

Effect of Micro-Finance Banks in Economic Growth of Nigeria

Enobong Akpan EKAETOR

Doctor of Philosophy

enobongekaetor@aksu.edu.ng

Department of Economics, Akwa Ibom state University.

ABSTRACT

Microfinance institutions play a critical role in promoting economic development in developing nations, particularly in Nigeria, where access to financial services remains limited for many segments of the population. This study employs the Ordinary Least Squares (OLS) regression analysis to assess the impact of microfinance banks on Gross Domestic Product (GDP) growth in Nigeria from the period 1990 to 2023 using secondary data obtained from Central Bank of Nigeria. The findings reveal that microfinance bank liabilities exert a negative and statistically insignificant influence on real GDP growth. Conversely, positive contributions to economic expansion were observed from microfinance bank deposits, loans, and gross fixed capital formation. Additionally, a modest yet positive correlation was identified between real GDP growth and total government expenditure. Based on these results, the study emphasizes the need for the Central Bank of Nigeria (CBN) and other monetary authorities to enhance lending practices within microfinance banks. Specifically, it is recommended that these institutions focus their credit offerings on small and medium-sized enterprises (SMEs) as well as financially constrained households to foster inclusive economic growth. By prioritizing the allocation of financial resources to these key sectors, it is anticipated that microfinance banks can significantly contribute to the broader economic development of Nigeria.

Keywords: *Microfinance Banks, Economic Growth, Gross Domestic Product (GDP), & Nigeria.*

1. INTRODUCTION

Microfinance banking has emerged as a pivotal element in the socio-economic enhancement of the poor in Nigeria and globally. It specifically targets self-employed, low-income entrepreneurs, including traders, street vendors, small farmers, hairdressers, barbers, GSM commercial operators, and artisans, among others. The core objective of microfinance is to build a financial system that effectively and efficiently caters to the needs of the poor. This is achieved by providing access to financial services which empowers the poor to increase their earnings, build assets, and cushion themselves against external shocks (Drechser et al., 2012).

The Central Bank of Nigeria (2013) defines microfinance banking as the provision of a broad spectrum of financial services such as savings, loans, payment services, money transfers, and insurance to the poor and low-income individuals, households, and their microenterprises. This definition underscores the comprehensive nature of services offered by microfinance banks, aimed at financial inclusion and economic empowerment of the underserved populations.

Robinson (2002) highlights that microfinance enables clients to protect, diversify, and increase their incomes. Additionally, it assists them in accumulating assets and reducing their vulnerability to income and consumption shocks. This capacity to stabilize and improve the financial status of low-income individuals is crucial for their socio-economic advancement. Seibel (2001) expands the concept of microfinance banking to include both banking and non-banking, formal and non-formal financial institutions that provide small-scale financial services predominantly to low-income people. He distinguishes micro banking as a subset of microfinance institutions that are regulated and belong to the banking sector, thereby emphasizing the diverse nature of institutions involved in microfinance.

According to the United Nations (2012), Nigeria has a population of approximately 160million people, with about 70% (98 million) living below the poverty line, which is estimated at US 1.25 per day. The Gross National Income (GNI) per capita is roughly US 1140, and the life expectancy stands at 48 years. The total adult population (18 years and above) is 84.7 million, with 70% residing in rural areas, and a near-equal gender distribution (51% male and 49%female). These demographic and economic indicators highlight the vast scale of poverty and the urgent need for effective poverty alleviation mechanisms such as microfinance. Osaniwonyi and Obayagbona (2012) argue that the role of microfinance banking in the growth and development of the Nigerian economy cannot be underestimated. Given the rapidly growing population, rising unemployment, and youth restiveness, the government faces significant challenges in providing adequate jobs for its populace (Uford, 2017; Akpan & Uford. 2024). Microfinance banking presents a viable solution by empowering individuals with the necessary loans and financial services to start or expand their business ventures, thus addressing unemployment and stimulating economic growth.

This study aims to examine the impact of microfinance institutions on economic growth in Nigeria. By evaluating the effectiveness of microfinance services in fostering economic development, this research seeks to provide insights into how microfinance can be leveraged as a tool for poverty alleviation and economic empowerment in Nigeria.

Statement of the Problem

The development of a robust national financial system is crucial for achieving sustainable economic growth and overall national development. This goal is particularly pressing in the context of developing countries, where economic growth must be generated alongside substantial reductions in poverty. One of the significant challenges in this regard is the chronic inadequacy of credit supply, which has long been a constraint on production and economic activity. In many developing nations, a large segment of the population remains excluded from formal financial services, lacking access to both credit and savings facilities. This financial exclusion hampers their ability to invest in productive ventures, thereby stifling economic growth (Walker, 1999).

In Nigeria, the problem is particularly acute. Despite the presence of various financial institutions, a substantial proportion of the Nigerian population is unable to access formal financial services. This exclusion is more pronounced among the poor and those living in rural areas. The traditional banking sector often perceives these individuals as high-risk clients, leading to a significant supply gap in credit and savings services. This situation results in a persistent "savings gap," wherein the country struggles to generate sufficient domestic savings to finance necessary investments for economic growth (Walker, 1999).

Microfinance banking has been posited as a potential solution to bridge this financial inclusion gap. By providing a broad range of financial services tailored to the needs of low-income individuals and micro-entrepreneurs, microfinance institutions (MFIs) aim to enhance the socio-economic well-being of the poor. These services include savings, loans, payment services, money transfers, and insurance. The underlying premise is that when poor individuals have access to these financial services, they can earn more, build their assets, and mitigate the impacts of economic shocks (Drechsler et al., 2012).

Despite the potential benefits of microfinance, several challenges and limitations hinder its effectiveness in fostering economic growth. High interest rates charged by some microfinance institutions, issues of over-indebtedness among clients, and operational inefficiencies are notable concerns. Furthermore, the impact of microfinance on economic growth is not uniform and depends on

various contextual factors, including the regulatory environment and the overall economic conditions (Robinson, 2002; Seibel, 2001).

Given these challenges, it is imperative to critically examine the role of microfinance banks in Nigeria's economic growth. This study seeks to address the following research problem.

To what extent do microfinance institutions contribute to economic growth in Nigeria, and what are the challenges and limitations they face in this endeavor? By investigating this problem, the study aims to provide insights into how microfinance can be optimized as a tool for poverty alleviation and economic empowerment in Nigeria, thereby addressing the broader goal of national economic development.

Objectives of the Study

The primary objective of this study is to determine the impact of microfinance banks on economic growth in Nigeria. Specifically, the study aims to:

1. To examine the impact of microfinance bank loans on economic growth in Nigeria.
2. To examine the effect of microfinance banks' deposits on economic growth in Nigeria.
3. To investigate the effect of microfinance banks' liabilities on economic growth in Nigeria.

2. CONCEPTUAL FRAMEWORK

Concept of Microfinance

Understanding Microfinance Banks and Their Role in Poverty Alleviation

Microfinance has emerged as an essential tool in the fight against poverty, particularly in developing countries. Microfinance institutions (MFIs) provide small-scale financial services to individuals who are typically excluded from the formal financial sector due to their lack of collateral, low income, and unstable economic conditions. These institutions offer a range of services, including credit, savings, and insurance, aimed at fostering economic independence and improving the living standards of the poor. This section provides a comprehensive explanation of microfinance institutions, their services, and their role in poverty alleviation. Additionally, it highlights how microfinance institutions act as agents of social change by addressing social inequalities and empowering marginalized communities.

Microfinance Institutions: Definition and Services

Microfinance institutions (MFIs) are organizations that offer financial services, such as small loans (microcredit), savings accounts, insurance, and money transfer services, to individuals or groups who do not have access to traditional banking services. The clients of MFIs typically include low-income individuals, particularly those in rural areas, small business owners, and women. Unlike conventional bank: that require collateral for loans, MFIs often rely on group lending models or social collateral, where borrowers support each other's repayment efforts (Armendáriz & Morduch, 2010).

The emergence of modern microfinance can be traced to the work of Muhammad Yunus, who founded Grameen Bank in Bangladesh in 1976. Yunus sought to address the challenges faced by poor individuals who were unable to secure loans from formal financial institutions. His model of providing small, unsecured loans to the poor laid the foundation for contemporary microfinance institutions, which have since expanded globally (Yunus, 1999).

i. Microcredit

Microcredit is one of the primary services offered by MFIs and refers to the provision of small loans to individuals or groups. These loans are typically used to start or expand small businesses, such

as farming, retail shops, or craft production. The goal of microcredit is to enable individuals to generate income and improve their economic situation. Unlike traditional banks, MFIs often do not require physical collateral, which makes microcredit more accessible to the poor (Ledgerwood,2013).

For instance, in Nigeria, many rural women have benefited from microcredit schemes that allow them to start small businesses, such as tailoring, food vending, or trading. These businesses provide them with a stable income, enabling them to improve their families' living conditions and access better healthcare and education (Adelakun,2018).

ii. Savings

Another crucial service offered by MFIs is access to savings accounts. Savings enable individuals to set aside money for future expenses, emergencies, or investments. For the poor, having a safe place to save is essential, as it provides financial security and reduces their reliance on high-interest informal lenders. MFIs often offer flexible savings products that cater to the needs of low-income individuals who may not have regular income flows (Karlan & Morduch, 2010).

Savings services are particularly valuable for rural communities in developing countries, where formal banks are often inaccessible. In Nigeria, for example, many people living in remote areas do not have access to conventional banking services. This may lead to the introduction of new products or techniques or of a new quality that consumers are not yet familiar with (Charles & Uford, 2023; Umoh, 2024).

MFIs fill this gap by providing savings accounts that allow individuals to build up small amounts of capital over time, which can later be used for investments or unforeseen expenses (Oluwatayo, 2021).

iii. Micro insurance

Micro insurance is another service offered by MFIs to help protect low-income individuals from risks such as illness, accidents, and natural disasters. Traditional insurance products are often too expensive or inaccessible to the poor, but micro insurance offers an affordable alternative. This service helps individuals mitigate risks that could otherwise plunge them deeper into poverty (Churchill & Matul, 2012).

In developing countries like Nigeria, where access to healthcare is limited and the costs of treatment can be prohibitive, micro insurance provides a safety net for poor families. It enables them to access healthcare services without falling into debt, thereby preventing a further decline in their economic status.

Microfinance Institutions as Agents of Social Change

Microfinance institutions are not merely financial intermediaries; they act as agents of social change by addressing social inequalities and empowering marginalized communities. Poverty is not only an economic issue but also a social one, as it often results in exclusion from economic, political, and social systems. By providing financial services to the poor, particularly those who are socially and economically marginalized, MFIs create opportunities for upward mobility and social inclusion (Armendáriz & Morduch, 2010). Entrepreneurship is a first-class global theory through which many first world nations expand their economic strength (Umoh, 2021).

i. Empowering Women

One of the most significant impacts of microfinance has been its role in empowering women. In many developing countries, women face systemic barriers to accessing financial services due to cultural norms, legal restrictions, and limited economic opportunities. Microfinance institutions have been

particularly effective in addressing these challenges by targeting women as primary clients (Mayoux, 2006).

By providing women with access to credit, savings, and insurance, MFIs empower them to become entrepreneurs and contribute to household income. This financial independence allows women to have greater control over their lives, participate in decision-making processes, and improve their social status. Studies have shown that when women have access to financial resources, they are more likely to invest in their children's education, healthcare, and overall well-being, which has long-term benefits for poverty alleviation (Kabeer, 2001).

In Nigeria, for example, microfinance programs targeting women have led to increased economic participation among women, particularly in rural areas. Women who receive microcredit can start small businesses, which not only improve their economic conditions but also enhance their role within the family and the community (Akinyemi, 2019).

ii. Reducing Social Inequalities

Microfinance institutions also play a crucial role in reducing social inequalities perpetuated by the lack of access to traditional financial institutions. In many developing countries, conventional banks are concentrated in urban areas and primarily serve the middle and upper classes. As a result, the poor, particularly those in rural areas, are excluded from formal financial services (Ledgerwood, 2013).

MFIs, on the other hand, focus on serving low-income individuals and communities that are typically underserved by formal financial institutions. By providing financial services to these marginalized groups, MFIs help reduce the disparities in access to resources and opportunities. This, in turn, contributes to social mobility and the reduction of income inequality (Adelakun, 2018).

iii. Strengthening Social Networks

Microfinance institutions often employ group lending models, where small groups of borrowers take out loans together and are collectively responsible for repayment. This model not only reduces the risk for the MFI but also fosters solidarity and cooperation among borrowers. Group lending creates social networks that provide emotional and practical support, which is particularly important for the poor, who often lack access to formal safety nets (Karlan & Morduch, 2010).

In many cases, these social networks extend beyond financial transactions. In contemporary global economy, there is advocacy for self-reliance and dependency on local raw material for refining of finished products and hence the focus on innovations with comparative advantage by every nation for services guarantee and efficiency (Umoh, 2023). Borrowers may share knowledge, resources, and skills, thereby creating a sense of community and social cohesion. In rural areas, where isolation and lack of access to information can exacerbate poverty, these networks play a critical role in improving livelihoods and fostering social change (Mayoux, 2006).

Microfinance and Poverty Alleviation

Microfinance is widely regarded as an effective tool for poverty alleviation. By providing financial services to the poor, MFIs enable individuals to invest in income-generating activities, build assets, and improve their living standards. However, the impact of microfinance on poverty alleviation extends beyond economic empowerment—it also addresses the social dimensions of poverty by promoting inclusion, dignity, and self-reliance (Kabeer, 2001).

i. Economic Empowerment

The primary way in which microfinance contributes to poverty alleviation is through economic empowerment. By providing access to credit, MFIs enable individuals to start or expand small

businesses, which generate income and improves their economic situation. The income generated from these businesses allows individuals to meet their basic needs, such as food, shelter, and healthcare, and reduces their reliance on informal lenders, who often charge exorbitant interest rates (Yunus, 1999).

In Nigeria, many small-scale farmers have benefited from microfinance services, which have enabled them to invest in better seeds, tools, and irrigation systems. These investments lead to higher crop yields and increased income, which improves the farmers' quality of life and helps break the cycle of poverty (Oluwatayo, 2021).

ii. Social Inclusion

Microfinance institutions also contribute to poverty alleviation by promoting social inclusion. Poverty often leads to social exclusion, where individuals are marginalized from mainstream economic and social systems. By providing financial services to the poor, MFIs create opportunities for them to participate in the economy, access essential services, and improve their social standing (Silver, 1994).

In many cases, microfinance clients are able to join cooperatives, attend training programs, and participate in community activities, which enhances their social capital and reduces isolation. For example, in Nigeria, microfinance institutions often provide financial literacy training to their clients, which not only improves their business skills but also empowers them to participate more fully in their communities (Akinyemi, 2019).

iii. Breaking the Cycle of Poverty

One of the key strengths of microfinance is its ability to break the intergenerational cycle of poverty. By providing individuals with the tools, they need to improve their economic situation, MFIs help create pathways out of poverty for future generations. When parents are able to generate income and improve their living conditions, they are more likely to invest in their children's education and health, which leads to long-term improvements in human capital and economic opportunities (Karlan & Morduch, 2010).

Research has shown that children in households that have access to microfinance services are more likely to attend school and receive adequate healthcare. This, in turn, increases their chances of escaping poverty as adults, creating a positive cycle of upward mobility (Kabeer, 2001).

The Role of Microfinance Banks in Fostering Small Business Development, Especially in Underprivileged Communities

Microfinance banks play a pivotal role in economic development, especially in underprivileged communities where access to formal financial services is limited or nonexistent. By providing small loans, savings, and other financial services, these banks enable entrepreneurs in low-income areas to start or expand small businesses. This section examines the critical role of microfinance banks in fostering small business development, with a particular focus on underprivileged communities. It explores how microfinance banks address financial exclusion, facilitate entrepreneurship, and contribute to sustainable economic growth in marginalized areas.

Fostering Small Business Development

One of the most significant contributions of microfinance banks is their role in fostering small business development, particularly in underprivileged communities. Small businesses are the backbone of many economies, especially in developing countries, where they provide employment opportunities and contribute to economic growth (Uford, 2026). However, entrepreneurs in underprivileged areas often face significant barriers to accessing the capital needed to start or expand their businesses.

Microfinance banks help bridge this gap by providing financial services tailored to the needs of small business owners.

i. Access to Capital

Access to capital is one of the primary challenges faced by small businesses in underprivileged communities. Traditional banks often require collateral, extensive documentation, and a proven credit history, which many small business owners in these areas do not have. Preference is given to exotic goods and products than those from the Nigerian soil (Umoh, 2018). Microfinance banks, however, provide small loans with minimal collateral requirements, allowing entrepreneurs to access the funds they need to start or grow their businesses (Karlan & Morduch, 2010).

For example, in Nigeria, many microfinance banks offer small loans to women who run businesses in the informal sector, such as street vendors, seamstresses, and food sellers. These loans allow women to purchase inventory, buy equipment, and expand their businesses, which in turn increases their income and improves their living standards (Akinyemi, 2019). A fiscal deficit is an excess of the government's total expenditure over its total revenue in an accounting year (Ekpo et al., 2024). The flexibility and accessibility of microfinance loans make them particularly suited to the needs of entrepreneurs in underprivileged communities, where formal financial institutions are often out of reach.

ii. Supporting Start-Ups and Expanding Existing Businesses

Microfinance banks not only provide capital for start-ups but also support the expansion of existing businesses. Small business owners in underprivileged communities often face difficulties in scaling their operations due to limited access to financing. Microfinance banks address this issue by offering additional rounds of credit to businesses that have demonstrated success with their initial loans. SWOT Analysis is a strategic planning tool used to identify and analyze the internal and external factors that can impact a startup's success (Edet et al., 2024). This enables entrepreneurs to expand their businesses, hire more employees, and increase their production capacity (Adelakun, 2018).

In developing countries, microfinance banks have played a crucial role in transforming small-scale enterprises into sustainable businesses. In many cases, these businesses are able to transition from informal operations to formal enterprises, contributing to local economic development and creating jobs in their communities. Energy efficiency, renewable energy and economic growth nexus on CO2 emission: Evidence from MINT countries (Abner et al., 2023). By providing entrepreneurs with the capital, they need to grow, microfinance banks foster the development of a vibrant small business sector that can drive economic growth and reduce poverty (Ledgerwood, 2013).

iii. Financial Inclusion

Microfinance banks are instrumental in promoting financial inclusion, particularly in underprivileged communities where access to formal financial services is limited. Financial inclusion refers to the process of ensuring that individuals and businesses have access to useful and affordable financial products and services that meet their needs. For small business owners, access to banking services such as savings accounts, credit, and insurance is essential for managing cash flow, making investments, and mitigating risks (Churchill & Matu, 2012).

Microfinance banks provide a range of financial products tailored to the needs of small business owners in underprivileged communities. In addition to credit, these banks offer savings accounts that allow entrepreneurs to save for future investments, cover unexpected expenses, and build financial resilience, Micro insurance products, such as health and life insurance, also help protect small business owners from risks that could jeopardize their operations (Ledgerwood, 2013). Creativity denotes bringing new ideas to reality through imagination. It suggests innovativeness through thought (Umoh & Ekpo, 2025). Social responsibility disclosure can be said to be a practice that involves reporting to stake

holders about the social and environmental impact of economic activities of an organization (John et al., 2025). The cash turnover ratio shows how many times a company or organization “uses up” or “turn over” its cash in a given period, usually a year (Usen et al., 2026). By promoting financial inclusion, microfinance banks help create an enabling environment for small businesses to thrive.

iv. Capacity Building and Entrepreneurial Training

In addition to providing financial services, many microfinance banks offer capacity-building programs and entrepreneurial training to their clients. These programs are designed to equip small business owners with the knowledge and skills they need to manage their businesses effectively. Topics covered in these training sessions may include financial literacy, business planning, marketing, and customer service. By grasping the interplay between market capitalization and cash management, companies can refine their financial strategies to achieve their objectives and maximize shareholder value (Udomah & Emenyi, 2023). By improving the skills of small business owners, microfinance banks help them run more efficient and profitable businesses (Mayoux, 2006).

Entrepreneurial training is particularly valuable in underprivileged communities, where many individuals may lack formal education or business experience. In Nigeria, for example, microfinance banks often provide training to rural entrepreneurs who are starting businesses in agriculture, trade, and handicrafts. This training helps entrepreneurs improve their productivity, increase their income, and contribute to the overall development of their communities (Oluwatayo, 2021). Economists are vastly divided on the desirability and impacts of fiscal deficit on the economy (Ekpo et al., 2024). The combination of financial services and capacity building offered by microfinance banks is essential for fostering small business development in underprivileged areas.

Microfinance Banks and Sustainable Development

In addition to fostering small business development and addressing social inequalities, microfinance banks contribute to sustainable development in underprivileged communities. Sustainable development refers to economic growth that is inclusive, equitable, and environmentally responsible. By promoting entrepreneurship, job creation, and financial inclusion, microfinance banks help create a foundation for long-term economic development that benefits both individuals and communities (Armendáriz & Morduch, 2010). John et al. (2024) investigated the effect of the size of firms on the nexus between the financing leverage and financial stability of listed industrial goods companies in Nigeria.

i. Job Creation

One of the key contributions of microfinance banks to sustainable development is their role in creating jobs. Small businesses are a major source of employment in developing countries, particularly in underprivileged communities where formal job opportunities are scarce. By providing capital to entrepreneurs, microfinance banks enable small businesses to grow and hire more workers, which reduces unemployment and contributes to economic stability (Adelakun, 2018). Fiscal deficit is caused and enhanced by factors such as a shortfall in revenue from taxes, large public sector, non-diversification of the revenue base of the economy, the rising cost of government activities due to rising inflation rate, corruption and mismanagement of available public funds, demographic changes and decline in terms of trade as stated by (Udo et al., 2024).

In Nigeria, for example, microfinance banks have played a crucial role in creating jobs in sectors such as agriculture, trade, and manufacturing. These jobs provide individuals with a stable source of income, which improves their quality of life and reduces their reliance on informal or subsistence-level work. The constant rise in the cost of imports in such a troubled economy like Nigeria's requires the

need for the nation to look inward by prioritising indigenous products in her multi-sectorial developmental drive (Umoh et al., 2024). Job creation through small business development also has a positive impact on local economies, as it increases demand for goods and services and stimulates economic activity (Oluwatayo,2021).

ii. Promoting Inclusive Growth

Inclusive growth refers to economic growth that benefits all members of society, particularly those who are most marginalized. Microfinance banks promote inclusive growth by ensuring that underprivileged communities have access to the financial resources they need to participate in the economy. By supporting small businesses in these areas, microfinance banks help reduce income inequality and promote more equitable economic development (Ledgerwood,2013). While maximum Nigerian universities have initiated the programme, little studies is to be had to evaluate its effect and additionally to affirm if a dating exists between college students taking guides in entrepreneurship and their goal of turning into marketers (Mbang et al., 2023). In underprivileged communities, where the formal financial sector often fails to reach, microfinance banks serve as a vital bridge to economic opportunity. Colour entails the perception of light and the different wavelengths that can be seen through in the spectrum as they are being reflected off the objects (Etim & Uford, 2018). By providing financial services to marginalized individuals and businesses, microfinance banks help ensure that the benefits of economic growth are shared more widely, contributing to poverty reduction and social cohesion (Armendáriz & Morduch, 2010). Agricultural raw materials exports has a positive effect on real gross domestic product while agriculture value added exhibited a negative relationship with real gross domestic product (Utuk et al., 2024).

iii. Supporting Environmentally Sustainable Practices

While the primary focus of microfinance banks is on economic and social development, some institutions also promote environmentally sustainable practices. For example, microfinance banks may provide loans for businesses that engage in environmentally friendly activities, such as renewable energy, sustainable agriculture, and waste management. These initiatives help reduce the environmental impact of economic activities and contribute to long-term sustainability (Churchill & Matul,2012).

In Nigeria, some microfinance banks have supported the development of small-scale renewable energy projects, such as solar power for rural households and businesses. These projects not only provide a source of clean energy but also create new economic opportunities for entrepreneurs in the renewable energy sector. Therefore, civilization has sponsored a great shift in interest and patronage of African ritual drama. By integrating environmental sustainability into their lending practices, microfinance banks contribute to the broader goal of sustainable development (Oluwatayo,2021).

Justification for the Establishment of Microfinance Banks in Nigeria, Target and Goals

The establishment of microfinance banks in Nigeria was primarily justified by the need to address the inefficiencies and gaps in the country's financial sector. The Central Bank of Nigeria (CBN) outlined several key reasons for their establishment. One significant issue was the weak institutional capacity of community banks, which had been performing sub-optimally for an extended period. Many of these banks failed to adequately meet the financial needs of their communities, particularly in rural areas where access to banking services was minimal (Central Bank of Nigeria,2005).

Another major justification for microfinance banks was the large unserved market that remained untapped by existing financial institutions. In Nigeria, the average banking density stood at one financial institution for every 32,700 people. This statistic was even more dire in rural areas, where there was only one financial institution for every 57,000 inhabitants. As a result, less than 2% of rural households

had access to formal financial services, leaving the vast majority of the population without access to credit, savings, or other financial products (Central Bank of Nigeria, 2005).

Additionally, the underutilization of available funds for small and medium enterprises (SMEs) was a concern. The Small and Medium Enterprises Equity Investment Scheme (SMEEIS), which was designed to support the growth of SMEs, had seen low utilization rates. By December 2004, only N8.5 billion¹ (or 29.5%) of the N28.8 billion allocated under the SMEEIS fund had been used. Microfinance banks were viewed as a solution to help channel these funds more effectively to SMEs, especially in underserved regions, and thus promote economic development and financial inclusion (Central Bank of Nigeria, 2005).

Target and Goals

Microfinance banks in Nigeria were established with a clear set of targets and goals aimed at fostering financial inclusion, reducing poverty, and promoting economic development. According to the Central Bank of Nigeria (CBN, 2005), the key targets for microfinance banks include:

- a. **Reaching the Economically Active Poor:** Microfinance banks aim to cover the majority of the poor but economically active population. By 2020, they were expected to create millions of jobs and significantly reduce poverty levels by providing access to financial services for underserved segments of society.
- b. **Promoting Gender Equality:** One of the objectives of microfinance banks is to eliminate gender disparity by improving women's access to financial services. The goal is to increase women's access by 5% annually, recognizing that women are often disproportionately affected by poverty and financial exclusion (CBN, 2005).
- c. **Fostering Linkages Among Financial Institutions:** Another target is to increase linkages between microfinance banks and other financial institutions such as universal banks, development banks, and specialized finance institutions. The aim is to strengthen the financial ecosystem by increasing these linkages by 10% annually, ensuring that microfinance banks can collaborate effectively with other players in the financial sector (CBN, 2005).

The goals of microfinance banks, as outlined by the CBN, are focused on the sustainable development of the active poor. These goals include:

- a. **Providing Diversified Financial Services:** Microfinance banks are tasked with offering affordable and dependable financial services to the active poor in a timely and competitive manner. This would enable them to undertake and develop long-term sustainable entrepreneurial activities, thereby promoting economic growth.
- b. **Mobilizing Savings for Intermediation:** Microfinance banks also aim to mobilize savings from their customers. By doing so, they can effectively intermediate these savings, using them to provide loans and other financial products that support business development and income generation for the poor.
- c. **Creating Employment and Increasing Productivity:** A major goal of microfinance banks is to create employment opportunities and increase the productivity of the active poor. Operational risks involve the internal processes and day-to-day activities of a start-up (Edet et al. 2024). By doing this, microfinance banks can help raise the individual household income of their clients, thereby improving their standard of living and contributing to the overall economic development of the country.

Theoretical Framework

This study adopts the following theories as its theoretical framework for analysis: Theory of Financial Intermediation, Endogenous Growth Theory, Credit Rationing Theory and Supply Leading Finance Theory.

i. Financial Intermediation Theory

The Financial intermediation Theory, developed by John G. Gurley and Edward S Shaw in 1960. Gurley and Shaw (1960), highlights the crucial role of financial institutions in economic development. This theory posits that financial intermediaries, such as banks, help bridge the gap between surplus units (savers) and deficit units (borrowers). A key assumption of the theory is that financial intermediaries reduce transaction costs and information asymmetry, thereby facilitating the efficient allocation of financial resources in the economy (Goldsmith, 1969). By managing risk and pooling resources, financial institutions ensure that funds are directed to their most productive uses.

In the context of microfinance banks, this theory is particularly applicable, as these institutions provide access to credit for individuals and businesses that are typically excluded from the formal financial system. In Nigeria, where small and medium enterprises (SMEs) and low-income households often struggle to secure financing, microfinance banks serve as crucial intermediaries. By providing credit and other financial services, microfinance banks enhance productive investment, particularly in underserved sectors, thus promoting economic growth (Beck & Levine, 2004). The Financial Intermediation Theory supports the idea that microfinance institutions, by bridging financial gaps, can drive economic expansion in Nigeria, making it highly relevant to the present study.

ii. Endogenous Growth Theory

The Endogenous Growth Theory, introduced by Paul Romer in 1986, offers a framework that views economic growth as being driven by internal factors rather than external influences. The core assumption of this theory is that investments in human capital, innovation, and knowledge creation lead to sustained economic growth (Romer, 1990). Unlike traditional growth models that view technological advancements as exogenous, Romer's model suggests that economic agents within an economy can generate long-term growth through strategic investments and innovation.

Microfinance banks, by providing financial support to small-scale businesses and low-income individuals, play a critical role in fostering these internal growth factors. In Nigeria, where capital constraints hinder entrepreneurial activities, microfinance banks contribute to economic development by offering loans that promote innovation and capacity building (Aghion & Howitt, 1998). Through access to credit, entrepreneurs are able to invest in human capital and technology, fostering productivity and economic growth from within. This theory is thus integral to understanding the role of microfinance banks in the endogenous development of Nigeria's economy.

iii. Credit Rationing Theory

The Credit Rationing Theory was proposed by Joseph E. Stiglitz and Andrew Weiss in 1981. Stiglitz and Weiss (1981), explains why financial institutions may limit the supply of credit, to certain borrowers, even when they are willing to pay higher interest rates. The theory is based on the assumption of asymmetric information between lenders and borrowers, which leads to adverse selection and moral hazard. As a result, financial institutions may ration credit to mitigate risk, often excluding borrowers they perceive as high-risk, such as small business and low-income individuals.

Microfinance banks emerge as crucial players in addressing this market failure by providing loans to those who are denied access to formal financial services. In Nigeria, where traditional banks often perceive lending to micro-enterprises and low-income individuals as too risky, microfinance institutions step in to fill this gap (Armendáriz & Morduch, 2010). By extending credit to underserved

segments of the population, microfinance banks not only reduce credit rationing but also enable small businesses and individuals to engage in productive activities, which stimulates economic growth. This theory is particularly applicable to the present study, as it highlights the importance of microfinance institutions in overcoming financial market imperfections.

iv. Supply-Leading Finance Theory

The Supply-Leading Finance Theory, formulated by Hugh T. Patrick in 1966. Patrick (1966), posits that the supply of financial services can stimulate economic growth by creating demand for investments. According to this theory, financial institutions act as catalysts of economic development by providing the necessary financial resources to underdeveloped sectors and regions. A central assumption of the theory is that increasing the supply of credit can lead to economic activities and investment opportunities, especially in economies with underdeveloped financial markets.

Microfinance banks in Nigeria exemplify this theory, as they extend financial services to sectors of the economy that are often neglected by commercial banks. By increasing access to credit for SMEs and low-income households, microfinance banks help to stimulate economic activities and create opportunities for growth. In this context, these institutions play a proactive role in fostering economic expansion, particularly in areas where access to traditional financial services is limited (King & Levine, 1993). The Supply-Leading Finance Theory is directly applicable to this study, as it emphasizes the role of microfinance banks in promoting economic growth by leading the provision of credit and other financial services.

Summary of Reviewed Literature

Different studies have been conducted on microfinance banks and its impacts on the growth of different economies. However, a number of such studies have been selected as essential for this research.

Araga, Sufian, Mac-Ozigbo, and Olusanya (2022) examined the impact of microfinance banks on poverty reduction and economic growth in Nigeria between 1980 and 2020. Using error correction methods for data analysis, their study found that while poverty reduction had no significant influence on GDP growth, the assets of microfinance banks significantly contributed to both poverty alleviation and GDP growth. In a study conducted in Ogbomoso, Oyo State, Nigeria, Obadire (2022) assessed the potential of microfinance banks to reduce poverty. The research involved 80 participants and employed Chi-square, Pearson correlation, and Analysis of Variance (ANOVA) for data analysis. The findings revealed that microfinance banks positively and significantly impacted the living standards of the respondents.

Gonji, Dapim, and Shodeinde (2022) analysed data from 2005 to 2019 to explore the role of microfinance banks in Nigeria's economic development. Using the Ordinary Least Squares (OLS) method, they found that factors such as capital growth, microfinance interest rates, employment, and microfinance loans were pivotal to economic growth. However, business expansion had an insignificant effect on Nigeria's economic growth. Falade (2022) investigated how microfinance bank services influence the growth of small and medium enterprises (SMEs) in Nigeria. With a sample of 200 participants, the study used correlation analysis and found a significant positive relationship between microfinance bank services and SME growth. Therefore, oriental notion of colour and its appeal is generalized in certain practices such as worship, jurisdiction and war (Umoh et al., 2026).

Babarinde, Abdulmajeed, Angyu, and Abu (2022) used annual data from 1992 to 2019 to analyse the impact of microfinance banks on Nigeria's economic growth, employing the Autoregressive Distributed Lag (ARDL) method. Their findings showed that microfinance banks' lending and deposit activities positively contributed to long-term economic growth, though microfinance bank investment

had no significant effect on short-or long-term growth. In their study, Otekunrin, Kenechukwu, Eluyela, John, and Ibrahim (2022) examined the influence of microfinance banks on economic growth using data from 1996 to 2019. Using the Vector Autoregressive (VAR) method, they found that microfinance bank activities had a minimal but positive impact on Nigeria's economic growth. Onyele (2022) assessed the role of microfinance banks in reducing poverty in Nigeria from 1992 to 2018, applying ARDL analysis. The study revealed that improvements in the loan-to-deposit and liquidity-to-deposit ratios of microfinance banks helped alleviate poverty in the long term, though short-term poverty reduction was not guaranteed.

3. RESEARCH METHODOLOGY

Research Design

The study adopted the ex-post facto research design due to its suitability in forecasting time series variables. In this design, the use of past values to explain future outcomes is made possible; it combines theory and empirical exercises in estimating the impact of the explanatory variable on the explained variable. Research design is the strategy for conducting research. It details the main scheme the researcher adopts to develop findings that are accurate as well as interpretable. This study adopted an ex-post facto research design. Hence, the study will examine the impact of microfinance banks on the economic growth of Nigeria for the period 1990-2023.

Data Sources

The method of data collection is documentary. Current, relevant, and rich data/literature were sourced from the Central Bank of Nigeria (CBN). Other sources include books and journal articles; the data used for this study are basically time series data covering 1990 to 2023.

Model Specification

Based on the hypotheses, objectives, and questions of this study, the researcher outlines the functional relationship between impact of microfinance banks, the study specifies the functional relationship of the model as follows:

$$RGDP = f(MFLO, MFLI, MFDEP, GFCE, GX.2) \dots (1)$$

Mathematically the model is presented as:

$$SMEG = \beta_0 + \beta_1 MFLO + \beta_2 MFLI + \beta_3 MFDEP + \beta_4 GFCE + \beta_5 GXP \dots (2)$$

The model when specified in its econometric form becomes:

$$RGDP = \beta_0 + \beta_1 MFLO + \beta_2 MFLI + \beta_3 MFDEP + \beta_4 GFCE + \beta_5 GXP + U; \dots (3)$$

Where:

RGDP=Real Gross Domestic Product

MFLO=Microfinance Banks Loan

MFLI=Microfinance Banks Liabilities

MFDEP= Microfinance Banks Deposits

GFCE=Gross Fixed Capital Formation (Domestic Investment)

GXP=Government Total Expenditure

β_0 =Intercept or constant term

$\beta_1 - \beta_5$ =Parameters to be estimated. They measure the effect of the independent variables on the dependent variables.

U_1 = Error term. This takes care of other variables not computed in the model.

Description of Variables in the Model

The model for this study is made up of the dependent and independent variables.

Dependent Variable:

RGDP (Real Gross Domestic Product): Real Gross Domestic Product (RGDP) measures the total value of goods and services produced in a country over a specific period, adjusted for inflation. It reflects the actual growth of the economy by accounting for price changes and provides a more accurate measure of economic performance. In this study, RGDP is used as the dependent variable to assess the impact of microfinance banks and other factors on Nigeria's economic growth.

Independent Variables:

MFLO (Microfinance Banks Loan): Microfinance Banks Loan (MFLO) refers to the total amount of loans disbursed by microfinance banks to individuals, small businesses, and other enterprises. These loans are typically aimed at improving financial inclusion by providing credit to underserved populations. In this study, MFLO is an independent variable used to assess: how microfinance loans contribute to economic growth in Nigeria.

MFLI (Microfinance Banks Liabilities) Microfinance Banks Liabilities (MFLI) represent the total obligations or debts of microfinance banks. These liabilities may include customer deposits, borrowed funds, and other financial commitments. MFLI is included as an independent variable to examine its effect on economic growth, particularly in terms of how the liabilities influence the financial capacity of microfinance banks and their ability to provide credit.

MFDEP (Microfinance Banks Deposits) Microfinance Banks Deposits (MFDEP) refer to the total amount of funds deposited by customers into microfinance banks. These deposits are crucial as they provide banks with the liquidity necessary to extend loans and other financial services. In this study, MFDEP is used as an independent variable to explore its contribution to economic growth by assessing the role of deposits in supporting bank lending and investment activities.

GFCF (Gross Fixed Capital Formation) Gross Fixed Capital Formation (GFCF) refers to the total value of investment in physical assets such as buildings, machinery, and infrastructure within an economy. It is a key indicator of domestic investment and long-term economic development. In this study, GFCF is included as an independent variable to capture the role of domestic investment in promoting economic growth.

GXP (Government Total Expenditure) Government Total Expenditure (GXP) represents the total spending by the government on goods, services, and public projects. It includes expenditures on infrastructure, education, healthcare, defense, and other public services. GXP is used as an independent variable to assess how government spending influences economic growth, particularly in the context of its interaction with microfinance activities and overall economic expansion.

These variables together will help in understanding the impact of microfinance banks and other economic factors on Nigeria's overall economic growth.

Method of Analysis

Regression analysis is a statistical technique used to estimate the relationship between a dependent variable and one or more independent variables. In the context of this study, regression analysis can be used to examine the impact of electronic banking on the banking sector and the Nigerian economy.

Economic A' Priori Expectation

Based on the variables provided, we can make some economic a priori expectations about the potential relationships between them as summarized in the table below:

Variables	Expectation Sign	Explanation
RGDP	Positive (+)	All other variables in the model affect RGDP

MFLO	Positive(+)	An increase in MFLO will lead to an increase in RGDP
MFLI	Negative(-)	An increase in MFLI will lead to a decrease in RGDP.
MFDEP	Positive(+)	An increase in MFDEP will lead to an increase in RGDP
GFCF	Positive(+)	An increase in GFCF will lead to an increase in RGDP
GXP	Positive(+)	An increase in GXP will lead to an increase in RGDP

First Order Test

The statistical criteria used to test the first-order hypothesis include:

(A) Coefficient of determination (R^2): This measures the proportion of variation in the dependent variable that can be explained by the independent variables. A higher R-squared value (close to 1) indicates a better fit of the model and suggests that the independent variables have a significant impact on the dependent variable and a low R-squared value (close to 0) indicates a poor fit of the model.

(B) F-Test: This measures the overall significance of the model. It tests whether at least one of the independent variables in the model is significant in explaining the variation in the dependent variable. The null hypothesis for the F-test is that all the regression coefficients are equal to zero, implying that the independent variables do not have any significant relationship with the dependent variable. If the calculated F-statistic is greater than the critical value of the F-distribution, the null hypothesis is rejected, and it is concluded that at least one independent variable has a significant relationship with the dependent variable. Conversely, if the calculated F-statistic is less than the critical value of the F-distribution, the null hypothesis is accepted, and it is concluded that none of the independent variables have a significant relationship with the dependent variable. A high F-statistic suggests that the model as a whole is significant.

(C) T-Test: This measures the significance of each individual independent variable in the model. A high t-statistic indicates that the independent variable is significant in explaining the variation in the dependent variable. In this study, we will use a significance level of 0.05. Therefore, if the calculated t-value is greater than the critical value of t at 0.05 significance level, we will reject the null hypothesis and conclude that the corresponding independent variable has a significant effect on the dependent variable. Conversely, if the calculated t-value is less than the critical value of t at 0.05 significance level, we will accept the null hypothesis and conclude that the corresponding independent variable has no significant effect on the dependent variable.

Second Order Test (Econometric Criterion)

The test was performed on the variables to check the reliability of estimates by testing whether the econometric assumptions hold true or not. The tests carried out under this criterion are:

(A) Unit Root Test: The purpose of the Unit Root Test is to check if time series data is stationary to avoid obtaining incorrect regression results. Stationary time series data possesses stable statistical characteristics, such as a constant mean, variance, and autocorrelation over time, making it necessary for valid evidence. To check for stationarity, the Augmented Dickey-Fuller Unit Root Test was employed.

(B) Augmented Dickey-Fuller Test: However, the Dickey-Fuller test may experience autocorrelation issues in the residual process if Ordinary Least Squares (OLS) is applied in this study. Therefore, the augmented Dickey-Fuller test was utilized due to possible non-normality and non-identical distribution of errors, and biased residual variance. The augmented Dickey-Fuller test is a modification of the Dickey-Fuller test, and it is a suitable method for checking the order of integration of a variable. The alternative hypothesis suggests that economic agents can predict future prices, and it does not follow a random walk.

(C) Co-integration: In this study, the engle-granger test was adopted to determine whether the variables are integrated in the same order. This method enabled the researcher to determine the number of co-integrating vectors among variables in consideration. After testing the unit root, the null hypothesis of no co-integration is rejected when the p-value is greater than 0.05 at a 5 percent level of significance.

(D) Normality Tests: Normality tests are used to determine whether a model is normally distributed and to compute how likely it is for a random variable underlying the data set to be normally distributed. This test assures that the error term ϵ is normally distributed. The study made use of the Shapiro-Wlik test to test for normality (Gujarati, 1995).The Jarque-Bera normality test was carried out to ascertain the normality of residuals in the model using the histogram-normality test.

(E) Granger Causality Test: This is a statistical hypothesis test for determining whether one-time series is useful in forecasting another. In other words, the Granger Causality Test is used to verify the usefulness of ore variable to forecast the other.

(F) Coefficient of Multiple Determination and Durbin Watson (DW) Statistics tests: The direction and significance of the impact of fiscal policy on economic growth in Nigeria are then examined with the use of the Ordinary Least Square (OLS) model. The coefficient of determination (R²) and Durbin-Watson was used in the interpretation of the results. The coefficient is used to measure the individual contribution of the variables to variation in the dependent variable. Durbin Watson (DW) Statistics tests for autocorrelation in the regression.

4. DATA PRESENTATION AND ANALYSIS

Data Presentation

This chapter focuses on the presentation of data used in estimating the model as developed and enumerated in chapter three. The data were sourced mainly from the Central Bank of Nigeria (CBN) publications from 1990-2023.

Table 4.1

YEAR	MFLO	RGDP	GFCF	MFDEP	MFLI	GXP
1990	11,148.10	494,644,000,000	263,085,000,000	21,680.20	8.03781	587,882,900
1991	10,910.56	590,060,000,000	285,623,000,000	21,757.90	9.90949	712,373,400
1992	11,578.98	906,029,000,000	396,654,000,000	22,765.55	17.2984	896,641,300
1993	10,790.31	1,257,170,000,000	559,303,000,000	22,302.24	22.0511	1,345,369,000
1994	10,151.70	1,768,790,000,000	744,372,000,000	21,897.47	21.8861	1,959,220,000

1995	9,845.97	3,100,240,000,000	1,154,520,000,000	21,881.56	21.8861	335,842,200
1996	10,402.19	4,086,070,000,000	1,496,540,000,000	22,799.69	21.8861	499,276,800
1997	10,599.70	4,418,710,000,000	1,700,210,000,000	23,469.34	21.8861	469,577,000
1998	10,641.26	4,805,160,000,000	1,951,610,000,000	24,075.15	21.8861	299,566,700
1999	10,201.81	5,482,350,000,000	2,102,030,000,000	24,215.78	92.6934	1,004,916,000
2000	10,962.84	7,062,750,000,000	2,409,070,000,000	25,430.42	102.105	1,140,168,000
2001	11,576.32	8,234,490,000,000	2,546,590,000,000	26,935.32	111.943	1,190,619,000
2002	11,725.42	11,501,500,000,000	3,172,390,000,000	31,064.27	120.97	1,874,071,000
2003	13,151.23	13,557,000,000,000	3,983,960,000,000	33,346.62	129.357	2,005,354,000
2004	13,382.86	18,124,100,000,000	4,914,880,000,000	36,431.37	133.5	1,874,061,000
2005	13,609.76	23,121,900,000,000	6,055,530,000,000	38,777.01	132,147	4,982,534,000
2006	13,342.47	30,375,200,000,000	8,464,220,000,000	41,126.68	128.652	4,854,354,000
2007	13,085.27	34,675,900,000,000	7,366,770,000,000	43,837.39	125.833	6,036,021,000
2008	12,817.79	39,954,200,000,000	7,949,690,000,000	46,802.76	118,567	8,194,072,000
2009	13,138.95	43,461,500,000,000	9,583,050,000,000	50,564.26	148.88	8,555,990,000
2010	13,826.43	54,612,300,000,000	9,591,060,000,000	55,469.35	150.298	6,026,253,000
2011	14,986.62	63,134,700,000,000	10,329,200,000,000	58,180.35	153.862	8,841,062,000
2012	15,350.45	72,351,500,000,000	10,822,900,000,000	60,670.05	157.499	7,069,908,000
2013	15,682.46	81,010,000,000,000	12,073,600,000,000	63,942.85	157.311	5,562,858,000

2014	16,742.15	90,137,000,000,000	14,244,100,000,000	67,977.46	158.553	4,693,829,000
2015	16,366.66	95,177,700,000,000	14,743,100,000,000	69,780.69	193.279	3,064,169,000
2016	14,918.15	102,575,000,000,000	15,762,500,000,000	68,652.43	253.492	3,453,258,000
2017	15,238.28	114,899,000,000,000	17,779,900,000,000	69,205.69	305.79	2,412,975,000
2018	15,523.43	129,087,000,000,000	25,577,000,000,000	70,536.35	306.08	775,247,400
2019	15,882.35	145,639,000,000,000	37,015,500,000,000	72,094.09	306.921	2,305,100,000
2020	14,953.72	154,252,000,000,000	45,348,400,000,000	70,800.54	358.811	2,385,278,000
2021	14,883.77	149,946,000,000,000	41,181,500,000,000	73,382.77	403.581	2,345,189,000
2022	15,371.51	184,597,000,000,000	47,247,671,000,000	75,206.64	428.246	2,347,957,000
2023	16,537.20	193,617,000,000,000	49,349,379,000,000	79,379.34	476.024	2,756,347,000

Sources: Central Bank of Nigeria Statistical Bulletin 2023.

Data Analysis

Unit Root Test

Table 4.2 Unit Root Test Result

Variables	ADF Statistical @ level	Critical value 5 per cent	ADF statistical @ First Differences	Critical value 5 per cent	Order of integration
RGDP	-2.424	-3.592	-5.083*	-3.596	1(1)
MFDEP	-1.076	-3.592	-4.245*	-3,596	1(1)
MFLO	-1.144	-3.592	-3.614*	-3.596	1(1)
MFLI	-1.036	-3.592	-3.784*	-3,596	1(1)
GFCF	-2.573	-3.592	-4.722*	-3.596	1(1)
GXP	-2.130	-3.592	-3.885*	-3.596	1(1)

Source: Authors Computation Using E-Views 10 Outputs.

The unit root (stationarity) test was conducted using Augmented Deckey Fuller (ADF) test. The result of the ADF test shows that all the variables were stationary at first difference 1(1). Furthermore, the result of the ADF test statistic above showed that the ADF statistics of the entire variables are greater

than their critical values at 5 percent level of significance. According to Pesaran and Yongcheol (1999) and Pesaran, Yongcheol and Richard (2001), if the data used in the econometric analysis is not stationary at level but is stationary after differencing the data, it means that information regarding the long run relationship between the variables has been lost during the process of differencing the data. As such they advocate for the test of long-run relationship to ascertain the long run status of the model.

Co-integrations Test

The variables were subjected to a co-integration test to determine whether they are co-integrated (i.e. whether there is a long-run relationship between them). Both Trace value and Maximum Eigen values indicate one co-integrating equation at 5 percent level of significance. This is shown in the table below:

Table 4.3 Co-integration Test Result

Date: 10/06/24 Time: 15:29
 Sample (adjusted): 1990 2023
 Included observations: 36 after adjustments
 Trend assumption: Linear deterministic trend
 Series: RGDP GFCF MFLO MFLI MFDEP GXP
 Lags interval (in first differences): 1 to 1

Unrestricted Co-integration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None*	0.7025	88.6219	82.49889	0.0002
At most 1	0.6153	54.6713*	59.46613	0.0781
At most 2	0.3955	27.9208	29.79707	0.7312
At most 3	0.3012	13.8232	39.89872	0.0688
At most 4	0.1128	3.7862	24.31471	0.6593
At most 5	0.01532	0.4323	3.841466	0.6095

Trace test indicates 1 co-integrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Source: Authors' Computation Using E-Views 10 Outputs.

The result of the cointegration test presented in table 4.3 shows that both trace value and maximum Eigenvalue indicate at least five cointegrating equations at 5 percent level of significance. This is shown by the value of the co-integrating likelihood ratio compared with 5percent critical value. Hence, the variables are co- integrated which implies that there is a long run relationship between the variables in the model.

Ordinary Least Square

In order to estimate the equation, the OLS method was employed. The data is presented in Table 4.4 below:

Table 4.4 Ordinary Least Square (OLS) Result

Dependent Variable: RGDP

Method:Least Squares

Date:10/06/24 Time: 16:31

Sample: 1990 2023

Included observations: 40

Variable	Coefficient	Std.Error	t-Statistic	Prob.
C	90.9593	73.3575	1.249569	0.2270
MFLI	-5.59116	5.5728	1.000000	0.3267
MFLO	6.3526	5.9418	3.075846	0.0000
MFDEP	1.0984	0.5085	2.164752	0.0448
GFCF	11.3358	3.3538	3.387689	0.0000
GXP	0.3091	0.5244	0.598434	0.5612
R-squared	0.627393	Mean dependent var		37361.70
Adjusted R-squared	0.487210	S.D. dependent var		20218.95
S.E. of regression	7518.899	Aksike info criterion		20.80470
Sum squared resid	1.98E+09	Schwarz criterion		21.01581
Log likelihood	-411.0939	Hannan-Quinr,criter		20.88103
F-statistic	61.75393	Durbin-Watson stat		2.460560
Prob(F-statistic)	0.000000			

Source: E-Views 10 2026

Interpretation Based on Economic Criterion

The result presented in table 4.4 is therefore put into econometric form as displayed below:

$$RGDP = 90.9593 + 6.3526MFLO - 5.5916MFLI + 1.0984MFDEP + 11.3358GFCF + 0.3091GXP + U_t$$

Interpretation Based on Economic Criterion

Constant: The intercept value of 90.9593 is not statistically significant(p-value=0.2270).This suggests that when all other variables are zero, the Real Gross Domestic Product (RGDP) does not significantly differ from zero. Therefore, the constant term does not provide meaningful information in this context.

Microfinance Banks Liabilities (MFLI): The coefficient for MFLI is -5.59116, indicating a negative relationship with RGDP. However, this relationship is not statistically significant (p-value = 0.3267). This implies that changes in microfinance banks' liabilities do not have a significant impact on RGDP in this model.

Microfinance Banks Loan (MFLO): The coefficient for MFLO is 6.3526, which is positive and statistically significant (p-value = 0.0000). This indicates that an increase in loans provided by microfinance banks is associated with an increase in RGDP. The significance of this variable suggests that microfinance loans play an important role in boosting economic activity.

Microfinance Banks Deposits (MIFDEP): The coefficient for MFDEP is 1.0984, showing a positive and statistically significant relationship with RGDP (t -Value=0.0448). This suggests that higher deposits in microfinance banks are linked to higher levels of RGDP, indicating the importance of savings and deposits in supporting economic growth.

Gross Fixed Capital Formation (GFCF): The coefficient for GFCF is 11.3358, which is both positive and statistically significant (p -Value=0.0000). This strong relationship indicates that domestic investment significantly contributes to the growth of RGDP. Investments in fixed capital are crucial for economic development.

Government Total Expenditure (GXP): The coefficient for GXP is 0.3091, but it is not statistically significant (p -value = 0.5612). This suggests that government expenditure does not have a clear or significant impact on RGDP in this model. The lack of significance may indicate that other factors or inefficiencies are affecting the effectiveness of government spending.

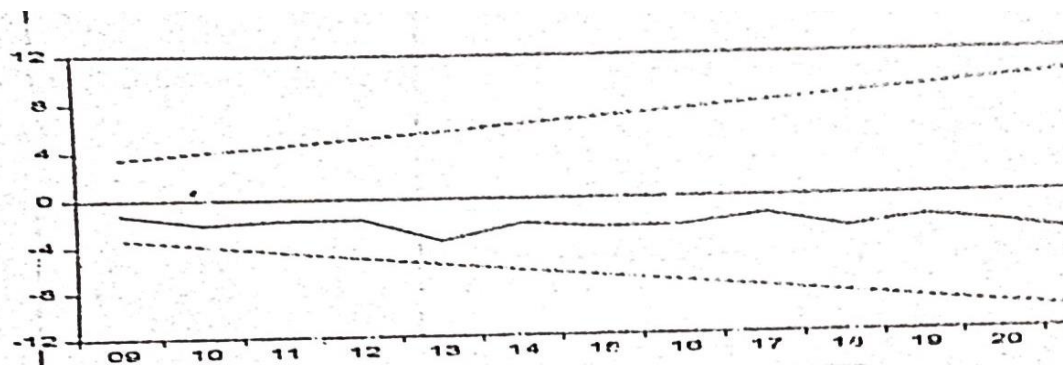
The R-squared value of 0.627393 indicates that approximately 62.74% of the variability in RGDP is explained by the model. The adjusted R-squared value of 0.487210 provides a more accurate measure, accounting for the number of predictors. The F-statistic of 61.75393 with a p -value of 0.000000 shows that the overall model is statistically significant, meaning the included variables collectively have a significant impact on RGDP. The Durbin-Watson statistic of 2.460560 suggests there is no significant autocorrelation in the residuals, indicating the model's reliability.

Diagnostic Tests

a. Normality Test

The models are examined for normal distribution. The Jarque-Bera (JB) statistics is used to test for the normality of the models. The null hypothesis states that the models are normality distributed. The decision rule is to reject the null hypothesis if the p -value is less than 0.05 level of significance. In the figure below, the Jarque-Bera statistics are used to test for the normality of the model. The Jarque-Bera p -value of 0.550940 is greater than 0.05, thus, there is a normal distribution. That is, the study, therefore, accepts the null hypothesis that the model is normally distributed.

Figure 4a: Normality test of the models of the study



Source: Author's computation (2026).

4.2.4b. Stability Test

To determine the stability of the model, CUSUM and CUSUM of squares were used. The estimated model is stable if its recursive residuals lie within the two critical bounds. On the other hand, if residuals fall outside the two critical lines the model is said to be unstable. The results of the stability test are presented in Figures 2a and 2b. The analysis in Figure 2a and 2b indicate that both the graph of

CUSUM was stable because the recursive residuals fall within the critical line, meaning that they are all within the 5 % critical bounds. This result implies that the estimated parameters for the study are stable for the period under investigation.

CUSUM RESULT

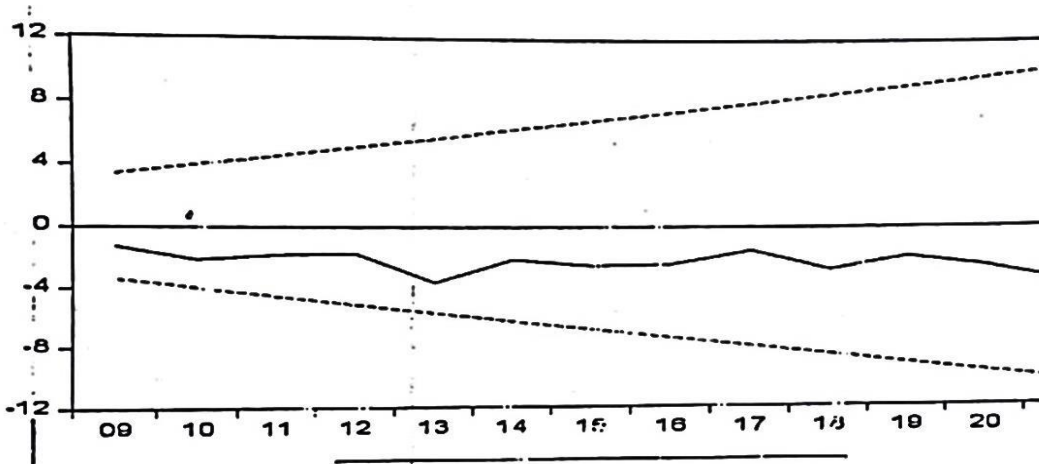


Figure 4.2. CUSUM test

CUSUM OF SQUARES

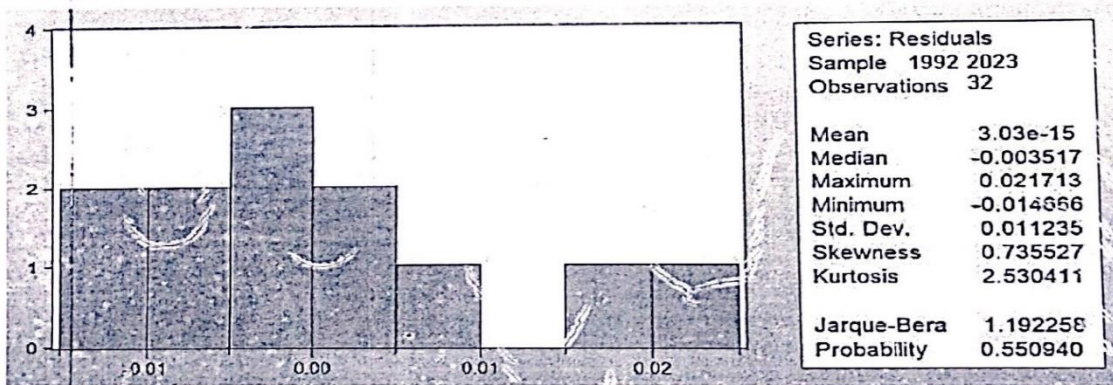


Figure 4.2.4b2. CUSUM of Squares test

4.3 Hypotheses Testing

H₀₁: Microfinance bank loans (MFLO) do not have a significant effect on economic expansion in Nigeria

From the OLS test result, it can be seen that the p-value for microfinance bank loans (MFLO) is 0.0000, which is less than the significance level of 5%. Hence, since the p-value is below the 5% significance level, we reject the null hypothesis (H₀₁) which states that microfinance bank loans (MFLO) do not have a significant effect on economic expansion in Nigeria and accept the alternative hypothesis

(Ha1), which states that Microfinance bank loans (MFLO) have a significant effect on economic expansion in Nigeria.

Ho2: Microfinance banks' deposits (MFDEP) do not significantly affect economic expansion in Nigeria.

From the OLS test result, it can be seen that the p-value for microfinance banks deposits (MFDEP) is 0.0448, which is less than the significance level of 0.05. Hence, since the p-value is below the 5% significance level, we reject the null hypothesis (H01) which states that microfinance bank' deposits (MFDEP) do not significantly affect economic expansion in Nigeria and accept the alternatives hypothesis (H_1).which states that Microfinance bank'deposits (MFDEP) have a significant effect on economic expansion in Nigeria.

Ho3: Microfinance banks' liabilities (MFLI) do not significantly affect economic expansion in Nigeria.

From the OLS test result, it can be seen that the p-value for the microfinance banks liabilities (MFLI) is 0.3267, which is greater than the significance level of 0.05. Hence, since the p-value is above the 5% significance level, we accept the null hypothesis (Ho1) which states that microfinance bank' liabilities (MFLI) do not significantly affect economic expansion in Nigeria and reject the alternative hypothesis (H_1).which states that Microfinance bank'liabilities (MFLI) have a significant effect on economic expansion in Nigeria.

5. SUMMARY OF MAJOR FINDINGS

The Study examined the impact of microfinance banks on economic growth in Nigeria. over the period, (1990-2023). The explanatory variables are Microfinance Banks Loan (MFLO), Microfinance Banks Liabilities (MFLI), Microfinance Banks Deposits (MFDEP), Gross Fixed Capital Formation (GFCF) and Government Total Expenditure (GXP) in Nigeria between the periods of 1990 through 2021 while the dependent variable is Real Gross Domestic Product (RGDP). The study adopted an ex-post facto research design and used secondary data obtained from the CBN Statistical Bulletin. The study covered a period of 33 years (1990 to 2021).The data were subjected to the Augmented Dicker Fuller stationarity test to determine the best suitable econometric tool for analyses. The Ordinary Least Square (OLS) technique was used for the model estimation.

Conclusion

This paper examined the impact of financial intermediation and the growth of SMEs in Nigeria for the period 1990-2021. The results from OLS indicated that Microfinance bank loans (MFLO) have a significant effect on economic expansion, Microfinance banks' deposits (MFDEP) significantly affect economic expansion as well as Microfinance banks' liabilities (MFLI) do not significantly affect economic expansion during the period under investigation. Hence, as shown in the study, microfinance banks have contributed to Nigeria's expanding economy. The results indicate that microfinance bank liabilities negatively affect real GDP growth in Nigeria, although only slightly. It also found that real GDP growth in Nigeria is positively and significantly impacted by microfinance bank loans. Deposits at microfinance banks are also a major factor in Nigeria's expanding economy. Investment at home, is a major factor in GDP expansion. Although government spending is associated with higher GDP growth, this is not the case in Nigeria, where spending is either insufficient or misdirected.

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