will be analyzed with NVivo 12, which is used for qualitative research analysis. These will then form the basis for achieving this objective.

The following represents the relevant hypotheses.

Hypotheses:

H_{4a}: Promoting SME finance through NBFI (Non- Bank Financial Institution) will

improve SME access to funding.

H4b: Promoting SME financing through DMB (Deposit Money Bank) will improve SME access to funding.

H4c: Reducing information asymmetry will improve SMEs' access to funding.

H4d: Lower cost of lending to SMEs will improve SME access to funding.

***H4e*:** Special government-funded agencies like the Bank of Industry (BOI) will enhance SME access to funding.

***H4*f:** De-risking of loans to SMEs through insurance will enhance credit allocation to SMEs

3.5.5. Estimating technique procedures and processes

The data were tabulated in Microsoft Excel for quantitative analysis. The quantitative findings were then coded. Then they were statistically analyzed using SPSS. The analytic strategy emphasized the main research questions about the questionnaire items. Chi-square statistics were the estimating technique used under the quantitative analysis of the data.

The qualitative data were evaluated using the NVivo 12 analytical software package just like in some previous studies. The interviews were recorded and transcribed electronically. The nodes were also developed to analyze the data gathered and reflect the variables indicated in the model. Coding was done by going through and examining the transcribed interviews that were conducted. All responses were linked with and mapped to a specific question and

afterward compared to those of other respondents. The information collected during the interview session was examined to see whether it would fit into the proposed model.

3.6. Summary

The methodology used in this study has been highlighted in this chapter. To choose the most relevant methodology for this study, several previous studies on SMEs were scrutinized. As a result, a mixed-method approach was chosen in gathering the required primary data: questionnaire surveys and interviews. To get a reasonable response, the survey was administered to SME owners and managers via electronic questionnaires. Interviews were the main source of information from the financial system and its institutions to investigate the factors inhibiting SME sector funding and suggested solutions from the standpoint of a Nigerian financial intermediary, and the environmental implication for SMEs.

The quantitative secondary data were sourced from databases, reports, and publications of the Central Bank of Nigeria (CBN) and World Bank and analyzed using the SPSS software. Overall, statistical techniques such as descriptive analysis, chi-square, and hypothesis testing were included after the initial estimations of frequency and proportion. The findings of these studies, discussions, and recommendations are presented in the next chapters.

CHAPTER FOUR

SECONDARY DATA ANALYSIS AND PRESENTATION OF RESULTS

4.1. Introduction

This chapter discusses the results of the secondary data to examine the relationship between SME access to financing, the financial system, and its channels in Nigeria. It should be noted that in the methodology, financial system impact is assessed based on both market efficiency and market depth. Consequently, the role of financial institutions as a mediating factor in transmitting the effect of the financial system on SME access to financing is analyzed under both market efficiency and market depth. It will, therefore, create an avenue to investigate which of these two enables the financial system to have a significant impact on SME access to financing in Nigeria.

In addition, the literature has shown that the financial system can have either a direct or indirect effect on SME access to financing and, therefore, the effect of the financial system variables is analyzed directly on SME access to financing without the mediating factors from the financial institution. Subsequently, it incorporates and examines the mediating effect of the financial institutions to assess the indirect effect of the financial system variables on SME access to financing.

4.2. Assessment of the effect of the financial system on SME access to financing under the market efficiency pathway

In this section, the efficiency of the money market as dominated by the financial institution is assessed. Both the direct and indirect effects of the financial system are

investigated under the market efficiency pathway. The financial system variables selected under this pathway are interest rate spread, overhead cost, and bank concentration ratio, while the mediating factor representing the financial institution is the current and savings accounts of the banks. The volume of loans to SMEs is used as a proxy for SME access to finance. The analysis begins with the use of interest rate spread under the market efficiency pathway, to investigate the direct and indirect effects of the financial system on SME access to financing.

4.2.1. Effect of the financial system on SME access to financing using interest rate spread to proxy financial system under the market efficiency pathway

The financial system variable under market efficiency is the interest rate spread INTSPRD, the mediating factor representing the financial institution is the current and savings account (CASA) of the banks while the SME access to financing is proxied by loans to the SMEs, LOSMES. The hypothesis to be tested is as follows:

Hypothesis:

H_{1a}: The financial institution mediates between the financial system and the volume of loans to SMEs.

Regression results on the effect of the financial system on SME financing under market efficiency pathway (proxied by interest rate spread)

The regression results are presented in stages since they involves both the indirect effect and the direct effect. The first regression result presents the impact of interest rate as a proxy for the financial system under the market efficiency pathway on the SME loan. This is

necessary to determine if the indirect mediating effect will be required. The result is presented in Table 1.

Table 1: Regression result on the impact of the financial system (interest rate) on SME loans

Variable	Coefficients
Constant	-2.7545692 (0.8557080)
Interest rate spread	0.3329310** (0.0488705)
F Statistics	46.410**

Note: Dependent variable is SME loans; (***) statistical significance at 99%; (**) statistical significance at 95%; (*) statistical significance at 90%

Sources: *Author's computation, 2022*

The result in Table 1 shows the total effect of interest rate spread on SME loans. Our findings show that the interest rate spread has a significant impact on SME loans. This result suggests that the mediating effect can now be investigated. It should be recalled that the mediating effect is to be examined through the financial institution, which is proxied by the current and saving account balance of the banks.

The next result (Table 2) explains the relationship between interest rate spread and the mediating factor (financial institutions), which is proxied by the current and saving accounts of the banks (CASA).

Table 2: Regression result on the impact of the financial system (interest rate spread) on financial institutions (current and savings account balance of banks)

Variable	Coefficients
Constant	1.092317163 (1.239155515)
Interest rate spread	0. 851167162* (0.070769)
F Statistics	144**

Note: Dependent variable is current and savings account balance of the banks; (***) statistical significance at 99%; (**) statistical significance at 95%; (*) statistical significance at 90%.

Source: *Author's computation, 2022*

Table 2 shows the result that confirms a significant relationship between the mediating factor, financial institution (proxied by CASA), and the financial system variable interest rate spread. The relationship has shown that the SOBEL test, which is meant to assess the presence of indirect effect can be conducted. Before conducting the SOBEL test for the indirect effect, it is necessary to examine the direct effect.

Table 3: Direct effect of the financial system (interest rate spread) and financial institution (current and savings account balance of banks) on SME loans

Variable	Coefficients
Constant	3.0387549 (0.7972152)
Interest rate spread	0.1114848** (0.631475)
Current and savings account balance of banks	0.003*** (0.001)
F Statistics	39.607**

Note: Dependent variable is SME loans; (***) statistical significance at 99%; (**) statistical significance at 95%; (*) statistical significance at 90%.

Sources: *Author's computation, 2022*

Results in Table 3 show the direct effect of interest rate spread and current and savings account balance of banks on SME loans. The result shows that the direct effect of interest rate on SME loans is significant. The SOBEL test is used to calculate and test the indirect effect. The result is presented in Table 4.

Table 4: SOBEL test for the indirect effect of interest rate spread on SME loans via financial institution (current and savings account balance of banks)

Variable	Coefficients
SOBEL test statistics	2.9108*** (877.2460)

Note: (***) Statistical significance at 99%; (**) statistical significance at 5%; (*) statistical significance at 90%.

Source: *Author's computation, 2022*

To test the indirect effect for statistical significance, the webpage calculator for the SOBEL test is used, and bootstrapping (though superior), which gives the same result will not be used. The resultant SOBEL test gives a test statistic value of 2.9108, standard error of 877.2460, and a p-value of 0.0036. Therefore, the indirect effect (with estimate a*b = 851167.16*0.003 = 2,553.50) between interest rate spread and loans to SMEs via current and savings account balance of banks is statistically significant at 99%.

4.2.2. Effect of the financial system on SME access to finance using bank overhead cost to proxy financial system under the market efficiency pathway

The second variable under the market efficiency pathway is the overhead cost. The task here is to access the effect of the financial system on SME access to financing using overhead cost as financial system variable and the financial institution variable is current and savings account balance of banks as mediating factor.

Hypothesis:

***H_{1a}*:** The financial institution mediates between the financial system and the volume of loans to SMEs.

Regression results on the effect of the financial system on SME financing under market efficiency pathway (proxy by overhead cost)

The results describing the relationship between the financial system and SME access to financing is presented by first accessing the total effect, which is the impact of overhead cost on loans to the SMEs. The regression result is presented in Table 5.

Table 5: The impact of the financial system (bank overhead cost) on SMEs loan

Variable	Coefficients
Constant	-0.44574066 (0. 13570.259)
Bank overhead cost	0.578** (0.106)
	29.987**

Note: Dependent variable is SMEs loans; (***) statistical significance at 99%; (**) statistical significance at 95%; (*statistical significance at 90%

Sources: *Author’s computation, 2022*

The regression result presented in Table 5 is an indication that bank overhead costs have a significant impact on SME loans and, consequently, the mediating analysis can be conducted. The next stage is to investigate the impact of the financial system variable under the market efficiency pathway, proxied by bank overhead cost on the mediating variable, the financial institution, which is proxied by current and savings account balance, CASA. The result is presented below in Table 6.

Table 6: Impact of the financial system (bank overhead cost) on current and savings account balance

Variable	Coefficients
Constant	-2.576783160 (0.2166959946)
Bank overhead cost	0.142337** (0.016)
F Statistics	71.337**

Note: Dependent variable is current and savings account balance of the banks; (***) statistical significance at 99%; (**) statistical significance at 95%; (*) statistical significance at 90%

Sources: Author’s computation, 2022

The effect of bank overhead cost on the mediating variable current and savings account balance is significant. The coefficient of current and savings account balance is 0.142337 and it is significant at 95%, thus indicating that there is a significant relationship between the current and savings account balance and bank overhead. It shows that, apart from the fact that bank overhead cost influences loans to SMEs, it also affects the current and savings accounts of the banks significantly. The next stage is to analyze the direct effects of both bank overhead cost and current and savings account balance on SME loans. The result is presented below in Table 7.

Table 7: Direct effect of the financial system (bank overhead cost) and financial institution (current and savings account balance of banks) on SME loans

Variable	Coefficients
Constant	-3.7220656 (1.2173687)
Bank overhead cost	0.172 (0.144)
Current and savings account balance of banks	0.003*** (0.000)
F Statistics	38.981**

Note: Dependent variable is SME loans; (***) statistical significance at 99%; (**) statistical significance at 95%; (*) statistical significance at 90%.

Sources: *Author's computation, 2022*

The result in Table 7 presents the direct effect of the financial system on SME loans, i.e., SME access to financing. The coefficient of bank overhead is 0.172 but it is not statistically significant at both 95% and 90%, respectively. The implication is that bank overhead cost does not have a direct significant impact on loans to SMEs in Nigeria. Notwithstanding, the mediating factor which is the current and saving account balance of the banks has a coefficient of 0.003 that is statistically significant. The next step is to conduct a SOBEL test to verify the existence of the significant indirect effect of the financial system on SME loans via a financial institution, proxied by current and savings account (CASA) balance.

Table 8: SOBEL test for the indirect effect of bank overhead cost on SME loans via Financial Institution (current and savings account balance of banks)

Variable	Coefficients
SOBEL test statistics	8.4463*** (0.0506)

Note: (***) Statistical significance at 99%; (**) statistical significance at 95%; (*) statistical significance at 90%.

Sources: *Author's computation, 2022*

The results from the SOBEL test show that the statistic of the test is 8.4463 and the figure is statistically significant at 99%. The implication is that the indirect effect of bank overhead cost via the current and savings account balance of banks is significant. It implies that, although bank overhead cost as the financial system indicator under market efficiency pathway failed to have a direct effect on SME access to financing, it does, however, have a significant indirect effect through the current and savings account balance of banks (CASA) on the SME access to financing.

4.2.3. Effect of the financial system on SME access to financing using bank concentration to proxy financial system under market efficiency pathway

The third variable used to proxy the financial system under the market efficiency pathway is the bank concentration ratio. The analysis of the effect of bank concentration on SME financing is done under this subsection; both the direct effect and the indirect effect through the current and saving account of the banks (a proxy for a financial institution) are also done here. Just like the previous ones, the first effect here is to investigate the impact of bank concentration on SME loans, and the hypothesis under consideration here is stated as follows:

Hypothesis:

H_{1a}: The financial institution mediates between the financial system and the volume of loans to SMEs.

Regression results on the effect of the financial system on SME financing under market efficiency pathway (proxied by bank concentration)

The first effort is the analysis of the effect of bank concentration proxy by several bank branches on SME loans. This will enable us to determine if there will be a need to estimate the mediating effect of the financial institution. The result of the regression is presented in Table 9.

Table 9: Impact of the financial system (bank branches) on SMEs loan

Variable	Coefficients
Constant	1.68632919 (0.64471)
Bank concentration ratio	-0.25589** (0.11765)
F Statistics	4.731**

Note: Dependent variable is SME loans; (***) statistical significance at 99%; (**) statistical significance at 95%; (*) statistical significance at 90%

Sources: *Author's computation, 2022*

Again, Table 9 shows that the effect of the number of bank branches on SME loans is significant. This is because the coefficient of bank branches is -0.25589, which is statistically significant at 95%. Consequently, the analysis can proceed to examine the mediation effect. The financial institution is used as the mediating factor and the next step is to analyze the effect of bank concentration on current and savings accounts of the banks, which is the proxy for financial institutions and the mediating factor.

Table 10: Impact of the financial system (bank concentration) on current and savings account balance

Variable	Coefficients
Constant	1.833345039 (0.11508449)
Bank branches (bank concentration)	0.2482* (0.2100)
F Statistics	1.397

Note: Dependent variable is current and savings account balance of the banks; (***) statistical significance at 99%; (**) statistical significance at 95%; (*) statistical significance at 90%

Sources: *Author's computation, 2022*

The effect of bank concentration on the current and savings account balance of the banks is shown in the regression result presented in Table 10. The result shows that the coefficient of current and savings account balance of the banks is 0.2482 and it is not statistically significant. It is an indication that the number of branches of the banks in Nigeria has not significantly influenced the current and savings account balance of the banks. Consequently, it implies that bank concentration does not have a significant impact on a financial institution which is the mediating factor.

The next step is to investigate the direct effect of bank concentration on SME access to financing. The result is presented in Table 11

Table 11: Direct effect of the financial system (bank concentration) and financial institution (current and savings account balance of banks) on SME loans

Variable	Coefficients
Constant	0.162480 (0.051793)
Bank branches (Bank concentration)	-0.33920*** (0.09493)
Current and savings account balance of banks	0.003*** (0.000)
F Statistics	38.981**

Note: Dependent variable is SME loans; (***) statistical significance at 99%; (**) statistical significance at 95%; (*) statistical significance at 90%.

Sources: *Author's computation, 2022*

Table 11 shows the regression results on the direct effect of bank concentration on SME loans. The coefficient of bank branches, which is a proxy for bank concentration is 0.33920 and the value is significant at 99%. It shows that bank concentration has a significant direct effect on SME access to financing. In the same vein, and, as usual, the current and savings account balance of the banks (CASA) has a significant impact on SME loans as well.

The next step is to estimate the SOBEL test for the indirect effect. The result is presented in Table 12.

Table 12: SOBEL test for the indirect effect of bank concentration on SMEs loan via financial institution (current and savings account balance of banks)

Variable	Coefficients
SOBEL test statistics	1.1821 (6.3001)

Note: (***) Statistical significance at 99%; (**) statistical significance at 95%; (*) statistical significance at 90%.

Unlike the previous result, the SOBEL test on the indirect effect of bank concentration on SME loans via current and savings accounts of the banks is not statistically significant. The coefficient is 1.1821 and it failed to pass the test of statistical significance at both 95% and 90%. The result implies that bank concentration, as proxied by the number of banks branches, has a significant direct effect on SME loans, but the indirect effect via current and savings accounts of the banks is not significant.

4.3. Assessment of the effect of the financial system on SME access to financing under market depth pathway

The introduction of this chapter stated that two pathways that will be used to assess the financial system are market efficiency and market depth. The variable under the market depth used to proxy the financial system in this study is a credit to the private sector. The analysis of both the indirect and direct effects on SMEs' access to financing is presented as follows:

Hypothesis:

$\boldsymbol{H_{1a}}$: The financial institution mediates between the financial system and the volume of loans to SMEs.

The regression result of the effect of credit to the private sector on SME loans is presented in Table 13.

Table 13: The impact of the financial system (credit to the private sector) on SME loans

Variable	Coefficients
Constant	0.77812 (0.12092)
Credit to the private sector	-0.3713*** (0.0890)
F Statistics	17.378**

Note: Dependent variable is SME loans; (***) statistical significance at 99%; (**) statistical significance at 95%; (*) statistical significance at 90%.

Sources: *Author's computation, 2022*

Table 13 presents the regression result of the relationship between credit to the private sector as a proxy for the financial system and SME loans. The coefficient of credit to the private sector credit is -0.3713 and the value is also statistically significant at 99%. This is an indication

that credit to the private sector is an important variable that determines SME loans or SME access to financing. This result has also paved the way for the analysis of the mediating effect of financial institutions. The next step is to present the result of the effect of credit to the private sector on the mediating variable, which is the financial institutions, proxied by current and savings account balance of the banks (CASA).

Table 14: Impact of the financial system (credit to the private sector) on current and savings account balance

Variable	Coefficients
Constant	0.29770419 (0.1919773)
Credit to the private sector	-0.1080766*** (0.0141432)
F Statistics	58.394***

Note: Dependent variable is current and savings account balance of the banks; (***) statistical significance at 99%; (**) statistical significance at 95%; (*) statistical significance at 90%.

Sources: *Author's computation, 2022*

The credit to the private sector shows a coefficient of 0.1080 in the regression result presented in Table 14. The value is statistically significant at 99%. The result implies that credit to the private sector does have a significant impact on the current and savings account balance of the banks (CASA), which is the mediating variable and a proxy for the financial institution. Next is to analyze the direct effect of credit to the private sector on SME loans.

Table 15: Direct effect of the financial system (credit to the private sector) and financial institution (current and savings account balance of banks) on SME loans

Variable	Coefficients
Constant	-0.16194 (0.051793)
Credit to the private sector	-0.301 (0.907)
Current and savings account balance of banks	0.003*** (0.000)
F Statistics	37.375***

Note: Dependent variable is SME loans; (***) statistical significance at 99%; (**) statistical significance at 95%; (*) statistical significance at 90%.

Sources: *Author's computation, 2022*

Table 15 shows that the coefficient of credit to the private sector is -0.301 and is not statistically significant. The result implies that the credit to the private sector has no significant direct impact on SME loans. Notwithstanding, the current and savings account balance of the banks does maintain a significant impact on SME loans. It can, therefore, be concluded from the result that credit to the private sector failed to influence loans to the SMEs directly. The test of significance of the indirect effect is given next.

Table 16: SOBEL test for the indirect effect of credit to the private sector on SME loan via Financial Institution (current and savings account balance of banks)

Variable	Coefficients
SOBEL test statistics	-7.6416*** (424.296)

Note: (***) Statistical significance at 99%; (**) statistical significance at 95%; (*) statistical significance at 90%.

Sources: *Author's computation, 2022*

The SOBEL test is statistically significant at 99%. This result implies that credit to the private sector will only affect SME loans significantly through the financial institution that is current and savings account balance of the banks (CASA). The result again implies that credit to the private sector in the Nigerian financial system will not influence SME access to financing without passing through the current and savings account balance of the banks This underscores the importance of the balance sheet of the banks in mediating the effect of the financial system on the access to financing of SMEs in Nigeria.

4.4. Summary

The role of the banks is germane in channeling the effect of the financial system variables identified above to the SME's access to financing. Therefore, the analysis used financial institutions that are proxied by current and savings account balance of the banks (CASA) as the mediating factor that transmits the effect of the financial system to the SME's access to financing is proxied by the volume of loans to the SMEs in Nigeria. The first variable analyzed under the market efficiency pathway of the financial system is the interest rate spread. Both the direct and the indirect effects of interest spread were analyzed. The indirect effect is assessed via the current and savings account balance of the banks (mediating factor). The regression result shows that interest rate spread has both significant direct and indirect effects on the SME's access to financing in Nigeria. The result implies that interest rate influences SME loans directly without going through the current and savings account balance of the banks. Again, the interest rate also has a significant indirect effect on SMEs' access to financing by going through the current and savings accounts balance of the banks.

The next variable used to proxy the financial system under the market efficiency pathway is the bank overhead cost. The result from the study confirmed that bank overhead

cost does not have a significant direct effect on SME access to financing but the indirect effect via the current and savings account of the banks is significant. It should be noted that financial institution is the mediating factor but proxy by the current and savings account balance of the bank.

Bank concentration is the next variable used to proxy the financial system under the market efficiency pathway, and the result has shown that the number of bank branches in the Nigerian financial system is germane to access to financing of SMEs directly, but not indirectly. The findings from the analysis have shown that the number of bank branches in Nigeria is a strong determinant of the access of SMEs to financing and this does not have to go through any mediating factor (financial institution) before it significantly affects the access of SMEs to financing.

Market depth is the next platform on which the efficacy of the Nigerian financial system is assessed. The result from the analysis has shown that credit to the private sector, which is a proxy for the market depth of the financial system will have a significant impact on the access of SMEs to financing, but it must first influence the current and savings account balance of the banks.

CHAPTER FIVE

PRIMARY DATA ANALYSIS AND PRESENTATION OF RESULTS

5.1. Introduction

This chapter summarizes the findings from the primary data, collected to determine the impact of the financial system on SMEs' access to financing. The primary objective of this study is to draw important lessons from the functioning of the financial system and how that affects SME financing and recommend changes to the Nigerian Financial System that will enhance SMEs' access to financing, which is expected to spur economic growth in Nigeria. This key objective is investigated using the following specific research objectives:

Objective 1: To establish the effect of financial system channels on SMEs' access to financing in Nigeria.

Objective 2: To identify the key factors inhibiting SMEs' access to financing in Nigeria.

Objective 3: To determine the key factors promoting SMEs' access to financing despite obstacles in the Nigerian financial system; and

Objective 4: To investigate and propose changes to the financial system that will boost SMEs' access to financing in Nigeria.

The study adopted a mixed-methods research design, such that the data are collected using both the quantitative and qualitative approaches. The collected data are analyzed, interpreted, and presented in accordance with the pre-determined objectives. Finally, the chapter tests the research hypotheses from the derived findings.

5.2. Research Design

A mixed-method approach was used for data collection in this study. Mixed methods design involves both quantitative and qualitative techniques to collect, interpret and analyze data to investigate a particular phenomenon.

"Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative data in a single study or a series of studies. Its central premise is that the use of both the quantitative and qualitative approaches in combination, which provides a better understanding of research problems when either of them is approached alone" (Creswell and Clark, 2007, 5).

The basic aim for using a mixed-method approach for this study is to validate the findings from two different perspectives and to triangulate the data. "Triangulation refers to the use of multiple methods or data sources in qualitative research to develop a comprehensive understanding of phenomena" (Patton, 1999). The purpose of triangulation in research is to increase the credibility and validity of results.

5.3.1. Quantitative method:

5.3.1.1. Data Collection

In this method, data from about 1,590 employees working in SMEs in Nigeria are collected through closed-ended questions. The collected data are analyzed using statistical instruments such as SPSS and SAAS. In quantitative data collection, the data are usually collected through surveys, polls, and questionnaires, and mathematical or statistical techniques are used to analyze the data to obtain results (Brannen & Bryman, 2017). The quantitative data, in this research, were gathered through a questionnaire administered to the managers and

owners in Small and Medium Enterprises in Nigeria. The research was originally set out to administer questionnaires to 2,000 Small and Medium Enterprises spread across the entire country. The respondents were randomly selected from among the registered members of the Small and Medium Enterprise Development Association of Nigeria (SMEDAN) domiciled in the Northwest, Southeast, and Southwest regions of the country. SMEDAN was selected for the study because it is the registered and largest organization of small and medium enterprises in Nigeria. Among the selected businesses, about 1,590 businesses agreed to participate in the survey, making the overall response rate 79.5%. According to Babbie (2004), the return rates on the survey of 50% are acceptable, fit for analysis and publishing, while 60% return rates are considered good, and 70% are considered excellent. Hence, the response rate for this study is excellent and sufficient for undertaking the study.

5.3.1.1. Data Analysis

Once the data are collected and checked, statistical analysis is performed before running the data for obtaining results for different research objectives, then, demographic profiling is done, to gain a better understanding of the study respondents. While undertaking the demographic profiling, first, the descriptive statistics of the questionnaire response rate were obtained to display the distribution of response rates across different geo-political zones selected for the study. Second are the descriptive statistics showing the background socio-economic and demographic characteristics of survey respondents. Third, the percentage distribution of business information and other variables related to the objectives were obtained. Next, several statistical analyses were performed to investigate the research objectives.

The results contained the analyses of the relationship between independent and dependent variables using the Chi-square test of association at a significance level of 99%.

Furthermore, regression analysis was used to estimate the relationship between different variables in the study, to measure the strength and character of the relationship between a dependent variable and one or more explanatory variables.

Once the results were found and interpreted in the light of the research objectives, the next section of this chapter consists of the testing of hypotheses. The hypothesis testing was carried out using regression analysis to achieve Objective 2, which is to determine the factors inhibiting SMEs or obstacles faced by SME owners, and the extent to which these obstacles affect or relate to their ability to access financing or loans from financial institutions. Furthermore, with the help of the Chi-square test of association, Objective 3 was achieved by assessing factors associated with successful access to finance among SME owners and testing whether these factors significantly affect the SME's access to finance or loans. Moving forward, the next section tests the hypotheses on proposed suggestions to facilitate and promote quick and easy access to financing by SME owners through the financial system.

5.3.2. Qualitative Method

5.3.2.1. Data Collection

In this method, data are collected from six interviewees through open-ended, semi-structured questions. The researcher conducted in-depth interviews with the respondents drawn from the critical areas of the financial system, including the Central Bank of Nigeria, SMEDAN, and the financial institutions. In-depth interviews are defined by Boyce and Neale (2006) as a qualitative research technique, in which intensive interviews from a small number of individuals are conducted, with the aim to explore their perceptions on a specific idea, program, or situation.

Thus, the data for the qualitative part were collected from the participants to gain an in-depth understanding of the impact of the financial system on SMEs' access to financing in Nigeria. An interview guide, as the data collection tool, was used for the interviews. All the interviews lasted between 40 and 60 minutes. Six interviews were conducted with the experts to obtain a deeper understanding of the influence of Nigeria's financial system and its channels on the small- and medium-sized enterprises' (SMEs) access to funding. During the interviews, participants expressed their perspectives on the obstacles that SMEs encounter when applying for credit and the difficulties faced by the lending institutions in granting credits to the sector. They also provided insights on the role of different institutions that provide financing, and the different measures to strengthen the financial system to encourage and boost SMEs' access to financing.

5.3.2.2. Data Analysis

This section summarizes and explains the findings from the thematic analysis of the participant interviews. Once the interviews were conducted, they were transcribed by professional transcribers and reviewed repeatedly so that the researcher gets familiarized with the emerging themes from the interviews. A thematic analysis approach, one of the most common approaches in qualitative data analysis (Guest, 2012), was used for analyzing the data to identify the emergence of similarities and differences in patterns within the data. Researchers all over the world use this method of analysis to understand qualitative data because it *"*minimally organizes the data and describes it in a (rich) detail*"* (Boyatzis, 1998, p. 6). This method is based on the propositions of Braun and Clarke (2006) who define it as a method used for identifying, analyzing, and reporting patterns or themes within data. This method of analysis was selected for this study because evidence suggests that it "can produce an insightful analysis that answers particular research questions" (Braun & Clarke, 2006, p.97). It is a highly

versatile method that can be adapted to meet the needs of many studies, providing a rich and informative, but complex account of results, thanks to its theoretical independence (Braun & Clarke, 2006; King, 2004). Since thematic analysis does not require the same level of theoretical and technical expertise as other qualitative methods, it is a more accessible method of analysis, particularly for those who are just starting out in their research careers (Braun & Clarke, 2006).

The NVivo 12 software was used by the researcher to analyze the qualitative data, as this software program provides an effective means to meaningfully analyze and organize large interview data sets. Computer-assisted qualitative data analysis helps the researcher to analyze data in an efficient way as the extracts of the data are coded more quickly than in the manual method, which requires the tedious tasks of cutting and pasting of the texts from the transcripts to another document and then assessing it to form themes (Welsh, 2002). The use of the NVivo 12 software not only helps the researcher to analyze data proficiently but also adds rigor to the research study. It has different tools and queries which allow the researcher to interrogate the data at particular levels. For example, if a researcher wants to carry out a quick search in a large data set, they can do it by running the word search query and getting results in seconds in NVivo. Similarly, it also helps the researcher to find the most frequent words or concepts used in the data through the word frequency query. This query helps the researcher to identify potential themes from the data, especially at the early stage of the analysis process.

Once all the interviews were transcribed, they were imported into the software to start the data analysis process. All the steps of thematic analysis were employed during the analysis of the data. After importing the data, all interview files were created as cases. The cases, according to QSR international (developer of the software), are the units of observation that represent people, places, events, organizations, or other entities that a researcher wants to

analyze and compare (QSR International, n.d.). These cases facilitate the process of comparison between research participants and provide useful insights into the data. In the first step (familiarization), once interviews were imported, they were read and re-read by the researcher to gain familiarity with the data. In this step, according to Braun and Clarke (2006, p. 77-101), the researcher "should attempt to go beyond surface meanings of the data to make sense of the data and tell a rich and compelling story about what the data means."

After getting familiarized with the contents of the data, initial codes (nodes on NVivo) were generated in the second step (i.e., coding) to capture the important features within the data. These nodes were the recurring patterns (themes) across the data that were developed during this process of familiarization. During this process, coding stripes were made visible alongside source documents, which allowed the researcher to see how the content is being coded and which codes are being used in the process.

In the third step (i.e., generation of themes), after all the data were coded and all the relevant extracts were highlighted, nodes were collated and examined to identify broader patterns of meaning, termed as themes. Themes are different from codes as they consist of a sentence or a phrase and sometimes a combination of different codes. After developing the potential themes (nodes) within the data, all relevant information was organized under their respective themes. The next step is reviewing and naming of themes, in which all the identified themes were refined and organized through an iterative process and then categorized meaningfully into sub-themes to develop a thematic framework. Similar themes and ideas were clustered in groups and organized in the thematic framework. In the last step, all themes and sub-themes were explained and described in detail. Some of the important features of NVivo are discussed as under:

Codebook

The codebook, in NVivo, consists of a list of themes and sub-themes identified during the process of analysis. These themes are presented with the columns of "references" and "sources" in the codebook to show the frequencies of the coded texts and files, respectively. "References" in the codebook show the number of extracts coded under a specific theme, while "sources" show the files or interviews of the participants from which the extracts have been quoted. For example, if a particular theme has six references and two sources, it will mean that six times a particular topic has been discussed in the data. The number of sources represents the files from which the data have been coded. Using this software, the references can be clicked and traced back to the sources (transcripts) where they have been mentioned. The codebook, with identified themes and sub-themes, was exported in a Word document to allow the researcher to view it outside of NVivo.

Framework Matrix

After the completion of data analysis, a framework matrix was created so that the coded data and themes can be summarized and put together at one place. The framework matrix is composed of a grid that has several rows and columns and can be exported in the Excel spreadsheet. The rows in the matrix represent the case nodes (research participants) whereas columns represent the theme nodes. According to QSR (nd), "these cells in the grid represent the intersection of a case and theme. When you enter text into the cell you can create a summary of the source content relevant to that case and theme."

Coding Summary Report

NVivo also proved to be effective in terms of its predefined reports and extracts (QSR International, nd). Through this function, a summary report of the coding process is generated which lists all the nodes and the files that are coded. All the text that is coded during the analysis process is included in the report. This report provides an overview of the coding process and helps the researcher to review the coding process throughout the analysis.

Word Cloud

A word cloud was generated through the word frequency query to identify the most frequently occurring words or concepts within the data. This query is used to identify possible themes in the project, especially if a researcher wants to see them in the early stages of a project. The word cloud, presented below, is the cloud of the whole project.

Figure 3: Specimen of Word Cloud

5.3. Demographic Profiling

5.3.1. Response Rate of the Study

A total of 2,000 questionnaires were administered across selected political regions in Nigeria (quantitative approach), varying across different types of businesses ranging from agriculture to manufacturing and services. Lagos State was selected in the Southwest, Anambra State in the Southeast; while Kano State in the Northwest. The selection of these states was based on their metropolitan stances, where most of the commercial activities in Nigeria take place. Below is the distribution of the questionnaire by region.

Table 17: Response rate summary by location of business

Business type	Business Location			
	Northwest	Southeast	Southwest	Total
Agriculture	64 (43.24)	64 (43.24)	20 (13.51)	148 (100.00)
ICT	153 (86.44)	20 (11.30)	4 (2.26)	177 (100.00)
Manufacturing	50 (11.79)	81 (19.10)	293 (69.10)	424 (100.00)
Oil and Gas	58 (25.89)	52 (23.21)	114 (50.89)	224 (100.00)
Retail	-	90 (40.54)	132 (59.46)	222 (100.00)
Services	124 (31.39)	208 (52.66)	63 (15.95)	395 (100.00)

*Figures in parentheses are in percentages**Source: Author's Computation 2022*

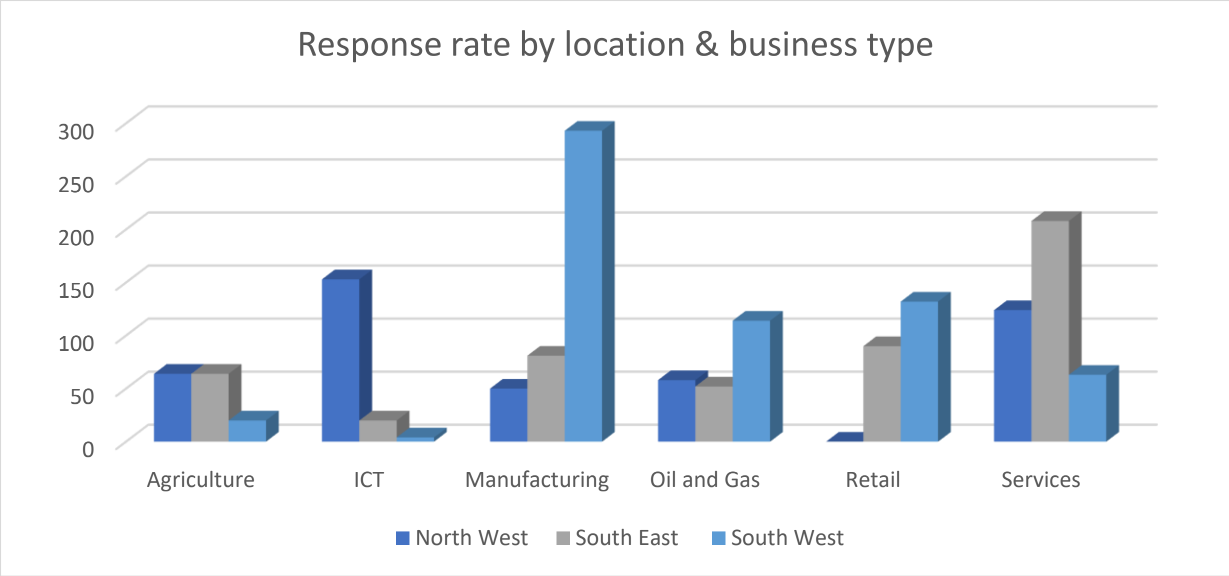


Figure 4: Response rate summary by location & business type

From Table 17 and Figure 4, it can be found that in the Northwest, 64 questionnaires were filled in the Agricultural sector and represent 43.24% of the total response rate. Likewise, in the Southeast, in the agricultural sector, the same value of questionnaires (64) representing 43.24% was obtained, while in the Southwest, less than 20% (13.51%) response rate was obtained in the same sector. In the Information and Technology sector, more than 80% (86.44%) of questionnaires were received in the Northwest, 11.30% were obtained in the Southeast while in the Southwest, a total of four questionnaires were obtained, representing less than 5% (2.26%) of the total responses. The Manufacturing sector showed a varying degree of questionnaire completeness as well. In the Northwest, a nearly 12% (11.79%) response rate was extracted, 19.10% of questionnaires was obtained in the Southeast and 69.10% of questionnaires was completed in Manufacturing businesses in the Southwest.

As for Oil and Gas, the result showed that at least 20% of questionnaires were completed for each Northwest and Southeast (25.89% and 23.21%, respectively). In the Southwest, on the other hand, a response rate of 114 questionnaires, which makes up 50.89% was extracted. Information regarding Retail Businesses shows that 40.54% of questionnaires

were completed in the Southwest, and about 60% (59.46%) were completed in the Southwest. Last, for Service Businesses, 124 questionnaires equating to 31.39% were acquired in the Northwest, while 208 (52.66%) responses were gathered from Retail Businesses in the Southeast, and only 63 responses, representing a 15.95% response rate was acquired in the Southwest, respectively.

5.3.2. Socio-economic and demographic background information of respondents (owners/managers of businesses)

Information regarding the socio-economic and demographic characteristics of respondents was contained in the first section of the questionnaire. This information consisted of the age of respondents in years, sex, educational attainment, religious affiliation, and ethnicity. The frequency of these factors is given in Table 18.

Table 18: Socio-economic and demographic characteristics of SME owners/ managers

Demographic Characteristics	**Frequency**	**Percentages (%)**
Age in years (Mean Age= 26.60)		
<20	120	7.55
20-24	654	41.13
25-29	216	13.58
30-34	485	30.50
35-39	49	3.08
40+	66	4.15
Total	*1590*	*100.00*
Sex		
Male	1125	70.75
Female	465	29.25
Total	*1590*	*100.00*
Educational attainment		
No formal education	436	27.42
Primary	127	7.99
Secondary	680	42.77
Tertiary	347	21.82
Total	*1590*	*100.00*
Religion		

Christianity	951	59.81
Islam	547	34.30
Traditionalists/Others	92	5.79
Total	*1590*	*100.00*
Ethnicity		
Hausa/Fulani	371	23.33
Igbo/Ibo	609	38.30
Yoruba	610	38.36
Total	*1590*	*100.00*

Source: Author's Computation, 2022

Table 18 shows that out of the 1,590 SME owners/managers that completed the surveys, more than 40% (41.13%) were from the age group of 20-24 years. It was followed by business owners who were aged 30-34 years representing the second highest on the table. While about 15% (13.58%) fell between ages 25-29 years; less than 5% each (3.08% and 4.15%) were of the ages of 35-39 years and 40 years and above, respectively. Concerning sex, most of the respondents (70.75%) were males while the remaining 29.25% were females. Information regarding educational attainment showed that at least four in 10 persons (42.77%) obtained secondary education. Almost 30% (27.42%) of the business owners/managers did not receive formal education, while less than 10% (7.99%) had primary education. Finally, only 21.82% obtained tertiary education.

Further results showed that religious affiliation varied among the business owners/ managers. From Table 18, it was found that the majority were Christians (59.81%), 34.30% were Muslims, while less than 10% (5.79%) belonged to other religions. Similarly, the analysis revealed that Igbo/Ibo and Yoruba ethnic groups were the dominant ethnicities in the study. It was reported from the table that 38% each were from the Igbo/Ibo ethnicity while 23.33% were Hausa/Fulani community.

5.3.3. Descriptive Analysis of Socio-economic and Demographic Variables by Type of Business

In this subsection, the descriptive statistics (frequency) were obtained for socio-economic and demographic variables as per the type of business. The findings are presented in Table 19.

Table 19: Percentage distribution of gender by type of business

	Gender		
Business Type/Sector	**Male**	**Female**	**Total**
Agriculture	129 (11.47)	19 (4.09)	148 (100.00)
ICT	148 (13.16)	29 (6.24)	177 (100.00)
Manufacturing	297 (26.40)	127 (27.31)	424 (100.00)
Oil and Gas	109 (9.69)	115 (24.73)	224 (100.00)
Retail	173 (15.38)	49 (10.54)	222 (100.00)
Services	269 (23.91)	126 (27.10)	395 (100.00)

Source: Author's Computation, 2022

Table 19 shows that males dominated the Agricultural and ICT sector more than the females (11.47% and 4.09% versus 13.16% and 6.24%, respectively). On the contrary, although with a slight difference, the findings in the table revealed that more women were found in the Manufacturing sector than males (27.31% females versus 26.40% males). The same result was also obtained from the Oil and Gas businesses, where it was found that women dominated the males (27.31% versus 9.69%, respectively). For Retail businesses, more men dominated women, with more than five percentage points (15.38% versus 10.54%, respectively). In the Services sector, women constituted 27.10% as compared with that of the males, which constituted 23.91%.

Furthermore, cross-tabulation between the age group of the respondents and the type/sector of business is computed, and is given in Table 20, and graphically presented in Figure 5:

Table 20: Percentage distribution of business owners/managers by type of business

Business Type/Sector	**Age of Business Owners/Managers**						
	<20years	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
Agriculture	-	36 (24.32)	40 (27.03)	61 (41.22)	11 (7.43)	-	148 (100.00)
ICT	26 (14.69)	74 (41.81)	6 (3.39)	55 (31.07)	1 (0.56)	15 (8.47)	177 (100.00)
Manufacturing	-	207 (48.82)	47 (11.08)	136 (32.08)	5 (1.18)	29 (6.84)	424 (100.00)
Oil and Gas	64 (28.57)	130 (58.04)	4 (1.79)	14 (6.25)	3 (1.34)	9 (4.02)	224 (100.00)
Retail	7 (3.15)	59 (26.58)	42 (18.92)	97 (43.69)	7 (3.15)	10 (4.50)	222 (100.00)
Services	23 5.82)	148 (37.47)	77 (19.49)	122 (30.89)	22 (5.57)	3 (0.76)	395 (100.00)

Source: Author's Computation, 2022

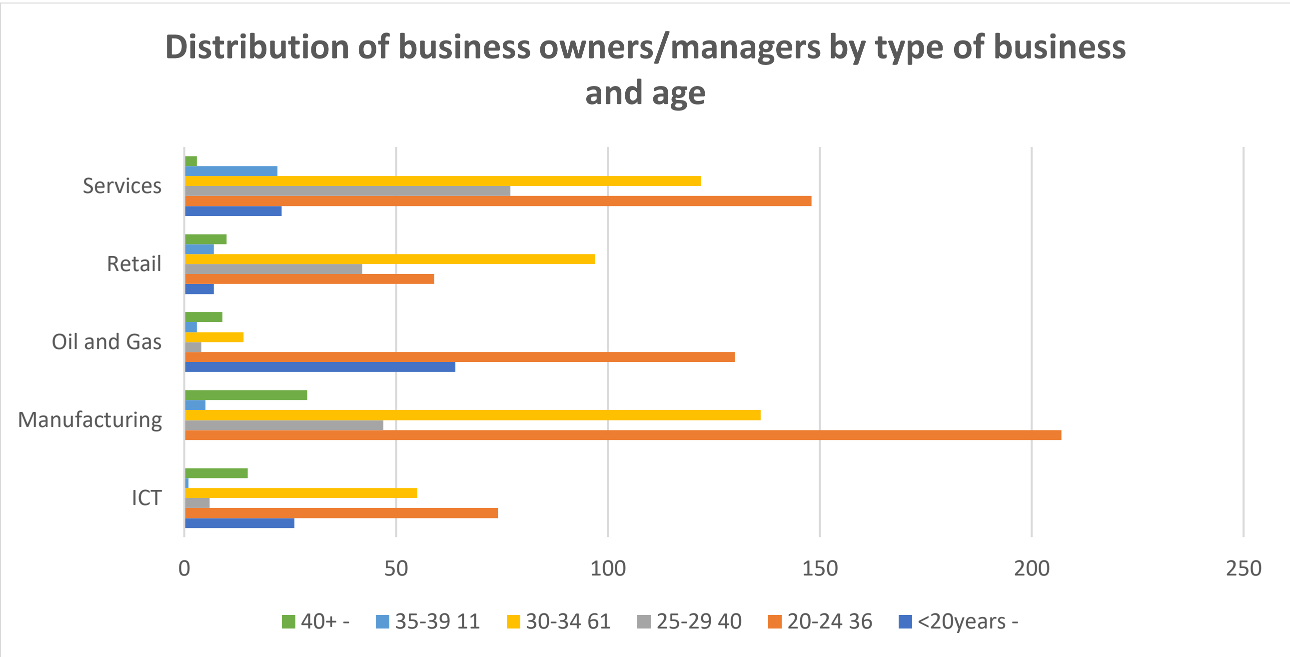


Figure 5: Summary of distribution of business owners/managers by type of business and age groups

In Table 20, respondents aged 30-34 years were mostly from Agriculture (41.22%). The ICT sector constituted most of the respondents aged 20-24 years, while 31.07% was allotted to those aged 30-34 years in the ICT sector. The analysis also shows that the Manufacturing and Oil and Gas businesses were constituted by those in ages between 20-24 years, representing 48.82% and 58.04% of responses, respectively, while the Retail and Services businesses were dominated by respondents aged 30-34 years (43.69%) and 20-24 years (37.47%), respectively.

Furthermore, the responses were categorized in terms of business type/sector and educational attainment levels of the respondents. The results are cross-tabulated and presented in Table 21:

Table 21: Educational attainment and type of business

Business Type/Sector	**Educational Attainment**				
	No Education	**Primary**	**Secondary**	**Tertiary**	**Total**
Agriculture	35 (8.03)	18 (14.17)	20 (2.94)	75 (21.61)	148 (100.00)
ICT	21 (4.82)	33 (25.98)	88 (12.94)	35 (10.09)	177 (100.00)
Manufacturing	94 (21.56)	50 (39.37)	193 (28.39)	87 (25.07)	424 (100.00)
Oil and Gas	105 (24.08)	20 (15.75)	86 (12.65)	13 (3.75)	224 (100.00)
Retail	15 (3.44)	5 (3.94)	155 (22.79)	47 (13.54)	222 (100.00)
Services	166 (38.07)	1 (0.79)	138 (20.29)	90 (25.94)	395 (100.00)

Source: Author's Computation, 2022

Overall, Table 21 shows that the Agricultural sector is dominated by tertiary educational attainders (21.61%) while ICT sector is dominated by secondary school holders (25.98%). Meanwhile, the Manufacturing sector is dominated by those who have primary

education. This was followed by those who had secondary school education. The least was found among respondents who attained no formal education (21.56%). Furthermore, analysis shows that the Oil and Gas and Services businesses were mostly constituted by respondents with no formal education (24.08% and 38.07%, respectively), while the retail businesses are constituted by secondary school level holders (22.79%). This finding is also confirmatory of the fact that Nigerian farmers, especially in the northern parts of the country, are still predominately engaged in sustenance farming (Nations Encyclopedia, n.d.).

Next, the categorization of the business type/sector based on the ethnicities is given in Table 22:

Table 22: Percentage distribution of ethnicity by business type

Business Type/Sector	**Ethnicity**			
	Hausa/Fulani	**Igbo/Ibo**	**Yoruba**	**Total**
Agriculture	90 (60.81)	-	58 (39.19)	148 (100.00)
ICT	-	98 (55.37)	79 (44.63)	177 (100.00)
Manufacturing	75 (17.69)	280 (66.04)	69 (16.27)	424 (100.00)
Oil and Gas	-	63 (28.13)	161 (71.88)	224 (100.00)
Retail	59 (26.58)	107 (48.20)	56 (25.23)	222 (100.00)
Services	147 (37.22)	61 (15.44)	187 (47.34)	395 (100.00)

Source: Author's Computation, 2022

Nigeria as a country is one of the most heterogeneous countries in terms of ethnicity distribution across the world with over 564 languages (Sasu, 2022). However, ethnicity can be categorized broadly into three main groups, namely Hausa, Igbo, and Yoruba. Table 6 shows that Agriculture was more practiced by the Hausa/Fulani people as compared to other regions like in the Southwest with only 39.19% in Agriculture. The ICT sector was more dominated by the Igbos/Ibo (55.37%) and followed by the Yorubas (44.63%). Oil and Gas businesses were

more found among the Yorubas (71.88%) while 28.13% Oil and Gas businesses were commonly found among the Igbos/Ibo. Manufacturing businesses were more dominated by the Igbos/Ibo as well (66.04%). This was followed by Hausa/Fulani with a 17.69% proportion of Manufacturing businesses while Yoruba had 16.27% of the Manufacturing businesses. Similarly, the Igbos/Ibo constituted most of the Retailers (48.20%), while the Yorubas constituted the majority of the Services businesses (47.34%). These distributions are in tandem with the initial demographic distribution of the SMEs in the sample that has more SMEs covered in the Southern part of the country where both Igbo and Yoruba belong.

5.3.4. Business Characteristics of SME Owners/ Managers

In this section, the business characteristics of the respondents (SME owners/managers) are found, by finding the frequency in terms of the business location, business experience, business registration with CAC, a form of business ownership, start-up capital, and source, whether they took periodic business training or workshops or not, number of employees, total years in operation, the current legal status of the business, and range of annual business turnover. The frequency of these characteristics of the respondents is presented in Table 23.

Table 23: Business characteristics of SME owners/managers

Business Characteristics	Frequency	Percentages
Business Location		
Northwest	449	28.24
Southeast	515	32.39
Southwest	626	39.37
Total	*1590*	*100.00*
Have had any years of business experience		
No	532	33.46
Yes	1058	67.54
Total	*1590*	*100.00*
Years of Experience		
1-4	166	15.69

5-9	263	24.86
10-14	107	10.11
15+	522	49.34
Total	1058	100.00
Businesses registered with CAC		
No	751	47.23
Yes	839	52.77
Total	*1590*	*100.00*
Business Ownership		
sole ownership	698	43.90
someone else	382	24.03
you and friends	34	2.14
family business	476	29.94
Total	*1590*	*100.00*
Capital used in starting a business		
<250,000	388	24.40
250,000-500,000	348	21.89
501,000-1,000,000	361	22.70
1,100,000-2,000,000	148	9.31
2,100,000-3,000000	274	17.23
3,100,000+	71	4.47
Total	*1590*	*100.00*
Source of Startup capital		
Bank loan/credit	437	27.48
cooperative loans	373	23.46
Family	80	5.03
Friends	107	6.73
government aid/loan	179	11.26
personal finance	414	26.04
Total	*1590*	*100.00*
Undergo periodic Business training or workshop		
No	1154	72.58
Yes	436	27.42
Total	*1590*	*100.00*
Including business owner/manager, number of people employed in the organization		
less than 10	659	41.45
10-19	453	28.49
20-49	224	14.09
50-99	106	6.67
100 and above	148	9.31
Total	1590	100.00
Year of Business existence or began operation		

before 1990	135	8.49
1990-2000	333	20.94
2001-2010	471	29.62
2011-2020	651	40.94
Total	*1590*	*100.00*
Current legal status of business		
Shareholding company with non-traded shares or shares traded privately	523	32.89
Shareholding company with shares traded in the stock market	93	5.85
Smallholder farmer	31	1.95
Sole proprietorship/ partnerships	943	59.31
Total	*1590*	*100.00*
Business turnover in the financial year (N)		
less than 1,000,000	494	31.07
1,500,000 – 2, 000,000	64	4.03
2,100,000 – 2.499,000	88	5.53
2,500,000 –5,000,000	289	18.18
5,500,000m – 9m	93	5.85
10,000,000 and above	517	32.52
Total	*1590*	*100.00*

Source: Author's Computation, 2022

According to Table 23, approximately 40% of business owners were situated in the Southwest, at least 30% were located in the Southeast, while 28.24% were situated in the Northwestern part of Nigeria. It is also found that in terms of years of experience, more than three-fifths (67.54%) of the business owners/managers have had business experience. Moreover, out of the number of those who have had years of business experience, it was reported that less than 20% each have had between one to four years of experience (15.69%) and 10-14 years of experience (10.11%), respectively. About half (52.77%) of the business owners/managers have had their business registered with Cooperate Affairs Commission (CAC) in Nigeria. Four in 10 (43.90%) businesses were owned solely, 24.03% of businesses were owned with someone else, while approximately 30% (29.94%) of businesses were owned by the family.

Furthermore, nearly one-quarter (24.40%) of the businesses started up with a capital of less than ₦250,000, about 20% (21.89%) with ₦250,000-₦500,000 capital, and approximately 23% of the businesses were started up with the sum ranging between 501,000 and a million. On the other hand, less than 5% (4.47%) of businesses were started with a capital of three million and above. Likewise, analysis on start-up capital shows that most of the businesses were established with bank loans (27.48%), followed by personal finance (26.04%), and then by cooperative loans (23.46%). Government loans approximated nearly 12%, while the loans from family and friends accounted for the lowest source of start-up capital (5.03% and 6.73%, respectively). Additionally, it is found that only less than 30% (27.42%) undergo periodic business training or workshops.

As regards the number of employees in a business organization, over 40% (41.45%) reported that they had less than 10 employees in their business organization, nearly three in 10 persons (28.49%) reported that their businesses consist of between 10-19 people. On the contrary, less than 20% (15.09%) reported that between 20-49 people constitute their employees in their business organization, while only 6.67% of the respondents employed 50-99 people. Conversely. 9.31% reportedly had at least 100 employees in their business organizations. In addition, most of the business owners reported that their business began operation between 2011-2020. Approximately 21% reported that their business was established between the years, 1990-2000. However, the analysis showed that about 30% (29.62 percent) had their business being in existence between 2001-2010 and less than 10% (8.49%) reported that their business was established before the year 1990.

Moreover, many of the respondents (59.31%) were sole proprietorship/partnerships, 32.89% were shareholding companies with non-traded shares or shares traded privately, 5.85% were shareholding companies with shares traded in the secondary stock market and less than 3% (1.95%) were smallholder farmers respectively. Finally, in this table, analysis on business

turnover in the financial year revealed that only 31.07% had a business turnover of less than a million naira. Furthermore, less than 5% each (4.03% and 5.53%) reported a business turnover of about two million and three million, respectively; at least three in 10 businesses (32.52%) had a turnover of 10 million naira and above.

5.3.5. Demographics of the Interview Respondents

In this study, interviews were conducted with six participants to gain their perspectives on the study topic. These participants were experts from different financial and non-financial institutions and had several years of experience working in the financial sector. The demographics of the participants are presented in Table 24.

Table 24: Socio-demographic information of participants

Participants	Position in the Company	Organization Type	Participants ID
Participant 1	Director, Strategy, Technology, and Innovation	Small & Medium Ent. Devt. Agency of Nigeria (SMEDAN)	P-1
Participant 2	Group Head, SME Business, Unity Bank	Deposit Money Bank (DMB)	P-2
Participant 3	Group Head, SME Business, UBA	Deposit Money Bank (DMB)	P-3
Participant 4	Group Head, SME Banking, FCMB Group	Deposit Money Bank (DMB)	P-4
Participant 5	Divisional Head, SME	Non-Bank Financial Institutions (NBFI)	P-5
Participant 6	Director, Financial Institution	Central Bank of Nigeria (CBN)	P-6

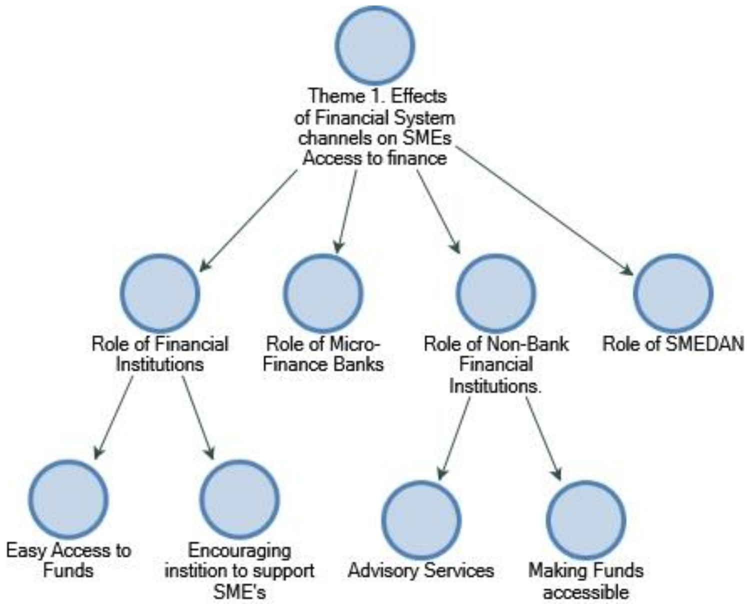
5.4. Results

The responses from the respondents are further examined using both qualitative and quantitative analysis, based on the pre-determined research questions and objectives. The results are further discussed in accordance with the stated objectives.

5.4.1. Objective 1: To assess the effect of financial system channels on SMEs' access to financing in Nigeria

5.4.1.1. Theme 1: Effects of financial system channels on SMEs' access to financing

This theme addresses the first objective which is to examine the effect of financial system channels on small- and medium-sized enterprises' access to funding in Nigeria. This theme examines the role of deposit money banks and non-bank financial institutions in facilitating SMEs' access to loans. This theme discusses not just facilitating aspects, but also some of the problems that these institutions confront while providing financing to SMEs. It will assist in comprehending the process through which banking and non-bank financial institutions support small- and medium-sized enterprises (SME) and the impact on their ability to access financing. Four main themes emerged during the analysis process which are further divided into sub-themes. All these themes and sub-themes are discussed in detail below.



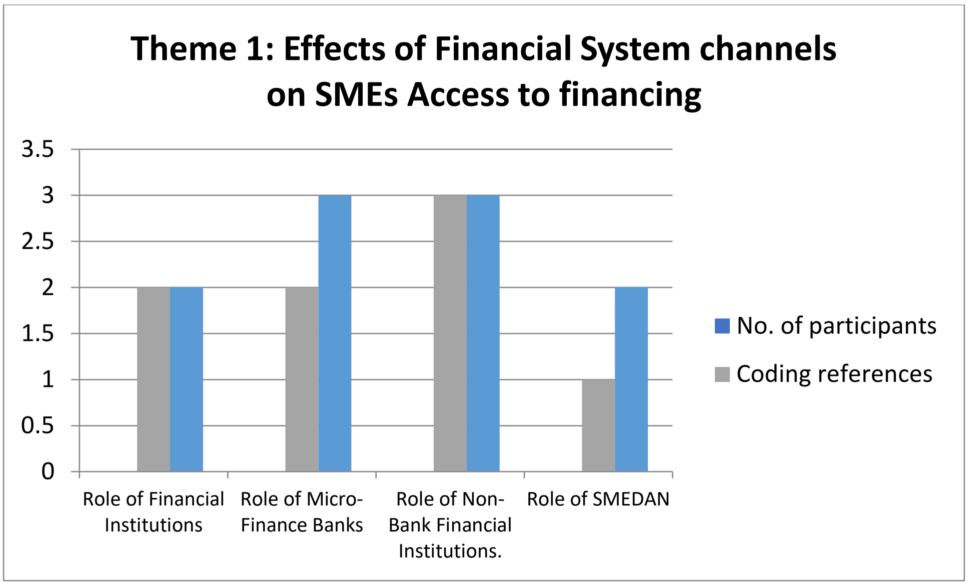


Figure 6: Theme 1: Effects of financial system channels on SMEs' access to financing

<u>Role of Financial Institutions</u>

The role of financial institutions in facilitating SMEs' access to financing is discussed in relation to their intermediation function in this theme. The theme has been subdivided into sub-themes based on the perspectives of the participants, which are discussed below.

Easy access to funds: While discussing the role of deposit money banks (DMBs) and non-bank financial institutions (NBFIs), participants shared their views on the primary role of financial institutions, which is to ensure an adequate flow of financial services to the country's economic sectors. In relation to SMEs, participants acknowledged that institutions such as the Central Bank and its agencies make every effort to support SMEs. One of the participants stated that *"You mentioned the deposit money banks and the non-bank financial institutions. They tend to be more active in extending credit to the SMEs. . ., the CBN normally expects the FIs to have a percentage of their deposit dedicated to the SMEs. So, the deposit money banks, also try to support SMEs." (P-6)*

Additionally, participants shared that while these organizations ensure that they promote small businesses through loans, they also make sure that the organizations to which they plan to grant funding fit certain criteria. According to the findings, the most critical factor to consider when lending is the history of regular and credible credit transactions; and the failure to achieve this criterion results in credit being denied. This finding is assessed from the words of an interviewee who stated:

> *It's easier to analyze the cash-flow of a business that has constant cash-flow coming in than looking at a project that has a gestation period of five years and above. You will be cracking your brain on how to fund those projects; It takes time (long gestation period) before you are able to see when production actually starts, but due to lack of structure in SMEs, it gets very difficult to analyze. (P-4)*

Encouraging institutions to support SMEs: Similarly, participants highlighted that several efforts have been made by numerous institutions, such as the Central Bank, to grow SMEs' access to financing, including encouraging institutions to support SMEs by providing them easy access to loanable funds. Participants mentioned that government institutions are contributing financially to the group, but some private financial institutions have historically been hesitant to lend to SMEs. According to one of the participants, *"... (T)he central bank stated at one point or another that we will share the risk with you (the FIs), if you lend to them (SMEs)*." (P-2)

Participants indicated that while the Central Bank provides these avenues and training opportunities to business owners, it would be beneficial to have private institutions as well to

educate SMEs and offer them training to help develop and scale their businesses. This notion is displayed by one of the respondents:

> *Maybe it's even better if it's not the government, because the private sector actually does better in some of these roles. They should come up with some kind of training institute that will actually guide SMEs that wish to get a loan, and they will actually coach the SMEs on how to make the more attractive, and less risky. So, from coming up with bankable projects to teaching them how to keep books of accounts, how to build controls within their business…everything should be packaged in such training. (P-6)*

Challenges in lending – structural issues: Another key problem addressed by a participant was the difficulty financial institutions have when lending, which eventually impacts SME access to funding. According to a participant, one of the major impediments to SME business in Nigeria is structural concerns. As a developing country, Nigeria faces several structural challenges, one of which is infrastructural (like electricity) problems, which ultimately result in difficulty conducting business. This concern is reflected in a response:

> *Because there is no business structure. I don't know maybe because of the structure in the country, we have a structural problem in the country. If you look at the fact that we do not have a 24/7 (meaning, all day-round) electricity supply, different firms had to produce their own source of power to be able to do whatever they want to do. Therefore, it hinders the business and affects the disposition of banks and other financial institutions to play within the SME space. (P-3)*

Lack of long-term funding was also identified as a critical factor impeding financial institutions from granting SMEs financing. One of the participants explains this point in the following way:

> *Basically, SMEs put most of their capital in trading and consumption business. If there is going to be a project, must be a very short time project because they don't have long-term funding. The funding we have today in Nigeria, specifically is short term, average fund tenor is between 1-2 years. Production projects will take more than that, that why it is difficult to put money into it. Those are some of the challenges we are having as financial institutions. (P-3)*

Additionally, respondents indicated that <u>political influence or involvement</u> is a significant factor in lending funding to organizations. While debating this subject, one of the participants shares the following:

> *I think the challenge to an extent is that there is some political undertone and I'll explain what I mean, sir. The role of the Central Bank Governor or the appointment of the Central Bank Governor, even though to some extent, is by merit. It is also by appointment based on the prerogative of the government in power and a concurrence by the legislative arms of government. What that will do is that policies may be at some point become very political. (P-2)*

<u>Role of microfinance banks</u>:

According to the participants, microfinance institutions also play a critical role in providing money to SMEs in Nigeria. They indicated that the purpose of establishing a

microfinance bank is to ensure that they service SMEs that face barriers in funding, and so play a critical role country's economic development. This thought is presented by Participant 1:

> *… (T)he deposits money banks tend to leverage large organizations; the big organizations and downplay the small and medium enterprises. But as you know, with covid-19 pandemic, it is now obvious that the SMEs stand to face tremendous challenge in terms of funding. So, the commercial banks, or deposit money banks have been mandated by the CBN to ensure that they allocate credit to the SMEs. (P-1)*

While addressing the role of microfinance banks in the Nigerian economy, one of the participants shares the following:

> *In Nigeria, we have the NIRSAL microfinance institution. This is another arm of the CBN that is purely playing the lending role entirely hundred percent to small and medium Enterprises and they are doing this with the maximum of about 10 million naira and the minimum of about 500,000 naira and this is classified as non-bank financial institution. (P-1)*

According to the participant, the micro finance bank's major purpose is to give small loans to financially distressed organizations or business owners or to assist them in acquiring financing from financial institutions. This notion is reflected in the views of Participant 6:

> *Well, for the microfinance banks for instance, their mission, is economic, but most importantly, social. A social mission in the sense that it is expected to bring in the financially excluded. And in the past when microfinance started, they got donor funds for that reason. And even if they're not actually getting the funds anymore, some of them still get assistance (grants) by way of low interest*

loans from bilateral organizations, donors and so on. So basically, we expect the microfinance banks to be able to lend without collateral. (P-6)

As with NBFIs, microfinance banks also coach SMEs on how to improve their presentation and "bankability." Additionally, they assist them in obtaining reputational collateral in lieu of real collateral. The views of Participant 6 present this finding:

And rather than collateral, what they should use is what we call 'reputational collateral.' Some of those MFBs adopt group lending model. This is more to for individual, but it could also work for SMEs as well. So, maybe one entity in a certain area guaranteeing the other, putting pressure on each other to repay. As Regulators, I think we have specific rules as to how much of their portfolios should go into micro credits. And the reasoning' is that it's to kind of incentivize them or guide them to focus on their main mission, which is the financially excluded which includes the SMEs. (P-6)

5.4.1.1.1. Role of non-bank financial institutions (NBFI):

<u>Advisory services</u>: In this theme, participants discuss the role of non-bank financial institutions. According to the participants, NBFIs primarily offer alternative financial services such as financial advising, accounting solutions, money transfers, and record and bookkeeping. According to the participants, whatever type of information that the organizations require to file for funds, they provide full support in that*, "(t)he non-bank financial institutions have their own role to play. In their own case too, they go outside some of the regulation to lend money to the SMEs. (P-1)*

Making funds accessible: Since these organizations are not money deposit banks, they are not involved in transactions. The primary service provided by these NBFIs is to make funds accessible to small SMEs by mobilizing capital and establishing investment possibilities. Additionally, they assist SMEs in planning to fulfill the requirements of financial institutions. This view is explicitly stated in the words of Participant 5:

> *…(W)e develop products to address the 'perceived higher risk,' and sort of help these customers build a credit history, then other types of financial institutions begin to find these customers attractive also. Because we have to take that risk, we then sort of created a better financial inclusion for the SMEs. I think that is a bit of what we do as a non-bank financial service organisation. (P-5)*

5.4.1.1.1.2 Role of SMEDAN:

The Small and Medium Enterprise Development Agency of Nigeria (SMEDAN) is a government agency that makes sure that access to financing for SMEs is easy and accessible. Though they are neither banking nor lending organizations, their principal mission is to provide funds and enable access to funding for SMEs through a variety of programs, which is further reinstated by Participant 1: *"…(W)we have a lot of programs. We have about 15 programs that give direct funds to the SMEs. There is one we call 'one local group and one product.' Another is 'conditional grant scheme' whereby we give at least 150,000 naira to all the SMEs within that state that have been accredited for such a program." (P-1)*

One of the participants, a member of this organization, discussed future activities aimed at assisting SME owners in obtaining funding. He stated that: *"Presently, we are working on SMEDAN microfinance bank so that the bank will have access to not only local funds but international funds too to ensure that we lend these things to small and medium enterprises.*

As at this level, I know that before the end of this year, I know the CBN will give us conditional approval for you to go and I am the chairman of that committee." (P-1)

5.4.2. Objective 2: To investigate the factors inhibiting SMEs' access to financing in Nigeria.

To meet this research objective, findings from both the quantitative and qualitative analysis are combined and discussed as under:

5.4.2.1. Quantitative Analysis

This objective was analyzed in two dimensions. First, the study analyzed obstacles encountered by SME owners who are unsuccessful in accessing finance from the point of the business owners themselves; and secondly from the stance of the obstacles caused by the financial granting organizations or institutions in Nigeria. Figure 7 shows the first aspect of the objective, Table 25 displayed the second aspect of the first objective which were the obstacles caused by the financial granting organizations or institutions in Nigeria.

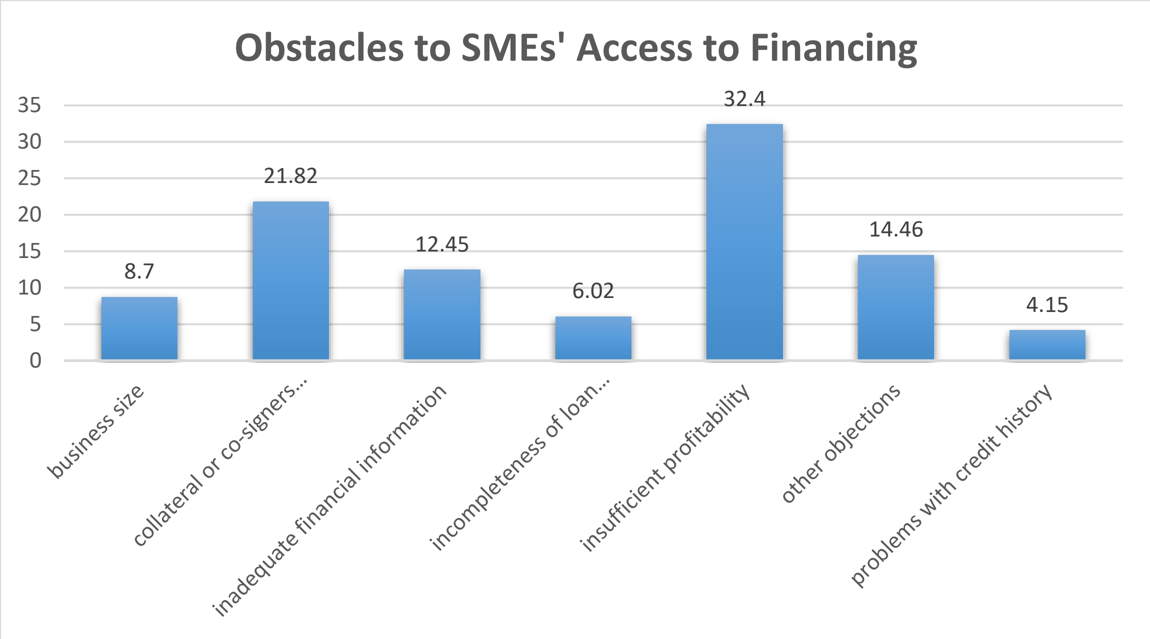


Figure 7: Obstacles experienced by SME owners who are unsuccessful in accessing finance in Nigeria.

Source: Author's Computation, 2022

Figure 7 above displays the graphical presentation of top barriers encountered by SME owners that lead to an unsuccessful application for credit in Nigeria. Most of the respondents (32.4%) reported that insufficient profitability was the greatest obstacle to successfully accessing funds from financial institutions. Approximately 22% reported a lack of collateral as another obstacle to credit assessment among SME owners. While about 13% reported that inadequate financial institutions impede access to credit, less than 10% each (8.7%; 6.0%; 4.1%) reported that size of business, incompleteness of application, and problems with credit history were the major obstacles to SME owners' access to finance.

From the data collected from the survey, it was clear that some barriers to accessing funds by the SMEs are self-induced. Out of all the factors assembled from the field, it shows that many of the SMEs seeking financial assistance, especially from the banks do not have the required level of profitability to guarantee them loans to finance their businesses. Repayment

of loans is directly related to the extent of business profitability, hence once the profit is inadequate to repay the loan requested, accessing funds becomes difficult. About 32% of the SMEs owners are facing this type of challenge in their quest to access funds. Apart from this, another prominent barrier faced by SMEs in accessing funds is inadequate collateral or unacceptable guarantors. About 21% of the SMEs encounter this problem and it has become a common story among the SMEs to complain about the inadequacy of securities that can stand as collateral to access loans from any Bank or other financial institutions. In some cases, guarantors or co-signees provided by the SMEs are unacceptable, as they usually fail to meet the minimum requirements to serve in that capacity. These two remain the greatest obstacles to accessing finance caused by the SMEs themselves. These factors are further discussed below.

5.4.1.1.1. Obstacles posed by financial institutions that prevent SME owners from easily and successfully accessing funds from financial institutions in Nigeria

This section presents the various common barriers to accessing credit by SMEs in the selected study areas. In addition, using a 6-point Likert scale, respondents were asked to rate those factors that contribute to the creation of obstacles and barriers to the success of credit application and access in Nigeria. The analysis is shown in Table 25 with key findings.

Table 25: Obstacles caused by financial institutions in Nigeria that SME owners who are unsuccessful in accessing financing encounter

Obstacles financial institutions create in making loan application unsuccessful for SME owners	**Not applicable**	**Strongly Disagree**	**Disagree**	**Somewhat Disagree**	**Agree**	**Strongly Agree**
The financial system in Nigeria is not developed	31 (2.45%)	31 (2.45%)	-	95 (7.52%)	532 (42.12%)	574 (45.45%)
The cost of operations is high due to a lack of an enabling environment	84 (5.28%)	238 (14.97%)	566 (35.60%)	293 (18.43%)	409 (25.72%)	
The financial institutions including commercial banks in Nigeria are supportive of the growth of small businesses	42 (3.33%)	172 (13.62%)	180 (14.25%)	243 (19.24%)	338 (26.76%)	288 (22.80%)
There is a low level of information and innovation in the financial system	74 (4.65%)	62 (3.90%)	33 (2.08%)	92 (5.79%)	706 (44.40%)	623 (39.18%)
The interest rate on loans is too high to support businesses and affect the ability of the business to access loans	151 ((.50%)	375 (23.58)	386 (24.28%)	291 (18.30%)	356 (22.39%)	31 (1.95%)
The business can access the funds through the current Nigerian capital market	84 (5.28%)	176 (11.07%)	247 (15.53%)	371 (23.33%)	681 (42.83%)	31 (1.95%)
The institutions such as the Bank of Industry is making efforts to help small and medium-sized businesses	53 (4.20%)	62 (4.91%)	127 (10.06%)	260 (20.59%)	525 (41.57%)	236 (18.69%)
The policies and the regulatory framework of the financial system in Nigeria does not support the growth of small and medium-sized businesses	127 (7.99%)	33 (2.08%)	203 (12.77%)	277 (17.42%)	727 (45.72%)	223 (14.03%)
Lending institutions are not involved in the growth of the businesses they lend to	172 (10.81%)	95 (5.97%)	72 (4.52%)	62 (3.90%)	623 (39.18%)	566 (35.60%)
Financial practices in the Nigerian financial system are not for the development of SME businesses	53 (3.33%)	114 (7.17%)	153 (9.62%)	410 (25.79%)	605 (38.05%)	255 (16.04%)
lack of collateral hinders access to financial aid	-	84 (5.29)	29 (1.82)	157 (9.87)	51 (3.21)	1269 (79.81)
Bank Size affects the funding of SMEs	-	380 (23.90)	223 (14.03)	57 (3.58)	696 (43.77)	234 (14.72)

Source: Author's Computation, 2022

Table 25 shows the various obstacles posed by the financial organizations or institutions in Nigeria, which hinder SME owners from accessing finance. From the table, it was found that most of the respondents agreed (45.45%) and strongly agreed (42.12%) that the financial

system in Nigeria is not developed. Similarly, at least one-fifth of the respondents each (44.40% agreed and 39.18% strongly agreed), supported the assertion that there is a low level of innovation in the financial system in Nigeria. Likewise, nearly 45% of respondents reported that their business should be able to access funds through the current Nigerian capital markets and that government-enabled institutions such as the Bank of Industry are making efforts to help small- and medium-sized businesses.

Meanwhile, while most of the respondents believed that the interest rate on loans is too high to support businesses and affect the ability of the business to access loans, only about 20% (26.76% agreed and 22.80% strongly agreed) supported the assertion that the financial institutions including commercial banks in Nigeria are supportive of the growth of small businesses and 35.60% disagreed that the cost of operations is high due to lack of an enabling environment, respectively. Regarding information about the policies and regulations guiding financial institutions in Nigeria, the result shows that almost all the respondents agreed that the policies and the regulatory framework of the financial system in Nigeria do not support the growth of small- and medium-sized businesses.

Conversely, Table 25 also shows that most of the respondents agreed (39.18%) and strongly agreed (35.60%) that lending institutions are not involved in the growth of the businesses they lend to. Nevertheless, at least three in ten persons agreed that the financial practices in the Nigerian financial system are not beneficial for the development of SME businesses.

The summary of the result shows that the level of financial development in Nigeria is very low, and hence, it appears to be the major challenge the SMEs are having in accessing loans. From the table, more than 80% of the SME owners agree that the financial system in Nigeria is not developed, and hence, this particularly constitutes a major challenge to their

accessing loans to finance their businesses. Similarly, more than 60% of them are of the opinion and agree that there is a low level of information and innovation in the financial system. In the same vein, about 50% of the respondents also agree that financial practices in the Nigerian financial system are not for the development of SME businesses. However, apart from these factors that directly relate to the level of development in the financial sector of the Nigerian economy, the SME owners also agree that lack of collateral hinders access to finance and more thnt 60% of them believe that bank size affects funding of SMEs. All these are factors that constitute barriers to loan accessibility by the SMEs which are caused by the financial system themselves or the banks.

Generally, some factors are extracted as major impediments to loan accessibility by the SMEs, and they are now investigated on how they affect different sectors in the SME. The results are shown in the following figure.

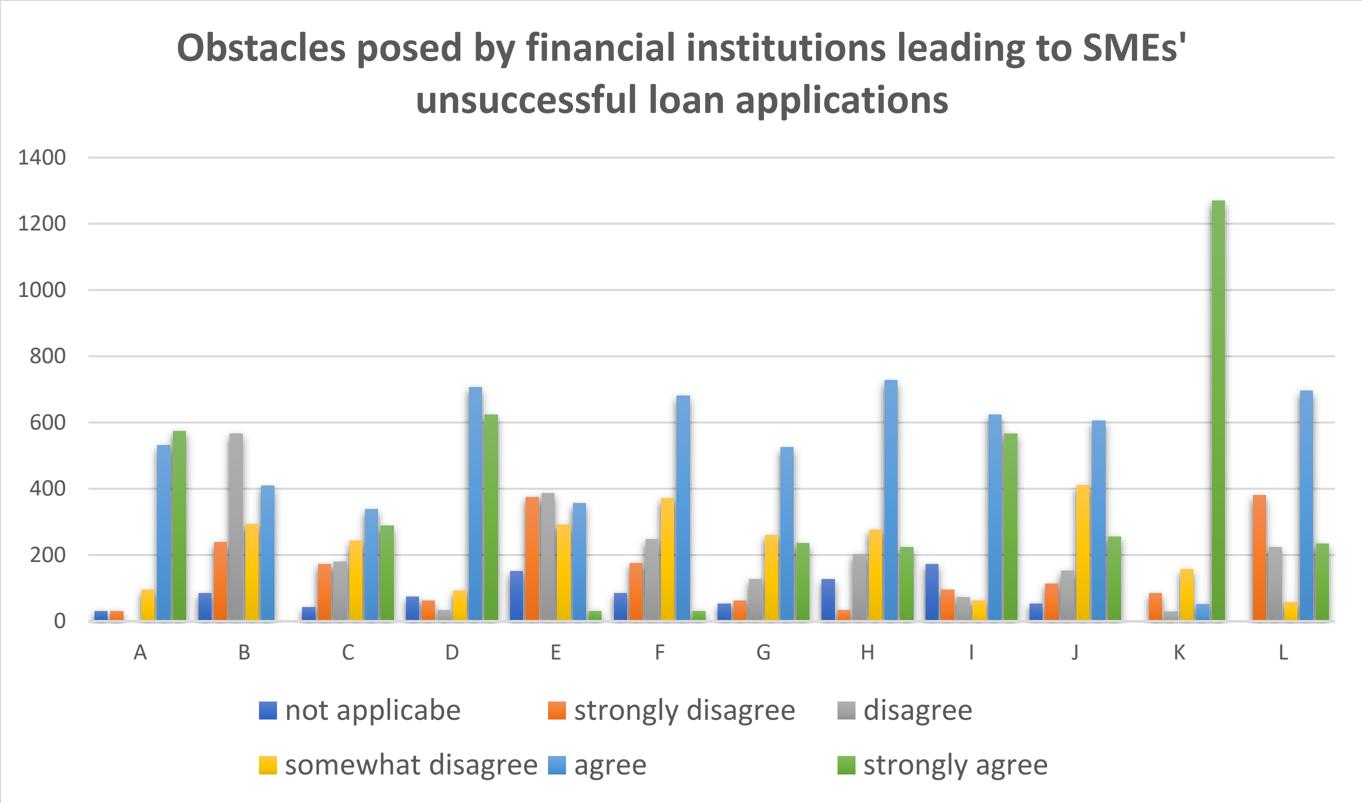


Figure 8: Obstacles posed by financial institutions leading to SMEs' unsuccessful loan applications in Nigeria

A: The financial system in Nigeria is not developed.

B: The cost of operations is high due to a lack of an enabling environment.

C: The financial institutions including commercial banks in Nigeria are supportive of the growth of small businesses.

D: There is a low level of information and innovation in the financial system.

E: The interest rate on loans is too high to support businesses and affect the ability of the business to access loans.

F: The business can access the funds through the current Nigerian capital markets.

G: The institutions such as the Bank of Industry is making efforts to help small- and medium-sized businesses.

H: The policies and the regulatory framework of the financial system in Nigeria does not support the growth of small and medium-sized businesses.

I: Lending institutions are not involved in the growth of the businesses they lend to.

J: Financial practices in the Nigerian financial system are not for the development of SME businesses.

K: Lack of collateral hinders access to financial aid.

L: Bank size affects the funding of SMEs.

Figure 8 above displays the numeric and graphical representation of the different obstacles encountered by small- and medium-scale businesses in accessing finance. From Figure 8, four key obstacles were identified and selected for further analysis to test some of the hypotheses for this study. The variables included are lack of collateral, bank size, inadequate innovation/financial information, and high-interest rate. The analyses were achieved by descriptive and cross-tabulation analysis of the concerned independent and dependent variables. Notably, the four obstacles selected were based on past and recent information in the literature reviewed in this study.

5.4.1.1.1.1. Sectorial analysis of the main barriers to SMEs' access financing in Nigeria

The following sub-sections explain the effect of all these barriers to accessing loans on different sub-sectors of SMEs. It is to enable a comparative analysis of how the barriers to accessing loans affect sub-sectors because a barrier to a particular SME sub-sector might not be a barrier to some SMEs in another sub-sector:

Lack of Collateral

Past and current evidence has shown that lack of business collateral is a hindrance to access to loans or finance of businesses. Respondents were asked to rate, on a scale of 1-6 whether lack of business collateral creates and serves as an obstacle to their unsuccessful application for finance in Nigeria.

Table 26: Lack of business collateral by business type

Business Type	strongly disagree (%)	disagree (%)	somewhat disagree (%)	agree (%)	strongly agree (%)	total (%)
Agriculture	0.00%	0.00%	0.00%	1.35%	98.65	100.00%
ICT	0.00%	0.00%	24.29%	0.00%	75.71&	100.00%
Manufacturing	0.00%	0.00%	0.47%	5.42%	94.10%	100.00%
Oil and Gas	0.00%	0.00%	25.89%	0.00%	74.11%	100.00%
Retail	0.45%	3.06%	0.00%	11.71%	74.77%	100.00%
Services	21.01%	0.00%	13.67%	0.00%	65.32%	100.00%

Source: Author's computation, 2022

Further analysis using cross-tabulation in Table 26 shows the respondents' rate of response on collateral as a barrier to access to financing by type of business. From the table, it was found that almost all the respondents strongly agreed that lack of collateral affects businesses' financial access in Nigeria. Specifically, among the Agricultural business owners, it was found that 98.65% of respondents strongly supported the assertion that lack of collateral is a barrier to access to loans. Also, among the ICT, it was reported that 75.71% strongly agreed that collateral affects businesses' financial access in Nigeria. Similarly, the Manufacturing business owners were of the strong opinion that collateral affects access to financing, while those in Oil and Gas also supported this assertion (74.11%). Moreover, across the remaining sector of Retail and Services, more than three-quarters of the respondents strongly agreed that collateral is a key determinant of access to loans by business owners in Nigeria.

High-Interest Rate

Interest rate is the rate paid on money borrowed. However, when the interest rate is too high, it affects the borrowing ability of businesses. Evidence from literature has also reiterated and justified the effects of high-interest rates on businesses. Below is the response rate of respondents on this premise.

Table 27: High-interest rate and business type

Business Type	strongly disagree (%)	disagree (%)	somewhat disagree (%)	agree (%)	strongly agree (%)	total (%)
Agriculture	43.24	19.59	0.00	0.00	37.16	100.00
ICT	0.00	0.00	0.00	0.00	100.00	100.00
Manufacturing	6.13	8.73	0.00	70.75	14.39	100.00
Oil and Gas	0.00	45.98	0.00	44.77	6.25	100.00
Retail	35.14	0.00	0.00	25.68	39.19	100.00
Services	53.67	13.67	0.00	28.35	4.30	100.00

Source: Author's computation, 2022

The results in Table 27 reveal that respondents have diverse opinions on the interest rate on loans in Nigeria. From the analysis, the Manufacturing and the ICT sub-sectors appear to be the worst hit by high-interest rates. The two have over 70% (70%) of their respondents agreeing that an interest rate that is very high is a major challenge they face in accessing loans from the banks. The agriculture sub-sector seems to be less affected by that as only about 37% of them agree that a high-interest rate is a barrier to loan accessibility by them. Generally, the percentage of the SMEs in all the sectors that agree that the high-interest rate constitutes a major challenge to accessing loans is higher than those that do not agree.

5.2.1.1.1.2. Low level of information and innovation in the financial system

Inadequate knowledge about the available financial systems or lending banks/institutions poses great obstacles to the assessment of loans by businesses. Information in Table 12 justifies this statement.

Table 28: Low level of information and innovation in the financial system and business type

Business Type	Strongly Disagree (%)	Disagree (%)	Somewhat Disagree (%)	Agree (%)	Strongly Agree (%)	Total (%)
Agriculture	14.41	12.61	2.70	25.23	23.42	100.00
ICT	15.22	12.32	3.62	26.09	23.91	100.00
Manufacturing	12.71	18.34	3.85	27.22	21.89	100.00
Oil and Gas	15.08	12.29	3.91	26.26	24.02	100.00
Retail	14.75	10.93	2.19	25.14	22.95	100.00
Services	12.10	14.33	3.18	28.34	22.29	100.00

Source: Author's computation, 2022

Table 28 indicates that more than one-fifth of the respondents engaged in Agriculture agreed and strongly supported that a low level of information and innovation about the available financial systems in Nigeria causes obstacles to accessing funds/loans by businesses. Out of the total ICT business owners, it was found that nearly 25% each (26.09%) agreed and (23.91%) strongly approved that lack of information about lending financial institutions poses a hindrance to accessing financing. In addition, across other business types in Oil and Gas, Retail, and Services, it was found that at least 20% of each of the responses (22.24% versus 24.02%; 25.14% versus 22.95%; 28.34% versus 22.29%, respectively) were in line with the assertion that inadequate knowledge of financial institutions mitigates against successful loan access among SMEs business owners.

Innovative ideas from the financial system on how loans can be accessed by SMEs are crucial to their growth. Results in Table 28 indicate that majority of the SMEs across all the sub-sectors agree with this proposition. More than 50% of all SME owners agree that the financial system in Nigeria lacks critical innovative ideas that could make them have more access to funds to finance their businesses. The responses from the SME owners on this kind of factor are somehow uniform; hence, it appears to be a collective belief among all the sub-sectors that the financial system in Nigeria is facing a challenge of innovative ideas tailored towards improving how funds are channeled SMEs sector.

5.2.1.1.1.3. Bank Size

Research evidence has shown that the size of a bank influences access to financing or loans by business owners. It is further reinstated in Table 29:

Table 29: Bank size and business type

Business Type	Strongly Disagree (%)	Disagree (%)	Somewhat Disagree (%)	Agree (%)	Strongly Agree (%)	Total (%)
Agriculture	43.24	19.59	0.00	0.00	37.16	100.00
ICT	0.00	0.00	0.00	100.00	0.00	100.00
Manufacturing	6.13	8.73	0.00	70.75	14.39	100.00
Oil and Gas	0.00	45.98	0.00	47.77	6.25	100.00
Retail	35.14	0.00	25.68	0.00	39.19	100.00
Services	53.67	13.67	0.00	28.35	4.30	100.00

Source: Author's computation, 2022

The size of the Nigerian banks, as well as the type of SME businesses, are believed to be some of the barriers to accessing funds by SMEs in Nigeria. The result from Table 29 shows that there is agreement among the SME owners, except those in Agriculture, that the business type and size of the banks are impediments to funding accessibility. It is believed that some banks do select businesses to fund in real life and, hence, if a particular SME does not fall in that area of businesses they have interest in funding, such businesses will be unable to access funding from such financial institutions. In addition, the size of the banks is also a factor affecting the allocation of credit to SMEs. For instance, as stated in Table 29 above, sub-sectors such as Manufacturing, Oil, and Gas, and ICT are well supported by the big banks, while smaller banks are more favorable towards SMEs. It points to the fact that some SMEs in those select sectors might enjoy more access to funds in big banks than small banks and vice versa.

Hypotheses Testing for Objective Two

The second objective of this study is to investigate the obstacles faced by SME owners that are unsuccessful at accessing finance in Nigeria. To achieve this objective, four hypotheses were formulated, which were:

H₁: The absence of collateral is an obstacle to access to finance by unsuccessful SME owners.

H₂: High lending rate is an obstacle to access to finance by unsuccessful SME owners.

H₃: The absence of verifiable business financial information is an obstacle to access to finance by unsuccessful SME owners.

H₄: Large banks/Bank sizes are obstacles to access to finance by unsuccessful SME owners

The Spearman's rank correlation was employed to achieve these hypotheses set for this study. The Spearman's rank correlation statistical tool was employed because the variables concerned under this section, namely collateral, bank size, high-interest rate, and lack of financial information, were all ranked variables as indicated by the Likert scale approach used in measuring the variables in the data collected for the quantitative method. For Spearman's rank correlation coefficient, values (r_s) can take values from +1 to -1. A value (r_s) of +1 signifies a perfect association of ranks; a value (r_s) of zero indicates no association between ranks, while a value (r_s) of -1 shows a perfect negative association of ranks. This indicates that the closer the value of r_s is to zero, the weaker the association between the ranks. Table 30 presents the results of the Spearman rank correlation coefficient.

Table 30: Spearman's rank correlation coefficients on barriers to accessing funds by the SMEs

Obstacles	Success	Absence of collateral	Bank size	High-interest rate	Low Business financial information
Success	1.000				
Absence of collateral	-0.037	1.000			
****Bank size**	-0.037	0.083**	1.000		
****High-interest rate**	-0.203**	-0.019	-0.032	1.000	
****Low Business financial Information**	-0.305**	-0.008	-0.008	0.294**	1.000

Spearman rho = 0.294

5.4.1 Hypothesis 1

H₁: *Absence of collateral is an obstacle to access to financing by unsuccessful SME owners.*

Hypothesis 1 was formulated to test whether absence of collateral in a business affects successful access of SMEs to financial aids or loans. Results from Table 30 show that there is a negative correlation between absence of business collateral and successful access to finance at

-0.037. The figure (-0.037) indicates that, as absence of business collateral increases, successful access to finance by SME owners decreases. This result thus shows that lack of collateral in business hinders access to loans by business owners. Therefore, the hypothesis that absence of collateral is an obstacle to successful access to finance by SME owners is accepted.

5.2.4.2 Hypothesis 2

H₂*: High lending rate is an obstacle to access to finance by unsuccessful SME owners.*

Hypothesis 2 was formulated to test whether high-interest rates imposed by financial lending institutions lead to unsuccessful access of SMEs to financial aids or loans. Similar to

what was obtained in the previous result, it was found from Table 4.2.1 that there is a negative correlation between high-interest rates and unsuccessful access to financial aid at -0.203. The figure (-0.203) indicates that as interest rates increase, successful access to finance by SME owners decreases. This result thus shows that high-interest rates imposed or proposed by financial lending institutions hinders SMEs' access to loan (again, strong credence to the credit rationing theory). Therefore, the study accepts the hypothesis and concludes that high-interest rates are an obstacle to successful access to finance by SME owners.

5.2.4.3 Hypothesis 3

H_3: *Absence of verifiable business financial information is an obstacle to access to finance by unsuccessful SME owners.*

Hypothesis 3 was formulated to test whether the absence of verifiable business financial information (information asymmetry) in a business affects the successful access of SMEs to financial aids or loans. Analysis showed that there exists a negative correlation between the absence of verifiable business financial information and successful access to finance at Rs = -0.305. The Rs value (-0.305) indicates that, as the absence of verifiable business financial information increases, successful access to financial aid by SME owners decreases. With this result, the study concludes that there exists a correlation and thus, we accept the hypothesis that absence of verifiable business financial information is an obstacle to successful access to financing by SME owners. This supports the concept of information asymmetry influencing access to finance.

5.2.4.4 Hypothesis 4

H_3: *Bank size is an obstacle to access to finance by unsuccessful SME owners.*

The final hypothesis in this section is Hypothesis 4 which was formulated to test whether the size of a bank undermines successful access to financing by SME owners. From the analysis, it was shown that there exists a negative correlation between the size of a bank and successful access to financial aid at Rs = -0.037. The Rs value, which is -0.037, reveals that, as the size of a bank increases, the successful access to financial aid by SME owners decreases. Therefore, the study concludes that bank size is an obstacle to successful access to finance by SME owners. Thus, Hypothesis 4 is accepted.

In summary, the result from Table 29 shows that two of these barriers have significant impact on the growth of the SMEs in Nigeria according to the analysis of the data collected from the respondents. High-interest rate and low business financial information, which point to the level of development of the financial sector in Nigeria, are both having significant impact on the success of the SMEs. For instance, the correlation coefficient of high-interest rate and SMEs success is -0.23 and it is statistically significant, thus implying that both have strong and significant association. It further shows that high-interest rate will affect the growth of the SMEs in Nigeria regardless of the sub-sector to which the SMEs belong. Therefore, with this result it can be concluded that high-interest rate is a major barrier and an important one facing fund accessibility by the SMEs in Nigeria because it has significant impact on their performance.

Low business financial information which is an indication of an underdeveloped financial system is also having significant impact on the success of the SMEs. It would be recalled that this is one of the factors overwhelmingly agreed by the SMEs as a barrier affecting their accessibility to funds. The correlation coefficient of this factor is -0.305 and it is

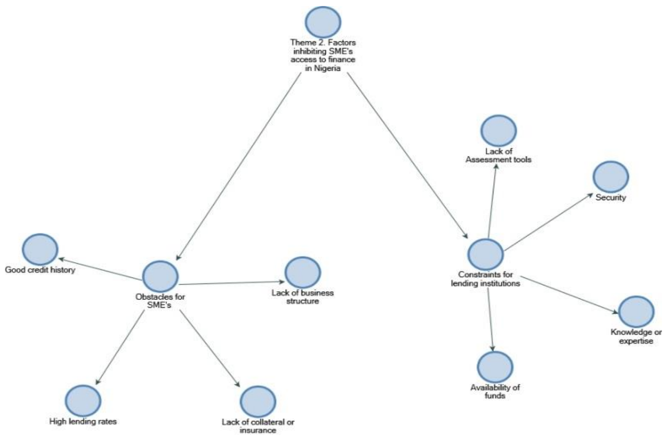
statistically significant. This shows that lack of adequate financial information will impact significantly on the success of the SMEs in Nigeria. This result shows some consistency in the discussion in that since the SMEs have earlier agreed that these two factors, namely high-interest rate and low business financial information, prevent them from accessing funds; hence it will have a tendency of affecting their success as well.

However, other factors such as absence of collateral and bank size might not be a major challenge to SME success in Nigeria, according to the analysis of the data from the respondents. The correlations coefficients of the two with SME success are -0.037 and -0.037 for both bank size and absence of collateral but they are not statistically significant, thus implying that we do not have evidence to suggest that these two factors do have significant association with the success of the SMEs. The result shows that both are strongly related to each other, but that their association with the success of the SMEs is not significant. Despite some of the SME owners agreeing in the earlier discussion that the two have an impact on their access to funds from the financial institutions, this result has shown that the two factors are not significant enough to affect the success of the SMEs.

5.4.2.2. Qualitative Analysis

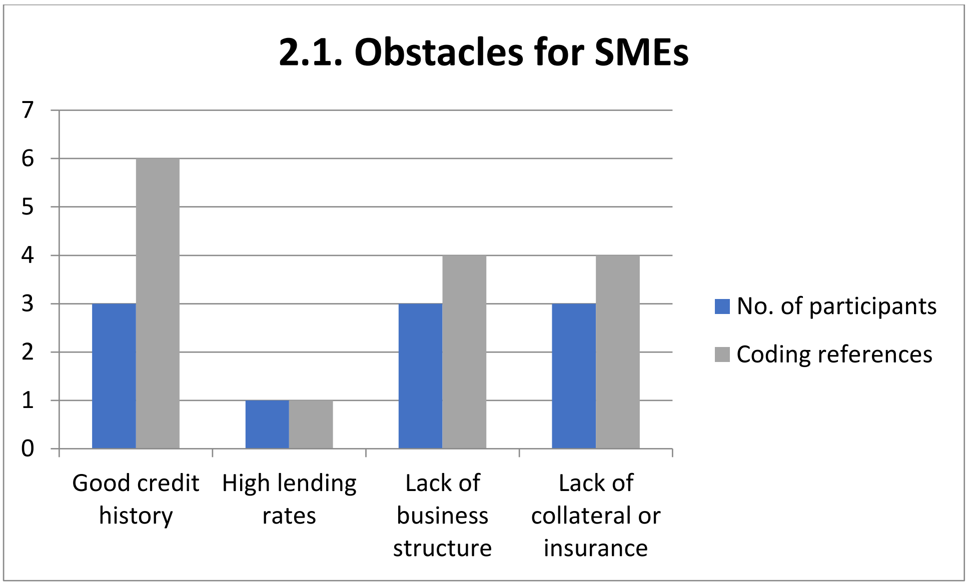
5.4.2.2.1. Theme 2: Factors inhibiting SME's access to financing in Nigeria:

The identified main theme in the map is "factors inhibiting SMEs' access to financing in Nigeria." This theme is first associated with the constraints encountered by SME owners to access funding and, second, to constraints of lending institutions. The first sub-theme serves as a parent for further sub-themes which are (a) good credit history, (b high lending rates, (c) lack of business structure, and (d) lack of collateral or insurance. The second sub-theme includes the following identified categories: (a) available funds, (b) knowledge or expertise, (c) requirement tools, and (d) security. Both sub-themes cover the second research question of the study, which is to identify the primary obstacles to SMEs' access to credit in Nigeria. All the themes shown in the chart above reflect the participants' views on the barriers or impediments that SME owners and lending institutions face when seeking funding and financing SMEs in Nigeria.



5.4.2.2.1. Obstacles for SMEs

The challenges that SME owners faced in accessing finance in Nigeria are also probed using qualitative interview analysis. Based on the views of the participants, this theme has been divided into four sub-themes, which are discussed in detail below.



<u>Good credit history</u>:

According to participants, one of the primary barriers that SME owners encounter when it comes to acquiring financing is a lack of good credit history. According to the participants, most SME owners are unable to acquire funds for their businesses because they lack a credible credit history or financials that match the desired amount. According to participants, insufficient credit reporting and accounting have a detrimental impact on SME profiles since they are unable to present audited financial statements, which frequently leads to funding denials.

Since credit reporting enables lending institutions to gain a better understanding of borrowers' characteristics, cash flow, repayment history, and current debt exposure, its absence makes it more difficult for lenders to assess borrowers' ability to repay loans and thus lenders frequently reject their request for funds. One of the participants talks about this issue thus: *"You will find that very few SMEs are able to get loans from Banks. Just because most of the time, SMEs do not have a financial statement for enough period, or that financial statements are not well prepared, or they are unaudited and there is no way you can have a good credit*

assessment on them. So, the DMBs would be wary about giving loans to such enterprises". (P-6)

One of the participants mentioned that sometimes owners' failure to keep their business and personal finances separate creates a larger risk when it comes to obtaining funds for their firm. They are unable to reveal their cash or other financial activities due to a lack of bookkeeping capabilities. Additionally, he claimed that most SMEs do not have a balance sheet to indicate how their assets and liabilities are classified, which creates a substantial hurdle to obtaining finance from lending institutions.

> *... (F)or me most SMEs cannot separate their business cash from their personal cash. So, an example, I was in Suleja (a city in Nigeria capital – Abuja), a few months ago, to have discussions with the community Pharmacists. Something happened with our host. As we were having the meetings, he wanted to give us Refreshments. So, he called one of his staff, he opened his drawer, brought out a bundle of maybe a hundred thousand and counted the money and gave it to him to go buy us refreshments. And then it was it may be like 1 hour, 30 minutes meeting or two hours, I can't remember. People were coming in; it was a fairly large shop. The guy is the president of the community Pharmacists in Suleja. As people were coming in to buy things, he was putting the money in the same drawer, now, that's a big challenge for SMEs. (P-2)*

<u>Lack of collateral or insurance</u>:

Another obstacle mentioned by most participants in accessing funds is the proprietors' inability to provide adequate security or collateral in exchange for the requested funding.

According to the participants, some banks and other financial institutions have very strict rules for lending money to small businesses. One of these rules is that businesses must provide basic assets as collateral or insurance. SMEs that don't have land or buildings, which banks usually require as collateral, have been unable to get loans from banks because they don't meet the required criteria. *One participant said, "So, the major constraint is lack of collateral because most lending institutions ensure that they either have land or basic assets before they can grant you credit. For the SME, it is a major constraint to them." (P-1)*

According to the participants, lending to SMEs is risky in Nigeria, and bankers and lending institutions want to protect their funds because they are dealing with depositors' cash, not their own so they want to ensure that borrowers have land or other essential assets before issuing loans which is a significant constraint for the SME if certain of these standards are not met. *"...(A)nother major thing is collateral. Collateral security is an issue, but I'm sure you know, that the Central Bank, in maybe 2016 also came up with the collateral registry, where things other than shares and properties can be used as collateral." (P-6)*

High lending rates

The review of the literature suggests that banks are typically the principal source of financing in most developing countries (Yoshino, 2017). According to the participants, even though the banking system in Nigeria has improved significantly, lending institutions have remained apprehensive of lending to small- and medium-sized enterprises (SMEs), even though they account for a significant share of the country's economic activity. Apart from the requirement for costly collateral, the study's analysis reveals that banks' high lending rates obstruct the process of acquiring funding for most SMEs. According to the participants, higher

fees and interest rates on aggregate loans to SMEs are the most significant impediments to the provision of funds to SMEs in developing countries.

> *In Nigeria, for an SME to get credit. I mean, in those days it is as high as 30%, How would you survive? How will you make profit? So yeah, something needs to be done about the economy. What has been done in the past? Central Bank giving out cash, that's okay, give this money to SMEs at 9% or 6%. I can't remember exactly what rate is right now, it's good, but it's not enough. There's no way it's going to go around. The macroeconomy needs to be fixed so that the interest rate is low for everybody. (P-6)*

<u>Lack of Structure</u>:

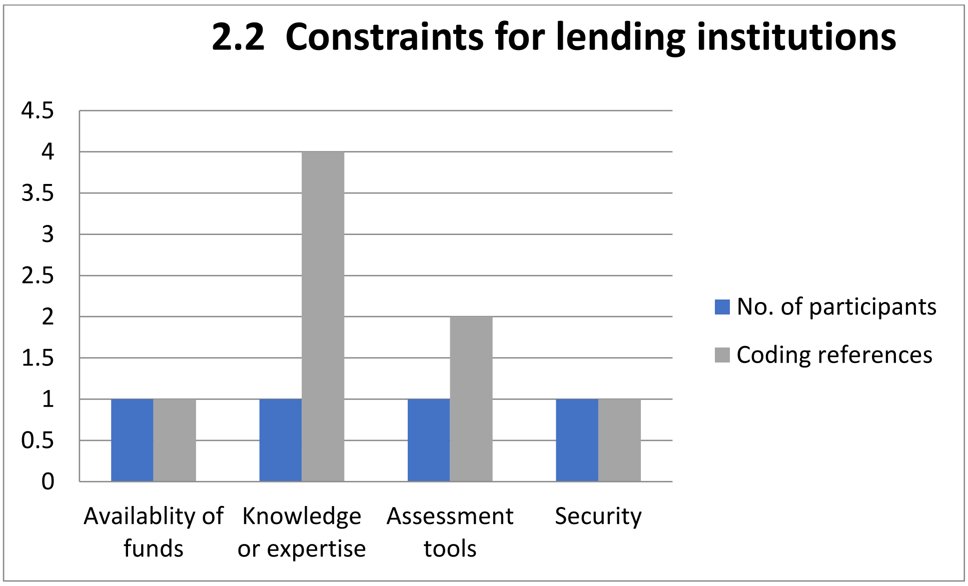
The lack of a sound business plan or structure was also discovered as a major barrier to obtaining funding during the analysis of the study. According to most participants, many SMEs are unable to obtain loans due to their inability to provide lenders with a viable business plan and structure. According to the participants, a lack of a proper business strategy, an accounting record, an inability to separate between personal and business finance, and a low debt service ratio, are among those factors that are crucial for granting funds to business owners.

> *This is a very important question for SMEs – the very poor business structure. SMEs don't fit into what I called a stereotype of what an organization should look like. Sometimes, you have the proprietor of the company as the CEFO, is the CEO, CFO, and also the chief HR officer, all because he probably wants to keep his costs down, and as a result, the business is not just structured. And sometimes, the kind of transaction is cash oriented. They don't really do proper*

accounting. So, apart from the way the business is structured, the way the responsibilities are centered on the key-man, create big risk. (P-5)

Additionally, participants mentioned that many borrowers lack sufficient expertise about the business they wish to operate. Not only do they lack structure in their business, but they also have no understanding of how to run their business or manage their costs effectively, which puts them at greater risk. *One said, "Many SMEs are not structured. Some have not gone through the rudiments of the business. Even then, they don't know a lot about their business. So many of them are just starting out and, for such we don't give money, won't even dare give our funds to such people." (P-3)*

Constraints for lending institutions



As shown in the figure, the references quoted in this theme are not recorded as much as in theme 1.1 but still, it emerged as an important area during the analysis of the study. Some of the important points observed in this theme are discussed below.

This theme illustrates some of the obstacles that lending institutions such as banks and non-financial institutions confront when lending money to small business owners. During the discussion of the constraints, one of the participants mentioned that the unavailability of funds in such institutions could be one of the factors that may act as an obstacle for lending funds to SMEs in developing countries. He reported that *"Another constraint too is the funds associated with it. Do the FIs have the volume of funds to lend? The is about savings and current account balances and not just loan issue. Again, some of the FIs because of the drop term-deposit, that will be equally constrained from lending to the SMEs." (P-1)*

Similarly, having inadequate knowledge regarding SMEs and the unavailability of updated data emerged as one of the constraints for banks in granting loans to business owners. While discussing the possible constraints for financial institutions to loan money, one of the participants pointed out that the lenders have inadequate knowledge regarding the SMEs as they have *"always been lumping SMEs in the same place with cooperates. And if that is not looked at and tackled adequately, will continue to run into problems."*

Lack of sufficient knowledge regarding the SMEs and the unavailability of updated facts and figures make it difficult for them to make an informed decision.

> *On our banking side, having expertise or knowledge about the SME business. We think we have an idea of what an SME is into or what they want. But to some extent, we do. I don't have the figure, that's why I don't want to say to a large extent, until maybe we do a proper empirical work on that. But I believe that we do not have enough. I think that we have a dearth of knowledge on our SMEs role. For instance, for somebody who is into manufacturing we lump that person into the same ship with somebody who want to run a shop, or you know develop an app. (P-4)*

Another impediment identified during the study was the lack of standardized criteria for loan approval. While discussing the constraints in lending or granting funds to SMEs, one of the participants stated that Nigerian lending institutions lack the tools necessary to assess the risks associated with providing loans for SMEs. *A participant said, "Another constraint is ranking. We do not have ranking. In some developed countries, SMEs or small businesses are ranked in terms of A+ or AB an' so on and so forth. In Nigeria, we don't have such facility to enable the banks or lending institution to know the level of the risks associated with the different individual and SMEs. So, this is among key constraints." (P-1)*

5.4.3. Objective 3: To determine the key factors promoting SMEs' access to financing despite obstacles in the Nigerian financial system

This is the third objective of the study. The main task is to interpret and analyze the information garnered through surveys and interview on how some SMEs have been successfully accessing financing despite the obstacles identified in the Nigerian financial system. This objective is achieved by analyzing the data quantitatively and qualitatively. First, the quantitative approach using Chi-square hypothesis testing, as the estimating and afterwards, qualitative

5.4.3.1. Quantitative Analysis

To meet the above objective, the following themes are analyzed with the help of quantitative analysis.

5.4.3.1.1. Year of Business Existence and Access to Finance

The factors associated with successful access to financing by SME owners, as per the year of business existence of the owners, are presented in the Table 14:

Table 31: Factors associated with successful access to finance by SME owners

Ever been successful in receiving finance Variables	No	Yes	Statistic
**Year of business existence or began operation			
before 1990	49 (36.30)	86 (63.70)	135 (100.0)
1990-2000	93 (27.93)	240 (72.07)	333 (100.0)
2001-2010	138 (29.30)	333 (70.70)	471 (100.0)
2011-2020	184 (28.26)	467 (71.74)	651 (100.0)
Statistic χ^2 = 232.3723; p=0.000			

Source: *Author's computation, 2022***= <0.001; figures in parentheses are percentages.

Table 14 presents the factors associated with successful access to finance by SME owners. Results show that year of business existence significantly relates to access to financing among SME owners at p-value <0.001. It was indicated from the table that businesses that were established in more recent times were more likely to access financing than businesses in previous years. In other words, the more recent a business is, the more successful their application for financing will be. From the table, it is shown that SMEs that have been in existence before the year 1990 had 63.70% successful application while the proportion of successful applications increased from 63.70% to at least 70% each for businesses that were established in more recent years.

5.4.3.1.2. Current legal status of the business and successful access to financing

The factors associated with successful access to financing as per the current legal status of the respondents is assessed using the findings from survey respondents, and is stated in Table 15:

Table 32: Factors associated with successful access to finance by SME owners

Ever been successful in receiving financial aid			
Variables	**No**	**Yes**	**Statistic**
**Current legal status of business			
Shareholding company with non-traded shares or shares traded privately	236 (45.12)	425 (54.9)	523 (100.0)
Shareholding company with shares traded in the stock market	33 (35.48)	26 (55.3)	93 (100.0)
Smallholder farmer	20 (64.51)	11 (35.48)	31 (100.0)
Sole proprietorship/ partnerships	642 (68.08)	301 (31.92)	943 (100.0)
Statistic χ^2 = 116.75; p=0.000			

Source: *Author's computation, 2022* **= <0.001; figures in parentheses are percentages.

Results also show that the current legal status of a business significantly affects successful access to financial aid by SME owners. From Table 4.1.6.2, it was found that shareholding companies with non-traded shares and companies with shares traded in the stock market have higher proportions of successful access to financial aid (54.9% and 55.3%) than a business with smallholder farmer or solely owned (35.48% and 31.92%) at p<0.001.

5.4.3.1.3. Business turnover in the financial year and successful access to financing

Table 16 shows the factors of business turnover in the financial year and successful access to financing studied as per the business turnover of the respondents

Table 33: Factors associated with successful access to finance by SME owners

Ever been successful in receiving financial aid			
Variables	**No**	**Yes**	**Statistic**
**Business turnover in the financial year (N)			
less than 1,000,000	378 (76.52)	116 (23.48)	494 (100.0)
1,500,000 – 2, 000,000	33 (51.56)	31 (48.44)	64 (100.0)
2,100,000 - 2.499,000	44 (50.00)	44 (50.00)	88 (100.0)
2,500,000 –5,000,000	46 (15.92)	243 (84.08)	289 (100.0)
5,500,000m – N9m	43 (46.24)	50 (53.76)	93 (100.0)
10,000,000 and above	149 (28.82)	368 (71.18)	517 (100.0)

Statistic χ^2 = 369.88; p=0.000

Source: Author's computation, 2022 **= <0.001; figures in parentheses are percentages.

Results from Table16 show that business turnover in the financial year significantly relates to successful access to financing by SME owners. The higher the turnover in the financial year, the higher the access to financing. From Table 16, it was found that companies with less than a million financial turnover accessed financial aid less than companies with financial turnover of more than a million naira (23.48% versus 48.44%, respectively). Similarly, companies with more than 2 million naira to 10-million-naira financial turnovers and above also have a higher proportion of successful access to financing (84.08% and 71.18%, respectively) than the previous turnover of less than 2 million nairas respectively.

5.4.3.1.4.: Number of People Currently Employed in Business and Successful Financial Aid Access

Table 17 presents the factors associated with successful financial aid access, categorized as per the number of people currently employed in the business.

Table 34: Factors associated with successful access to financial aid by SME owners

Ever been successful in receiving financial aid			
Variables	**No**	**Yes**	**Statistic**
**Number of people currently employed in business			
less than 10	469 (71.17)	190 (28.83)	695 (100.0)
10-19	303 (66.89)	150 (33.11)	453 (100.0)
20-49	86 (38.39)	138 (61.61)	224 (100.0)
50-99	32 (30.19)	74 (69.81)	106 (100.0)
100 and above	46 (31.08)	469 (68.92)	148 (100.0)
Statistic χ^2 = 302.49; p=0.000			

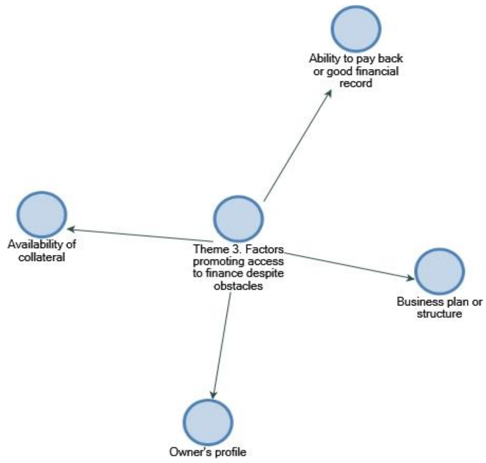
Source: Author's computation, 2022 **= < 0.001; figures in parentheses are percentages.

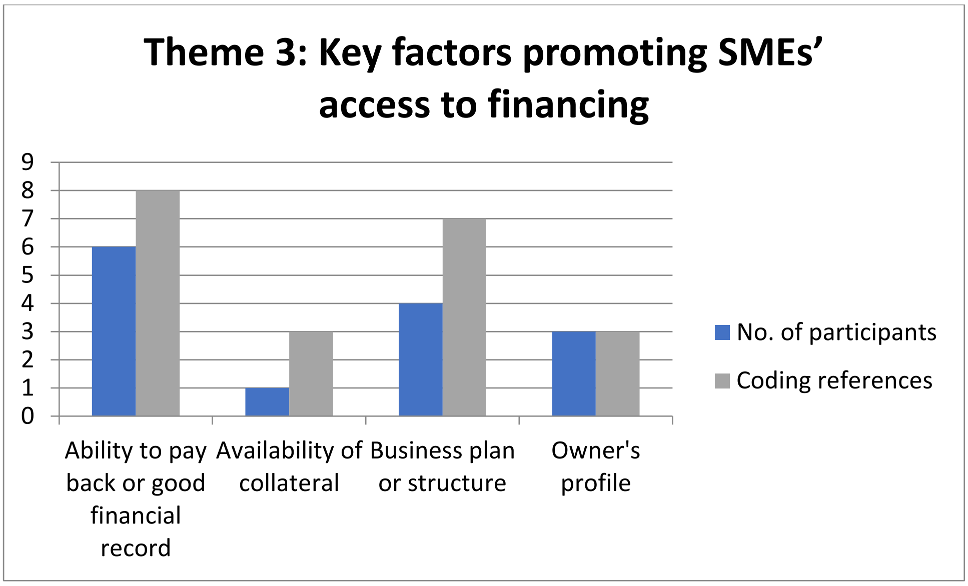
Results from Table 17 show that the number of people currently employed in business significantly determines the successful accessing of financial aid by SME owners. The table shows that the higher the number of people presently employed in a business or company, the higher the rate of successful accessibility of financial aid. Businesses with less than 10 people had the lowest proportion of access to financial aid (28.83%) as compared to those businesses with between 10-19 people (33.11%). Likewise, businesses with between 20-49 people had a rate of 61.61% access to financial aid while companies or businesses with 50 people and above had nearly 70% (69.81% and 68.92%) of successful access to financial aid.

5.4.3.2. Qualitative Analysis

5.4.3.2.1. Theme 3: Key factors promoting SMEs' access to finance

The third theme identified during the study was "key factors promoting SMEs' access to financing." This theme pertains to the third research objective of the study. This theme highlights participants' perspectives on the factors that facilitate SME owners in accessing financing. As illustrated in the graph above, this theme has been subdivided into four sub-themes based on the participants' perspectives. These sub-themes include: i) Ability to pay back or good financial record, ii) availability of collateral, iii) business plan or structure, and iv) owner's profile.





5.4.3.2.1.1. Ability to pay back or good financial record:

The findings of the analysis show that having a good financial record is one of the biggest facilitating factors in accessing financing for SMEs. As shown in the graph as well, this theme has recorded the most references in this category. According to most respondents, lending institutions are more likely to offer financing to SMEs with strong bookkeeping capabilities and a track record of financial stability. The findings of the study indicate that this is a critical factor that financial institutions consider when giving a loan to a borrower as they verify the borrower's ability to repay the loan by examining the borrower's transactions and financial records. *"The FIs will look at the financial statements of the borrowers, whether the borrower has been making profits, how long has the borrower already been in that business, look at competition within that space. So, is that profit likely to continue…depending on how much, they will also look at whether the borrower is likely to put up very good collateral." (P-6)*

5.4.3.2.1.2. Availability of collateral

Another important factor that emerged as a facilitating factor for SMEs to access financing is their ability to provide collateral for the loan they requested for their businesses. According to the analysis of the study, numerous lending organizations, require a tangible asset in the form of insurance or collateral as a condition of granting loans to the applicant. Depending on the size of the loan, these collaterals are frequently fixed assets such as land or property. SMEs that meet the collateral requirements are successful in obtaining a loan, however, those who are unable to meet such standards are unable to acquire financing for their enterprises. *"... We consider what we call insurance to be the secondary way, whether in the form of collateral security, setting some mitigations, that affect our business. So, if something goes wrong, we should be able to recover if not all the money, but some of those funds here." (P-5)*

5.4.3.2.1.3. Business plan or structure

According to the findings of the study, having a sound business plan or structure is another important facilitating factor in obtaining financing. According to the participants, a good corporate structure, among other things, is crucial for appraising loans. Participants stated that lending institutions place a greater emphasis on the nature of the borrower's business and usually support those businesses that have a strong structural foundation. Other than that, they also evaluate the borrower's ability to repay the loan, as well as the proposed company plan's ethics and visibility. Moreover, they verify the company's location to ensure that all information provided is authentic.

Although not all these characteristics are critical for granting a loan, they are critical for some of the lending institutions and play a substantial part in the decision-making process. Participant 3 shares his views

> *... basically, it's around structure. If I have structure and I know that you've done this business for a specific period of time, in fact what we look at most times, you must have run your business for, at least two years. And what defines two years is the fact that the business has been registered for at least three years. It's not that you've been running the business, your past money. We want to see that there is a little bit of structure in that business. That is the critical point for us. (P-3)*

5.4.3.2.1.4. Owner's profile

Apart from conducting a thorough check on the applicant's business history, it was discovered during the analysis of the data that lending institutions also look at the applicant's reputation and character prior to granting the loan application. If the business's owner has an outstanding credit history, a positive reputation, and credible references, the chances of loan acceptance increase significantly (Black & Frankel, 2021).

The participants noted that the business owner's personality, qualifications, and experience are extremely important when it comes to accessing funding, as most lending organizations, such as banks, place a higher priority on the borrower's character when granting loans to SMEs owners. *"I think the first thing we look at is the character of the SME owner or the applicant. You will agree with me that they seem to have Key-mam issue or risk. So, the character of the founder, or the management is very important." (P-4)*

Another participant states that:

We call this 'know your customer (KYC).' Sometimes, it comes under the regulatory requirements, but beyond that, we use the basic information that we are able to gather on the customer, especially from the documentation, to understand who the customer is, especially if the customer is genuine and to understand if the customer is someone you want to do business with. You want to know if the registration of the customer is a legal entity. (P-5)

5.4.4. Objective 4: To propose financial system changes that will enhance SMEs' success at accessing finance in Nigeria.

This objective is achieved by triangulating the results from both the qualitative and quantitative data analysis, beginning with quantitative, then qualitative analysis.

5.4.4.1. Quantitative Analysis

This objective was measured in two parts. First, this objective examined financial system changes that will enhance SMEs' success at accessing financing in terms of the kind of government actions that would generally help SME owners' the most and, second, from the aspect of the lending policies and services that financial institutions can provide to boost SMEs' access to financing.

5.4.4.1.2. Government actions would generally help SME businesses the most, especially, during this current economic situation in Nigeria.

In this section, the respondents' views on the government actions that would generally accelerate and improve SME business the most, considering the current Nigerian financial system conditions are stated in Table18.

Table 35: Government actions that would generally help SME business the most, especially, during this current economic situation in Nigeria

What kind of government action would generally do to help businesses	**Freq.**	**Percent**
Government-aided loans	696	43.77
Opening of new lending channels by institutions such as the Bank of Industry	205	12.89
Reduced taxes	332	20.88
Simplification of lending regulation	357	22.45
Total	1590	100.00

Source: Author's computation, 2022

Table 18 shows that most of the respondents reported government-aided loans as the paramount financial system changes that will enhance SMEs' access to financing in Nigeria. This was followed by a reduction in tax and simplification of lending regulation with both having more than 20% responses. Last, the opening of new lending channels by institutions had the last proportion (12.89%).

5.4.4.1.2. Policies and services provided by financial institutions to enable better access to funding

Table 36 presents the policies and services that can be provided by the financial institutions to enable better access to funding.

Table 36: Policies and services provided by the financial institutions to enable better access to funding

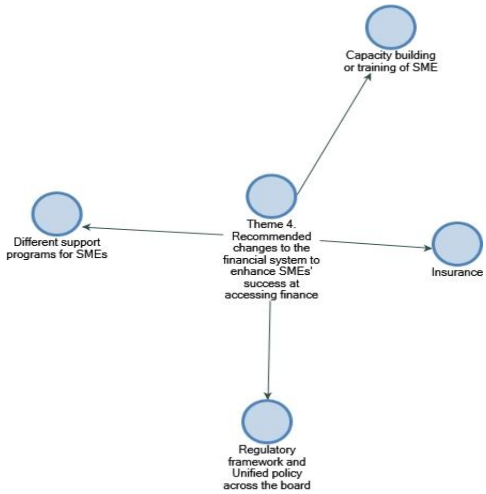
What policies and services can financial institutions provide for better access to fund	Freq.	Percent
Better understanding of the type of business	74	4.65
Eliminating exorbitant costs	221	13.90
Enforce rural banking to reduce bank concentration	150	9.43
Negotiating longer payment terms	81	5.09
Reduced interest on loans	1,064	66.90
Total	1,590	100.00

Source: Author's computation, 2022

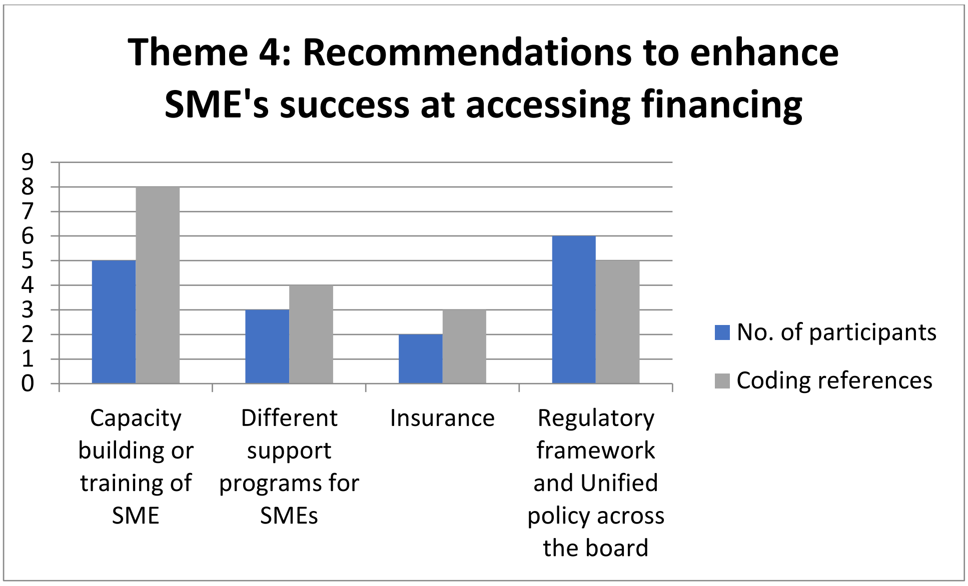
The results in Table 19 show that most of the SMEs are of the opinion that the main change that is expected in terms of policies and services is a reduction of the current interest rate in the Nigerian financial system. About 70% of the respondents agreed that interest rates on loans should be reduced to make loans more accessible. Other changes that are mentioned by them failed to get more support, like a reduction in the interest rate on loans. Notwithstanding, about 14% of the SMEs still believe that exorbitant processing costs on loans from these financial institutions is a major structural change that is needed to make loans more accessible in the system. Apart from these two, other policy changes such as negotiating longer payment, enforcement of rural banking to reduce concentration, and a better understanding of business types all receive low acceptance by the respondents. The major change that is expected by the SMEs as shown from the result from the services and policies perspective is the reduction of the lending rate on loans. This will enable them to access loans more easily. This again reinforces the relevance of the credit rationing theory.

5.4.4.2. Qualitative Analysis

5.4.4.2.1. Theme 4: Recommended changes to the financial system to enhance SMEs' success at accessing financing



In this section, the third theme of the study, i.e., recommendations to enhance SME success at accessing financing is presented with its sub-themes. This theme addresses the third and fourth research objectives of the study, which seek to identify factors that facilitate SMEs' access to financing in Nigeria and make recommendations for enhancing SMEs' access to financing. Considering Nigeria's financial system's challenges, this theme highlights the views of participants on the role of financial and non-financial entities in encouraging funding. This theme also includes recommendations on how to improve the financial system's ability to provide easy access to financing to Nigeria's small and medium enterprises. As presented in the map, this theme has been subdivided into four sub-themes based on participant feedback, which includes i) Capacity building or training of SMEs, ii) Different support programs for SMEs, iii) Insurance, and iv) Regulatory framework and unified policy across the board.



5.4.4.2.1.1. Capacity building or training of SME

This theme represents the views of the participants regarding the efforts and initiatives of the institutions in promoting SMEs' access to finance in Nigeria. In this theme, participants discussed the efforts of various institutions to assist SME owners in growing their enterprises and made comments on what actions can be implemented to improve Nigeria's current financial position.

Several microfinance banks, according to participants, encourage SME owners to engage in capacity building. These institutions advise and encourage SMEs with a poor credit history by educating them on how to maintain books and deposits to do a credit appraisal on them before granting a loan. In the following quote, one of the participants discusses such training as:

We have various programs that we do to ensure that the SMEs have access to financing. Not only that, but we also enhance the capacity of these SMEs to enable them to prepare a bankable business plan, to enable them to remodel their business plan, make them attractive to the lending institution. We have capacity building in almost every state of the federation. Every year, we go

around to ensure that will build the capacity of the small and medium enterprises and the entrepreneurs that run these enterprises. (P-1)

Similarly, participants highlighted that several efforts have been made by numerous institutions, such as the Central Bank, to increase SMEs' access to finance, including encouraging institutions to support SMEs by providing them easy access to loans. Participants mentioned that government institutions are contributing financially to the group, but some private organizations have historically been hesitant to lend to SMEs. According to one of the participants, "*… the central bank has stated at one point or another that we will share the risk with you.*"

Participants indicated that while the Central Bank provides these training opportunities to business owners, it would be beneficial to have private ones as well to educate SMEs and offer them training to help develop their businesses.

Maybe might even be better if it's not the government because the private sector actually does better in some of these things. They should come up with some kind of training institute that will actually prepare SME that wish to get a loan, through actually coaching them on how to make itself more attractive, and less risky. So, from coming up with bankable projects to teaching them how to keep books of accounts, how to have controls within that business…everything will be packaged in such training. (P-6)

According to the participants, although effective measures are being taken for SMEs to promote easy access to financing, still there is a need to have a structured approach to train and educate SME owners on the issue.

Another thing is that there must be a kind of cluster approach to training SME owners and developing SME business. So, you could pick up, maybe retailers in the pharmaceutical industry or retailers of consumer durable, SME retailers and sort of, I mean maybe we have bodies of financial services that could look into these in training and helping to develop these set of businesses to make them more appealing to their member companies for lending. (P-5)

5.4.4.2.1.2. Different support programs for SMEs

While discussing the factors that promote SMEs' access to finance, participants reported that several programs have been developed by government organizations and agencies to assist SMEs owners to support their businesses. One of the participants shared that *"We have a lot of programs, we have about 15 programs that give direct money to the SMEs. There is one we call 'one local group and one product,' there is one we call 'conditional grand scheme,' whereby we try to give at least 150,000 naira to all the SMEs within that state that has been accredited for such a program." (P-1)*

They noted that despite the various programs, SMEs in Nigeria are unable to prosper due to the requirements for accessing credit. According to the participants, "*one in six SMEs fail*" not just in Nigeria but also in advanced countries, but the difference is that SMEs in advanced countries may access capital much more easily and at a lower cost; in some circumstances, less than 5%. In Nigeria, however, an SME must pay a higher interest rate, which was once around 30% but has fallen in recent years. Apart from offering reduced financing rates, they proposed that organizations should introduce different support programs and schemes for SMEs to motivate and prepare them to develop and run their businesses. *"... the policy, which I keep saying is the Credit guarantee scheme for the SMEs. If there is a policy from the government*

just as we have the agricultural credit guarantee scheme, we can equally have the SME credit guarantee scheme as a deliberate policy to ensure that our lending institutions are happier or friendlier or more friendly to the SMEs." (P-1)

They agreed that the government should improve its lending policies for both large and small lending institutions to speed up giving funds to SMEs. They must make greater efforts to entice financial and non-financial organizations to support small business owners and ensure their survival.

5.4.4.2.1.3. Insurance

During the study, insurance or provision of collateral were found to be the biggest challenge for SMEs owners in accessing financing from the lending institutions. It was found that most SMEs are turned down for financing due to a lack of credit history or an inability to provide insurance or collateral as a guarantee. According to the study's findings, to alleviate this constraint *"... if the government can de-risk or guarantee to a level that if the deposit money bank or lending institution extend money to SMEs, they cover up to some percentage, that will help." (P-1)*

5.4.4.2.1.4. Regulatory framework and policy

The review of the literature indicates that the foundation for economic growth in most countries has been attributed to SMEs as they play a significant role in promoting the economies of developing countries. (Pandya, 2012). However, under bank-dominated financial systems, SMEs in Nigeria face significant barriers to receiving affordable funding, as they are burdened with restraints that make survival difficult. The inability of SMEs in Nigeria to obtain

finance is identified as the primary impediment during the analysis of the study. One method to alleviate such barriers, according to the analysis's findings, for SMEs is to strengthen the infrastructure that underpins financial transactions, including policies, rules, regulations, and institutions for developing, registering, and enforcing collateral and credit reporting instruments.

> *... to create an enabling and regulatory environment and framework that support these SMEs. And how do we do that? We need to do that by simplifying business registration – a one-stop registration environment, build a supportive platform or ecosystem, facilitate judicial framework – the office of public offenders, promote incubators business support system, support with research institutes. ,.. (P-2)*

The findings imply that, in addition to the establishment of various supportive programs and finance mechanisms. There is a need for policy assistance for SME financing. Participants agreed that a consistent policy approach is crucial for strengthening the financial system's structure and increasing SMEs' access to finance in Nigeria. It was discovered that while numerous government and commercial entities are operating in Nigeria to aid the development of SMEs, they all have their own agendas and policies, which complicate matters and add to the confusion and difficulty of receiving financing. Participants noted that having a consistent and flexible strategy that benefits both SMEs and lending institutions will enable them to operate more efficiently and contribute to economic progress and prosperity. While debating this point, Participant 2 stated the following:

> *In the various meetings that I've attended in different forms, you will find out that SMEDAN comes up with its own policy. Then LASIMBA comes up with its own policy, then Chamber of Commerce or Lagos Chamber of Commerce comes*

up with policies, various institutes and agencies of government coming up with various advice and encouragement on what needs to be done, too much! So, I believe everybody con come under one umbrella and provide road map that will help us generate momentum. (P-2)

5.5. Hypotheses Testing

Different hypotheses, stated in one of the preceding chapters of the research, are tested as per the objectives analysis done above.

5.5.1. Objective 2

The second objective of this study is to investigate the obstacles faced by SME owners that are unsuccessful at accessing finance in Nigeria. To achieve this objective, four hypotheses were formulated which were:

H_1: The absence of collateral is an obstacle to access to finance by SME owners.

H_2: High lending rate is an obstacle to access to finance by SME owners.

H_3: The absence of verifiable business financial information is an obstacle to access to finance by SME owners.

H_4: Large banks/Bank sizes are obstacles to access to finance by SME owners

In achieving these hypotheses set for this study, Spearman's rank correlation was employed. The Spearman's rank correlation statistical tool was employed because the variables concerned under this section namely collateral, bank size, high-interest rate, and lack of financial information were all ranked variables as indicated by the Likert scale approach used in measuring the variables in the data collected for the quantitative method. For Spearman's

rank correlation coefficient, values (r_s) can take values from +1 to -1. A value (r_s) of +1 signifies a perfect association of ranks; a value (r_s) of zero indicates no association between ranks while a value (r_s) of -1 shows a perfect negative association of ranks. This indicates that the closer the value of r_s is to zero, the weaker the association between the ranks. The findings of spearman's rank correlation coefficients are presented in Table 20, as under:

Table 37: Spearman's rank correlation coefficients

Obstacles	Success	Absence of collateral	Bank size	High-interest rate	Low Business financial information
Success	1.000				
Absence of collateral	-0.037	1.000			
**Bank size	-0.037	0.083**	1.000		
**High-interest rate	-0.203**	-0.019	-0.032	1.000	
**Low Business financial information	-0.305**	-0.008	-0.008	0.294**	1.000

Spearman rho = 0.294 *Source: Author's computation, 2022*

5.5.1.1. Hypothesis 1

***H*₁**: Absence of collateral is an obstacle to access to finance by SME owners.

Hypothesis 1 was formulated to test whether the absence of collateral in a business affects the successful access of SMEs to financial aids or loans. Results from Table 37 showed that there is a negative correlation between the absence of business collateral and successful access to financial aid at -0.037. The figure -0.037 indicates that as the absence of business collateral increases, successful access to financial aid by SME owners decreases. This result thus shows that lack of collateral in business hinders access to loans by business owners. Therefore, the hypothesis that the absence of collateral is an obstacle to successful access to finance by SME owners is accepted.

5.5.1.2. Hypothesis 2

H_2: High lending rate is an obstacle to access to finance by SME owners.

Hypothesis 2 was formulated to test whether high-interest rates imposed by financial lending institutions lead to unsuccessful access of SMEs to finance or loans. Similar to what was obtained in the previous result, it was found from table 37 that there is a negative correlation between high-interest rates and unsuccessful access to finance at -0.203. The figure -0.203 indicates that as interest rates increase, successful access to financial aid by SME owners decreases. This result thus shows that high-interest rates imposed or proposed by financial lending institutions hinder SMEs' access to loans, which lend credence to the credit rationing theory. Therefore, the study accepts the hypothesis and concludes that high-interest rates are an obstacle to successful access to finance by SME owners.

5.5.1.3. Hypothesis 3

H_3: Absence of verifiable business financial information is an obstacle to access to finance by SME owners.

Hypothesis 3 was formulated to test whether the absence of verifiable business financial information in a business affects the successful access of SMEs to finance or loans. Analysis showed that there exists a negative correlation between the absence of verifiable business financial information and successful access to finance at -0.305. The Rs value -0.305 indicates that as the absence of verifiable business financial information increases, successful access to financial aid or loans by SME owners decreases. With this result, the study concludes that there exists a correlation and thus, accepts the hypothesis that the absence of verifiable business financial information is an obstacle to successful access to finance by SME owners. This supports the concept of information asymmetry influencing access to financing.

5.5.1.4. Hypothesis 4

H_3: Bank size is an obstacle to access to financing by SME owners.

The final hypothesis in this section is hypothesis 4 which was formulated to test whether the size of a bank undermines successful access to financial aids or loans by SME owners. From the analysis, it was shown that there exists a negative correlation between the size of a bank and successful access to financing at -0.037. The Rs value -0.037 reveals that, as the size of a bank increases, the successful access to finance by SME owners decreases. Therefore, the study concludes that bank size is an obstacle to successful access to financing by SME owners. Thus, Hypothesis 4 is accepted.

In summary, the result from Table 37 shows that two of these barriers have a significant impact on the growth of SMEs in Nigeria according to the analysis of the data collected from the respondents. High-interest rates and low business financial information which is a pointer to the level of development of the financial sector in Nigeria are both having a significant impact on the success of the SMEs. For instance, the correlation coefficient of high-interest rate and SMEs success is -0.23 and it is statistically significant, thus implying that both have a strong and significant association. It further shows that a high-interest rate will affect the growth of the SMEs in Nigeria regardless of the subsector that the SMEs belong. Therefore, with this result, it can be concluded that a high-interest rate is a major barrier and an important one facing fund accessibility by the SMEs in Nigeria because it has a significant impact on their performance.

Low business financial information which is an indication of an underdeveloped financial system is also having a significant impact on the success of the SMEs. It would be recalled that this is one of the factors overwhelmingly agreed by the SMEs as Barriers affecting

their access to funds. the correlation coefficient of this factor is -0.305 and it is statistically significant. This shows that lack of adequate financial information will significantly impact the success of the SMEs in Nigeria. This result shows some consistency in the discussion in that since the SMEs have earlier agreed that these two factors namely high-interest rate and low business financial information prevent them from accessing funds, hence it will have a tendency of affecting their success as well.

However, other factors such as the absence of collateral and bank size might not be a major challenge to the SMEs' success in Nigeria according to the analysis of the data from the respondents. The correlations coefficients of the two with SMEs' success are -0.037 and -0.037 for both bank size and absence of collateral respectively, but they are not statistically significant. It, therefore, implies that we do not have evidence to suggest that these two factors do have a significant association with the success of the SMEs. Although, the result shows that both are strongly related to each other but their association with the success of the SMEs is not significant. Despite some of the SMEs owners agreeing in the earlier discussion that the two have an impact on their access to funds from the financial institutions, this result has shown that the two factors are not significant enough to affect the success of the SMEs.

5.5.2. Objective 3

Objective 3: To investigate the factors promoting SMEs despite the obstacles in the Nigerian financial system.

Under this section, the task is to interpret and analyze the result on the basis of how some SMEs are able to access funds successfully despite the current situation in the financial system. The Pearson Chi-square test of association was used to achieve the hypotheses of this objective. The hypotheses capturing this objective are listed as follows:

H₁: Year of business existence promotes access to finance by successful SME owners.

H₂: Current Legal Status of business is a promoter of access to finance by successful SME owners

H₃**:** Business turnover in the financial year influences access to finance by successful SME owners.

H₄: Number of people currently employed in business promotes access to finance by successful SME owners.

5.5.2.1. Hypothesis 1

H₁: Year of business existence promotes access to finance by SME owners.

Table 38: Year of business existence and successful finance access

Variables	**No**	**Yes**	**Statistic**
****Year of Business existence or began operation**			
before 1990	49 (36.30)	86 (63.70)	135 (100.0)
1990-2000	93 (27.93)	240 (72.07)	333 (100.0)
2001-2010	138 (29.30)	333 (70.70)	471 (100.0)
2011-2020	184 (28.26)	467 (71.74)	651 (100.0)
Statistic χ^2 = 232.3723; p = 0.000			

**= <0.001; figures in parentheses are percentages. Source: Author's computation, 2022

Hypothesis 1 was concerned with examining the association between the year of existence of business and access to finance by SME owners. Using the chi-square test of association, Table 5.1.6.1 showed that the year of business existence significantly influenced access to finance by SME owners at a value <0.001. By this, the study concludes and accepts

the hypothesis that the length of the year an SME has been in existence is an important factor to access to finance.

5.5.2.2. Hypothesis 2

H_2: Current legal status of business promotes access to finance by SME owners.

Table 39: Current legal status of the business and successful access to finance

Variables	No	Yes	Statistic
****Current legal status of the business**			
Shareholding company with non-traded shares or shares traded privately	236 (45.12)	425 (54.9)	523 (100.0)
Shareholding company with shares traded in the stock market	33 (35.48)	26 (55.3)	93 (100.0)
Smallholder farmer	20 (64.51)	11 (35.48)	31 (100.0)
Sole proprietorship/ partnerships	642 (68.08)	301 (31.92)	943 (100.0)
Statistic χ^2 = 116.75; p=0.000			

**= <0.001; figures in parentheses are percentages. Source: Author's computation, 2022

Hypothesis 2 was concerned with examining the association between the current legal status of business and access to finance by SME owners. Also using the chi-square test of association, Table 39 showed that year of business existence significantly influenced access to finance by business owners at value<0.001 as it was found that shareholding companies with non-traded shares and companies with shares traded in the stock market have higher proportions of successful access to finance than a business with smallholder farmer or businesses that are solely owned. Therefore, we accept the hypothesis and conclude that the current legal status of business predicts the chances of accessing finance by SME owners.

5.5.2.3. Hypothesis 3

H_3: Business turnover in the financial year influences access to finance by SME owners.

Table 40: Business turnover in the financial year and successful financing access

Variables	No	Yes	Statistic
****Business turnover in the financial year (N)**			
less than 1,000,000	378 (76.52)	116 (23.48)	494 (100.0)
1,500,000 – 2,000,000	33 (51.56)	31 (48.44)	64 (100.0)
2,100,000 – 2,499,000	44 (50.00)	44 (50.00)	88 (100.0)
2,500,000 –5,000,000	46 (15.92)	243 (84.08)	289 (100.0)
5,500,000 – 9,000,000	43 (46.24)	50 (53.76)	93 (100.0)
10,000,000 and above	149 (28.82)	368 (71.18)	517 (100.0)
Statistic χ^2 = 369.88; p=0.000			

**= <0.001; Figures in parentheses are percentages. Source: Author's computation, 2022

Similarly, the analysis showed that Hypothesis 3 proposed whether an association holds between the business turnover and access to finance. Table 40 shows the chi-square value of 369.88 is significant at 1%, showing that the higher the financial turnover of businesses in a year, the higher their probability of accessing financial aids or loans. With this result, the study concludes that there exists a significant relationship between business turnover and access to finance and therefore accepts the hypothesis.

5.5.2.4. Hypothesis 4

H_3: The number of employees significantly influences access to finance by SME owners.

Table 41: Number of people currently employed in business and access to finance

Variables	No	Yes	Statistic
****Number of people currently employed in business**			
less than 10	469 (71.17)	190 (28.83)	695 (100.0)
10-19	303 (66.89)	150 (33.11)	453 (100.0)
20-49	86 (38.39)	138 (61.61)	224 (100.0)
50-99	32 (30.19)	74 (69.81)	106 (100.0)
100 and above	46 (31.08)	102 (68.92)	148 (100.0)
Statistic χ^2 = 302.49; p=0.000			

Source: Author's computation, 2022 **= <0.001; Figures in parentheses are percentages

Furthermore, Hypothesis 4 was proposed to determine whether the number of employees in a business significantly determines the SMEs' access to finance. From the analysis in Table 41, results showed that the higher the number of employees, the more likely they access to finance as that businesses or companies with a higher number of employees of 50 or more had a higher proportion of access to finance than their counterparts with 20 employees or less at value <0.001. In other words, SMEs with very few workforces might struggle to access finance from the current situation in the Nigerian financial system. Thus, the study concluded that a relationship exists between several employees and access to finance and therefore accepts the hypothesis.

5.5.3. Objective 4

Objective 4: To propose changes to the financial system that will enhance SMEs' success at accessing finance in Nigeria. This objective was achieved through surveys of SME owners, and interviews of relevant stakeholders in the financial system like the Central Bank of Nigeria (CBN), SMEDAN, financial institutions like Deposit Money Banks (DMB), and Non-Bank Financial Institutions (NBFIs). For the survey analysis, two key hypotheses were deduced:

***H*₁**: Government actions will increase access to funding.

***H*₂**: Promoting SME funding through policies and services from financial institutions will increase access to funding.

5.5.3.1. Hypothesis 1

***H*₁:** Government actions will increase access to funding.

Table 42: Government actions that would generally help SMEs

What kind of government action would generally do to help businesses	Freq.	Percent
Government-aided loans	696	43.77
Opening of new lending channels by institutions such as the Bank of Industry	205	12.89
Reduced taxes	332	20.88
Simplification of lending regulation	357	22.45
Total	1590	100.00

Source: Author's computation, 2022

In Table 42, it was suggested by respondents that governmental actions such as government loans, reduction in taxes, making lending regulation more friendly and simple, and lastly, opening new lending channels to SMEs will increase SMEs' access to finance. From the table, it was found that government-aided loans were most emphasized amidst other suggestions raised and therefore had the highest proportion out of hundred (43.77%). This was followed by Simplification of lending regulation and reduction in taxes on businesses. Stemming from the results, the study, therefore, concludes that government actions are a significant factor for access to funding.

5.5.3.2. Hypothesis 2

H$_2$: Promoting SME funding through policies and services from financial institutions will increase access to funding.

Table 43: Enabling policies and services by financial institutions

What policies and services can financial institutions provide for better access to fund	Freq.	Percent
A better understanding of the type of business	74	4.65
Eliminating exorbitant costs	221	13.90
Enforce rural banking to reduce bank concentration	150	9.43
Negotiating longer payment terms	81	5.09
Reduced interest on loans	1,064	66.90
Total	1590	100.00

Source: Author's computation, 2022

From Table 43 in the analysis, it was found that most of the respondents mentioned that favorable policies and services from financial institutions will help promote access to finance among SME owners. About 70% of the respondents agreed that interest rates on loans should be reduced to make loans more accessible. Other changes that are expressed by them failed to get more support like a reduction in the interest rate on loans. Notwithstanding, about 14% of the SMEs still believe that exorbitant processing cost on loans from these financial institutions is a major structural change that is needed to make loans more accessible in the system. More specifically, five points were listed by respondents to justify the statement. These include a better understanding of business type, eliminating exorbitant costs, enforcing rural banking, negotiating longer payment terms, and reducing interest rates. However, the reduction of the lending rate on loans remains a critical factor. With this, the study concludes that promoting favorable policies and services from financial institutions will increase better access to finance by SMEs' owners. Thus, the study accepts the hypothesis. This again reinforces the relevance of the credit rationing theory.

5.6. Summary

The current study was carried out to investigate the impact of financial system channels on SMEs' access to funding in Nigeria. SMEs have been identified as the foundation for most countries' economic progress but in Nigeria, SMEs have several challenges and are in desperate need of a financial system that will facilitate their access to funding.

Four main themes emerged during the analysis which addresses the four research objectives of the study.

<u>Objective 1. To assess the effect of financial system channels on SMEs' access to financing in Nigeria</u>

This objective was addressed in *Theme 1* of this study, which analyzed the role of various financial entities – Deposit Money Banks (DMBs) and Non-Bank Financial Institutions (NBFIs). The purpose of this objective was to ascertain the extent to which these institutions assist and support SMEs in the country, as well as the extent to which they affect their access to credit directly or indirectly. The findings from the analysis indicate that financial institutions, like deposit money banks are actively involved in lending to small business owners; these institutions are making an effort to support SMEs. FIs such as the DMBs are also required by central bank of Nigeria to assign a specified percentage of their current and savings account balances (deposits) to SMEs. Additionally, it encourages other public and commercial organizations to promote SMEs by facilitating their access to credit. Thus, an overall favorable attitude toward supporting this sector by these institutions was observed during the analysis. However, it is important to note that, despite the support, many SMEs continue to face significant barriers to financing. To further understand this phenomenon, various aspects were

examined to determine why, despite these financial institutions' efforts, access to funding is limited for these SME owners. These factors were addressed in theme 2.

Objective 2. To identify the key factors inhibiting SMEs' access to financing in Nigeria

This objective was addressed in *theme 2* of the study which shows the barriers or constraints of SMEs in accessing funding and also discusses the obstacles lending institutions face while granting funds. The study suggests that significant obstacles exist for SMEs in Nigeria, impeding their ability to get financing from lending institutions. These constraints are discovered to be applicable to both the owners of SME's and lending institutions. The key barriers to funding that SME owners confront include (i) a lack of structure in their firm, (ii) a poor credit history, (iii) the absence of collateral, and (iv) exorbitant interest or lending rates on debt. However, institutional obstacles are determined to be largely organizational in nature, including a (i) lack of assessment criteria and knowledge, as well as (ii) a lack of funding and (iii) collateral or credit insurance. According to the data, most SME owners' loan requests are denied due to their inability to match the bank's criteria. It was found that the process is frequently hindered by an inability to provide collateral or a lack of a good business strategy. Due to a lack of structure and bookkeeping capabilities, owners are frequently unable to offer a complete accounting of their financial transactions, and as a result, their loans are denied. The findings of the study identify criteria that, if considered, will boost SME owners' access to funding. These factors are described in further detail in the third theme of the analysis, which follows.

Objective 3. To determine the key factors promoting SMEs' access to finance despite obstacles in the Nigerian financial system

This objective is covered in the study's theme 3, which addresses the critical factors that assist business owners in securing financing. These factors include a sound company plan, a good financial history, the availability of collateral or insurance, and a favorable profile. The findings indicate that having a sound financial history is one of the most important elements supporting SMEs' access to funding. Lenders are more likely to lend to SMEs that have solid bookkeeping capabilities and a track record of financial stability. Additionally, the study's findings show that SMEs who meet collateral criteria are more likely to secure a loan. This is a significant criterion that financial institutions evaluate when approving a borrower for a loan, as it enables them to verify the borrower's ability to repay the loan through this guarantee and through an examination of the borrower's transactions and financial records.

Objective 4. To investigate and propose changes to the financial system that will boost SMEs' access to finance in Nigeria

Theme 4 of the study addresses this objective which seeks to identify facilitating factors and recommendations for improving SMEs' access to financing in Nigeria. This theme reflects the participants' perspectives on the role of financial and non-financial institutions in promoting financing in light of Nigeria's financial system's challenges. The findings indicate that there is a need for policy help in small business financing as a consistent policy approach is critical for enhancing the structure of the Nigerian financial system and increasing SMEs' access to funding. Additionally, the study finds that capacity building or training workshops for business owners are critical as they will have a significant impact on their overall profile. These trainings will assist business owners in meeting the requirements and in obtaining

funding for their enterprises. Additionally, it was determined that the government's support of SMEs and the introduction of new programs and schemes benefiting both SMEs and lending institutions will enable them to operate more efficiently and contribute to economic progress and prosperity.

Chapter SIX

DISCUSSION AND CONCLUSION

6.1. Introduction

This chapter discusses the results from the primary and secondary data analysis in light of the pre-determined research objectives derived from the main research questions. It also provides the key takeaways and contributions to different SME sector stakeholders and body of research. The findings provide some guidelines for boosting SME performance when seeking financing, and for financial institutions, policy makers, and the research community. Furthermore, the limitations faced by the researcher in collecting and analyzing data and the scope for future study to build upon the subject of SMEs access to financing were also highlighted. As a reminder, the research question is:

What is the impact of the financial system on SMEs' access to financing in Nigeria?

6.2. Key Findings

The contributions of this study to existing literature stem from its theoretical foundation in credit rationing which arises from information asymmetry and risk perception resulting in SME's financing being rationed (Wolfson, 1996) and the channels of distribution (Levine, 2005). It examines and measures the effects of the bank-based theory and channels of distribution (Levine, 2005) of financial resources from the financial system to SMEs through the instrumentalities of financial institutions – deposit money banks (DMBs) and non-bank financial institutions (NBFIs) employing the two pathways of financial system development, namely, market efficiency and market depth.

As indicated in the earlier chapters, it marked a deviation from previous SME studies where financial system variables are pulled together without distinguishing which one measure market efficiency or market depth, especially within the context of an emerging economy like Nigeria. The segmentation is necessary because it allows the researcher to understand which of these two pathways has a more significant impact on SMEs' access to financing. According to Kaya (2020), if the financial system is efficient, variables such as interest rate spread, bank overhead cost, and bank concentration are key variables to consider. Bilgin, Marcolau, and Demir (2012) suggested that the financial system might not directly affect the SMEs' access to financing without passing through a medium. In other words, the efficacy of the medium of transmission or distribution through which the financial system affects the SMEs' access to financing is vital. In Nigeria, financial institutions, especially deposit money banks (DMBs) and non-bank financial institutions (NBFIs), are the two critical agents of distribution of resources from the financial system to other economic agents, including SMEs.

The first important finding of the research is that **interest rate spread** has a significant direct impact on SME financing, as well as indirectly via the current and savings account balances (CASA) of the FIs. The study established that interest rate spread plays a significant role in determining the current and savings account balances of the banks and this has significant implications on the availability of funds to the SME sector. This finding joins other empirical works in the literature to underscore the importance of interest rate as a key variable in the financial system of any country that significantly influences SME access to financing (Kisseih, 2017; Yang & Yan, 2012).

The second important factor for SME access to financing is **bank overhead cost**. It is found for Nigerian banks that the bank overhead cost does not influence SME access to financing but affects the current and savings accounts of the banks significantly. The study by Beck & Cull (2014) shows that bank overhead costs have a significant impact on SME access

to financing. However, it failed to distinguish between direct and indirect effects. Furthermore, the findings from the extant literature imply that the bank's overhead cost has a significant effect on the financial institution's performance and this relationship affects SME access to financing significantly. This finding here supports the research results of Ashton and Keasey (2005) who maintained that bank overhead cost might not affect the SME's performance because banks are not the only entity that determine the performance of the SMEs. In the same vein, the access of SMEs to financing is the focus of this study and not performance, but the same conclusion applies. The total volume of funds available to the SMEs is not determined by the banks alone; hence, their overhead cost might not directly influence the SMEs' access to financing, notwithstanding, if this overhead cost affects the performance of the financial institution significantly, according to the study, it will, in the long run, have a significant impact on the SMEs' financing. This might not be unconnected to the fact that financial institutions remain a major and important player in the Nigerian financial system and the factors that affect its performance will naturally impact the economic agents like SMEs. Therefore, the efficacy of the financial system measures in supporting SMEs' access to financing highly depends on the performance of the financial institution, and bank overhead costs have been shown to have a strong influence on the performance of these banks; hence, bank overhead cost will only affect the SMEs' access to financing through the financial institution.

The third finding is that the **number of bank branches** impacts SMEs' access to financing but does not significantly influence the current and savings account balance of the banks. It implies that the number of banks in Nigeria is a strong factor that impacts the SMEs' access to financing, without having to seek the support of any mediating factor. However, the result underscores the fact that bank branches which proxy bank concentration do not have a significant impact on the current and savings account balances of the financial institutions in Nigeria. The result further supports the line of thought that diminishes the assertion that an

increase in the establishment of bank branches is an indicator of improvement in bank performance (Hassan Al-Tamimi, 2010). According to Zhao and Jones-Evans (2017), many banks with numerous branches before the recapitalization exercise in 2007 could not stand after the recapitalization. For example, the defunct Intercontinental Bank Nigeria Plc had more branches than Access Bank Nigeria Plc but was subsumed. Instead, results from the analysis have shown that the number of branches is important to SMEs' access to financing, but it is unrelated to the performance of the financial institutions. Once there are many bank branches, access of SMEs to financing is strongly and positively influenced. This could be because spread brings FI branches near to SMEs. The findings also support existing studies which arrived at the same conclusion (Degryse, Matthews & Zhao, 2018).

The fourth finding is that **credit to the private sector** does have a significant impact on SME access to financing but must be mediated by the current and savings account balance of the FIs. The result further shows that credit to the private sector has a significant relationship with the performance of the financial institution, and that is the current and savings account balance of the banks. This significant relationship is relevant to the availability of SME loans. Credit to the private sector is an integral variable in the financial system that affects the SMEs' access to financing, but the findings have shown that the financial institution has an important role to play before that can happen. Mamman and Hashim (2013) and Owolabi and Nasiru (2017) have also shown that credit to the private sector is significant to the SME's performance, although the study did not use the access to financing metrics used in this study. The same conclusion goes for this analysis that credit to the private sector is important to SMEs' access to financing.

The fifth finding explored the main factors that pose as **obstacles to SME owners' access to financing.** The findings show that the key inhibiting factors are *lack of business collateral, high lending rate, and absence of verifiable business financial information*. Of these

factors, the two most important variables based on empirical evidence, are high-interest rate and low verifiable business financial information. High-interest rate increases the cost of finance for SMEs and discourages SME owners from exploring bank borrowing. This is supported by the existing literature as examined in Beck and Cull (2014) and Chilembo (2021). Similarly, information asymmetry (low business financial information) creates an obstruction to SME financing, supporting existing studies (Krasniqi, 2010; Forkuoh et al., 2015; Pula & Berisha, 2015). Findings from Aminu and Shariff (2015) have also supported the result that many SMEs in Nigeria fail to keep adequate records that can help the banks to process their loan requests and because of this, the largest percentage of SMEs in Nigeria are usually disappointed in their quest to seek financial assistance from the financial institutions. The same conclusion was reached by Krasniqi, (2010); Forkuoh et al., (2015); Pula and Berisha, (2015); Saari (2020), and Ufua, Olujobi, Ogbari, Dada, and Edafe (2020) in their studies. This finding lends credence to credit rationing theory – information asymmetry and perceived costs create access to the credit rationing effect for SMEs. The research findings hold that the *bank size* does not act as an obstacle to SME financing. There is contrasting evidence from the literature about bank size's influence on SME access to financing. Bank size poses no significant influence on SME access to financing is supported by Shen et al. (2009). In support of this, Peterson (2004) and Berger et al. (2002) claim that smaller banks are more likely to provide higher SME lending, due to the advantage of soft information collection on SMEs and efficient communication with SME owners. This may not be unconnected to the perception that funding SMEs is an invitation to accumulation of bad debts (Sabiu & Abduh, 2021). According to Aminu and Shariff, (2015) big banks in Nigeria see lending to SMEs in the light of high default in loan repayment.

The sixth finding relates to the **factors that promote SMEs' access to financing**, despite the existence of multiple obstacles and the status of the Nigerian financial system. The

key factors that promote access to financing by SME owners are the *Length of Existence in business (length is positively related to SMEs' access to financing), the current Legal Status of the business (partnerships, shareholding companies with non-traded shares as well as shares traded in the stock market have higher proportions of successful access to financing than a business with smallholder farmer or solely-owned businesses), Business Turnover (higher turnover implies a better opportunity for financing access), Number of People Currently Employed in Business (businesses with more than 50 employees are more likely to access finance as compared to those with lesser than 20 employees) and the owner's characteristics*. The result supports the view of Quartey, Turkson, Aborr, and Iddrisu (2017) who posited from their studies that banks in Nigeria are more inclined to allocate credit to old and already established SMEs instead of infant ones. Boyer and Blazy (2014), also posited that newly formed firms face higher difficulties in accessing funds, as compared to established firms. The reason for this is attributed to the fact that newly formed firms, to keep the cost low, resort to internal financing. As the firms grow mature, they are more likely to substitute debt for existing funds, and preference for retained earnings and debt over equity to source more funds at efficient costs (La et al., 2011; MacKay & Phillips, 2005).

The legal status of the SMEs is one of the main factors that determines their suitability for financing. According to CBN (2019) more than 60% of the SMEs in Nigeria are not duly registered with the Corporate Affairs Commission (CAC); hence, they are not recognized under the law as a legal entity. This is prominent among the sole proprietorship type of business which is the predominant structure of SMEs. From the conclusion of Ufua, Olujobi, Ogbari, Dada, and Edafe (2020), many SMEs in Nigeria, mostly the sole proprietorship, fail to separate the business from the business owners in that the bank account used by their business is their personal account, the business address is their home address, and many other things that do not distinguish the business from the ownership of the business thus affecting the legal status of

the business. The legal status of the business as a promoter of SMEs' access to financing is supported by Ndiaye et al. (2018), who claim that the SME with legal status is in a better situation to raise funds. It is because firms with formal ownerships like private foreign, private, or public ownership companies have formal registration, indicative of higher performance, which promotes their ability to access funds.

The positive relationship between higher sales turnover and SME access to financing is also shown by Brogi and Lagasio (2016). It implies that the firms with higher turnover are in a better position to bear the cost of finance (interests) and access to financing. The number and quality of employees also impact the SMEs' ability to access funding. However, the existing research does not directly support this assertion. Avyagari et al. (2008) and Gambetta et al. (2019) assert that the SMEs employing skilled employees enjoy better access to financing. Moreover, Avyagari et al. (2008) prove that SMEs with better access to financing are more likely to increase the number of employees through job growth. Thus, having more employees indicates that the firm's size is big, with better resources and the ability to access financing. Also, if the business's owner has an outstanding credit history, a positive reputation, and credible references, the chances of loan acceptance increase significantly (Black & Frankel, 2021).

Finally, this study proposes **changes to the financial system that will enhance SMEs' success at accessing financing in Nigeria**. A list of policy recommendations is included in Chapter Five. Government actions aimed at promoting SMEs' funding through policies and services from financial institutions are helpful in boosting SMEs' access to financing. Government actions, like government loans, reduction in taxes, making lending regulation more friendly and simple, and opening new lending channels to SMEs should boost their chances with financing. The importance of government actions to enhance SME funding accessibility is also emphasized by Valentin and Wolf (2013). The scholars showed that

government reforms provide a legislative regime that offers stable lending solutions, helps secure legal redress in default situations, and develops appropriate mechanisms to facilitate access to financing for SMEs. The study also found that favorable policies and services from financial institutions, like reducing interest rates, creating a better loan structure by eliminating exorbitant processing costs on loans, enforcing rural banking, understanding business type, and negotiating longer payment terms, will enhance the SME access to financing. The importance of these variables is amplified by the fact that these either act as a major hindrance to SMEs' ability to access financing more easily (like high-interest rates, a higher concentration, high processing cost) and/or ingrain trust in SMEs and thus, increase their accessibility by easy terms (longer payment terms and understanding business type).

The integrated framework for all the key findings is presented in figure- 9:

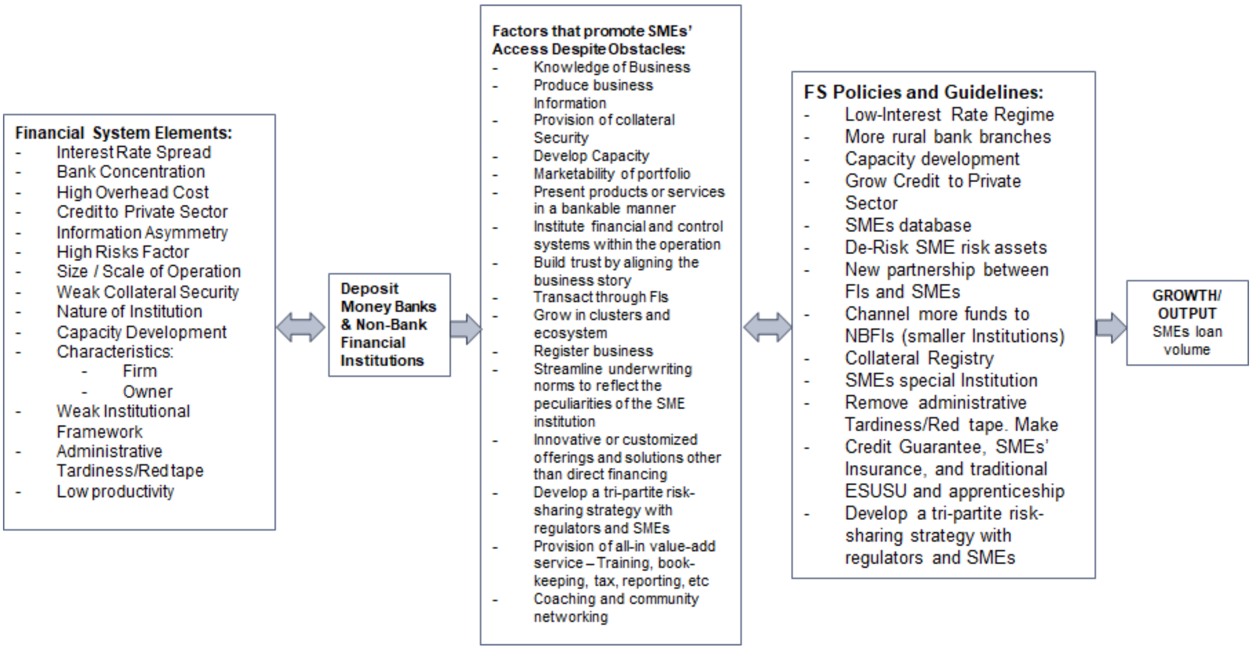


Figure 9: Integrated Framework of findings

Source: Author, 2022

6.3. Policy Recommendations

Based on the empirical evidence from the study, below are some policy recommendations for the Nigerian financial system's consideration that could boost SMEs' access to financing.

(i) Reduction of the interest rate

From the various analyses done in the study using the predetermined objective, the current lending rate in the financial system greatly inhibits SMEs. Various analyses under all the objectives of this study have shown that the current high-interest rate regime in the Nigeria financial system creates a big obstruction to SMEs access to financing; thus, as a matter of policy, the SME should be treated to its own lending rate guide separate from big conglomerates or companies that have the financial strength to withstand the high-interest rate and systemic shocks.

(ii) Simplification of loan application process

The current loan application process in most financial institutions is very cumbersome. The application process and documentation complexity continued to be one of the greatest inhibiting factors discouraging SMEs from accessing financing from financial institutions. Consequently, to make the situation more friendly to SMEs, there is the need to simplify the loan application and documentation processes to bring more SMEs into the Nigerian financial system.

(iii) Reduction or elimination of exorbitant loan processing cost

Findings from this study have shown that a major change to the financial system regarding credit allocation to the SMEs is removal of processing and administrative charges. In most cases SMEs are faced with several unreasonable service charges

during the loan application that makes loan application very expensive. Consequently, the policy makers and other relevant stakeholders in the Nigerian financial system need to restructure loan application and processing to contain excesses of SME lenders.

(iv) Direct intervention of government in providing credit facilities to the SMEs

The paucity of credit facilities in the Nigerian financial system remains one of the greatest challenges faced by the SMEs in accessing financing. The available funds come with stringent conditions and high costs. Consequently, an intervention policy that is directed at increasing the volume of credit facilities currently available to SMEs can be made through establishment of a dedicated institution and direct allocation to the SMEs.

(v) Removal of stringent conditionalities to accessing loans by the SMEs

Findings from the study have shown that lack of required collateral and guarantors that can co-sign loan application documents are a major challenge faced by the SMEs when seeking funds from the Nigerian financial system. Therefore, it important for the financial system to take care of this bottleneck through policies directed at other sources of collateral like movable assets using the asset register. The supply of collateral and unrealistic guarantors often deprives many SMEs with potential for growth from accessing financing.

(vi) Mandatory registration to achieve legal status by all SMEs

This aspect of policy recommendation is for the SMEs themselves to implement. Findings from the analysis have shown that a major factor that makes SMEs have better chance of success in the credit market is the achievement of legal status for the business. There is the need for the SMEs to separate their businesses from themselves and make the businesses achieve a separate legal status. This will

enhance the SMEs' chance of accessing loans from the Nigerian financial institutions.

(vii) Establishment of specialized banks, agencies, and more branches

This aspect has to do with the issue of financial inclusion. The advent of mobile banking has recently impacted positively on SME access to financing, especially the ones in rural areas. Financial institution policies need to focus on channels like specialized SME banks or agency banking that brings financial services proximate to SMEs. Findings from the study show that bank concentration has a positive direct impact on SME access to financing.

(viii) Incentivize FIs to allocate more credit to SMEs from the pool of funds available to the private sector

Empirical findings from the study have shown that credit to the private sector will not directly impact SME access to financing unless the financial institutions play some vital intermediation roles. Over the years, credit to the private sector has been rising but with little or no effect on the SMEs (Amoo, Eboreime, Adamu, & Belonwu, 2017). A policy that ensures a good portion of credit to the private sector is allocated to the SMEs will enlarge the SME base and grow their impact. For this effort not to suffer sabotage, which is a constant feature from the study's finding, the CBN and other agencies of government must increase their oversight function – openly monitor, reward and support compliance while they punish offenders by transferring such funds from defaulting institutions to complying ones.

ix) **Capacity building or training of SMEs**

This addresses the efforts and initiatives of the various financial system institutions to develop and equip SME owners and operators to grow their enterprise. Trainings tailored toward bookkeeping, technical skill, business management, and marketing

and branding will help to meet requirements and showcase SMEs in a positive light to enhance their access to financing.

ix) Insurance

Empirical findings also show that insurance or provision of collateral were found to be one big challenge for SME owners in accessing financing. It was found that many SMEs are turned down for accessing financing due to a lack of credit history, information asymmetry, inability to provide insurance protection, or collateral to guarantee the loans. Therefore, the government should help decrease SMEs' risk assets with FIs through a government-backed SME credit insurance guarantee scheme (Boocock, & Shariff, 2005, Saito, & Tsuruta, 2014).

x) **Regulatory policy and environment**

A final point from the research findings is that, under a DMB dominated financial system like Nigeria's, and a fragmented monitoring environment, SMEs will continuously be faced with funding barriers, as they are required to meet standardized restraining conditionalities consistent with requirements for other businesses and expectations of diverse agencies of government. Therefore, SMEs regulators should strengthen and harmonize the infrastructure that underpins SME financial transactions, including policies, rules, regulations, and institutions for developing, registering, and enforcing collateral and credit reporting instrumentalities.

6.4. Contributions to Theory

6.4.1. Channels of Distribution

First, this study has made an original contribution to the body of literature by assessing the relationship between the financial system and SMEs access to financing from a different perspective focused on the role of channels like financial institutions. This study deviates from the existing route of studying the impact of either financial development or the financial system on SMEs' financing by taking cognizance of the intermediation role of the deposit money banks (DMBs) and Non-Bank Financial Institutions (NBFIs). In some past studies, credit to the private sector was used as a financial system variable and the effect was investigated on SMEs finance with the finding that it failed to have effect on SMEs finance or performance (Ademosu & Morakinyo, 2021). However, this study has shown that the reverse is the case and that it does have effect on SMEs' financing, but the effect can only be felt via the financial institutions. The study has shown that credit to the private sector might not have direct impact on SMEs' access to financing, however, with FIs playing active roles, the effect on SMEs' access to financing will be significant.

Furthermore, most of the existing studies in this area narrowly discuss the role of financial institutions (Okere et al., 2020; Olawale et al., 2019), but ignore the most critical elements of their functioning as the channel of distribution, and its capital market element, which are equally important. Ademosu and Morakinyo (2021) provide an integrated approach, pooling together the variables in money and capital market as well as the macroeconomy, but these are rendered negligible by Bilgin and Lau (2012). This study makes a valuable contribution by stressing the importance of these channels through which the financial system affects how resources, such as funding, are made available to SMEs. This study confirms the validity of the finance-growth nexus model (Levine, 2004), that the allocation of capital and information, corporate governance and monitoring, risk management, pooling savings, and

exchange of goods/services are the key channels used for mediating and transmitting the financial system policies and resources to the SME sector in the Nigerian economy.

6.4.2. Credit Rationing

The research also contributes by providing a broad academic discussion and analysis of SME development and its influence on the Nigerian economy by examining how distribution channels interact with credit rationing to determine SMEs' funding. So far, other studies have not fully explored the role of credit rationing especially, its moderating effect on SMEs' access to financing within an emerging economy context, like Nigeria. The extant studies determined the number of factors that impede the growth of SMEs, which include inadequate financing and inaccurate financial statement (Yoshino & Taghizadeh-Hesary, 2016) and high-risk profile (Yoshino & Taghizadeh-Hesary, 2016), but failed to determine that these asymmetry constraints and high-cost perception introduced by credit rationing which limit the availability of funds to SME, even if they are willing to recompense higher interest rates exist. To fill the gap, this study's results embrace the variable of credit rationing as having a moderating factor between the channels of distribution and SMEs' access to financing, which is measured using the borrowing interest rate. The results further provide important finding indicating that high-interest rates imposed or proposed by lending institutions due to credit rationing factors hinder SMEs' access to loans. Similarly, the finding successfully explains that the use of the right policies, reduction in taxes, credit guarantee, and provision of an enabling environment, integrated policies among all agencies of government, and improvement in the services offerings of the financial institutions will boost SMEs' access to required financing, reduce mortality rate, and help grow the footprints of SMEs' contribution to nation-building.

Another contribution based on evidence is that substantially de-risking SMEs' risk assets creation for financial institutions through policies like credit guarantee and insurance and collateral registry where SME owners' movable assets can be used as collateral will reduce credit rationing for SMEs.

6.5. Contributions to Practice

The research also provides significant value and contributes towards filling many knowledge gaps for practical implications for different stakeholders.

6.5.1. Small and Medium Enterprises

This study provided important takeaways and implications for the SMEs operating in Nigeria and in related markets and economies. It identified the key factors that act as a hindrance to access to funding and, the facilitating factors that boost SMEs' probability to successfully access funding. The current studies identified funding as the vital challenge inhibiting the growth of SMEs in Nigeria (Nofsinger & Wang, 2011; Eferakeya, 2014; Osano & Languitone, 2015; Obokoh et al., 2016; Adegboye & Iweriebor, 2018). However, there are other challenges facing the SMEs, which shows that even the SMEs with access to adequate funds are not able to perform to full potential (Uzoma et al., 2021). The current research recognized the need to find out those challenges, which included insufficient profitability, lack of collateral as security, inadequate financial institutions, size of business, incompleteness of application, problems with credit history, high lending rate, and absence of verifiable business financial information. Furthermore, the study reveals that the number of branches of a bank is not a plausible factor challenging SMEs' financing access and performance. Furthermore, the owners of SMEs should also understand that some other features that increase the possibility of receiving funds from financial institutions include proper business strategy, proper

bookkeeping, a separation between personal and business finance, a high debt service ratio, age of the business, and personality of the business owner and managers (Chowdhury & Alam, 2017). Thus, the SMEs must work on their financial efficiency and discipline, and information asymmetry to be able to increase their probability to secure funds for their business sustainability and growth. This information is critical for SME owners when deciding on business status, expansion plans, and growth strategies

6.5.2. Financial Institutions

The study also presents several implications for the financial institutions in Nigeria. As the FIs are known for supporting growth and development and increasing wealth for investors, the findings from the study are essential to improve on these objectives. The study finds the lacunas in the system and the policies recommended for the parallel growth of the financial institutions and SMEs. The financial institutions' related factors also become a hindrance to easy access to financing for SMEs, which include underdeveloped financial system, low enabling environment leading to the high cost of operations, policies unsupportive of SMEs, low level of information innovation in the financial system and high-interest rates on loan. Thus, revealing these findings poses an opportunity for the Nigerian financial sectors to invest and uplift the institutions with innovation, information, and efficiency so that they can grow along with the SMEs. It is also found that some banks do select businesses to fund in real life and hence, if a particular SME does not fall in that area of businesses they have interest in funding, such businesses may not enjoy funding from such banks. It calls for even the smaller banks to increase the horizons of businesses for investment purposes, which remain unserved by the big banks. Another point of importance for the SME entails that the firms with legal status, robust ownership (limited public or private company) enjoy a better chance to secure

funds. This information is important for the owners while deciding on business status, expansion plans, and growth strategies.

6.5.3. Policy Makers

The policymakers play a vital role when it comes to SME growth and development in Nigeria, due to their ability to forge a more sustainable path forward for the economy. Based on empirical evidence, the study has clearly established that SMEs are challenged with credit rationing as they are unable to access funding through the current Nigerian financial system and the government-enabled institutions such as the Bank of Industry. However, there are some policy directions from the findings for policymakers to undertake in other to boost the current success rate of SMEs’ access to financing in Nigeria, such as a change in the application of measures based on relevant components of the financial system, especially the efficiency factors. Interest rate spread, bank concentrations and overheads are requirement for FIs successes, however, more focus should be given to policies that drive interest rate down from the current high rates. There is also the issue of focus on low level of innovation in the financial system, which does not favor the development of SME businesses. It implies that the policymakers must formulate reforms in boosting the innovation and development of the financial institutions so that they are able to support the SMEs. The primary respondents of the research further asserted that the policies framework and the regulatory environment of the current financial system do not support the growth of small- and medium-sized businesses, which calls for immediate attention by the policymakers.

From the primary findings, it is also found that government-aided loans must be initiated for supporting the SME funding needs, especially in light of the current business situation. Also, other policies that are found to be effective are reduction in tax, simplification

of lending regulation, and opening new lending channels, which must be undertaken by the policymakers to boost SME growth. Apart from this, reforms are needed in the existing financial system as well, such that the policies and regulations must be changed to reduce the interest rates on loans, eliminate exorbitant costs, boost rural banking, and provide for longer payment terms. These findings, therefore, call for alteration in rules and regulations to govern the financial system, so that economic growth through SME development becomes possible. Some other policies like strengthening the infrastructure that underpins financial transactions, including policies, rules, regulations, and institutions for developing, registering, and enforcing collateral and credit reporting instruments must also be undertaken by the regulatory authorities, to boost the growth and performance of SMEs. Another flash point is the credit and insurance guarantee which could de-risk the SME portfolio to the level of corporate loans so that credit rationing will be reduced.

6.6. Limitations of the Study

The thesis successfully achieved the pre-stated research aim and objectives, but it is not free from limitations. The main limitation pertains to the data collection. Of the six geopolitical zones in Nigeria, three zones – the Northeast, North-Central and South-South were all excluded in the study sampled SMEs. The exclusion though not premeditated but based on SMEs geo-density and activities in Nigeria. This might affect generalizability due to uncovered areas. In addition to this limitation, the limited scope of population and representative sample. Since the population for the survey comprised SMEDAN registered SMEs, the survey process might yield a different result if both registered and unregistered SMEs are drawn into the survey. Therefore, it failed to consider the large pool of informal SMEs. Thus, the sample for data collection may not be the true representation of the SME sector in Nigeria. It implies that there

is probability that the findings drawn from the research may not be applicable for the entire pool of the SME industry and requires further study. However, due to the likely similarities of SMEs within a geographical area, like Nigeria, this bias is substantially mitigated (Quartey, Turkson, Abor, & Iddrisu, 2017).

Even though the study collected both qualitative and quantitative data, the survey and interviews were conducted using online platforms. A person-to-person survey and interview could bridge the gap of interpretation and understanding of survey questions. It was basically due to the mobility restrictions owing to Covid-19, which restricted physical contact with the voluntary respondents to collect information. However, proper measures were taking in the process that mitigate the deficiencies arising from the use in the format (Evans, & Mathur, 2005).

Another important limitation is the publication bias in responses. That is, there may be some chances that the respondents, after learning about the research, or for lack of understanding or interpretation of the questions may not provide their true opinions and viewpoints, which affect the results.

6.7. Future Research

In conducting this study, the focus has been on the most critical challenge facing SMEs, access to financing. The obstacles faced by SMEs are multi-dimensional, and a further deep dive into other key issues faced by SMEs that inhibit them from contributing to the economic development in most emerging economies, especially in sub-Sahara Africa and other emerging economies, can be explored.

The adoption of credit rationing and channel of transmission theories has opened new opportunities for the application of multiple theories to analyze and contribute to the body of knowledge in the field of SME financing and development.

Furthermore, to understand industry-specific problems, the scope of the study can be narrowed, and future studies can be explored using SME sectorial formation.

Also, the current study was performed in Nigeria, but the problem of access to funding for SMEs is broad and global, thus, similar research can be performed in other countries. And a geographical comparative analysis of different factors affecting SMEs access across geography can be conducted to draw a comparison.

Finally, in the theoretical formation, the channel of distribution application of financial structure has two views, the bank-based view, and the market-based view. This study has extensively explored the bank-based approach, an in-depth analysis using the market-based view which highlights the importance of well-functioning markets in promoting economic growth by facilitating risk management and risk issues, including information asymmetry (Demirgiu-Kunt & Huizinga, 2000; Levine, 2005; OECD, 2009) should provide an interesting perspective into SMEs' access to financing.

REFERENCES

Abara, G. (2021). Role of financial institutions in the growth of micro and small enterprises in ire Dawa administration. *European Journal of Business and Management, 8*(3), 36-40, https://doi.org/10.7176/ejbm/13-5-05.

Abdullahi, I. B., & Fakunmoju, S. K. (2017). Financial inclusion and small and medium enterprises contribution to sustainable economic growth in Nigeria. *Journal of Sustainable Development in Africa, 19*(2), 52-66.

Acharya, V., & Naqvi, H. (2012). The seeds of a crisis: A theory of bank liquidity and risk taking over the business cycle. *Journal of Financial Economics, 106*(2), 349-366, https://doi.org/10.1016/j.jfineco.2012.05.014.

Ackah, J., & Vuvor, S. (2011). The challenges faced by small & medium enterprises (SMEs) in obtaining credit in Ghana. *Journal of Small Business Management, 38*(3), 53-66.

Adam, S. B. (2020). The Influence of Islamic financing on SMEs performance in Nigeria. *International Journal of Research and Innovation in Social Science (IJRISS), IV* (Ix), 593-598.

Adegboye, A. C., & Iweriebor, S. (2018). Does access to finance enhance SME innovation and productivity in Nigeria? Evidence from the World Bank enterprise survey. *African Development Review, 30*(4), 449-461, https://doi.org/10.1111/1467-8268.12351.

Adeyonu, A. G., Otunaiya, A. O., Oyawoye, E. O., & Okeniyi, F. A. (2021). Risk perceptions and risk management strategies among poultry farmers in southwest Nigeria. *Cogent Social Sciences, 7*(1), 1891719. https://doi.org/10.1080/23311886.2021.1891719.

Ahmad, N., & Hoffmann, A. (2011). A framework for addressing and measuring entrepreneurship. *SSRN Electronic Journal*, November, https://doi.org/10.2139/ssrn.1090374.

Alexy, O. T., Block, J. H., Sandner, P., & Ter Wal, A. L. J. (2012). Social capital of venture capitalists and start-up funding. *Small Business Economics*, *39*(4), 835-851, https://doi.org/10.1007/s11187-011-9337-4.

Amoo, G., Eboreime, M. I., Adamu, Y., & Belonwu, M. C. (2017). The impact of private sector credit on economic growth in Nigeria. *CBN Journal of Applied Statistics (JAS)*, *8*(2), 1.

Andries, A. M., Marcu, N., Oprea, F., & Tofan, M. (2018). Financial infrastructure and access to finance for European SMEs. *Sustainability (Switzerland)*, *10*(10), https://doi.org/10.3390/su10103400.

Annalisa F., & Mulier, K. (2015). Firms' financing constraints: Do perceptions match the actual situation? *The Economic and Social Review*, *46* (1), 87-117, https://doi.org/https://econpapers.repec.org/RePEc:eso:journl:v:46:y:2015:i:1:p: 87-117.

Archibald, M. M., Radil, A. I., Zhang, X., & Hanson, W. E. (2015). Current mixed methods practice in qualitative research: A content analysis of leading journals. *International Journal of Qualitative Methods*, *14*(2), 5-33, https://doi.org/10.1177/160940691501400205.

Arevalo, M., & Brown, L. D. (2019). Using a reasoned action approach to identify determinants of organized exercise among Hispanics: A mixed-methods study. *BMC Public Health*, *19*(1), 1-10, https://doi.org/10.1186/s12889-019-7527-1.

Ashton, J., & Keasey, K. (2005). Competition and the provision of banking services to SMEs in the UK. *Small Business Economics*, *24*(5), 477-485.

Avevor, E. E. (2016). Challenges faced by SMEs when accessing funds from financial institutions in Ghana. *University of Applied Sciences*, 65.

Ayyagari, M., Demirgüç-Kunt, A., & Maksimovic, V. (2008). How important are financing

constraints? The role of finance in the business environment. *The World Bank Economic Review*, *22*(3), 483-516, https://doi.org/10.1093/wber/lhn018.

Bai, B., Zhang, W., Li, B., Li, C., & Bai, G. (2017). Application of probabilistic and non-probabilistic hybrid reliability analysis based on dynamic substructural extremum response surface decoupling method for a blisk of the aeroengine. *International Journal of Aerospace Engineering*, *2017*, 1-11, https://doi.org/10.1155/2017/5839620.

Banerjee, A. V., & Duflo, E. (2013). Do firms want to borrow more? Testing credit constraints using a directed lending program. *Review of Economic Studies*, *81*(2), 572-607, https://doi.org/10.1093/restud/rdt046.

Banerjee, A., Duflo, E., Glennerster, R., & Kinnan, C. (2015). The miracle of microfinance? Evidence from a randomized evaluation. *American Economic Journal: Applied Economics*, *7*(1), 22-53, https://doi.org/10.1257/app.20130533.

Beck, T., & Cull, R. (2014). SME finance in Africa. *Journal of African Economies*, *23*(5), 583-613, https://doi.org/10.1093/jae/eju016.

Beck, T., & Demirguc-Kunt, A. (2006). Small and medium-sized enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, *30*(11), 2931-294, https://doi.org/10.1016/j.jbankfin.2006.05.009

Beck, T., & Maimbo, S. M. (2013). *Financial sector development in Africa: Opportunities and challenges*. The World Bank.

Beck, T., Demirgüç- Kunt, A., & Pería, M. S. M. (2011). Bank financing for SMEs: Evidence across countries and bank ownership types. *Journal of Financial Services Research*, *39*(1-2), 35-54, https://doi.org/10.1007/s10693-010-0085-4.

Beck, T., Demirgüç-Kunt, A., & Peria, M. S. M. (2008). Bank financing for SMEs around the world: Drivers, obstacles, business models, and lending practices. *World Bank Policy Research Working Paper, 4785*.

Beck, T., Levine, R., & Loayza, N. (2000). Finance and the sources of growth. *Journal of Financial Economics, 58*(1-2), 261-300, https://doi.org/10.1016/S0304- 405X (00)00072-6.

Beck, Thorsten & Asli Demirguc-Kunt (2011). Small- and medium-size enterprises: Access to finance as a growth constraint. Washington, D.C.: World Bank. http://arno.uvt.nl/show.cgi?fid=95608.

Bekhet, A. K., & Zauszniewski, J. A. (2012). Methodological triangulation: An approach to understanding data. *Nurse Researcher*, *20*(2), 40-43, https://doi.org/10.7748/nr2012.11.20.2.40.c9442.

Berger, A.N., Miller, N.H., Petersen, M.A., Rajan, R.G., & Stein, J.C. (2002). *Does function follow organizational form? Evidence from the lending practices of large and small banks*. NBER Working Papers 8752. National Bureau of Economic Research, Inc.

Berry, A. J., Sweeting, R., & Goto, J. (2006). The effect of business advisers on the performance of SMEs. *Journal of Small Business and Enterprise Development*, *13*(1), 33-47, https://doi.org/10.1108/14626000610645298

Bilgin, M. H., Marco L. C. K., & Demir, E. (2012). Technology transfer, finance channels, and SME performance: New evidence from developing countries. *The Singapore Economic Review, 57*(03), 1250020.

Black, M. and Frankel, R.S. (2021). *What Is a good credit score?* Forbes, 28 June. Retrieved from <https://www.forbes.com/advisor/credit-score/what-is-a-good-credit-score/> [Accessed 3

February 2022]

Boocock, G., & Shariff, M. N. M. (2005). Measuring the effectiveness of credit guarantee schemes: evidence from Malaysia. *International Small Business Journal*, *23*(4), 427-454.

Bouazza, A. B., Ardjouman, D., & Abada, O. (2015). Establishing the factors affecting the growth of small- and medium-sized enterprises in Algeria. *American International Journal of Social Science*, *4*(2), 101-115.

Boyatzis, R. E. (1998). Transforming qualitative information: Thematic analysis and code development. Thousand Oaks, CA: Sage.

Boyce, C. & Neale, P. (2006). *Conducting in-depth interviews: A Guide for designing and conducting in-depth interviews*. Pathfinder International Tool Series.

Boyer, T., & Blazy, R. (2014). Born to be alive? The survival of innovative and non-innovative French micro-startups. *Small Business Economics, 42*(4), 669-683, https://doi.org/10.1007/s11187-013-9522-8.

Brancati, E. (2015). Innovation financing and the role of relationship lending for SMEs. *Small Business Economics*, *44*(2), 449-473, https://doi.org/10.1007/s11187-014-9603-3.

Braun, V. & Clarke, V. 2006. Using thematic analysis in psychology. Qualitative Research in Psychology 3, 77-101

Bremus, F., & Neugebauer, K. (2018a). Reduced cross-border lending and financing costs of SMEs. *Journal of International Money and Finance, 80*, 35-58, https://doi.org/10.1016/j.jimonfin.2017.09.006.

Bremus, F., & Neugebauer, K. (2018b). Reduced cross-border lending and financing costs of SMEs.

Journal of International Money and Finance, *80*, 35-58, https://doi.org/10.1016/j.jimonfin.2017.09.006

Breuer, W., & Pinkwart, A. (2018). Venture capital and private equity finance as key determinants of economic development. *Journal of Business Economics*, *88*(3-4), 319-32, https://doi.org/10.1007/s11573-018-0892-x.

Brogi, M. & Lagasio, V. (2016). *SME sources of Funding: More Capital or More Debt to Sustain Growth? An Empirical Analysis, Access to Bank Credit and SME Financing*, in Rossi S. (eds.) Access to Bank Credit and SME Financing. Palgrave Macmillan Studies in Banking and Financial Institutions. Palgrave Macmillan.

Carter, N., Bryant- Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, *41*(5), 545-547, https://doi.org/10.1188/14.ONF.545-547.

Cavana, R., Delahaye, B., & Sekeran, U. (2001). *Applied business research: Qualitative and quantitative methods*. John Wiley & Sons.

Chilembo, T. (2021). A xtudy of the factors affecting small and medium enterprises (SMEs) Access to finance. A case of Lusaka based SMEs. *American Journal of Industrial and Business Management*, 11(5), 437- 460.

Chowdhury, M., & Alam, Z. (2017). Factors affecting access to finance of small and medium enterprises (SMEs) of Bangladesh. *USV Annals of Economics and Public Administration*, *2*(26), 55.

Coad, A., Segarra, A., & Teruel, M. (2016). Innovation and firm growth: Does firm age play a role? *Research Policy*, *45*(2), 387-400, https://doi.org/10.1016/j.respol.2015.10.015.

Cole, R. A. (2013). What do we know about the capital structure of privately held US firms? Evidence from the surveys of small business finance. *Financial Management*, *42*(4), 777-813, https://doi.org/10.1111/fima.12015.

Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed method approaches. In *Revista de Administração Contemporânea* (5th ed.) *7*(1). Sage Publications, https://doi.org/10.1590/s1415-65552003000100015.

Creswell, J. W., & Plano Clark, V. L. (2007). Choosing a mixed methods design. In L. C. Shaw (Ed.), *Designing and conducting mixed methods research* (79-83). SAGE Publications.

Dauda, A., & Akingbade, W. A. (2010). Employee's market orientation and business performance in Nigeria: Analysis of small business enterprises in Lagos State. *International Journal of Marketing Studies*, *2*(2), 134.

Degryse, H., Matthews, K., & Zhao, T. (2018). SMEs and access to bank credit: Evidence on the regional propagation of the financial crisis in the UK. *Journal of Financial Stability*, *38*, 53-70.

Demirgiu- Kunt, & Huizinga, H. (2000). Financial structure and bank profitability (Policy Research Working Paper, Issue August), https://doi.org/10.7551/mitpress/3001.003.0010.

Dowling, M., O'Gorman, C., Puncheva, P., & Vanwalleghem, D. (2019). Trust and SME attitudes towards equity financing across Europe. *Journal of World Business*, *54*(6), 101003, https://doi.org/10.1016/j.jwb.2019.101003.

Eferakeya, I. (2014). Nigerian small and medium scale enterprises' access to finance: What is the story since bank consolidation in 2005? 6(4), *International Journal of Innovation and Applied Studies*, *6*(4), 1111-1122.

Eniola, A. A., & Entebang, H. (2015a). SME firm performance – Financial innovation and challenges. *Procedia- Social and Behavioral Sciences, 195,* 334-342, https://doi.org/10.1016/j.sbspro.2015.06.361.

Eniola, A. A., & Entebang, H. (2015b). SME firm performance – Financial innovation and challenges. *Procedia – Social and Behavioral Sciences*, *195* (November), 334-342, https://doi.org/10.1016/j.sbspro.2015.06.361.

Erdogan, A. I. (2019). Determinants of perceived bank financing accessibility for SMEs: Evidence from an emerging market. *Economic Research: Ekonomska Istrazivanja 32*(1), 690-716, https://doi.org/10.1080/1331677X.2019.1578678.

Feild, L., Pruchno, R. A., Bewley, J., Lemay, E. P., & Levinsky, N. G. (2006). Using probability vs. nonprobability sampling to identify hard-to-access participants for health-related research. *Journal of Aging and Health*, *18*(4), 565-583, https://doi.org/10.1177/0898264306291420.

Ferrando, A., & Ruggieri, A. (2018). Financial constraints and productivity: Evidence from Euro area companies. *International Journal of Finance & Economics*, *23*(3), 257-282, https://doi.org/10.1002/ijfe.1615.

Forkuoh, S. K., Li, Y., Affum-Osei, E., & Quaye, I. (2015). Informal financial services: A panacea for SMEs financing? A case study of SMEs in the Ashanti region of Ghana. *American Journal of Industrial and Business Management*, *05*(12), 779-793, https://doi.org/10.4236/ajibm.2015.512075.

Forward, S., & Levin, L. (2021). A detailed approach to qualitative research methods. In *International Encyclopedia of Transportation* (39-45), Elsevier, https://doi.org/10.1016/B978-0-08-102671-7.10652-9.

Fouejieu, A., Ndoye, A., & Sydorenko, T. (2020). Unlocking access to finance for SMEs. *IMF Working Papers*, *20* (55), https://doi.org/10.5089/9781513536156.001

Franke, N., Gruber, M., Harhoff, D., & Henkel, J. (2006). What you are is what you like--similarity biases in venture capitalists' evaluations of start-up teams. *Journal of Business Venturing, 21*(6), 802-826, https://doi.org/10.1016/j.jbusvent.2005.07.001.

Freel, M., Carter, S., Tagg, S., & Mason, C. (2012). The latent demand for bank debt: Characterizing 'discouraged borrowers.' *Small Business Economics, 38*(4), 399-418, https://doi.org/10.1007/s11187-010-9283-6.

Gambetta, N., Azadian, P., Hourcade, V., & Reyes, M. (2019). The financing framework for sustainable development in emerging economies: The case of Uruguay. *Sustainability*, *11*(4), 1059. https://doi.org/10.3390/su11041059.

Gibandi, E. C., & Amissah, G. (2004). Financing options for small and medium scale enterprises in Nigeria. *Nigerian Journal of Accounting Research*, *1*(2), 327-340.

Gibson, T., & Vaart, H. J. Van De. (2008). Defining SMEs: A less imperfect way of defining small and medium enterprises in developing countries. *Brooking Global Economy and Development*, *September*, 1-29.

Gilmore, A., & Carson, D. (2000). The demonstration of a methodology for assessing SME decision making. *Journal of Research in Marketing and Entrepreneurship*, *2*(2), 108-124, https://doi.org/10.1108/14715200080001542.

Godwin-Opara, M. N. (2016). *A resource-based perspective on financial resource strategies for small business sustainability*. 143. https://doi.org/10.1111/j.1467-8616.2008.00521.x Malik.

Guest GM. and Namey, EE (2002). *Applied thematic analysis.* Thousand Oaks California: Sage.

Gupta, H. (2020). A detailed analysis of probability & non-probability sampling techniques for business research. *International Journal of Advanced Science and Technology*, *29*(4 Special Issue), 1107-1115.

Gupta, J., & Gregoriou, A. (2018). Impact of market-based finance on SMEs failure. *Economic Modelling*, *69*(September), 13-25, https://doi.org/10.1016/j.econmod.2017.09.004.

Hadlock, C. J., & Pierce, J. R. (2010). New evidence on measuring financial constraints: Moving beyond the KZiIndex. *Review of Financial Studies*, *23*(5), 1909-1940, https://doi.org/10.1093/rfs/hhq009.

Halme, M., & Korpela, M. (2014). Responsible innovation toward sustainable development in small- and medium-sized enterprises: A resource perspective. *Business Strategy and the Environment*, *23*(8), 547-566, https://doi.org/10.1002/bse.1801

Harrigan, P., Ramsey, E., & Ibbotson, P. (2012). Exploring and explaining SME marketing: investigating e-CRM using a mixed methods approach. *Journal of Strategic Marketing*, *20*(2), 127-163, https://doi.org/10.1080/0965254X.2011.606911.

Hassan Al-Tamimi, H. A. (2010). Factors influencing performance of the UAE Islamic and conventional national banks. *Global Journal of Business Research*, *4*(2), 1-9.

Henard, D. H., & McFadyen, M. A. (2012). Resource dedication and new product performance: A resource-based view. *Journal of Product Innovation Management*, *29*(2), 193-204, https://doi.org/10.1111/j.1540-5885.2011.00889.x.

Hirsch, B., Nitzl, C., & Schoen, M. (2018). Inter-organizational trust and agency costs in credit relationships between savings banks and SMEs. *Journal of Banking and Finance*, *97*, 37-50,

https://doi.org/10.1016/j.jbankfin.2018.09.017.

Ioniţă, D. (2019). Success and goals: An exploratory research in small enterprises. *Procedia Economics and Finance, 6*, 503-511, https://doi.org/10.1016/S2212-5671 (13)00168-8.

Isaac, O., & Ph, O. (2015). Capital market operations and SMEs' financing in a developing economy: A conceptual evaluation of the Nigerian stock market. *Research Journal of Finance and Accounting*, *6*(10), 12-18.

Jin, Y., & Zhang, S. (2019). Credit rationing in small and micro enterprises: A theoretical analysis. *Sustainability (Switzerland)*, *11*(5), https://doi.org/10.3390/su11051330.

Johnson, R., & Christensen, L. (2008). *Educational research: Quantitative, qualitative, and mixed approaches.* Sage Publications.

Jr, J. F. H., Black, W. C., Babin, B. J., Anderson, R. E., Black, W. C., & Anderson, R. E. (2018). *Multivariate Data Analysis*. 2(1), https://doi.org/10.1002/9781119409137.ch4.

Judith, M. N., & Chijindu, E. H. (2017). Relationship between financial development and economic growth in Nigeria: A triangulation approach. *International Journal of Economics and Financial Issues*, *6*(4), 1842-1850.

Karnani, A. (2007). Micro-finance misses its mark, *Stanford Social Innovation Review*, *May*, 34-40.

Kauffmann, C. (2006). Financing SMEs in Africa, OECD Development Centre, Policy Insight, No. 7, OECD, Paris.

Kellogg, C. G. (2009). Evaluating poverty outreach of small business lending: A study of BRAC Bank, Bangladesh. *Enterprise Development and Microfinance*, *20*(3), 188-204, https://doi.org/10.3362/1755-1986.2009.019.

Kijkasiwat, P. (2021). The influence of behavioral factors on SMEs' owners' intention to adopt private finance. *Journal of Behavioral and Experimental Finance, 30,* https://doi.org/10.1016/j.jbef.2021.100476.

Kim, H. T., & Nguyen, Q. (2021). Managers' loss aversion and firm debt financing: Some insights from Vietnamese SMEs. *Finance Research Letters*, 102046. https://doi.org/10.1016/j.frl.2021.102046.

Kisseih, K. G. (2017). The impacts of interest rate fluctuations on the growth of small and medium enterprises (SMEs) in Accra. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 7*(2), 44-53.

Klenke, K. (2016). Mixed methods (MMs) in leadership research. In *Qualitative Research in the Study of Leadership* (151-175). Emerald Group Publishing Limited, https://doi.org/10.1108/978-1-78560-651-920152008.

Kraemer, K. L., & Pinsonneault, A. (1993). Survey research methodology in management information systems: An assessment. *Journal of Management Information Systems*, *10*(2), 75-105.

Krasniqi, B. A. (2010). Are small firms really credit constrained? Empirical evidence from Kosovo. *International Entrepreneurship and Management Journal*, *6*(4), 459-479, https://doi.org/10.1007/s11365-010-0135-2.

Kyei-Boadu, N. S. (2017). *SMEs external financing preference and its impact on growth*. *June*. http://ugspace.ug.edu.gh/bitstream/handle/123456789/23552/SMES External Financing Preference and Its Impact on Growth.pdf?sequence=1&isAllowed=y.

La, M., Tiziana, R. E., & Rocca, L. (2011). *Capital structure decisions during a firm's life cycle*.

Small Business Economics, Springer, 37(1), 107-130, https://doi.org/10.1007/s11187-009-9229-z

Lawal, F. A., Iyiola, O. O., & Adegbuyi, O. A. (2018). Exploring alternative financing for entrepreneurship development in Nigeria: Surmounting challenges. *Journal of Entrepreneurship Education*, *21*(2), 1-7.

Lee, N., Sameen, H., & Cowling, M. (2015). Access to finance for innovative SMEs since the financial crisis. *Research Policy*, *44*(2), 370-380, https://doi.org/10.1016/j.respol.2014.09.008.

Levine, R. (2000). Bank-based or market-based financial systems: Which is better? *Journal of Financial Intermediation*, *11*(4), 398-428, https://doi.org/10.1006/jfin.2002.0341.

Levine, R. (2005). Finance and growth: Theory and evidence. *Handbook of economic growth*, *1*(SUPPL. PART A), 86-934, https://doi.org/10.1016/S1574-0684 (05) 01012-9.

Li, Y., & Zahra, S. A. (2012). Formal institutions, culture, and venture capital activity: A cross-country analysis. *Journal of Business Venturing*, *27*(1), 95-111, https://doi.org/10.1016/j.jbusvent.2010.06.003.

Lin, J. Y., Sun, X., & Jiang, Y. (2009). Toward a theory of optimal financial structure. The World Bank, https://doi.org/10.1596/1813-9450-5038.

Lin, M. S., Song, H. J., Sharma, A., & Lee, S. (2020). Formal and informal SME financing in the restaurant industry: The impact of macro environment. *Journal of Hospitality and Tourism Management*, *45*(July), 276-284, https://doi.org/10.1016/j.jhtm.2020.08.017.

MacKay, P., & Phillips, G. M. (2005). How does industry affect firm financial structure? *Review of Financial Studies*, *18*(4), 1433-1466, https://doi.org/10.1093/rfs/hhi032.

Mamman, A., & Hashim, Y. A. (2013). Impact of private sector credit on the real sector of Nigeria. *International Journal of Business and Social Research (IJBSR), 3*(5), 105-116.

Mättö, M., & Niskanen, M. (2019). Religion, national culture, and cross-country differences in the use of trade credit: Evidence from European SMEs. *International Journal of Managerial Finance*, *15*(3), 350-370, https://doi.org/10.1108/IJMF-06-2018-0172.

Maula, M., Autio, E., & Arenius, P. (2005). What drives micro-angel investments? *Small Business Economics*, *25*(5), 459-475, https://doi.org/10.1007/s11187-004-2278-4.

Mazanai, M., & Fatoki, O. (2012). Perceptions of start-up small and medium-sized enterprises (SMEs) on the importance of business development services providers (BDS) on improving access to finance in South Africa. *Journal of Social Sciences*, *30*(1), 31-41, https://doi.org/10.1080/09718923.2012.11892980.

Mehjabeen, D. M. (2020). Distributing stimulus package through banking channel Impact on the banking sector. *The Financial Express*. https://thefinancialexpress.com.bd/views/views/distributing-stimulus-package-through-banking-channel-impact-on-the-banking-sector-1590163507.

Michael, O. B., & Oluseye, B. S. (2014). Sustainable development reporting practices by Nigerian banks. *Mediterranean Journal of Social Sciences*, *5*(23), 2535-2544, https://doi.org/10.5901/mjss.2014.v5n23p2535.

Molina-Azorín, J. F. (2007). Mixed methods in strategy research: Applications and implications in the resource-based view. *Research Methodology in Strategy and Management* (37-73), https://doi.org/10.1016/S1479-8387 (07) 04003-9.

Moradi, Z. S., Mirzaeenejad, M., & Geraeenejad, G. (2016). Effect of bank-based or market-based

financial systems on income distribution in selected countries. *Procedia Economics and Finance, 36*(16), 510-521, https://doi.org/10.1016/s2212-5671 (16)30067-3.

Moreira, D. F. (2016). The microeconomic impact on growth of SMEs when the access to finance widens: Evidence from internet & high-tech industry. *Procedia - Social and Behavioral Sciences, 220* (March), 278-287, https://doi.org/10.1016/j.sbspro.2016.05.500.

Mori, N. G. (2014). *Access to finance for SMEs*. *December 2009*, 121-136, https://doi.org/10.1787/9789264218413-14-en.

Moro, A., & Fink, M. (2013a). Loan managers' trust and credit access for SMEs. *Journal of Banking and Finance, 37*(3), 927-936, https://doi.org/10.1016/j.jbankfin.2012.10.023.

Moro, A., & Fink, M. (2013b). Loan managers' trust and credit access for SMEs. *Journal of Banking & Finance, 37*(3), 927-936, https://doi.org/10.1016/j.jbankfin.2012.10.023

Moscalu, M., Girardone, C., & Calabrese, R. (2019). SMEs' growth under financing constraints and banking markets integration in the euro area. *Journal of Small Business Management*, *00*(00), 1-40, https://doi.org/10.1080/00472778.2019.1668722.

Muneer, S., Ali, A., & Ahmad, R. A. (2017). Impact of financing on small and medium enterprises (SMEs) profitability with moderating role of Islamic finance. *Information Management and Business Review, 9*(2), 25-32, https://doi.org/10.22610/imbr.v9i2.1720.

Nations Encyclopedia. (nd). *Nigeria- Agriculture*. Retrieved from <https://www.nationsencyclopedia.com/economies/Africa/Nigeria-AGRICULTURE.html> [Accessed 23 February 2022]

Navarro-Rivera, J., & Kosmin, B. A. (2013). Surveys and questionnaires. *The Routledge handbook of research methods in the study of religion*, 395-420, https://doi.org/10.4324/9780203154281-

35.

Nemlioglu, I., & Mallick, S. (2020). Does multilateral lending aid capital accumulation? Role of intellectual capital and institutional quality. *Journal of International Money and Finance*, *108*, 102155, https://doi.org/10.1016/j.jimonfin.2020.102155.

Nkuah, J. K., Paul, J., & Kala, T. (2013). Financing small and medium enterprises (SMEs) in Ghana: Challenges and determinants in accessing bank credit. *International Journal of Research in Social Sciences*, *2*(3), 12-25.

Noble, H., & Heale, R. (2019). Triangulation in research, with examples. *Evidence-Based Nursing*, *22*(3), 67-68, https://doi.org/10.1136/ebnurs-2019-103145.

Nofsinger, J. R., & Wang, W. (2011). Determinants of start-up firm external financing worldwide. *Journal of Banking and Finance*, *35*(9), 2282-2294, https://doi.org/10.1016/j.jbankfin.2011.01.024.

Obamuyi, T. M. (2007). An exploratory study of loan delinquency among small and medium enterprises (SMEs) in Ondo State of Nigeria. *Labor and Management in Development Journal*, *8*(1), 1-11.

Obokoh, O. L., Unam, M. J., & Ojiako, U. (2016). Microfinance banks and small and medium sized enterprises access to finance: The Nigerian experience. *Banks and Bank Systems*, *11*(4), 111-121, https://doi.org/10.21511/bbs. 11(4-1). 2016.01.

Odia, J. O., & Odia, A. A. (2013). Developing entrepreneurial skills and transforming challenges into opportunities in Nigeria. *Journal of Educational and Social Research*, https://doi.org/10.5901/jesr.2013.v4n3p289.

OECD (2009). *Competition and financial markets*.

OECD (2012). *Enhancing the contributions of SMEs in a global and digitalized economy*. OECD, Paris.

OECD (2017). *SME Access to External Finance* (Issue 16).

OECD (2020). *Financing SMEs and entrepreneurs: Understanding and developing an OECD scoreboard*, https://doi.org/10.1787/9789264166769-3-en.

Ogbonna, O. E., Mobosi, I. A., & Ugwuoke, O. W. (2020). Economic growth in an oil-dominant economy of Nigeria: The role of financial system development. *Cogent Economics & Finance*, *8*(1), 1810390.

Ogujiuba, K., & Obiechina, E. M. (2011). Financial sector reforms in Nigeria: Issues and challenges. *International Journal of Business and Management*, *6*(6), https://doi.org/10.5539/ijbm.v6n6p222

Oke, & Aluko, O. A. (2015). Impact of commercial banks on small and medium enterprises financing In Nigeria. *IOSR Journal of Business and Management Version 1*, *17*(4), 2319-7668, https://doi.org/10.9790/487X-17412326.

Oladepo, O. I., & Ajoseh, H. J. (2015). Capital market operations and SMEs' financing in a developing economy: A conceptual evaluation of the Nigerian stock market. *Research Journal of Finance and Accounting*, *6*, 12-17.

Ololade, R. A., & Olagunju, F. I. (2013). *Determinants of access to credit among rural farmers in Oyo State, Nigeria*. *13* (2).

Olomi, D. R., & Mori, N. (2010). *Recent African experience in SME financing – A case of CRDB bank LTD (Tanzania) a presentation paper*. *June*.

Osano, H. M., & Languitone, H. (2015). Factors influencing access to finance by SMEs in Mozambique: Case of SMEs in Maputo central business district. *Journal of Innovation and Entrepreneurship*, *5*(1), https://doi.org/10.1186/s13731-016-0041-0.

Owolabi, O. A., & Nasiru, A. (2017). Deposit money bank credit to small and medium enterprises, socio-economic performance, and economic growth in Nigeria. *International Journal of Development and Sustainability*, *6*(10), 1218-1485.

Oyelaran-Oyeyinka, B. (2020). SME: Issues, challenges, and prospects. *FSS 2020 International Conference*.

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2013). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, *42*(5), 533-544.

Pandya, V. M. (2012, September). Comparative analysis of development of SMEs in developed and developing countries. In *The 2012 International Conference on Business and Management* (6-7).

Peltoniemi, J., & Vieru, M. (2013). Personal guarantees, loan pricing, and lending structure in Finnish small business loans. *Journal of Small Business Management*, *51*(2), 235-255, https://doi.org/10.1111/jsbm.12015.

Petersen, M.A. (2004). *Information: Hard and soft.* Working paper. Northwestern University and NBER.

Piperopoulos, P. (2010). Qualitative research in SMEs and entrepreneurship: A literature review of case study research. *International Journal of Economics and Business Research*, *2*(6), 494,

https://doi.org/10.1504/IJEBR.2010.035701.

Pradhan, P., Costa, L., Rybski, D., Lucht, W., & Kropp, J. P. (2017). A systematic study of sustainable development goal (SDG) interactions. *Earth's Future*, *5*(11), 1169-1179, https://doi.org/10.1002/2017EF000632.

Pula, J. S., & Berisha, G. (2015). Defining Small and Medium Enterprises: A critical review. *Academic Journal of Business, Administration, Law, and Social Science*, *1*(1), 16-28, https://doi.org/ISSN 2410-3918.

QSR International. (nd). *Cases*. Retrieved from <https://help-nv.qsrinternational.com/12/win/v12.1.110-d3ea61/Content/cases/cases.htm> [Accessed 11 March 2022]

Quartey, P., Turkson, E., Abor, J. Y., & Iddrisu, A. M. (2017). Financing the growth of SMEs in Africa: What are the constraints to SME financing within ECOWAS? *Review of Development Finance*, *7*(1), 18-28, https://doi.org/10.1016/j.rdf.2017.03.001.

Quaye, I., & Sarbah, A. (2014). Assessing alternative sources of financing for small & medium scale enterprises in Ghana: Case study of savings and loans companies (S&Ls) in the Greater Accra Region of Ghana. *International Journal of Advanced Research & Technology*, *3*(7), 123-136.

Racheal, J. C., & Uju, M. (2018). The role of commercial banks in financing small & medium size enterprises in Nigeria: A study of selected banks and firms in Anambra State, Nigeria. *European Journal of Economic and Financial Research*, *3*(1), 1-32, https://doi.org/10.5281/zenodo.1143751

Rioja, F., & Valev, N. (2014). Stock markets, banks, and the sources of economic growth in low and high-income countries. *Journal of Economics and Finance*, *38*(2), 302-320,

https://doi.org/10.1007/s12197-011-9218-3.

Robb, A. M., & Robinson, D. T. (2014). The capital structure decisions of new firms. *Review of Financial Studies, 27*(1), 153-179, https://doi.org/10.1093/rfs/hhs072.

Rocca, M. La, Rocca, T. La, & Cariola, A. (2010). *Small business financing. Financial preferences throughout the life cycle of a firm*. *August*, 1-31, http://www.efmaefm.org/0EFMAMEETINGS/EFMA ANNUAL MEETINGS/2009-milan/EFMA2009_0476_fullpaper.pdf.

Rojas- Suarez, L. (2010). Access to financial services in emerging powers: Facts, obstacles, and policy implications. *Washington DC: Center for Global Development*, *March*, 1-42.

Rumler, F., & Waschiczek, W. (2016). Have changes in the financial structure affected bank profitability? Evidence for Austria. *The European Journal of Finance*, *22*(10), 803-824, https://doi.org/10.1080/1351847X.2014.984815.

Rupeika-Apoga, R. (2014). Financing in SMEs: Case of the Baltic States. *Procedia – Social and Behavioral Sciences*, *150*, 116-125, https://doi.org/10.1016/j.sbspro.2014.09.013.

Saito, K., & Tsuruta, D. (2014). Information asymmetry in SME credit guarantee schemes: Evidence from Japan. *Discussion papers*, *14042*.

Saqib, N. (2018). Review of literature on finance-growth nexus. *SSRN Electronic Journal*, *December 2015*, https://doi.org/10.2139/ssrn.3288751.

Sasu, D.D. (2022). Main languages spoken at home in Nigeria 2020. Statista, 1 February. Retrieved from https://www.statista.com/statistics/1268798/main-languages-spoken-at-home-in-nigeria/ [Accessed 22 February 2022]

Saunders, M., Lewis, P., & Thornhill, A. (1997). *Research methods for business students* (5th ed.).

Savignac, F. (2008). Impact of financial constraints on innovation: what can be learned from a direct measure? *Economics of Innovation and New Technology, 17*(6), 553-569, https://doi.org/10.1080/10438590701538432

Schonfeld, S, I., & Farrell, E. (2010). Qualitative methods can enrich quantitative research on occupational stress: An example from one occupational group. In P. L. Perrewé & D. C. Ganster (Eds.), *New developments in theoretical and conceptual approaches to job stress* (137-197). Emerald Group Publishing, https://doi.org/10.1108/S1479-3555(2010)0000008007.

Shamsudeen, K., Keat, O., & Hassan, H. (2015). Relationship between some determinants of SMEs performance in Nigeria: A pilot test. *International Journal of Management Research Review, 5*(10), 957-963.

Shen, Y., Shen, M., Xu, Z. & Bai, Y. (2009). Bank Size and Small- and Medium-sized Enterprise (SME) Lending: Evidence from China. *World Dev.*, 37(4): 800–811.

Shinozaki, S. (2013). A new regime of SME finance in emerging Asia. *ADP Working Paper Series, 104*.

Slater, S. F., & Atuahene-Gima, K. (2004). Conducting survey research in strategic management. *Research Methodology in Strategy and Management, 1*, 227-249, https://doi.org/10.1016/S1479-8387 (04)01108-7.

SMEDAN (2020). MSME Survey Report by Small and Medium Enterprise Development Agency of Nigeria. National Bureau of Statistics (NBS).

SMEDAN (2021). MSME Survey Report by Small and Medium Enterprise Development Agency of Nigeria. National Bureau of Statistics (NBS).

SMEDAN. (2013). SMEDAN and National Bureau of Statistics Collaborative Survey: selected findings (2013). In *SMEDAN/NBS MSME Survey*.

Somoye, R. C. O. (2013). The impact of finance on entrepreneurship growth in Nigeria: A co-integration framework. *ACRN Journal of Entrepreneurship Perspectives*, *2*(2), 21-45.

Song, H., Yang, X., & Yu, K. (2020). How do supply chain networks and SMEs' operational capabilities enhance working capital financing? An integrative signaling view. *International Journal of Production Economics*, *220*, 107447, https://doi.org/10.1016/j.ijpe.2019.07.020.

Steinerowska-Streb, I., & Steiner, A. (2014). An analysis of external finance availability on SMEs' decision making: A case study of the emerging market of Poland. *Thunderbird International Business Review*, *56*(4), 373-386, https://doi.org/10.1002/tie.21627.

St-Pierre, J., Sakka, O., & Bahri, M. (2018). External financing, export intensity, and inter-organizational collaborations: Evidence from Canadian SMEs. *Journal of Small Business Management*, *56*, 68-87, https://doi.org/10.1111/jsbm.12390.

Szerb, L., Rappai, G., Makra, Z., & Terjesen, S. (2007). Informal investment in transition economies: Individual characteristics and clusters. *Small Business Economics*, *28*(2-3), 257-271, https://doi.org/10.1007/s11187-006-9019-9.

Tagoe, N., Nyarko, E., & Anuwa-Amarh, E. (2005). Financial challenges facing urban SMEs under financial sector liberalization in Ghana. *Journal of Small Business Management*, *43*(3), 331-343, https://doi.org/10.1111/j.1540-627X.2005.00140.x.

Taherdoost, H. (2016). Sampling methods in research methodology: How to choose a sampling technique for research. *International Journal of Academic Research in Management (IJARM)*, *5*(2), 18-27.

Taiwo, J. N. (2016). SMEs financing and its effects on Nigerian economic growth background of the study. *European Journal of Business, Economics, and Accountancy, 4*(4), 37-54.

Tashakkori, A., & Teddlie, C. (2003). *Handbook of mixed methods in social & behavioral research,* Sage.

The World Bank (2006). *Making finance work for Africa*, Washington: World Bank.

The World Bank. (1999). *Bank-based and Market-based financial systems: Cross-country comparisons* Asli Demirguc-Kunt and Ross Levine. June.

The World Bank. (2021). *Small and medium enterprises (SMEs) finance--Improving SMEs' access to finance and finding innovative solutions to unlock sources of capital.* Retrieved July 19, 2021, from https://www.worldbank.org/en/topic/smefinance.

Timans, R., Wouters, P., & Heilbron, J. (2019). Mixed methods research: What it is and what it could be. *Theory and Society, 48*(2), 193-216, https://doi.org/10.1007/s11186-019-09345-5.

Trovato, G., & Alfò, M. (2006). Credit rationing and the financial structure of Italian small and medium enterprises. *Journal of Applied Economics*, *9*(1), 167-184, https://doi.org/10.1080/15140326.2006.12040643.

Udeh, S.N., Onwuka, I. O., & Agbaeze, E. (2015). Resolving Nigeria's dependency on oil — The derivation model. *Journal of African studies and development*, 7(1), 1-14.

Uhlaner, L. M., Berent-Braun, M. M., Jeurissen, R. J. M., & de Wit, G. (2012). Beyond size: Predicting engagement in environmental management practices of Dutch SMEs. *Journal of Business Ethics, 109*(4), 411-429, https://doi.org/10.1007/s10551-011-1137-x.

Ujunwa, A., Salami, O. P., Nwakoby, I., & Umar, A. H. (2012). Financial structure and economic

growth in Nigeria: Theory and evidence. *International Journal of Economics and Finance*, *4*(4), https://doi.org/10.5539/ijef.v4n4p227.

Ullah, B. (2020). Financial constraints, corruption, and SME growth in transition economies. *The Quarterly Review of Economics and Finance, 75*, 120-132, https://doi.org/10.1016/j.qref.2019.05.009.

United Nations Population Fund. (2021). *World Population Dashboard Nigeria*. https://www.unfpa.org/data/world-population/NG.

Usman, H., Isah, S., & Tanko, A. I. (2018). The role of financial institutions in financing small and medium enterprises in Nigeria. *IIARD International Journal of Economics and Business Management*, *4*(4), 83-90.

Ussif, R. & Salifu, K. (2020). Contributions of small & medium enterprises to economic developments in sub-Saharan Africa. *Impact of Information Communication Technological Change on Performance of SMEs in Ghana and Turkey,* 4(3), 63-78.

Valentin, A., & Wolf, B. (2013). Credit guarantee schemes and their impact on SME lending: Existing literature and research gaps. *International Journal of Entrepreneurial Venturing*, *5*(4), 391, https://doi.org/10.1504/IJEV.2013.058168.

Veiga, G. M., & McCahery, J. A. (2019). The financing of small and medium-sized enterprises: An analysis of the financing gap in Brazil. *European Business Organization Law Review 20*(4), Springer International Publishing, https://doi.org/10.1007/s40804-019-00167-7.

Wagner, J. (2014). Credit constraints and exports: A survey of empirical studies using firm-level data. *Industrial and Corporate Change*, *23*(6), 1477-1492, https://doi.org/10.1093/icc/dtu037.

Waked, B. (2016). Access to finance by Saudi SMEs: Constraints and the impact on their

performance, Bandar Waked Thesis submitted in partial fulfillment of the requirement for the award College of Business, *May*. https://vuir.vu.edu.au/32466/.

Wang, X., Han, L., & Huang, X. (2020). Bank market power and SME finance: Firm-bank evidence from European countries. *Journal of International Financial Markets, Institutions, and Money*, *64*, 101162. https://doi.org/10.1016/j.intfin.2019.101162.

Wang, Y. (2016). What are the biggest obstacles to growth of SMEs in developing countries? An empirical evidence from an enterprise survey. *Borsa Istanbul Review*, *16*(3), 167-176, https://doi.org/10.1016/j.bir.2016.06.001.

Watse, D. U. (2017). Sources of financing for small and medium enterprises in Nigeria. *Walden University Dissertation and Doctoral Studies Collection*, 1-178. https://scholarworks.waldenu.edu/dissertations.

Wehinger, G. (2012). Bank deleveraging, the move from bank to market-based financing, and SME financing. *OECD Journal: Financial Market Trends*, *2012*(1), 65-79, https://doi.org/10.1787/fmt-2012-5k91hbvfh9g3

Wellalage, N. H., & Fernandez, V. (2019). Innovation and SME finance: Evidence from developing countries. *International Review of Financial Analysis*, *66*, 101370, https://doi.org/10.1016/j.irfa.2019.06.009.

Welsh, E. (2002). Dealing with data: Using NVivo in the qualitative data analysis process. forum: Qualitative social research. 3**,** Retrieved from https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home [Accessed 20 February 2022].

Widya-Hasuti, A., Mardani, A., Streimikiene, D., Sharifara, A., & Cavallaro, F. (2018). The role of process innovation between firm-specific capabilities and sustainable innovation in SMEs:

Empirical evidence from Indonesia. *Sustainability (Switzerland)*, *10*(7), https://doi.org/10.3390/su10072244

Wiśniowski, A., Sakshaug, J. W., Perez Ruiz, D. A., & Blom, A. G. (2020). Integrating probability and nonprobability samples for survey inference. *Journal of Survey Statistics and Methodology*, *8*(1), 120-147, https://doi.org/10.1093/jssam/smz051.

Wolfson, M. H. (1996). A Post Keynesian theory of credit rationing. *Journal of Post Keynesian Economics*, *18*(3), 443-470, https://doi.org/10.1080/01603477.1996.11490081.

Yang, Y., & Yan, B. I. (2012). The impact on interest rate of manufacturing SMEs lending by the relationship between banks and SMEs: Evidence from Xuzhou and Liuzhou [J]. *On Economic Problems*, *7*.

Ye, J., & Kulathunga, K. M. M. C. B. (2019). How does financial literacy promote sustainability in SMEs? A developing country perspective. *Sustainability (Switzerland)*, *11*(10), 1-21, https://doi.org/10.3390/su11102990.

Yinusa, O. G. (2016). SME Credit financing, financial development and economic growth in Nigeria. *African Journal of Economic Review*, *4*(2), 1-15.

Yoshino, N, & Taghizadeh-Hesary, F. (2016). Major challenges facing small- and medium-sized enterprises in Asia and solutions for mitigating them. ADBI Working Paper 564, Tokyo: Asian Development Bank Institute. http://www.adb.org/publications/majorchallenges-facing-small-and-medium-sized-enterprises-asia-and-solutions/.

Yoshino, N, and F. Taghizadeh-Hesary. (2017*). Solutions for mitigating SMEs' difficulties in accessing finance: Asian experiences*. ADBI Working Paper 768. Tokyo: Asian Development Bank Institute. Retrieved from <https://www.adb.org/publications/solutions-smesdifficulties-

accessing-finance-asian-experiences> [Accessed 21 February 2022]

Yu, J., & Fu, J. (2021). Credit rationing, innovation, and productivity: Evidence from small-and medium-sized enterprises in China. *Economic Modelling*, *97*(February), 220-230, https://doi.org/10.1016/j.econmod.2021.02.002

Zhao, T., & Jones-Evans, D. (2017). SMEs, banks, and the spatial differentiation of access to finance. *Journal of Economic Geography*, *17*(4), 791-824.

Zhao, X., Wang, Z., & Deng, M. (2019). Interest rate marketization, financing constraints and R & D investments: Evidence from China. *Sustainability (Switzerland)*, *11*(8), 1-17, https://doi.org/10.3390/su11082311.

Zhuang, J., Gunatilake, H., Niimi, Y., Khan, M. E., Jiang, Y., Hasan, R., Khor, N., Lagman-Martin, A. S., Bracey, P., & Huang, B. (2009). Financial sector development, economic growth, and poverty reduction: A literature review. *ADB Economics Working Paper Series*, *173*(173), 1-48, https://doi.org/10.2139/ssrn.1617022

Zott, C., & Amit, R. (2007). Business model design and the performance of entrepreneurial firms. *Organization Science*, *18*(2), 181-199, http://www.jstor.org/stable/25146093.

Zubair, S., Kabir, R., & Huang, X. (2020). Does the financial crisis change the effect of financing on investment? Evidence from private SMEs. *Journal of Business Research*, *110*(January), 456-463, https://doi.org/10.1016/j.jbusres.2020.01.063.

APPENDICES

Appendix 1. Survey Questionnaires

Title: The Impact of the Financial System and its channels on SMEs' access to financing: A Nigerian Perspective

Dr. Wes Johnston (dissertation chair), and Akinwande Ademosu (candidate)

The main research question:

" What is the impact of Financial System on SMEs' Access to Financing in Nigeria?"

Dear Respondent,

This survey is carried out to assess Small and Medium Enterprises' (SMEs) access to Financing, and impact of the Financial System on SMEs' access to financing in Nigeria.

Note*: Each survey statement/question has multiple possible responses. To complete the survey, kindly respond to each statement/question as it applies to your organization.*

Thank you for taking time to support this survey and the research work.

PART ONE: CHARACTERISTICS AND NATURE OF YOUR BUSINESS

A.1. What industry sector do you operate in? Pls tick√ ( )		
	Agriculture & forestry & fishing	
	Manufacturing - Processing & Food from agricultural activities and manufacturing of food from non-agricultural activities/ (tobacco and beverages) / garment making	
	Manufacturing: mining, paper, plastic, chemical, pharmaceutical, machinery, car assembly, electronics, home appliances, crafts, small hydropower stations, other	
	Construction - General construction (including general building & civil engineering)	
	Logistics/transportation	
	Retail Trade & Repairs (motor only)	
	Hotels & restaurants	
	Business services (auditing and accounting, financial consulting, legal, other business consulting/services)	
	ICT and high value-added sectors (cinema, industrial engineering, web design, fashion etc.	
	Other, please specify	
A.2. Including yourself, how many people are currently employed in your business?		
1	<10	( )
2	11-20	( )
3	20-49	( )
4	50-100	( )
5	101-249	( )
6	249 and above	( )

A.3. What is the current legal status of this business?		
1	Shareholding company with shares traded in the stock market	( )
2	Shareholding company with non-traded shares or shares traded privately	( )
3	Sole proprietorship or partnerships	( )
4	Others	( )
A.4. In what year did this business begin operations?		
1	Before 1990	
2	1991- 2000	( )
3	2001 - 2010	( )
4	2011-2020	( )
A.5. What was your business' turnover in the financial year, as per the following bands?		
1	<N1, 000,000	
2	N1,500,000 – N2, 000,000	
3	N2.5m –N5m	
4	N5.5m – N9m	
5	N10m and above	

PART TWO: FINANCIAL SYSTEM CHARACTERISTICS AND ENVIRONMENT

B.1	**Indicate your agreement or disagreement by scoring each question using the following scale: 1 (strongly disagree); 2 (somewhat disagree); 3 (neither agree nor disagree); 4 (somewhat agree); 5 (strongly agree)**		Strongly Disagree	Disagree	Somewhat Disagree	Agree	Strongly Agree
1	The financial system in Nigeria is not developed	NA	1	2	3	4	5
2	The cost of operations is high due to a lack of an enabling environment	NA	1	2	3	4	5
3	The financial institutions including commercial banks in Nigeria are supportive of the growth of small businesses	NA	1	2	3	4	5
4	There is a low level of innovation in the financial system to enable	NA	1	2	3	4	5
5	The interest rate on loans is too high to support businesses and affect the ability of the business to access loans	NA	1	2	3	4	5
6	The business is able to access the funds through the current Nigerian capital market	NA	1	2	3	4	5
7	The institutions such as the Bank of Industry is making efforts to help small and medium-sized businesses	NA	1	2	3	4	5
8	The policies and the regulatory framework of the financial system in Nigeria does not support the growth of small and medium-sized businesses	NA	1	2	3	4	5

9	Lending institutions are not involved in the growth of the businesses they lend to	NA	1	2	3	4	5
10	Financial practices in the Nigerian financial system is not for the development of SME businesses	NA	1	2	3	4	5

Note; NA (Not Applicable)

PART THREE: ENABLERS AND BARRIERS TO FUNDING

C.1a. Have you ever been successful (meaning, you were able to access at least 75% of required funding) in receiving funds from any financial institution like banks?

1. **Yes ( )**
2. **No ( )**
3. **I am not interested ( )**

C. 1b. Referring only to the most recent application for a line of credit or loan, what was the outcome of that application?

1. Application was approved ( )
2. Application was rejected ( )
3. Application still in process ( )

C.2. If yes, (from C1a) what did you consider to be the factors that enabled you access finance Tick ( )

1	Access to collateral	( )
2	Level of business profit or potential	( )
3	Trustworthy credit history	( )
4	Personal relationship with bankers	( )
5	Others:	

C.3. if no, (from C1a) what were the reasons you were rejected access to funding or insufficient funding (i.e less than 75% of required funding)? Tick ( )

1	Collateral or co-signers unacceptable	( )
2	Insufficient profitability	( )
3	Problems with credit history or credit report	( )
4	Inadequate financial information	( )

5	Concerns about level of debt already incurred	( )
6	Business size	( )
7	Sectorial focus	( )
8	Industry maturity stage	( )
9	Level of education	( )
10	Credibility/ reputation	( )
11	Other objections…..	( )

C.4. In your own opinion, if you want to get a loan from a financial institution, how important are the following factors? Please note we want to hear your own view NOT the lender's.			Absolutely Unimporta	Unimporta nt	Somewhat Important	Important	Absolutely Important
1	Convenient location of financial institution	NA	1	2	3	4	5
2	Quick disbursement of loan (quick processing of loan application)	NA	1	2	3	4	5
3	Quality of service of financial institution's staff	NA	1	2	3	4	5
4	Low interest rate/cost of borrowing	NA	1	2	3	4	5
5	Convenient repayment period	NA	1	2	3	4	5
6	Absence of requirement for immovable property as collateral		1	2	3	4	5
7	Availability of other financial services from same financial institution		1	2	3	4	5

PART FOUR: SOURCES OF FUNDING

NOTES: Based on objective 3: a. Identify the main barriers to access funding. B. The factors that aided the SMEs to be successful at accessing loans.

D.1. if you were able to access funding, (from C1) which of the financial institutions did you get?
Please list them here

____

D.2 If you weren't able to get from financial institutions, (from C1) what other sources were you able to get?

1	Individual Money lenders	
2	Non-bank credit institution / Non-bank financial institutions (including microfinance institutions, credit cooperatives, credit unions)	
3	Family and friends	
4	Other non-bank financial institutions (angel funds, venture capital, etc.)	
5	Others	

D.3.If you were successful in accessing loans, (from C1a) what was your major reason for accessing funds from a financial institution
Tick (√)
1. Business expansion or opening new branches ( )
2. Payment of existing debt ( )
3. Working capital needs for daily operations ( )
4. Needs of family and relatives ( )
5. Access to more customers ( )
6. Access to more goods ( )

D.4 If you have successfully accessed funding, what is the percentage (volume) of loans your business accesses from financial institutions on a yearly basis when compared to total financial inflows for your business.		
1	1% - 10% of total funds ( )	
2	11%-20% of total funds ( )	
3	21% - 49% of total funds ( )	
4	50% - 74% of total funds ( )	
5	75%- 100% of total funds ( )	
6	Do not know ( )	
7	Refused to disclose ( )	
D.6. If you have successfully accessed funding, what is the rate charged on the last loan/ borrowing for your business accessed from the financial institutions? Tick one option		
1	1%- 5%	
2	5% - 10%	

3	10% - 15%
4	15% - 20%
5	20% and above

D.6.If you have never applied or are not interested in accessing loans, what was the main reason why this establishment did not apply for any line of credit or loan? Tick one option

1	No need for a loan - establishment had sufficient capital ( )
2	Application procedures were complex ( )
3	Interest rates were not favorable ( )
4	Collateral requirements were too high ( )
5	Size of loan and maturity were insufficient ( )
6	Did not think it would be approved ( )
7	Others specify…
8	Don’t know ( )

PART FIVE: IMPLICATION OF THE CURRENT FINANCIAL ENVIRONMENT

E.1. How much do you agree or disagree with the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Agree	Strongly Agree
I require certain skills and knowledge to better access funding opportunities	1	2	3	4	5
The financial system and the business environment is becoming increasingly hostile to businesses like mine	1	2	3	4	5
Businesses like mine depend a lot on Non-bank financial institutions to survive	1	2	3	4	5
The current interest rate on loans affects my business performance	1	2	3	4	5
It has become harder to access loans as a business owner	1	2	3	4	5
Businesses like mine do not depend on the Nigerian financial system	1	2	3	4	5

E.2. How much do you agree or disagree with the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Agree	Strongly Agree
The rules and regulations of the financial institutions in accessing funds are many and	1	2	3	4	5

too stringent					
The bigger a business, the more likely they are to get loans from financial institutions. Size is a factor	1	2	3	4	5
There exist initiatives and programs by the government to help businesses like mine access loans	1	2	3	4	5
My business can access short and medium-term loans from the Nigeria Banks	1	2	3	4	5
I depend entirely on my savings and profit to sustain my business	1	2	3	4	5

PART 6: CHANGES REQUIRED IN THE FINANCIAL SYSTEM TO IMPROVE ACCESS TO FUNDING

F.1. What kind of government action would generally help your business the most, especially, during this current economic situation?	
1	Reduced taxes ( )
2	Government aided loans ( )
3	Simplification of lending regulation ( )
4	Opening of new lending channels by institutions such as the Bank of Industry ( )
5	Others ...
F.2. What policies and services can financial institutions provide to enable better access to funding	
1	Reduced interest on loans ( )
2	Eliminating exorbitant costs ( )
3	Enforce rural banking to reduce bank concentration ( )
4	Negotiating longer payment terms ( )
5	Others (specify) _____

Appendix 2. Interview Protocol

Title: The Impact of the Financial System and its channels on SMEs' access to financing: A Nigerian Perspective

Interviewers: Dr. Wes Johnston (dissertation chair), and Akinwande Ademosu (candidate)

The main research question:

" What is the impact of Financial System on SMEs' Access to Financing in Nigeria?"

Date	Time	Location
Step 1	Introduction	Appreciate the participant for taking the time to participate in the research process.
Step 2	Purpose of research	The research aims to study the impact of the financial system on SMEs' access to finance and recommend a financial system framing that will ultimately lead to SMEs' success and economic growth.
Step 3	Reason for participating in the research	The participant's information will be of immense value in supporting the researcher's partial fulfillment for the professional Doctor of Business Administration at J. Mack Robinson College of Business at Georgia State University.
Step 4	Benefits of participating in the research	The research seeks to create a sustainable framework that advances SME business access to loans. This will enable government agencies and financial institutions better support the most critical agents of economic growth – SMEs.
Step 5	Ethical consideration	Ethical standards and considerations require individual privacy protection, request permission to take notes during discussion and at the interview session and keep participants' information confidential.

Step 6	Confidentiality and privacy	The information or data collected during the research process will be confidential, secured, and password protected. The researcher alone will have proper access to the records, and all the data collected will be destroyed after completing the research. All data collected remains confidential.
Step 7	Any reservations or questions.	Ask permission to proceed by asking if the participants have any reservations or concerns about the process discussed.
Step 8	Transition to the interview session	This is a semi-structured interview meaning that there is a percentage of flexibility in questioning, and all vital information from the respondent is included.
Step 9	Interview session	What factors are considered before funding approval is granted to SMEs in your bank/institution? What constraints exist when considering an SME for a loan? What role do financial Institutions like DMB and NBFI play in SMEs' access to financing success? What are your recommendations for SME owners to improve their chances of financing access? Given the importance of SMEs to the Nigerian Economy, what policies can the financial system introduce to boost aid easy access to funding?
Step 10	Conclusion	To ensure the correctness of data collected and interpreted, would you consider it appropriate to contact you for any follow-up or clarification if needed? Is there a preferred method of communication? Would there be a preferred day and time for your convenience?

Appendix 3. Interview Protocol

J. Mack Robinson College of Business Georgia State University

Doctorate in Business Administration Program Informed Consent

Title

The Impact of the Financial System and its channels on SMEs' access to financing: A Nigerian Perspective

Principal Investigator: Wesley J. Johnston, Ph.D. (dissertation chair)

Student Principal Investigator: Akinwande Ademosu

Purpose

This research study aims to examine the impact of the financial system on Small and Medium-Scale Enterprises (SMEs) access to finance. SMEs are essentially the main sustenance of a country's economy. They are responsible for improving national productivity, boosting socio-economic development, and enhancing citizens' living standards. Nigeria SMEs contribute almost half of the nation's GDP, account for over 90% of businesses, and are responsible for more than 80% of employment. However, despite this contribution, the poverty level is rising in the largest economy in Africa. This study is, therefore, compelling for four important reasons. The first factor relates to the enormity of the impact of a potential new transforming SMEs financing system. The second reason is the concern for a rising poverty level in sub-Sahara Africa and its implication on the global economy. The third factor is the growing young population, rate of youth unemployment, and its adverse socio-economic consequences. The last factor is to use the study to draw the attention of policymakers and practitioners to the urgent need for a specific and more effective financial system that is more *SMEs-friendly*. We will also collect and analyze secondary aggregate economic data from the country and primary data through surveys.

Procedures: If you are willing to participate in this study, please initiate or commence the corresponding survey. This brief online survey will only take 15-20 minutes of your time.

Risks/Discomforts: We don´t anticipate that you will experience any troubles or discomforts other than that on a typical day of life.

Benefits: Participating in this research will not benefit you directly. Overall, we hope to learn about the impact of the framework and structure of the financial system on how loans are made available to SMEs, which will, in turn, lead us to propose a more SME-friendly financial system. If requested, I will be glad to share the general results of the investigation with you.

Voluntary Participation and Withdrawal: Participation in research is voluntary. You do not have to be in this study. If you decide to be in the research and subsequently change your mind, you have the right to withdraw at any time. You may skip questions or stop participating at any time. Whatever you decide, you will not lose any benefits to which you are otherwise entitled.

Confidentiality: We will keep your records private to the extent allowed by law. Dr. Wesley Johnston and the student researcher will have access to the information you provide. Information may also be shared with those who ensure the study is done correctly (GSU Institutional Review Board, the Office for Human Research Protection (OHRP). We will use a study number rather than your name on study records. Your information will be stored digitally through a password and firewall-protected computers. We will transfer your answers to a spreadsheet if you respond by email before deleting the email with your responses. After your email is deleted, there will be no way to identify you personally. Your name and other facts that might point to you will not appear when we present this study or publish its results. The findings will be summarized and reported in group form. You will not be identified personally.

Contact Persons: If any questions, comments, or concerns about the issuance of this survey and or the usage of its results, please feel free to contact the principal investigator at the J. Mack Robinson College of Business at Georgia State University, Wesley J. Johnston, Ph.D. at wesleyj@gsu.edu

The IRB at Georgia State University reviews all research that involves human participants. You can contact the IRB if you want to speak to someone not involved directly with the study. You can get the IRB for questions, concerns, problems, information, input, or questions about your rights as a research participant. Contact the IRB at 404-413-3500 or irb@gsu.edu.

Permission and Consent: Please click/start to continue if you agree to participate.

Appendix 4. Coding and Identification of Themes of Survey responses:

Codes	Code Descriptions	Exemplary quotes
Diversified banking approach	Increase the diversity of your lending approach by providing loans to a range of sectors.	“We also expect the bank to diversify, to don't lend too much to a particular sector.” (TM)
Lending amount upper limit	There is specific amount which can be lend.	"So, there's a limit is an upper limit on the amount that can be lend to any borrower." (MT)
Risk management assessment	Bank should do their homework before granting any loan to company about their products.	"But apart from that, we expect the bank itself to conduct good risk management and risk assessment. So, we would expect the bank to look at the project" (TM)
Amount of funds asked	The approval of funds depends upon the amount of loan the company asked for.	"The other thing we look at also is the amount of money you're looking at as well." (GO)
Assessing the character of SME founder	Factor that effects fund approval is the character of company.	" I think the first thing we look at is the character of the of the SME applicant. " (GO)
Capacity of business	Looked upon the past and present performance of the SME.	"The other thing we look at is the ability. You know, if the SME has demonstrated any form of capacity for the businesses" (GO)
Collateral insurance	Nigeria doesn't allow borrower lo lend money in exchange of specific property as a security	"But here in Nigeria, we still to do balance sheet in terms of your level of assets, level of a liability. So, the major constraint is lack of collateral for them to seek funds" (Dr. Okpara)
Credit reports to minimize risk	Before loan approval, SMEs have to get their credit report as a security.	"Another requirement as a regulatory requirement is that before you lend to any borrower, you have to get credit reports" (TM)
Ethical viability of product	Either the product SME sell is legally or ethically environment friendly or not.	"So condition would be like, okay, I've seen, for example, this is profitable for me as an organization, but is it legally viable? " (OA)
Financial structure of business	Looked at the structure of money that the business works with.	"I want to be sure that there's a separation between your personal purse and business purse. " (BA)
Impact of loan on capital	Its beneficial in long term to generate environment.	" So what can this business for back on the events that you need to stay afloat? Then I think we may also look at employment generation. " (OA)
Inability to preserve accurate financial records	Ability to keep the transaction record effect the lending process in Nigeria.	"And again, their inability to keep good record in terms of their transaction. So that makes some of the lending institution not to actually embrace them." (Dr Okpara)
Stability of business	Funds approval depends on how stable the business is.	"We can't just be but it's not a quick. so, we want to see stability in the business." (BA)

Verified business	Whether the business is verified or register, its the critical factor for SME to access loans.	"You want to know if the registration of the customer is a legal entity. You also want to know if they have an office location or business location as the case may be. So, you have to sometimes do a business verification." (GA)
Collateral rejection from bank	The security collateral might not be accepted by bank as it doesn't meet the criteria.	"And so one of them could be they may have collateral but not register in the format that you as a bank, find it comfortable with." (GO)
Difficulty in access to Central Bank tools	Constraint in access to bank requirement tools important in lending money to SME.	"Okay, part of the constraints the lending institutions face is the requirement tools of the Central Bank of Nigeria." (Dr. Okpara)
Lack of knowledge about SMEs	Banks have limited knowledge about the SMEs.	'I think that we have a dearth of knowledge on our SMEs role." (OA)
Lack of access to SME credentials	Lending institutions faces the difficulty in knowing the details about SMEs.	"Again, the banks or lending institutions too want to know the management of the SMEs. Who are the managers? What is their qualification? What are their experiences? Some of these things are lacking in terms of the SME. So, these are part of the constraint the bank or the lending institution face in lending or extending credit to the SMEs in Nigeria. " (Dr Okpara)
No SME ranking in Nigeria	In Nigeria, banks and lending institutions do not have the capacity to know the amount of danger.	"Another constraint too is ranking. We don't have ranking. In some developed countries, they rank SMEs in terms of a A+ or AB and so on and so forth." (Dr Okpara)
Profit scope for shareholders	Bank has a policy look looked at the profit margin for their shareholder, this many constraint SMEs to get loan.	"The deposit money bank, their primary motive is to make profit, to give a good return to their shareholders." (MT)
Risk of lending money to SMEs	The substantial risk of lending money to small enterprises also makes it difficult.	"Another constraint is the high risk associated with lending to SMEs." (Dr. Okpara)
Trouble in determining funds volume of lenders	Lenders are restricted in their ability to assess the number of funds available.	"Another constraint too is the funds associated with it. Do they have the volume of fund to lend out " (DR. Okpara)
Unavailability of data for banks	Banks don't have enough data about SMEs in Nigeria.	"The other one on the bank side is issue of data availability. So we think we have data but we really do not have data" (OA)
COVID economy shock	Covid effects the overall economy, would be a factor that effect SMEs.	"I mean…definitely it's not only SMEs that would have been affected. Everybody was affected by COVID,

		which triggered a macro economic shock. "
Financial strain due to taxation	SMEs have taxation strain which made it difficult for lending institutions to grant loans.	"Also, when you look at when you look at the Nigerian contests now, you see multiple taxation in some of these." (BA)
High loan cost	The cost of borrowing money is high in Nigeria which is the biggest constraint.	"The other issues are on affordability. So he gets some SMEs they are doing well, but the costs of borrowing in Nigeria is extremely high" (GO)
Marketable business plan	To make sure how marketable is their business plan to get a loan.	"The last one is the marketability side. How marketable is that? Like I said, on the part of the bank: data availability and expertise." (OA)
Mutual business and personal funds	SMEs are unable to segregate their business and personal cash.	"The third one will be .... for me most SMEs cannot separate their business, cash from their personal cash" (OA)
Newly registered business	There is a policy of having mature registered business of at least three years which is a limitation for many of SMEs.	"You must have run your business for, at least two years. And what defines two years is the fact that the business has been registered for at least three years. " (BA)
Poor accounting	No proper transaction history or cash flows depict the poor structured company.	"The second thing, the accounting, no proper accounting and therefore, you cannot find audited financials." (GA)
Unstructured business	The business model they run is not well structured.	"Many of them are not structured. Some have not gone through the rudiments of the business." (BA)
Build trust	In order to gain access to funds, SME owners should build their trust to get things done easily.	"so the advice I always give to SMEs is in their place to build trust because a lot of things are built on trust and one way to build trust is to improve on your transparency." (GO)
Business banking	Its related to financial competency of business.	"The next one sir would be, you need to bank your business, bank your business, without banking your business you will not be able to effectively manage your business" (OA)
Competitive analysis	It's important to do the competition analysis.	"I will have them know your competition. " (OA)
Disciplined entrepreneurship	There should be a well-balanced business plan.	"There should be discipline in entrepreneurship. Discipline as an entrepreneur." (BD)
Educate about Financial market	Sound knowledge about money market is very important fir SMEs to grow.	"I would say is that SME owners need to educate themselves on the way financial market work." (GA)
Financial record keeping	SMEs should keep the bookkeeping of their financials.	"Yeah. Number one is their ability to keep records. They must keep records of their dealings, keep financial documents." (Dr. Okpara)
Incorporate	Groom their organization	"They must keep records of their

advancement	digitally to enhance their capacity. "I think is for them to enhance their capacity." (Dr Okpara)	dealings, keep financial documents. " (Dr Okpara)
Investing of funds in govt. projects	Businesses should invest their money in long-term projects in collaboration with govt. rather than just their own production.	"We also need a combination of funding, not just their capital. I am thinking of we are having designing a founding where you have a condition of equity and debt coming together to play a role for a longer and longer tenable projects. (BA)
Learn about Government initiative	SMEs should aware themselves about the govt. initiatives that could benefit them	"I think which is very crucial is for them to get themselves acquainted with some of these government programs." (Dr Okpara)
Maintaining account keeping	To build a good impression for bank, to get loans easily.	"So, if they can start off by keeping good books of accounts and starting a consistent relationship with a bank." (MT)
Professional money management	Manage personal and enterprise money.	"They should try as much as possible to see how they can separate the enterprise money from their own personal money." (Dr Okpara)
Registered their organisation	To get benefit with corporate registration	" Another one too is that they should try as much as possible to ensure that their businesses incorporated with the corporate Affairs commission," (Dr Okpara)
Seek advice	For the clarity of mind, they should seek expert advice.	"The next thing is that I will advise the SMEs to seek advice." (OA)
Central Bank percentage for SMEs	In Nigeria Deposit banks have some percentage of deposits specially for SMEs. "	CBN normally have some percentages of their deposit that they must send to the SMEs. So, the deposit money banks try on their own.
Facilitating role of SME banker	As a SME holder and banker, the are able to provide more facilities to fellow SME holders.	"An SMS as a banker is loyal is an accountant sees everything so it's easier. And so what that tells me is that for you to be able to successfully manage your service, you go beyond providing just banking services." (GO)
Long term funding	Provide SMEs with a plan to invest the funds in long run.	"The cash flow of a business that has constant cash flow coming in than looking at a project that has a gestation period of five years." (BA)
Regulatory framework	To build the capacity, everything should be regulated and aligned.	"First part of it understand that we operate under a regulatory framework, and we are highly peculated. " (OA)
Advisory services	To add value to their work provide advisory for SME holders.	"I add a bit of work on value-added services as in a non-financial banking services that enables them to take

		care of the other issues. for example, as a bank, we have some advisory Services " (GO)
Fair funds dealing	NFBI make sure to make the process fair despite of many constraints.	"I hope that regulation will not stifle them in as much as I've said about being taking their own fair" (OA)
Help beyond the capacity	In order to lend money to small and medium-sized businesses, NFBI bypass certain of the rules.	"But the non-bank financial institutions have their own role to play. In their own case too, they go outside some of the regulation to lend money to the SMEs." (Dr Okpara)
Introduced user friendly products	To increase the financial inclusion of SMEs, these institutions help in production of more user-oriented products.	"Because, we have to take that risk, we then sort of created a better financial inclusion for the SMEs. " (GA)
Microfinance bank for SME	Microfinance banks in Nigeria are established to assist SMEs in lending funds.	"Because the microfinance bank was established in the first instance to ensure that they service the SMEs, that is their primary constituency so to say" (Dr Okpara)
More donor funds	Microfinance bank aid in getting more funds without collateral.	"And in the past where microfinance started, a lot of them got donor funds for that reason. " (MT)
Reputational collateral	NFBI consider reputational collateral model for SMEs which usually used by many banks for individual's loan.	"And rather than collateral, what they should use is what we call reputational collateral. " (MT)
Work as a regulator	Regulate the process of getting funds from bank to the SME.	"It is also by appointment based on the prerogative of the government in power and a concurrence by the legislative arms of government. " (OA)
Consultation for business remodelling	Enable SME by providing them business remodelling services which help them to gain access to funds.	"We enhance the capacity of these SMEs to enable them prepare a bankable business plan, to enable them remodel their business model, has to make them attractive to the lending institution. " (Dr Okpara)
Cost and time effective solutions	To reduce the Cost and time institutions provides facilities to SME for better finance approach.	"So ultimately for what we see for from a valid point of view is most SMEs Look for two things: cost saving and time saving. So, if you can save them cost and time" (GO)
Facilitating programs to access finance	As an agency their institution facilitate the SMEs to access the finances easily.	"Our own part, as an agency of government, we are not lending institution as such, but we facilitate access to finance. Most of our programs are targeted at giving money to the SMEs." (Dr Okpara)
SMEDAN microfinance bank	Help SME by approaching local and international	"Presently, we are working on SMEDAN microfinance bank so that

	funds.	the bank will have access to not only local funds but international funds too to ensure that we lend these things to small and medium enterprises." (Dr Okpara)
Better financial communication	Communicate SMEs about every step they should imply to get easy access to funds.	" So, it should be communicated to financial institutions that this is going on; that any SME that has gone through this kind of training" (TM)
Build legal structure for SMEs	Build a structure where before asking for the loan SMEs would have to report.	"a very simple one is a credit bureau reporting. If every lender report to the credit bureau and every lender refers to the Credit Bureau report in granting loan" (GA)
Cluster approach to train SME owners	Training about the whole process of funding.	"Another thing is that there has to be a kind of cluster approach to training SME owners and developing SME business. " (GA)
Enterprise investment scheme	It is a capital-raising scheme that makes it easier for smaller businesses to raise cash.	"Agribusiness Small and medium, Enterprise investment scheme. What the CBN now did was that… okay. Let's make this fund to go to go around, let's reduce the average loan size to 10 million." (BA)
Flexible policies	Institution should have flexible policies that could benefit the SMEs equally.	"So, policy-wise, we should come up with a flexible policy that will not only favour the SMEs, but will equally favour the lending institutions" (Dr Okpara)
Government guarantee schemes	To facilitate SMEs govt. should come up with guaranteed schemes that help easier fund lending.	"If there is a policy from the government just as we have the agricultural credit guarantee scheme, we can equally have the SME credit guarantee scheme as a deliberate policy to ensure that our lending institutions are happier " (Dr Okpara)
Govt. training institute for SMEs	To train SMEs to do better in real.	"Should come up with some kind of training institute that will actually…a SME wants to get a loan, will actually coach the SME on how to make itself more attractive, less risky." (MT)
Incentivised bank to de-risks SME	To minimize the risk of SME, there should be some incentive to bank.	"And then thirdly, maybe there should be other ways of incentivizing the banks to give them credit. It's been done in the past. " (TM)
Rating of true SMEs	To be succeeded in economical ecosystem govt. should rate true SMEs which automatically increase their access to loans.	" I think the biggest issue, Nigeria is the actual definition of an SME and that is a big issue, so, sometimes they confuse themselves between MSME and SME " (GO)
Research centre for business	Incubators for business research and for support.	"We need to have and promote incubators and business support services. We need to our incubators

		and business support service.”
SME insurance	Insurance to cut the loan cost for SMEs.	" It might not be so expensive, and it might still be cheaper for the SME to go through that route rather than going to loan sharks " (TM)
To promote growth funding	Instead of just lending money make policies to promote growth funding in collaboration with SMEs.	"I think for banks to also do if really we want growth, you need to be able to make our positions known to CBN and the federal government" (BA)

Axial Coding:

Axially coded categories were sought in the following stage, which was derived from the links between the codes established in open coding and discovered by the researcher during the previous step of open coding. The researcher categorizes these open codes into meaningful categories. All of the open codes are connected together to make 8 categories depending on the reasons provided by the employee of the respective institution.

<u>How codes are linked to newly established categories is shown in the table below.</u>

Categories	Category Meaning	Aligned Codes
1. Evaluating policies of lending institutions	Evaluating policies of lending institution that effects the loan approval of SMEs	• Diversified banking approach • Lending amount upper limit • Risk management assessment
2. Factors affecting SME's loan approval	List of factors that affect the loan approval of SMEs	• Amount of funds asked • Assessing the character of SME founder • Capacity of business • Collateral insurance • Credit reports to minimize risk • Ethical viability of product • Financial structure of business • Impact of loan on capital • Inability to preserve accurate financial records • Stability of business

		• Verified business
3. Limitations on approving SMEs loans by lending institutions	Constraint lending institution faced in granting loan to SMEs	• Collateral rejection from bank • Difficulty in access to Central Bank tools • Lack of knowledge about SMEs • Lack of access to SME credentials • No SME ranking in Nigeria • Profit scope for shareholders • Risk of lending money to SMEs • Trouble in determining funds volume of lenders • Unavailability of data for banks • COVID economy shock • Financial strain due to taxation • High loan cost • Marketable business plan • Mutual business and personal funds • Newly registered business • Poor accounting • Unstructured business
4. Recommendations to SME owners	Suggestions to SME owners that improve the chance to get access to funding	• Build trust • Business banking • Competitive analysis • Disciplined entrepreneurship • Educate about Financial market • Financial record keeping • Incorporate advancement • Investing of funds in govt. projects • Learn about Government initiative • Maintaining account keeping • Professional money management • Registered their organisation • Seek advice
5. Role of Deposit Money Bank	Facilitating role of deposit banks in accessing funds to SME	• Central Bank percentage for SMEs • Facilitating role of SME banker • Long term funding • Regulatory framework

6. Role of NBFI	Facilitating role of NBFI in accessing funds to SME	• Advisory services • Fair funds dealing • Help beyond the capacity • Introduced user friendly products • (Micro)finance bank for SME • More donor funds • Reputational collateral • Work as a regulator
7. Role of other institutions	Facilitating role of other institutions in accessing funds to SME	• Consultation for business remodelling • Cost and time effective solutions • Facilitating programs to access finance • SMEDAN microfinance bank
8. Strategic recommendation to lending institution	Improvement strategies that help SME in gaining easy access to funds	• Better financial communication • Build legal structure for SMEs • Cluster approach to train SME owners • Enterprise investment scheme • Flexible policies • Government guarantee schemes • Govt. training institute for SMEs • Incentivised bank to de-risk SME • Rating of true SMEs • Research centre for business • SME insurance • To promote growth funding

Thematic Coding

Research Question	Themes	Aligned categories
RQ: 1. What is the effect of the financial system channels on SMEs' access to financing in Nigeria?	Establish the influence of Nigeria's financial system different channels on SMEs access to financing	Implication of different channels on SME's loan approval Evaluating policies of lending institutions
RQ: 2. What are the main obstacles to SMEs' access to financing in Nigeria?	Impediments to access to finance for Nigeria's SMEs	Limitations on approving SMEs loans by lending institutions
RQ: 3. What are the key factors promoting access to finance by SMEs despite obstacles in the Nigerian financial system?	The essential factors promoting SMEs' access to funding in the context of Nigeria's financial system's difficulties	Role of Deposit Money Bank Role of NBFI Role of other institutions
RQ: 4. What key changes to the financial system structure will enhance SMEs' access to finance in Nigeria?	Strategical implication to improve SMEs access to finance in Nigerian Financial System	Strategic recommendation to lending institution Recommendations to SME owners Policy recommendation to government agencies