Micro Economics Variables: Evidence on Credit Facility Obtained By Smes in Nigeria

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Abstract

The study evaluated microeconomic variables namely interest rate exchange rate and inflation rate on credit facility obtained by Small and Medium Enterprises (SMEs) in Nigeria. The study employed ex post facto research design. Data were extracted from the Central Bank of Nigeria statistical bulletin from 1990 to 2018. The study found out that a significant relationship exists between the three independent variables namely interest rate, exchange rate, inflation rate and the dependent variable i.e credit facility. The study therefore concluded that the government should work and bring in policies that will reduce the interest rate, exchange rate and inflation rate in the country so as to help SMEs to grow.

Keywords: *Exchange rate, interest rate inflation rate, credit facility, and Small and Medium Enterprises (SMEs)*

1.0 Introduction

SMEs create employment opportunities, enhance regional economic balance through industrial dispersal and generally promote effective resource utilization considered critical to engineering economic development and growth (Ogujiuba, Ohuche & Adenuga, 2004). However, the seminal role played by SMEs notwithstanding its development is everywhere constrained by inadequate funds, high interest rate, high dollar to naira rate (exchange rate) and high inflation. The unfavorable macroeconomic environment has also been identified as one of the major constraints which most times encourage financial institutions to be risk-averse in funding small and medium scale businesses. The reluctance on the part of a financial institution to fund SMEs can be explained by the insufficient capital base of banks and information asymmetry that often exists between SMEs and lending institutions (Ogujiuba, Ohuche & Adenuga, 2004).

Most of the developed economies have recognized the role of SMEs in industrial restructuring and went further to formulate and adopt national financial policies for the growth of SME. However, the relevance of SMEs in solving the macroeconomic problems is hampered by the absence of adequate capital, the inability to access funds from financial agencies (Schneider, 2002). Looking statistically at the scenario in developed countries like the US and Japan it was noted (2010) that more than more 99 percent of businesses in Japan and the U.S. are SMEs and accounts for 99.9 percent of the million employers in the country. Small banks in both countries find it more convenient to give credit facilities to SMEs this may be the few managerial layers and closer coordination between the management and loan officers. These banks in most developed countries are into relationship lending which is easy to achieve compared to African countries (Berger & Black 2011).

Awoniyi (2010) asserted that for any developing country to grow and develop economically, greater attention and concentration must be given to the SMEs sector. The SMEs sector is a viable and important means to utilize the locally available resources, develop local technology for production for local consumption and export trade. Small and medium enterprises' development in the area of agriculture is a means of sustainable food production, improve employment generation and combat food shortage in developing countries. More so the high cost of borrowing and inaccessibility of funds have remained serious factors inhibiting the availability of funds, thus resulting in the early death of small and medium scale enterprises (Mambula, 2002). The unavailability of credit has been identified as a challenge bedevilling the performance of business enterprises particularly the SMEs. In the event of unavailability of credit, high interest rate, fluctuation in the exchange rate and inflation has also been seen as a major issue when it comes to SMEs financing.

Finance has been seen as one of the major factors militating against the development of small and medium scale enterprises in Nigeria and other developing countries (Lawson 2007). As a result of the problem in credit availability and recognition of the role SMEs play in the growth of a country and for the purpose of investment that the Nigerian government singled out small and medium scale enterprises as key area of intervention in 1971, when the Federal Military Government set up the Small Industries Development Programmed to provide technical and financial support for the SMEs. That led to the creation of the Small Industries Credit Fund (SICF), which was formally launched as the Small-Scale Industries Credit Scheme (SSICS) in the third National Development Plan, 1975- 1980 (Ubesie, Onuaguluchi & Mbah, 2017). This was premised on the government's desire to giving support to small and medium scale enterprises in the country as a measure of meeting up with its commitment to the development plan and the indigenization policy. The intention was that it would be a reaction against the dominance of the economy by the international capitalist entrepreneur and also on the account that revitalizing small and medium scale enterprises would enhance the capacity of the indigenous capitalist class, as a potential player in economic growth and national development (Ubesie, Onuaguluchi & Mbah, 2017).

Many business surveys have identified finance as one of the most important factors determining the survival and growth of small and medium enterprises (SME) in both developing and developed countries (United Nations Conference on Trade and Development, 2001). Access to finance allows SMEs to undertake productive investments to expand their businesses and to acquire the latest technologies, thus ensuring their competitiveness and that of the nation as a whole. Poorly functioning financial systems can seriously undermine the microeconomic fundamentals of a country, resulting in lower growth in income and employment. Despite their dominant numbers and importance in job creation, SMEs traditionally have faced difficulty in obtaining formal credit or equity. This is because the maturities of commercial bank loans extended to SME are often limited to a period far too short of paying off any sizeable investment and poor collateral (Arogundade, 2010).

Healthy economic growth cannot be achieved without putting in place a well-focused policy to reduce poverty, through empowering the people, by increasing their access to factors of production, especially credit (Abu & Ezike, 2012). The inactive ability of the underprivileged to engage in entrepreneurship would be enhanced through the provision of bank services to enable them to engage in economic activities, and be more self-reliant, thus increasing employment opportunities, enhancing household income and creating wealth (Nigerian Investment Promotion Council, 2004).

Interest rate is the price offered by a lender, Commercial bank or Microfinance institutions (MFIs) for the use of advanced funds. Money is an asset that is not only acceptable as a medium of exchange across economies but also acts as a store of value (Crowley, 2007). Interest rates tend to be very high in most developing countries including Nigeria. Charges by microfinance institutions (MFIs) on loans to SMEs has traditionally been very high compared with the levels offered through more established financial services in the developed world. This is because it costs more to service a tiny loan than a larger one and most SMEs go for a smaller loan (Julien, 2009). Interest rate aids in determining the current market and also gives information about future inflation (Ndung'u, & Ngugi, 2000).

Rosenberg, Gonzalez and Narain (2009) argue that over the past two decades, institutions that make microloans to low-income borrowers and SMEs in developing and transition economies have focused increasingly on making their lending operations financially sustainable by charging interest rates that are high enough to cover all their costs. They argue that doing so will best ensure the permanence and expansion of the services they provide and address the problem of administrative costs that are inevitably high.

Inflation is generally the persistent increase in the price level of goods and services in an economy over a period of time. When the price level rises, each unit of currency buys fewer goods and services. Consequently, inflation results in a reduction in the purchasing power per unit of money, a loss of real value in the medium of exchange and unit of account within the economy (Boyd & Champ, 2004). Inflation is a key determinant of commercial banks and microfinance institutions (MFIs) " lending rates globally. Inflation depreciates the value of money such that a percentage increase in inflation results in a similar

percentage fall in the value of the country's currency. Broadly, inflation theorists attribute inflation to monetary causes and mal adjustments in the economic system (Chand, 2008).

Taner (2000) study on the effects of inflation uncertainty on credit markets reveals that unpredictable inflation raises interest rates, decreases loan supply and affects loan demand. This therefore suggests that an increase in inflation may raise the bank lending rates and lead to low bank lending volumes. Emon (2012) confirms this assertion and states that lenders are very aware that inflations erode the value of their money over the time period of a loan, so they increase the interest rates to compensate for the loss. The increased interest rates may therefore influence the borrowing patterns for any commercial bank. This also suggests that there is a positive relationship between the inflation rates and the lending rates even though the extent to which one affects the other for different time periods is not certain thereby affecting SMEs.

The rise and fall in the exchange rates for major currencies have been a particularly acute problem for most small and medium enterprises in Nigeria since they get the source for most of the raw Material or sales overseas this makes them particularly vulnerable to currency and exchange rate fluctuations, which can also make predicting the revenue stream difficult. Any small business will rely on income predictions for the financial year ahead, but that figure could rise or fall significantly depending on changes in the exchange rate. Small businesses are also more vulnerable to periods of fluctuating currency values than large or medium-sized enterprises as they often lack the financial backing to ride out negative short-term changes or to take a loss when the exchange rates turn against them (Dragan Sutevski 2018).

Nga, Hien, and Chien, (2013), in their study-related foreign exchange rate and inflation rate stating that they have an indirect relationship. Foreign exchange rate impacts on inflation by three ways: the first way is the effect on aggregate demand, the second way is the effect on money supply, the final way is the effect on imported prices. According to (Mishkin, 2004), there are seven factors that shift and affect the exchange rate, which includes: domestic interest rate (iD), foreign interest rate (iF), expected domestic price level, expected trade barriers, expected import demand, expected export demand, expected productivity.

2.0 Theoretical Review

2.1 Classical Theory of Interest Rate

This theory is also known as the demand and supply theory was propounded by the economists Marshall and Fisher in the early 1930s. Later on, Pigou, Cassel, Knight and Taussig worked to modify the theory. The theory determines the interest rate by using the classical theory of economics. The interest rate is defined as the element that compares savings to investment. The theory explains the interest rate as a point of equilibrium created by an intersection point of supply of savings and borrowing demand curves. Therefore, when savings exceed investments the rate of interest will fall, and when investments exceed savings rate of interest will rise until equilibrium is attained. The increase in interest rate (reward) will encourage savings (Gorder 2009).

Other proponents of the classical theory of interest rates look at it differently. Marshal argues that interest rate is the price paid for the use of capital and that it is determined by the intersection of aggregate demand and supply of capital. According to Keynes, interest rates definitely influences the marginal propensity to save. He concludes that the rate of interest should be at a point where the demand curve for capital at different rates intersects the savings curve at a fixed income level. However, the classical theory of interest rates fails to account for factors besides supply and demand that may affect interest rates such as the creation of funds, the importance of income and wealth and changes in the primary borrowers in an economy.

2.2 Liquidity Preference Theory

Liquidity preference theory asserts that economic units have a preference for liquidity over investing. The concept was first developed by John Maynard Keynes in his book The General Theory of Employment, Interest and Money (1936) to explain the determination of the interest rate by the supply and demand for money. Applying this theory explains the premium offered in forwarding rates in comparison to expected future spot rates. This premium is used as payment for the use of scarce liquid resources. The preference for liquidity can be accounted for by the fact that economic units need to hold certain levels of liquid assets for

purchase of goods and services and the fact that these near-term future expenditures can be difficult to predict (Lydiah 2013).

Liquidity theory is limited by its short-term nature, the assumption that income remains stable, and, like classical theory, only supply and demand for money are considered (Gorder 2009).

This theory tries to balance the demand for money which is split into transitionary, precautionary and speculative knowing that humans will always be conscious of their spending, follow precautions and also listen to what the book matters speculate about the future of that item they are spending on.

2.3 Loanable Fund Theory

In the 1930s, Dennis Robertson and Bertil Ohlin formulated the theory. However, another economist that contributed to the doctrine included Erik Lindahl, Knut Wicksell and Myrdal. The interest rate is equated to an intersection between loanable funds supply and credit demand. An inverse relationship is assumed to exist between the loanable funds and the interest rates. Loanable funds are determined by the government, foreign borrowing, consumers and domestic business. Supply on the other side is derived from foreign lending and domestic savings. The economy's financial and monetary situation help in reaching short- and long-term interest rates (Gorder 2009).

Funds available for lending are largely influenced by the saving behavior of individuals and money supply additions through the creation of credit by the bank during a particular period. The theory assumes that at equilibrium, bank savers and borrowers should be well compensated. Interest rate spread should be at a point where all parties' comfortable (Emmanuelle 2003). The theory assumes that constrained savings limit credit supply that is meant to finance investment opportunities.

2.4 The Purchasing Power Parity Theory (PPP)

Menon and Viswanathan (2005) advanced the PPP theory which explained that the value of homogenous goods is similar in different countries based on the currency of each country. According to them, when purchasing power is similar in different countries then the exchange rates between the country's currencies will be at equilibrium. The idea originated with the School of Salamanca in the 16th century, and was developed in its modern form by Gustav Cassel in 1916, in The Present Situation of the Foreign Trade (Cheung 2009).

The concept of purchasing power parity allows one to estimate what the exchange rate between two currencies would have to be in order for the exchange to be at par with the purchasing power of the two countries' currencies. Using that PPP rate for hypothetical currency conversions, a given amount of one currency thus has the same purchasing power whether used directly to purchase a market basket of goods or used to convert at the PPP rate to the other currency and then purchase the market basket using that currency. Observed deviations of the exchange rate from purchasing power parity are measured by deviations of the real exchange rate from its PPP value of 1.

This theory is based on the assumption that there are no transactional costs, no barriers to trade and the commodities being traded are homogeneous. If the trading currency is exchanged at the spot exchange rate, the price of a homogenous commodity should be identical across borders. The theory suggested the use of price indexes to determine the exact price of a homogenous commodity between countries. The main challenge of this belief is in measuring Purchasing Power Parity constructed from price indexes given that different countries use different goods to determine their price level (Reid, 2005).

Menon and Viswanathan (2005) showed two classifications of PPP; relative and absolute. According to them, absolute PPP implies that regardless of the currency similar commodities should cost the same thus the emergence of the Law of One Price. Due to limitations in the absolute PPP, another form of PPP has evolved, the relative PPP. Relative PPP recognizes the imperfections of the markets; it indicates what exchange rate changes rather than absolute exchange rates over time (Ross, 2008). This theory is relevant for this study as it explains a country's currency value over another country's currency. This theory argues that

the equilibrium exchange rate is one that ensures that the value exchanged can purchase the same basket of goods and services from either of the countries involved.

2.5 Monetary Theory of Inflation

The Monetary Theory of Inflation asserts that the general price level rises only due to the increase in the supply of money, but not proportionally.

The monetary theory of inflation relates to the work of Milton Friedman, who tried to revive the classical monetary theory (price level rises with a proportionate change in the supply of money) in a modified form. According to him, inflation is always and everywhere is a monetary phenomenon and can be produced more rapidly with an increase in the quantity of money than the increase in output. Although, he believed that prices rise due to the increase in money, such an increase is not proportionate. The classical economist, especially Irving Fisher proposed that the increase in the stock of money is the sole cause of inflation and the rise in the price is proportional to the money supply. He had explained this through an equation given below:

MV = PT

And

P = MV/T

Where,
MV = money supply = currency X velocity of money
P = general price level
T = Total number of transactions (Sale and Purchase)

This clearly shows, that the **price level (P)** increases proportionately with the increase in the **money Supply (MV)**, the total number of **transactions (T)** remaining constant. This proposition is not acceptable to modern monetarists and does not agree with the proportional increase in the price level.

Thus, the monetary theory of inflation asserts that price rises only due to the increase in the money supply, but there is no proportional relationship between the supply of money and the general price level.

2.6 Empirical Review

Abu & Ezike (2012) examined the role of Micro-finance banks in reducing poverty and the development of entrepreneurship. Data were collected using questionnaires and administered to entrepreneurs (SMEs) and micro-finance banks within the Lagos state areas. The study identified a high rate of loan default among SMEs, which poses serious consequences for microfinance banks. It was also established that the challenges facing microfinance banks include, among others, the documentation of the credit process, wrong information, identity of the loan applicant and unstable economic situation in the country.
Berger & Black (2011) investigated the effect of bank size on relationship lending and how relationship lending can affect credit availability, interest rates and collateral to SMEs in the context of Bangladesh. This study made use of data collected by one of the authors during June-August 2015 via a self-administered questionnaire survey of banks credit officers who are dealing only with SMEs finance. Empirical results suggest that SMEs with a long-term relationship with small banks have more access to finance than from large banks. However there was no evidence that long-term relationships with small banks can reduce interest rates or collateral requirements for SMEs.
Chowdhury (2012) this study was done with an objective to unearth the influence of inflation on the lending rate of commercial banks in Bangladesh. The period 2002-2011 was considered for the study. The inflation and lending rate satisfy Dickey Fuller Test. Later, the dependent variable lending rates are regressed with the independent variable inflation. The result shows that the residuals are stationary, and the co-integration test proves that during the period of study, there is no significant relationship between the rates and inflation.

Imoughele and Ismalia (2014) studied the impact of commercial bank credit on Nigeria's small and medium scale enterprises and adopted a Co-integration and Error correction modelling (ECM) technique for data between 1986 and 2012. The results revealed that SMEs and selected macroeconomic variables included in the model have a long run relationship with SMEs output. The study also revealed that the savings time deposit and the exchange rate have a significant impact on SMEs output in Nigeria. The study also shows that the interest rate has an adverse effect on SMEs output. The study recommended among others that interest rate on credit facility granted to SMEs should be drastically reduced, commercial banks should grant soft loan to this important sector of the economy and also reduced stringent policy in supply of credit to SMEs and monetary authority should encourage commercial bank to set up more branches in the rural areas in order to encourage rural occupant to save and have assessed to credit facility.

Mambula (2002) this study investigates the factors that influence the growth, performance and development of small and medium-sized enterprises (SMEs) in Nigeria and what implications these factors have for policy. For this study, 32 small business entrepreneurs were interviewed across the country. A multiple-method strategy was adopted for this study to reduce the possibility of personal bias by not depending on only one method of approach or response coming from only one firm or sector. Adopting this method of approach supports the authenticity of the study. Both qualitative and quantitative data were used in a variety of ways, including a detailed overview of survey results in terms of a general profile and a model of Nigerian small firms.

Menon & Viswanathan (2005) attempt to provide a better understanding of the use of foreign exchange derivatives (FXD) and its benefits to U.S. multinational corporations (MNCs). This study was an extension to a study conducted by Makar and Huffman (1997) examining how U.S. MNCs used foreign exchange derivatives in the 1990 to 1994 period. The study made use of samples from 20 U.S. MNCs that used foreign exchange derivatives from 1995 through 2000. For any company to be included in the sample, the company should have disclosed information about its use of currency derivatives in its annual report. They concluded that the results from the original study are reaffirmed for the more recent period (1995-2000). They observed a positive relationship between the notional amounts of foreign exchange derivatives used and the extent of foreign involvement by MNCs. Furthermore, the results indicate that the use of FXD may be sensitive to industry members and the effects of time across firms.

3.0 Methodology

This research work dealt with the effect of interest rate, exchange rate and inflation on credit facility obtained by SMEs in Nigeria

3.1 Research Design

The ex *post facto* research is to be adopted in carrying out this research. This research focused on the empirical analysis of the effect of interest rate, exchange rate and inflation on credit facilities obtained by SMEs in Nigeria. This research relied heavily on historical data i.e. time series as the data used in the analysis were extracted from Central Bank if Nigeria online statistical bulletin and journals from 1990-2018. A time-series data for 29 years on the interest rate, exchange rate and inflation will be used.

3.2 Model Specification

The mathematical model is used to show the functional relationship between interest rate, exchange rate and inflation and credit facility.

$Y=f(X)$

Y= Credit facility (CF) (Dependent variable)

X = Interest rate, Exchange rate and Inflation rate (IEIR**)(**Independent variable)

t= Time series.

Regression Equation

$Y = \alpha + \beta(X) + \mu$

$CF_t = \alpha_1 + \beta_1 (IR)_t + \mu_t$

$CF_t = \alpha_2 + \beta_2 (ER)_t + \mu_t$

$CF_t = \alpha_3 + \beta_3 (IFR)_t + \mu_t$

$C = f (IR_{1t} + ER_{2t} + IFR_{3t})$

Where:

CF= Credit Facility

IR= Interest Rate

ER = Exchange Rate

IFR = Inflation Rate

f = submission

α= value of y where all the values of explanatory variables are zero intercept

β= average change in y that is associated with a unit change in variable x

μ= error term

3.3 Method of Data Analysis

The data collected for this project work will be presented in a table using the Excel Software package to allow for trends. The data analysis technique used to investigate the relationship of the independent variable (interest rate, exchange rate and Inflation rate) on the dependent variable (credit facility) is the Ordinary Least Square Regression Method.

Two variables can have a linear relation captured using the formula $Y = \alpha + \beta(X) + \mu$; where α is the constant β intercept or slope and μ the error term. Regression and correlation analysis shows us how to come up with both the strength and the nature of the two variables. Hence the giving us the relationship between variables. The known variable is called the independent variables (s) which include the lending rates, lending volumes and the loan defaults rate

The unknown variable that is estimated depending on the objective being sought from the research questions , that is the first one was commercial banks' lending rate, the second being the lending volume and thirdly being the loan default rate, a scatter diagram is drawn for the case of regression analysis ,the regression line is put in place by fitting the lines visually among data points ,whereas the correlations analysis will also be used to describe the degree at one variable is linearly related to the other.

The coefficient of determination is also used to give the extent or the strength of the associations between two variables X and Y.

A sample coefficient of determination was developed from the relationship between two kinds of variations that is a sum of a group of squared variations. The variations of the Y values in a data set around the fitted regression line and their own mean.

Regression can be bivariate (between 2 variables, x and y) or multivariate between greater than two variables, both have been used in the study, with objective one and three using bivariate whereas objective two using a multivariate approach

Formula

$Y = \alpha + \beta(X) + \mu$

According to Hall (2017), some of the advantages of using the regression analysis include;

I. **Predicting the Future**: The primary advantage of regression-based forecasting techniques is that they use research and analysis to predict what is likely to happen in the next quarter, a year or even further into the future.
II. **Supporting Decision-making**: All organizations are very concerned with data and due to a large number of transactions carried out on a daily basis by these organizations, managers no longer rely on their experience but rather look to business data analytical tools to make informed decisions. Regression and forecasting techniques can lend a scientific angle to the management of small organizations, reducing large amounts of raw data to actionable information. In some instances, the regression analysis will support a manager's positive feelings.
III. **Transformation of data into information**: Voluminous data have the capability to yield valuable information about small businesses and their operations. However, the data do not speak for themselves, making analysis necessary. Regression and forecasting techniques can yield new insight for managers by uncovering patterns and relationships that they had not previously considered or noticed.

4.0 Data Presentation and Analysis

4.1 Descriptive Statistics

This section provides an overview of the data while an attempt is also made to describe the main features of the data. This study is to determine the of effect interest rate, exchange and inflation on credit facilities obtained by SMEs in Nigeria. The descriptions of the data are based on mean, maximum, minimum, standard deviations, skewness, Shapiro-Wilk and kurtosis of Interest rate Exchange rate, inflation rate and credit facility using data from 1990 - 2018.

The summary statistics of the series of Interest Rate (IR), Exchange Rate (ER), and Inflation Rate (IFR) are shown below in Table 4.1

Table 4.1: Descriptive statistics

	CREDIT_FACILITY	EXCHANGE	INFLATION	INTEREST_RATE
Mean	2.765172	115.2641	18.25483	19.27207
Median	5.940000	125.8100	12.22000	18.18000
Maximum	25.28000	305.8200	72.84000	31.65000
Minimum	-43.57000	8.040000	5.380000	14.00000
Std. Dev.	17.19666	83.03545	17.18095	3.824183
Skewness	-1.268092	0.574028	2.038274	1.321466
Kurtosis	4.378530	2.990335	5.971588	5.030415
Jarque-Bera	10.06853	1.592736	30.75036	13.42178
Probability	0.006511	0.450964	0.000000	0.001218
Sum	80.19000	3342.660	529.3900	558.8900
Sum Sq. Dev.	8280.305	193056.8	8265.184	409.4825
Observations	29	29	29	29

Sourced: Researchers' Computation using E-Views and Microsoft excel

Table 4.1 shows the descriptive statistics for Interest Rate (IR), Exchange Rate (ER), Inflation Rate (IFR) and Credit Facility (CF). The mean gives the average value of the series over the period, which are 19.2720, 115.2641, 18.2548 and 2.7651 for IR, ER, IFR and CF respectively. The maximum and minimum values provide indications of significant variations as shown by the difference between the two values for each of the variables under research over the years of research. The standard deviation in the above table shows the spread of the series, the higher the value, the higher the deviation of the variables from the mean, and vice versa for IR, ER, IFR except for CF. The skewness of the variables IR, ER and IFR are positive, which indicates that the variables are positively skewed, showing that the right tails are extreme. The skewness of theCF is negative which indicates that the variable is negatively skewed showing that the left tails are

extreme. The variable ER is platykurtic in nature since its values for kurtosis are less than three (3), while the variables IR, IFR and CF are leptokurtic in nature since their values for kurtosis are higher than three (3).

The probability of Jarque –Bera statistics showed that all the series of the variables when combined are not normally distributed. This is so because the study adopted historical data over a period of 29 years.

Table 4.2 Aggregate Model

Variables	Coefficient	Std Error	T Stat	Prob.
C	-3.185762	22.74230	-0.140081	0.8897
INTEREST_RATE	0.705487	1.027219	0.686793	0.4985
EXCHANGE	0.021501	0.045846	0.468981	0.6431
INFLATION	-0.554568	0.196025	-2.829068	0.0091
R^2	0.287195			
ADJ R^2	0.201658			
F Statistics	3.357563			
Prob(F-Stat)	0.034709			
Durbin Watson	2.554381			
Observation	**29**			

Sourced: Researchers' Computation using E-Views and Microsoft excel

$CF_t = \alpha_4+\beta_3(IR)_t+ \beta_4(ER)_t+ \beta_5(IFR)_t+\mu_t$

$CF= 0.73+0.72IR_t-0.016ER_t-0.61IFR_t+\mu_t$

The model above tested the effect of the three independent variables on the credit facility.

5.1 Conclusion

This research has examined the effect of interest rate, exchange rate and inflation on the credit facility obtained by SMEs in Nigeria using data from 1990 to 2018. The study was able to examine how the three independent variables (interest rate, exchange rate and inflation) can individually and aggregately affect credit facility in Nigeria. The study further provided an insight as to the extent to which each of the independent variables affects the dependent variable through descriptive statistics and provides an affirmation of the extent to which the variations in the dependent variable are caused by the independent variables covered in the models as depicted by the coefficient of determination (R^2).
However, from the study it was understood that there are other factors that affect credit facility apart from the three major factors.
The study therefore found out that a significant relationship exists between the three independents variables and the dependent variable – credit facility. The government should therefore work and bring in policies that will help reduce the interest rate, exchange rate and inflation rate in the country so as to help SMEs grow.

5.2 Recommendations

Based on the findings and conclusions of the study, the following recommendations are made:
To positively influence the uptake of credit facilities by SMEs, CBN should employ monetary policies to ensure sustained money supply in the economy.
In a period of high inflation, exchange and interest rate Government should caution SMEs from the huge stocks by stabilizing the credit market through microfinance banks and commercial banks.
Full disclosures of all charges related to credit facilities should be done by the financial institutions to enable bank customers and SMEs make informed decisions this also includes disclosure on various components that might affect the effective interest rate year to year.

The government and private institutions should also support the development of alternative sources of financing such as microfinance institutions and Such that offer friendly terms of borrowing as opposed to Commercial banks.

In order to have a more rapid economic growth, the Nigerian authorities should lower the interest rate so that the investment will increase and also enforce economic policies to help reduce inflation and exchange rate.

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