Monetary Policy Instruments and Growth of Small and Medium Scale Enterprises in Nigeria (1981-2020)

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Abstract

This research discourse critically investigates monetary policy instruments and growth of small and medium scale enterprises in Nigeria spanning from 1981 to 2021. Secondary data were obtained from Central Bank of Nigeria (CBN) statistical bulletin. Augmented Dickey Fuller unit root test was adopted to ascertain the stationarity of the variables. The ADF unit root test revealed that the variables have mixed order of integration 1(1) and 1(0). This situation makes it necessary for the study to adopt Autoregressive distributive lag to ascertain long-run relationship between the variables using bound test. The result from ARDL establish that in the long-run only broad money supply contribute significantly to the growth of medium scale enterprises in Nigeria. It equally established that monetary policy rate (MPR) had negative, but significant relationship with proportion of service sector to gross domestic product (SGDP) in Nigeria in the short-run. The ARDL result further showed an insignificant correlation between cash reserve ratio (CRR), treasury bill rate (TBR) and the proportion of service sector to gross domestic product (SGDP) in Nigeria. The implication of this result is that if more funds in the guise of money supply is directed to small and medium scale enterprises in the country, unemployment rate and prices of goods and services would reduce. However, increase in other variables such as TBR, MPR, and LR would not enhance the growth of small and medium scale enterprises in Nigeria. The study recommended amongst others that the monetary authority should mandate deposit money banks to direct bulk of its loans to registered small and medium scale enterprises to enable them expand on their productive activities and help reduce unemployment and stable price level in the country.

Keywords: *Monetary Policy Instruments, Money Supply (MS), Service Sector Gross Domestic Product.*

1.0 Introduction

Rapid and potential growth of an economy (developed, developing or less developed) is largely dependent on the viability of small and medium scale enterprises. Therefore, small and medium-sized firms are businesses with a limited

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amount of labour and capital available for production. Small and medium-sized businesses, as defined by Aginah *et al.* (2013), are organisations with an asset base of at least $5 million and at least 100 workers. Small and medium-sized businesses (SMEs) are a crucial element of the economy's growth and development, especially in less developed nations like Nigeria. It is impossible to overstate the significance of the subsector of small and medium-sized businesses. It is crucial to mention that the small and medium-sized company sector has significantly boosted the GDP, business expansion, and job creation in the nation. This is shown by the fact that during the last five years, Nigeria's small and medium-sized firms (SMEs) have created more than 84% of the nation's employment, contributed 48.5% of the nation's GDP, and exported roughly 7.27% of the products and services produced there (Ministry of Industry, Trade and investment, 2020).

This is why small and medium scale enterprises (SMEs) is regarded as the life blood of a nation, the oil that lubricates the wheels of a nation's economy. This is believed to be true based on the illustration above. Small and medium scale enterprises ensure creation of jobs, generate revenue for the economy and develop both rural and urban areas of the country economy. In-line with this observation, the Central Bank of Nigeria (CBN) governor, Emefiele in his presentation in the national Economic council meeting in Abuja, 2020 noted that, bank has helped 120,290 small scale farmers in about three states under Anchor Borrowers Programme launched by President Muhammad Buhari, creating more than 500,000 jobs in the process. It was also observed that the present administration by President Muhammad Buhari, has formulate other programmes such as trader monie to support small and medium scale enterprises in the country, as a policy measure to reduce the rate of unemployment. It was further observed that this programme favoured mostly the unskilled labourers in the country, particularly the market men and women.

However, it has been observed that these laudable programmes, have not reflected the current situation of the country. Take for instance, citizens find it very difficult to meet up with their basic human requirement of life (food, clothing & shelter). A pilot survey of markets in Rivers State shows that, the prices of second hand clothes cost between #2000 and #2500 as at September, 2022, as new ones are very expensive to afford. The situation is worse for accommodation and food. The survey further showed that the cost of a one bedroom flat goes for minimum of #300,000 in an isolated area without security, electricity, good road and other basic

facilities. Food as the chief in the scale of preference should be a source of concern. For instance, in 2022, the prices of goods and services have increased four times. It would be recalled that earlier this year inflation rate was about 16.8%, this rate alone is more than enough to dehumanise the citizens particularly the active poor, but the rate increased to 17.71% in the same year, making life very difficult. Between July and September, 2022 inflation rate increased to 19.64% and now 20.5% (CBN, 2022). This situation has resulted to immense hardship leading to all sort of crime in the country.

It is therefore, imperative to note that the viability and contributions of small and medium scale enterprises is largely dependent on policy framework such as monetary and fiscal policy. However, this study dwells on monetary policy. Monetary policy refers to measures designed to regulate the flow of funds to achieve macroeconomic objectives of full employment favourable balance of payment, price stability etc. According to Thankgod and Igbinovia (2022) monetary policy are tools, techniques or mechanisms adopted by the government through the monetary authority (CBN) to regulate the flow of funds in the economy. According to Amadi and Amadi (2014), monetary policy refers to actions taken to control the amount of credit available to the economy, in order to accomplish certain macroeconomic goals. In order for an economy to grow and flourish, especially one that is still in its early stages like Nigeria's, monetary policy is crucial. For instance, during the last four years, the price of goods and services (inflation) has consistently increased in the Nigerian economy, 11.40%, 13.2%, 15.50% , 17.71%, 19.64% and 20.5% respectively (2019, 2020, 2021, & 2022: NBS, 2022). This situation has resulted to high unemployment rate of about 33.3% in 2021 (NBS, 2022).

As a result, it suggests that Nigeria's small and medium-sized firms (SMEs) have fallen short of expectations in terms of their contribution to the creation of jobs, the generating of money, and the development of both rural and urban parts of the nation. This research article examines how monetary policy tools in Nigeria affect the development of small and medium-sized firms in response to this terrible circumstance. The research is broken into five portions to do this. Section two, which examines theoretical and empirical literatures, follows the introduction. Methodology is covered in Section 3, while Data Analysis, Findings, Conclusion, and Recommendation are covered in Sections 4 and 5**.**

2.0   Literature Review

2.1 Conceptual Framework

2.1.1 Monetary Policy

Monetary policy is one of the prime economic management tools that governments use to shape economic performance. Monetary policy is said to be quicker at resolving economic shocks. Therefore, monetary policy refers to those actions taken by monetary authority, such as the apex bank of a nation, to regulate the value of money; supply and cost of money in the economy with the aim of achieving predetermine macroeconomic objectives. Monetary policy is defined by the Central Bank of Nigeria (CBN) as mixture of processes intended to regulate value supply and interest rate as fees for money in a financial transaction, in agreement with the status of economic accomplishments (Nwoko *et al.,* 2016; Central Bank of Nigeria, 2018).

Nwoko *et al.* (2016) defined monetary policy as the blend of procedures taken by monetary authorities (e.g. the central bank of Nigeria and the Ministry of Finance) to influence directly or indirectly both the supply of money and credit to the economy and the structure of interest rate for economic growth, price stability and balance of payment equilibrium. The experts added that the central bank of Nigeria is empowered by Decree 25 of 1991 Act, to formulate and implement monetary policy in Nigeria, in consultation with the ministry of finance subject to the approval of the President. Ufoeze *et al.* (2018) summed it up when they asserted that monetary policy is therefore applied to influence the availability and cost of credit in order to control the money supply policy. The Central Bank of Nigeria (2011) defined monetary policy as the specific actions taken by it to regulate the value, supply and cost of money in the economy with a view to achieving predetermined macroeconomic goals. Thus, to achieve predetermined economic goals, the CBN embarks on monetary controls. In doing this, it classified money into Narrow Money (M1) and Broad Money (M2). Narrow money (M1) is made up of currency in circulation with the non-bank public; and demand deposits (current accounts in the banks). This category of money represents money used for daily transactions and short-term monetary needs. The broad (M2) consists of narrow money and savings as well as time deposits (that is, call money). It also includes foreign currency-denominated deposits. This categorization measures the total

volume of money in supply in the economy. It is via the broad money that liquidity and inflation issues are tackled by the central bank of Nigeria.

2.1.2 Small and Medium Scale Enterprises

The pursuit of economic development has been a major goal of many nations particularly less developing countries like Nigeria**.** The Nigerian economic has been confronted with numerous problems such as high rate of poverty and unemployment which have continued to hinder the attainment of socio-economic development. However, the medium scale enterprises sub sector of the economy holds the key to the nation's quest for economic growth and development. Today, notwithstanding of the level of growth and development the world over, countries continue to embark on viable policies and programs that would create and pave way for the sustainable development of their economies through small and medium scale enterprises development.

Therefore, medium scale enterprises are necessary tools adopted to attain socio-economic development. In recent time, medium scale industrial sector is considered to be the backbone of modern day economy. Medium scale enterprise are engine to the growth and development of a country, they are the oil that lubricate the wheels of a nation's economy. Medium scale enterprises are regarded as organizations whose productive capacity are small in terms of assets, and capital employed (human and material). According to Imoughele and Ismaila (2014), an enterprise that has an asset base (excluding land) of between N5 million and N500 million and labour force of between 11 and 300 belongs to the small or medium scale enterprise sub-sector Fasanya *et al.* (2012), noted that a business with turnover of less than N100 million, asset base of N1.5 billion (excluding land and working capital) with no lower or upper limit of staff is regarded as small or medium scale enterprise.

The Central Bank of Nigeria Monetary Policy Circular No. 22 of 1996 defines a small and medium scale business enterprises as any manufacturing or service enterprise whose business turnover does not exceed N500,000 (including land and working capital) and or the annual turn-over did not exceed N5 million. It is believed that small and medium scale enterprises makeup the largest proportion of

businesses all over the world and are hence the engine that drives world financial system and the stepping stone to industrialization, both for developing and developed Nations. According to Gbandi and Amissah (2014), small and medium scale enterprises represent about 90% of manufacturing/industrial sector in terms of number of enterprises in Nigeria. Also in the view of Imeokparia and Ediagbonya (2014), small and medium scale enterprises in Nigeria make up about 97% of the economy, hence they play a very important and major role in the development of the economy through job creation, poverty alleviation and foreign exchange conservation. Although small and medium scale enterprises are smaller in size, they are the most important enterprise in the economy, due to the fact that when all the individual enterprises are combined, they exceed that of the larger companies.

2.2 Review of Past Empirical Studies

Thankgod and Igbinovia (2022) looked on how Nigeria's real sectors performed in relation to monetary policy tools. Utilizing yearly time series data for 40 years, the ARDL regression method was utilised to ascertain the link between monetary policy instruments and the performance of the real sectors in Nigeria from 1981 to 2020. The results of the ARDL showed that the variables exhibited a sustained connection. It also shows that Nigeria's real sector output is affected temporarily by the monetary policy instruments (MPR, CRR MS, & TBR) (AGDP & MGDP). In order to achieve some of the macroeconomic objectives of price stability and full employment, the study recommends, among other things, that monetary targeting be employed by the central bank (CBN) as a tool for monetary policy. Similar to this, Abere, *et al*. (2020) examined how Nigeria's monetary policy affected the distribution of loans and advances to small and medium-sized businesses from 1992 to 2017. The research found that commercial bank loans and advances to small and medium-sized firms were positively correlated with the monetary policy rate and exchange rate using the Ordinary Least Square regression approach. On the other hand, commercial banks' loans and advances to SMEs in Nigeria are adversely impacted by the money supply, liquidity ratio, and inflation rate. According to the study's findings, the government should work to lower the monetary policy rate so that small and medium-sized businesses in Nigeria may obtain commercial banks' loans and advances.

Salihu (2020) used secondary yearly data ranging from 1981 to 2019 to examine the efficacy of monetary policy in controlling inflation in Nigeria between 1981

and 2019. The factors employed in the research to control inflation were the money supply, the rate on Treasury bills, the rate on monetary policy, and the exchange rate. A long-term link between the variables was found via the Johansen co-integration test. The money supply, Treasury bill rates, and the monetary policy rate all had a beneficial impact on inflation in Nigeria, according to the empirical results of the OLS test. whereas a decline in the exchange rate causes inflation to rise. This outcome is in line with what economic theory predicts. Therefore, the study came to the conclusion that the amount of money in circulation, the rate of Treasury bills, monetary policy, and exchange rates all had an impact on inflation during the time period under consideration. It also suggests that since open market operations using the annual Treasury bill rate as a proxy have not been successful in controlling inflation, strategies to improve their effectiveness be adopted, perhaps by offering competitive rates and the monetary authority should reevaluate their assessment of monetary policy's effectiveness.

Hussaini, *et al*. (2020) conducted study in 2020 to examine the effects of monetary policy tools on Nigerian economic development. The long run and short run dynamic link between each of the policy variables—Monetary supply, Interest rate, and Exchange rate—and the goal variable—Gross domestic product—was examined using the Autoregressive Distributed Lag Model (ARDL). The projected long run model demonstrates that the log of money supply has a positive influence on the log of GDP, the exchange rate has an inverse relationship with the target variable in the present period, but a positive relationship with the target variable one period later. Additionally, the interest rate at its present level has a beneficial and considerable effect on Nigeria's economic growth. Similar to this, the target's one period lag has a short-term positive effect on its present value, but the exchange rate strongly affects economic growth in both its current and one period lag conditions. The error correction mechanism coefficient reveals that the short-run speed of variable adjustment to equilibrium is 19%. As a result, the research draws the conclusion that monetary policy tools are crucial in illuminating Nigeria's economic expansion.

Nwosu (2020) looked on how Nigeria's fiscal and monetary policies influenced small businesses and entrepreneurship. When the study first started working with SMEs, it used an action research technique with a qualitative approach to data

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collection. an AR strategy built on coalitions and several sites. First-level interviews with 19 participants are conducted as part of the first research stage to gather qualitative data utilising in-depth one-on-one interviews. The ensuing AR emphasis improved interaction between SME operators, SME umbrella organisations, and policy makers within the government agencies taking part in the study.

Furthermore, Adongo *et al.* (2020) investigate the effects of monetary policy on Kenya's agricultural sector's GDP. The research used an OLS regression model to perform empirical analysis to ascertain the association between monetary policy and agricultural domestic product using yearly data for the years 1981 to 2019. The broad money supply (M2), central bank rates (CBR), cash reserve ratio (CRR), and exchange rate were chosen as the monetary policy tools (ER). The variables' stationary status was verified using the ADF and Philip-Perron unit root tests, and the short- and long-term associations between the variables were verified using the Johansen Co-integration test. The empirical results showed that although the exchange rate has a negative effect on the performance of the agricultural sector, the overall money supply has a favourable influence on agricultural GDP. To fully fulfil the potential of the agricultural sector, the government must strengthen budgetary assistance for agriculture and sustain exchange rate volatility via the monetary policy commission.

Osakwe, *et al.* (2019) looked at how Nigeria's manufacturing sector performed in relation to monetary policy. The dependent variable is the output of the Manufacturing (MANU) sector, while the explanatory variables are the monetary policy rate, Treasury bills rate, cash reserve requirement, and money supply. The study employed secondary data from the CBN Statistical Bulletin and an ex-post facto research approach. 32 years were covered by the research (1986 to 2017). For model estimate, the Autoregressive Distributive Lag (ARDL) was used. The findings show that monetary policy instruments only have a major short-term impact on Nigeria's manufacturing sector production. According to the research, treasury bills and the money supply may be utilised as short-term policy tools to preserve macroeconomic stability in Nigeria with a focus on the industrial sector.
The effect of the money supply on the expansion of the Nigerian economy is examined by Odumusor (2019). The classical quantity theory served as the study's foundation. EVIEWS version 9.0, an econometric programme, was used for all estimates. Empirically, the outcome shown that the short-term importance of the

money supply is negligible. Long-term money supply is crucial, yet it hinders economic expansion. The causality test revealed that money and economic growth are unrelated, indicating that neither the money supply nor the economy's growth can be predicted. Therefore, increasing the money supply won't lead to economic development in Nigeria. The result is that in order to promote economic development, the government shouldn't focus as much on the money supply as a key instrument of monetary policy. Additionally, investment (GFCF) is substantial in the anticipated outcomes over the long term but not over the short term, which is to be expected given that capital accumulation takes time to generate returns. The government should promote capital investments in the productive areas of the economy, such as agriculture, education (which will assist to improve the quality of labour), transport, electricity, health, etc., since labour is important both in the long and short terms.

Garba (2019) examined the impact of the investment environment on the expansion of small and medium-sized businesses in Makurdi Metropolis. The Neoclassical Approach, Financial Growth Theory, and Theory of Diffusion of Innovation served as the study's foundations. 250 respondents were selected from the study locations using a well-structured questionnaire, and the researcher employed both primary and secondary sources from this group. In Makurdi Metropolis, Nigeria, the results of the regression analysis show a negative relationship between access to credit (ACTC) and the growth of small- and medium-sized businesses (SGT), although this relationship is not statistically significant (p>0.05) and does not correspond to a priori expectations. The growth of small and medium-sized businesses in Makurdi Metropolis, Nigeria, was positively correlated with the availability of power (PWSP). This correlation is statistically significant (p 0.05) and consistent with a priori expectations. Information and communication technology (ICT) and small- and medium-sized business growth in Makurdi Metropolis, Nigeria (SGT) are positively correlated, and the association is statistically significant (p 0.05) and consistent with presumptive expectations. It was determined that in order to accomplish this development, the investment environment needed to be addressed and made favourable for company startup and expansion. It was advised that the government control the electricity industry properly, since there are still unresolved issues with invoicing, tariffs, and metering procedures after privatisation.

In Nigeria between 1985 and 2016, Charisma *et al.* (2018) look at the effects of the money supply on macroeconomic variables. Descriptive statistics and the ex post facto study methodology were utilised to observe the variables after the fact. The data were solidified using the Augmented Dickey Fuller test to prevent erroneous findings, which incorporated at first difference I (1). The size and direction of the variables in the models were determined using the ordinary least squares method. It was shown that the real gross domestic product and inflation are positively and significantly impacted by the narrow money supply, but these outcomes are not significantly impacted by the wide money supply. Furthermore, empirical data indicated that the exchange rate had little effect on actual GDP and inflation. On the other hand, the influence of the inflation rate on Nigeria's actual gross domestic product is inverse and statistically negligible. Ceteris Paribus, the findings imply that the money supply (limited money supply) and exchange rate in Nigeria are related to economic growth and inflation. The study suggests that measures be taken to improve the naira's exchange rate with other currencies. This will lessen the impact of foreign inflation on domestic products and services.

Opuni and Edward (2017) examined how tax burdens and loan interest rates affected the development and performance of SMEs in Ghana. A structured questionnaire was used to gather data for the research from 153 respondents (SMEs). Data analysis techniques included both qualitative and quantitative approaches. With employment growth as the dependent variable and loan rates, power availability, business length, company kind, tax burdens, owner gender, and educational background as independent variables, a multiple regression model was built. The research discovered that monetary policy had a significant impact on company performance in terms of employment growth. Therefore, even though Ghana's interest rates are typically high, businesses who are able to get slightly lower financing rates have better employment growth. The relationship between fiscal policy and corporate performance in terms of tax pressures or perceptions is weaker. To improve businesses and economic development, policymakers should regularly monitor the financial sector to reduce significant spreads in lending rates in an environment of high rates.

Anowor and Okorie (2016) used the Error Correction Model technique to evaluate how Nigeria's monetary policies affected economic development. It made use of secondary time series data that covered the years 1982 to 2013. The findings

indicated that a unit rise in Nigeria's Cash Reserve Ratio (CRR) caused an increase in economic growth of almost seven units. The outcome was consistent with economic theory since, among other things, monetary policy aims to achieve the macroeconomic goals of steady economic growth and price stability. As a result, the study suggests that monetary authorities gave the CRR monetary policy tool their undivided attention, because it will produce the desired results in terms of economic stabilisation. Additionally, a combination of fiscal policy measures is needed to achieve the complementary balance needed to move an economy in the desired direction.

Marisa (2013) seeks to determine if other policies are responsible for Thailand's rising service sector employment, or whether monetary and fiscal policies are to blame. In the research, multiple regression analysis was used. The outcome demonstrates that socioeconomic variables and supply-side policies, as opposed to fiscal and monetary policies, are what influence employment in Thailand's service industry. Industrialization, trade openness, and the minimum wage all have favourable effects on employment in the service industry.

In Osuala (2012), the impact of monetary policy factors on banks' provision of credit to small and medium-sized companies (SMEs) in Nigeria was investigated. The CBN statistics bulletin and the financial accounts of five commercial banks were used to elicit time series data that was gathered on a quarterly basis. Fully modified ordinary least square(FMOLS) was used to analyse the data, which encompassed the years 1995 to 2010. According to the FMOLS results, interest rate and liquidity ratio policies were, respectively, negative and significant at a 1% probability level. Based on the findings, it was advised that the government, via the Nigerian Central Bank (CBN), improve current policies on the adjustment of interest rates and the liquidity ratio in order to boost and stabilise the supply of credit to SMEs.

Nwankwoeze (2012) investigated how Nigeria's money supply affected economic growth. For the years 1981 to 2010, information was gathered from the CBN statistical Bulletin. Using the Stata 10 software programme, the common least squares statistical method was employed for the study. Real interest rates and real exchange rates in Nigeria throughout the study period did not have an impact on

real GDP, according to the research, whereas the broad money supply, the only significant regressor, had an impact on real GDP at that time. Time delays have been shown to be the main obstacle to the low effectiveness of monetary policy tools in impacting real GDP in Nigeria. As a result, every government policy now takes several months to fully take effect. As a result, given that the wide money supply is statistically significant, it may be more beneficial to focus on it than on monetary target factors in order to influence real gross domestic product in Nigeria.

After an in-depth review of empirical literature, this paper evaluated the related literature and found an inconclusive result. For instance, (Thankgod & Igbinovia, 2022; Abere *et al.,* 2020; Salihu, 2020; Hussaini *et al.*, 2020; Nwosu 2020; Adongo, *et al.,* 2020; Ogugua 2019; Osakwe, *et al.*, 2019; Odumusor, 2019; Garba, 2019; Charisma *et al.*, 2018; Opuni & Edward, 2017; Anowor & Okorie, 2016; Marisa, 2013; Osuala, 2012; & Nwankwoeze, 2012), all reposted existence of relationship between monetary policy instruments and small and medium scale enterprises. However, these studies failed to agree on the direction of the relationship. For instance, Thankgod and Igbinovia, (2022); Abere *et al*. (2020); Nwosu (2020); Hussaini *et al*. (2020); Salihu (2020); Osakwe *et al*. (2019); Charisma *et al*. (2018); Opuni and Edward, (2017); Anowor and Okorie (2016); and Marisa, (2013) reported positive relationship between the dependent and independent variables while, Odumusor (2019); Garba, (2019); and Osuala, (2012), revealed negative relationship between the variables. The reviewed studies equally reported that most of the literature used econometric techniques (Thankgod & Igbinovia, 2022; Abere et al., 2020; Salihu, 2020; Hussaini *et al*., 2020; Odumusor, 2019; Osakwe *et al*., 2019; Ogugua, 2019; Garba, 2019; Charisma *et al*., 2018; Anowor & Okorie, 2016; Marisa, 2013; Osuala, 2012; & Nwankwoeze, 2012) while, (Nwosu, 2020 & Opuni and Edward, 2017) utilized survey method. The present study also found out that, different estimation techniques were employed to analyse the variables. For instance, Thankgod and Igbinovia, (2022); Hussaini, *et al*, (2020); and Osakwe *et al*. (2019) used Auto-Regressive distributive lag (ARDL) techniques while, Abere *et al*. (2020); Salihu, (2020); Charisma *et al*. (2018); and Osuala, (2012), used ordinary least square (OLS) method, therefore , a gap exist in literature which deserved to be filled

2.3 Theoretical Literature

2.3.1 Monetarist Theory

Friedman was the one who introduced the monetarist hypothesis (1968). This idea states that inflation is a universally occurring financial phenomena. According to Friedman (1968), increasing the money supply temporarily may lower unemployment, but it can also lead to inflation, thus monetary authorities should proceed cautiously. Based on this, the monetarist adds a new variable—price expectations—to the equation used to determine interest rates. An rise in the money supply has a liquidity impact on income and price effects. The monetarist theory of the money transmission mechanism may be summed up symbolically as follows:

$$\uparrow OMO \rightarrow \uparrow MS \rightarrow Spending \rightarrow \uparrow GNP$$

The classic quantity theory of money lies at the heart of the monetarist argument. Variations in the money supply will have a direct impact on prices and production or income if the velocity of money in circulation remains constant. The monetarist hypothesis holds that changes in the money supply directly affect changes in the amount of money that exists in reality. According to Friedman and Schwartz (1963), who described this transmission mechanism, the Central Bank's expansive open market operations increase the money stock, which also increases commercial banks' reserves and their capacity to extend credit, both of which have the knock-on effect of increasing the money supply.

2.3.2 Keynesian Theory of Money

John Maynard Keynes developed the Keynesian General Theory of Employment, Interest, and Money (1936). According to the notion, the best way to combat the Great Depression was to boost the economy by combining two measures: - A decrease in interest rates and - Government investment in infrastructure. The consequence of this is that the government is telling commercial banks to treat consumers better by lowering the interest rate at which the central bank loans money to them. Government investments in infrastructure help the economy grow by generating demand, jobs, and business opportunities, while also correcting the

impacts of the aforementioned imbalance. According to the Keynesians, government spending boosts aggregate demand, which improves the profitability of private investments and encourages greater levels of investment to take advantage of the economy's better aggregate demand.

According to Keynes's reasoning, the supply and demand for money determine the rate of interest, which is what causes it to fluctuate. A radically different perspective is held by contemporary monetary theory. They contend that since the public portfolio comprises of a diverse range of assets, including bonds, shares, savings, mortgages, etc., when the central bank acquires securities on the open market, substitution and wealth effects are triggered. In the end, these impacts will boost overall money demand and boost production. This theory's implications for the research suggest that government spending is a crucial tool for accelerating economic growth, since it will support the development of small and medium-sized businesses that have the potential to employ a sizable portion of the population. Both in the short and long terms, this scenario will raise the average living standard of the populace and expand the economy.

3.0 Methodology

This paper utilized secondary data obtained from Central Bank of Nigeria (CBN) statistical bulletin. The variables includes involved are; share of service sector to gross domestic product (SGDP), as a proxy for growth of small and medium scale enterprises, while Monetary policy rate (MPR), Cash reserve ratio and (CRR), treasury bill rate (TBR), Broad money supply (Ms), and liquidity ratio (LR) are proxy for monetary policy instruments spanning from 1980 to 2020. The service sector was used because it involves, trade, accommodation and food services, transport, information and communication, education, health etc. which directly or indirect deals with the basic requirements of human being.

3.1 Model Specification

Investigating the effects of monetary policy tools on real sector performance in Nigeria, Thankgod and Igbinovia (2022) modified their model, which served as the foundation for this research. Their model is stated below:

$$\Delta LAGDP_t = \beta_0 + \Delta LAGDP_{t-1} + \Sigma\beta_{1t}\Delta LMPR_{t-1} + \Sigma\beta_{2t}\Delta LCRR_{t-1} + \Sigma\beta_{3t}\Delta LMS_{t-1} + \Sigma\beta_{4t}LTBR_{t-1} + U_t$$

$$\Delta LMGDP_t = \beta_0 + \Delta LMGDP_{t-1} + \Sigma\beta_{1t}\Delta LMPR_{t-1} + \Sigma\beta_{2t}\Delta LCRR_{t-1} + \Sigma\beta_{3t}\Delta LMS_{t-1} + \Sigma\beta_{4t}LTBR_{t-1} + U_t \qquad \text{Where;}$$

Where: AGDP = share of agricultural sector to gross domestic product, MGDP = share of manufacturing sector to gross domestic product, MPR = monetary policy rate, CRR = cash reserve ratio, TBR = Treasury bill rate, and MS broad money supply, b_0 is the constant, while b_{1-4} are the coefficients of the explanatory variables (MPR, CRR, TBR, and Ms). ε is the error term. The model above will be modified by introducing liquidity ratio as a new variable, thus:

$$MGDP = f(MPR, CRR, TBR, MS, LR)\dots\dots\dots\dots\dots3.1$$

The mathematical model could be symbolically expressed as;

$$SGDP = b_0 + b_1MPR + b_2CRR + b_3TBR + b_4 M2 + b_5 LR \dots\dots 3.2$$

Equation (3.2) above is transformed into an econometric model by incorporating the disturbance term (ε) as follows;

$$SGDP = b_0 + b_1MPR + b_2CRR + b_3TBR + b_4M2 + b_5LR + \varepsilon \dots\dots 3.3$$

Logarithmic transformation are also a convenient means of transforming a highly skewed variable into one that is more approximately normal (Kenneth ,2011). The modified version of the model adopted for this study now take the form of:

$$LSGDP = b_0 + b_1 LMPR + b_2LCRR + b_3LTBR + b_4LM2 + b_5LLR + \varepsilon \dots\dots 3.4$$

Where:
Where: SGDP = share of service sector to gross domestic product, MPR = monetary policy rate, CRR = cash reserve ratio, TBR = Treasury bill rate, MS broad money supply, and LR =Liquidity ratio, b_0 is the constant while b_{1-5} are the coefficients of the explanatory variables (MPR, CRR, TBR, MS & LR) and ε is the error term.

3.2 Method of Data Analyses

3.2.1 Unit Root Test

The study employed the Augmented Dickey Fuller (ADF) unit root test to identify the order of integration of the variables under study to select appropriate methodoly in order to avoid spurious regression.

3.2.2 The ARDL Methodology

The study employed the autoregressive distributive lag model (ARDL) proposed by Pesaran, Shin and Smith (2001) to estimate the relationship between the variables. The model is therefore specified in unrestricted error correction form to test for cointegration relationship as follows:

The Autoregressive Distributed Lag (ARDL) Model is specified as follows:

$$\Delta LSGDP_t = \beta_0 + \Delta LSGDP_{t-1} + \Sigma\beta_{1t}\Delta LMPR_{t-1} + \Sigma\beta_{2t}\Delta LCRR_{t-1} + \Sigma\beta_{3t}\Delta LTBR_{t-1} + \Sigma\beta_{4t}\Delta LMS_{t-1} + \Sigma\beta_{5t}\Delta LLR_{t-1} + \Delta LSGDP_{t-1} + \Sigma\Phi_{1t}\Delta LMPR_{t-1} + \Sigma\Phi_{2t}\Delta LCRR_{t-1} + \Sigma\Phi_{3t}\Delta LTBR_{t-1} + \Sigma\Phi_{4t}\Delta LMS_{t-1} + \Sigma\Phi_{5t}\Delta LLR_{t-1} + U_t \ldots\ldots\ldots\ldots\ldots\ldots\ 3.5$$

The inference here is that, if the computed F-statistics is greater than the upper bound critical value at 5%, there is said to be cointegration. If the computed F-statistics is less than the lower bound critical value at 5% there is no cointegration. however, if the value of the computed F-statistics lies between the upper and the lower critical values, then the inference is said to be inconclusive. Once cointegration relationship exists, the long-run model would be estimated as specified:

$$\Delta LSGDP_{t-1} + \Sigma\Phi_{1t}\Delta LMPR_{t-1} + \Sigma\Phi_{2t}\Delta LCRR_{t-1} + \Sigma\Phi_{3t}\Delta LTBR_{t-1} + \Sigma\Phi_{4t}\Delta LMS_{t-1} + \Sigma\Phi_{5t}\Delta LLR_{t-1} + U_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ 3.6$$

Similarly, the short-run model of the error correction specification would be estimated to ascertain the short-run dynamic behaviour of the variables in the model as;

$$\Delta LSGDP_t = \beta_0 + \Delta LSGDP_{t-1} + \Sigma\beta_{1t}\Delta LMPR_{t-1} + \Sigma\beta_{2t}\Delta LCRR_{t-1} + \Sigma\beta_{3t}\Delta LTBR_{t-1} + \Sigma\beta_{4t}\Delta LMS_{t-1} + \Sigma\beta_{5t}\Delta LLR_{t-1} + ECT_{t-1} + U_t \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots 3.7$$

Where the ECT in the above equation is specified as;

$$ECT_t = \Delta LSGDP_t - \beta_0 - \Delta LSGDP_{t-1} - \Sigma\beta_{1t}\Delta LMPR_{t-1} - \Sigma\beta_{2t}\Delta LCRR_{t-1} - \Sigma\beta_{3t}\Delta LTBR_{t-1} - \Sigma\beta_{4t}\Delta LMS_{t-1} - \Sigma\beta_{5t}\Delta LLR_{t-1}\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots.3.8$$

Finally, the study diagnosed the model by conducting test for serial correlation, Ramsey reset test and heteroskedasticity.

4.0 Empirical Data Analysis

Table 4.1: Unit Root Test using Augmented Dickey Fuller (ADF)

Variable	Levels			First Difference			Order of integration	Prob
	ADF statistics	1% critical value	5% critical value	ADF statistics at First Difference	1% critical value	5% critical value		
LSGDP	-1.258988	-3.610453	-2.938987	-2.968856	-3.615588	-2.941145	1(1)	0.0388
LMPR	-3.178519	-3.610453	-2.938987				1(0)	0.0290
LCRR	-1.404027	-3.610453	-2.938987	-5.452456	-3.615588	-2.941145	1(1)	0.0001
LMS	-0.734114	-3.615588	-2.938987	-10.13053	-3.615588	-2.941145	1(1)	0.0000
LLR	-3.214715	-3.610453	-2.938987				1(0)	0.0266
LTBR	-2.928358	-3.610453	-2.938987	-6.428410	-3.615588	-2.941145	1(1)	0.0000

Source: Extracts from E-view 10. * Level of significance at 5%

The variables included in the study were put through Augmented Dickey Fuller (ADF) Tests to assess if they are stationary series or non-stationary series, according to the results from table 4.1 above. The stationarity test results show that LSGDP, LCRR, LPSC, LMS, and LTBR were stationary at initial difference 1(1), whereas LMPR and LLR are stationary at level 1(0). Therefore, the variables exhibit mixed order of integration or stationarity at level and first differences. For the data analysis, the Autoregressive Distributive Lag (ARDL) method, which can handle both stationary at level I(0) and first difference I(1), was used. The ARDL test, which takes into account both short- and long-term trends when examining the connection between the dependent and independent variables, is therefore the most appropriate analytical technique.

Table 4.2: ARDL Bound Test

Test Statistics	Value	K
F-statistics	5.740141	5

Significance	I (0)	1(1)
10%	2.26	3.35
5%	2.62	3.79
2.5%	2.96	4.18
1%	3.41	4.68

Source: Authors computation from E-view 10 Output

Table 4.2 presents the results of the bound test, which compared the F-statistics with the critical bound values. The value of the F-statistic is 5.740141. The outcome demonstrated that, at a significance level of 0.05, the F-statistic is bigger than both the lower and upper limits of the critical values, which are 2.62 and 3.79, respectively. It follows that there is a degree of co-integration between monetary policy tools and the expansion of small and medium-sized businesses in Nigeria. As a consequence, the projected results of the long-run and short-run Auto-Regressive Distributive Lag (ARDL).

Table 4.3: ARDL Long-run Result

Variable	Coefficient	Std. Error	t-statistics	Prob
LMPR	-3.012400	1.802761	-1.670993	0.1096
LCRR	0.286001	0.386877	0.739257	0.4679
LMS	0.984001	0.080257	12.26066	0.0000
LTBR	0.538027	1.030015	0.522344	0.6069
LLR	2.021604	1.365237	1.480771	0.1535

EC=LSGDP-(3.01240* LMPR + 0.2860* LCRR + 0.9840* LMS + 0.5380*LTBR = 2.0216*LLR)

Source: Authors computation from E-view 10 Output

Table 4.3 of the Autoregressive Distributive Lag (ARDL) long-run result demonstrate that the log of broad money supply (LMS) reported a positive (0.984001) relationship with the contribution of service sector to gross domestic product (SMGDP). This implies that when CBN increase money supply (MS) in the country, the contribution of the service sector will increase by 98.4 percentage. The p-value of 0.0000 revealed that increase in broad money supply had significant impact on the proportion of service sector to GDP in the long-run. The economic insinuation of this result is that, if the monetary policy authority (CBN) continues to increase the money supply in the country, it will send signal to deposit money banks to reduce their lending rate, which will enable investors in the service sector to access sufficient loans for investment purposes. This will mean expansion to the service sector leading to job creation, generation of more profit, stable prices of goods and services etc. This result conforms to earlier study by Thankgod and Igbinovia (2022); and Adongo *et al* (2020). However, the log value of monetary policy rate (LMPR) is negative and has little impact on the contribution of service sector to gross domestic product (SMGDP). This implies that when the monetary policy rate (MPR) rises over time, the proportion of the service sector in GDP will decline by about 3.01 percentage. The p-value of 0.1096 revealed, however, that the decline in monetary policy had no obvious effect on the contribution of the service sector to gross domestic product (SMGDP). The implication of this is that, the predicted contribution of the service sector to gross domestic in terms of job creation, provision of raw materials, finished and semi-finished goods to other sectors, generation of revenue and development of rural and urban areas would be uncertain. While, the ARDL long-run result indicated that the log of cash reserve ratio (CRR), Treasury bill rate (LTBR) and liquidity ratio (LLR) is positive with an insignificant relationship with the proportion of the service sector to the GDP.

Table 4.4: ARDL Short-run Result

Variables	Coefficient	Std. Error	t-Statistics	Prob
D(LMPR)	0.025980	0.082655	0.314322	0.7564
D(LMPR(-1))	-0.264200	0.079365	-3.328945	0.0032
D(LCRR)	-0.008847	0.034988	-0.252855	0.8028
D(LCRR(-1))	-0.001289	0.034134	-0.037755	0.9702
D(LMS)	-0.018888	0.021582	-0.875174	0.3914
D(LMS(-1))	0.018629	0.018685	0.996991	0.3301
D(LTBR)	-0.027696	0.052107	-0.531534	0.6006
D(LTBR(-1))	-0.071417	0.056817	-1.256965	0.2226
D(LLR)	0.038790	0.058712	0.660677	0.5160
D(LLR(-1))	0.096344	0.054504	1.767654	0.0916
ECM(-1)	-0.113949	0.017450	-6.530011	0.0000

Adj R^2 =0.603944, F-statistics = 6.129203 (0.000072), DW =2.255290

Source: Authors computation from E-view 10 Output

The short-run model results are shown in table 4.4. It demonstrates that the log of monetary policy rate (LMPR) is negative, but significant to influence the contribution of service sector to gross domestic product (SGDP) in the preceding lag period. However, the log of cash reserve ratio (LCRR) revealed a positive relationship with the proportion of service sector to GDP (SGDP) in both current and previous year lag periods, but insignificant to influence the share of service sector to gross domestic product. Similarly, the coefficient of the log of broad money supply (LMS) reported a negative relationship with the share of service sector to GDP (SGDP) at the most current and preceding year lag period. The p-value of 0.3914 and 0.3301 indicates that broad money supply (MS) is statistically insignificant to cause any effect on the proportion of service sector to GDP (SGDP).

Furthermore, the coefficient of the log of Treasury bill rate (LTBR), reported a negative and insignificant correlation with the contribution of service sector to gross domestic product (SGDP) both in the current and previous year lag period. Finally, the log of liquidity ratio (LLR) revealed a positive but negligible relationship with the contribution of service sector to GDP (SGDP). The coefficient estimates for the error correction component, ECM (-1), is negative and significant at the 1 percent level of significance. It shows that the model will move at a 0.9 percent yearly rate towards long-run equilibrium. This implies that a yearly adjustment speed of 9.0 percent may be used to correct the distortion from the prior year.

According to the corrected R-square (R2) value, the independent variables (MPR, CRR, MS, TBR & LR) account for 60% of all the variance in the dependent variable

(SGDP). The whole model is significant according to the F-statistics, which is statistically significant at 5.0 percent level. The lack of serial correlation in the model is shown by the Durbin-Watson statistics of 2.255290.

Diagnostic Test

Table 4.1.5: Ramsey Reset Test, Serial Correlation LM Test and Homoscedasticity Test Results

	F-Statistic	Prob.Value
Ramsey ᵢᵢReset ᵢᵢTest	3.765668	0.0609
Breusch-Godfrey ᵢᵢSerial ᵢᵢCorrelation ᵢᵢLM ᵢᵢTest	0.445250	0.6472
Breusch-Pegan-Godfrey ᵢᵢHeteroskedasticity ᵢᵢTest	0.317942	0.9885

Source: *Author's Computation using E-view 10*

According to Table 4.1.5 above, the results of the diagnostic test reveal that the Ramsey reset test's linearity test revealed that the f-statistic (3.765668) with a computed p-value of 0.0609, which is greater than the 5 percent (0.05) critical value, indicates that the model is correctly specified. The study therefore rejected the null hypothesis. Breusch-Godfrey Serial Correlation LM Test results for the serial or autocorrelation test indicate that the f-statistic is 0.445250 and the Chi-Square probability value is 0.6472. The result demonstrates that there is no serial correlation in the model, with a probability value of roughly 65 percent (0.6472) being more than the 5 percent (0.05) threshold value.

The outcome of the Breusch-Pegan-Godfrey test for heteroscedasticity reveals that the f-statistic is 0.317942, and the Chi-Square probability value is 0.9885. Since the probability Chi-square value is more than 5% (P > 0.05), the result shows that there is no indication of heteroskedasticity in the model. Therefore, residuals are homoscedastic, because they have constant variance, which is desired in regression.
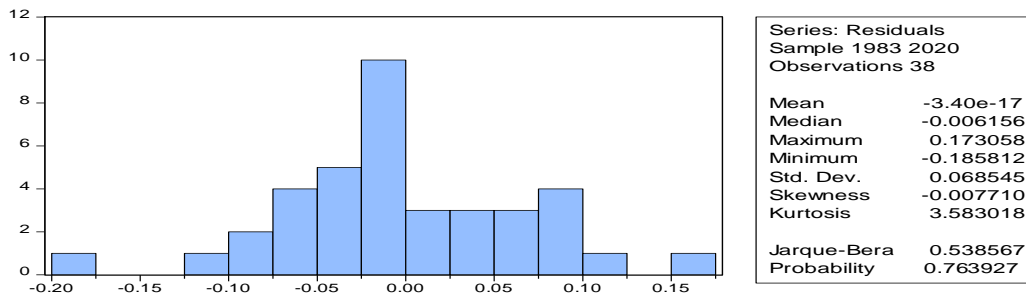
Figure 4.1: Normality Test

Figure 4.1, shows summary of the normality test with Jarque-Bara value of 0.538567 and a corresponding probability value of 0.763927 more than 0.05 level of significance, indicating that the residuals are normally distributed.
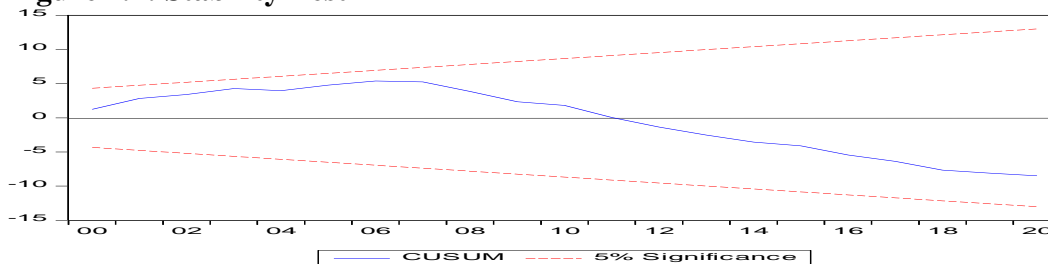
Figure 4.2: Stability Test

Figure 4.2, shows summary of the stability test, the result showed that the model is stable. This is evident to the fact that the blue line is in-between the two red (-5 & +5) or less than 0.05 level of significance.

5. Conclusion and Recommendation

The study concludes that broad money supply (LMS) had a positive and significant impact on growth of small and medium scale enterprises in Nigeria, which is also in line with the findings of Thankgod and Igbinovia (2022); Salihu (2020); and Husaini (2020). Monetary policy rate (MPR) indicated a negative but significant relationship with growth of small and medium scale enterprises in Nigeria in the short-run, while cash reserve ratio (CRR), treasury bill rate (TBR) and liquidity ratio (LR) indicated an insignificant relationship with growth of small and medium

scale enterprises in Nigeria over the study period. The recommendations of this research discourse are based on the findings arising from the analysis of data. Thus,

In-line with the findings of this study, broad money supply and monetary policy rate should be adopted by the central bank of Nigeria (CBN) as a monetary policy measures or tools to achieve predetermined macroeconomic objectives. Specifically the monetary authority should mandate deposit money banks to direct bulk of its loans to registered small and medium scale enterprises to enable them expand on their productive activities and help reduce unemployment rate in the country, and to ensure stable price level. While other policy instruments (TBR, CRR & LR), should be re-examined by the CBN and make them viable to stabilize the economy.

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