

Micro, Small and Medium-Scale Enterprises (MMSMEs) Financing and Intensive Growth in Nigeria

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Abstract— This study examines the effect of Micro, Small and Medium-Scale Enterprises (MSMEs) on intensive growth in Nigeria from 1981 – 2020 using the Autoregressive Distributed Lag (ARDL) technique. Empirical results show that MSMEs and domestic investment had a positive and statistically significant effect on intensive growth in the long and short run. Government external debt had a negative and insignificant effect on intensive growth both in the short and long runs. While labour force participation also had a negative effect on intensive growth but the effect was significant only in the short run. The government can help MSMEs to survive in the long run by ensuring that funds set aside for MSMEs development get to them. Also, training MSMEs periodically on entrepreneurship management is recommended. Measures should also be taken to encourage domestic investment while the labour force should properly be engaged. Laws can be made to guide against the underemployment of labour by the private sector and control the engagement of the labour force.

Keywords— Micro, small and medium-scale enterprises, Intensive growth, entrepreneurship.

1. INTRODUCTION

Intensive economic growth is a growth stimulated mainly by increasing labour efficiency and adequate capital utilization among other factors. It is driven by productivity enhancement through increasing efficiency – higher output per unit of input in lieu of augmented factor supplies. Both intensive and extensive factors sustain economic growth; however, of course, most times either intensive or extensive factors predominate. Inasmuch as extensive growth can occur in pure form, intensive growth may not because more effective production means such as labour-saving means, new processes of production, more adequate factory layout and more suitable product quality are mostly achievable only with more capital outlays. Especially, in the long run, reliance on extensive growth may not be rational since resources could be exhausted (diminishing returns could probably set in). Thus, one can say that it has no meaningful contribution to per capita magnitudes in the long run. Intensive growth, however, particularly on a per capita basis, can bring about experience and skills and technology advancement capable of increasing production possibilities frontiers of the economy, with economic welfare implications. Ahmed & Nwankwo (2013) specifically pointed out intensive growth – measured by GDP growth to be among the most ideal benefits of entrepreneurship growth and development in developing countries.

Entrepreneurship, described as the establishment of commercial/entrepreneurial activities, is a medium to raise the quality of life of individuals, families and communities, especially in developing countries. From

different perspectives, government agencies, development agencies, farmers and the unemployed have characterised entrepreneurship. Government agencies see entrepreneurship as a fundamental strategy to guide against social unrest. Development agencies perceived it to be having enormous employment potentials. To the farmers, it is a means for commercial farming with improved farm earnings. Unemployed, on the other hand, see entrepreneurship as an employment possibility close to them that provides them with autonomy, self-reliance and less social support (Nwokoye, Metu, Aduku & Eboh, 2020). Entrepreneurship is a key ingredient for intensive growth such that without it, other development factors could be wasted or frittered away. It is a means of economic sustenance at the national, household and individual levels. An aspect of entrepreneurship that has gained prominence in developing countries as well as in the entrepreneurship literature over the years is Micro, Small and Medium-Scale Enterprises (MMSMEs).

MMSMEs, as characterised by Oloketuyi (2012) have a relatively small share of their market and are labour intensive. In their areas of specialization, compared to large firms, MMSMEs are more flexible and adapt easily and fast to market and environmental challenges within a short while. Though, MSMEs are not a subset of large enterprises, yet, they are the seedbed for endogenous entrepreneurship growth and development. MMSMEs promote indigenous technological know-how; make use of local resources – with little or no foreign exchange needs and easily fits the needs of customers.

Although the benefits of MMSMEs development are widely known all over the world, countries do not derive the benefits equally. This is due to differences in the level of MMSMEs development caused by diverse MMSMEs developmental challenges faced by the country. The level of significance of the role of MSMEs in essence depends largely on the level of MMSMEs growth and development. With this awareness, countries formulate policies and programmes to harness the power of MSMEs to foster intensive growth. In Nigeria, every government regime has supported the development of MSMEs in terms of policies, financial interventions, as well as technical assistance. Obaji & Olugu (2014) grouped government MMSMEs developmental efforts in Nigeria into Entrepreneurship Development Programmes/Institutions (EDP) and Finance/Micro-credit Programmes and institutions (MPI). However, contrary to policy thrusts, it is still a fact that MSMEs development has not achieved the needed success (Obaji & Olugu, 2014). MSMEs complain of the increasing cost of investing in addition to unfavourable economic policies and corruption.

Financial constraints, insufficient technical and conceptual ability among others continue to hinder entrepreneurship development. Therefore, limiting MSMEs from playing the expected role is a source of concern given the slow intensive growth rate. The frequent recessions especially in recent years are indications of the level of inefficiencies of the economic system of the Nigerian economy, making it difficult for MSMEs to strive well.

Given the increasing supports for MSMEs, an empirical investigation on the role of MSMEs in stimulating inclusive growth needs to be examined to cover the periods of recent economic recession including the 2016 and 2020 recessions.

Though studies on MSMEs in Nigeria exist, economy-wide studies on the effect of MSMEs on intensive growth, in particular, are limited, and previous research studies are carried out mostly in the western region of the country.

They mostly looked at MMSMEs and employment generation at the state level (micro-level). This study, therefore, becomes relevant in filling this observed gap.

The policy authority would find the recommendations proffered based on the findings useful in their policy considerations. Finally, this study is useful to academics because the study contributes to the body of knowledge since little or no information was available at the macro level – mainly on intensive growth.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Micro, Small and Medium-Scale Enterprises (MMSMEs)

There are so many definitions of MSMEs. This is because the concept has no globally accepted definition. It is defined in different ways by different scholars and in different countries. The World Bank described micro-enterprises as enterprises that have between 1 – 9 employees, and small enterprises as those with 10 – 49 employees. The medium enterprises, on the other hand, were grouped to be those whose employees are between 50 – 249 employees. In most countries including Canada, the USA, Britain and Nigeria, MSMEs are defined concerning annual turnover and number of employees. For countries like Japan, MSMEs are defined as the industry and nature of businesses. In Britain for instance, MSMEs are firms with an annual turnover of not more than two million pounds (£2,000,000) and not more than two hundred (200) paid employees. Institutions as well have their definitions of MSMEs which are based primarily on the purpose of classification. For example, the European Commission (EUC), defines MSMEs as enterprises that employ fewer than two hundred and fifty (250) people and have annual sales, not more than sixty-seven million pounds (£67,000,000) and total assets not more than fifty-six million pounds (£56,000,000). According to the Asian Pacific Economic Co-operation (APEC), MSMEs are enterprises with less than one hundred (100) employees (Hudson, Andrew & Ibrahim, 2014).

In Nigeria, as stated by Hudson, Andrew & Ibrahim (2014), the Central Bank of Nigeria (CBN) and Small and Medium Scale Industries Equity Investment Scheme (SMIEIS) proffer similar definitions. According to them, MSMEs are enterprises with an asset base of less than two million Naira (N2, 000,000) but with the exclusion of land and working capital. The number of staff employed must not be less than ten (10) and not more than three hundred 300. The common point is that it is difficult to define and compare the size and distributions of MSMEs across countries for the fact the statistical definitions vary. But globally, the most common way to define MSMEs according to Katua (2014) is the number of employees. For this study, the definition of MSMEs adopted by SMIEIS (1998) will be used, and it is captured by the government credits to MSMEs.

2.1.2 Intensive Growth

Intensive growth is linked to innovation and technology advancements or skills that can affect the techniques of production and, the production possibility frontier can

be shifted outwards and instigate an increase in productivity and living standards. It is a growth stir up by factors including entrepreneurship, technology, innovation, and information and other economic processes such as organization excluding the classical factors of production (land, labour and capital). Intensive growth is economic growth due to entrepreneurship, technology advancements or skills and innovations that change the production technique, thus, causing the production possibility frontier outwards and enabling productivity increase. It is an economic growth stirred up by factors like entrepreneurship, innovation, information and technology and other economic processes like organization excluding the classical factors of production – land, labour and capital.

Wawrosz & Mihola (2013) provided a clear boundary between intensive growth and extensive growth. According to them, economic growth is intensive when it is based on innovations. While extensive growth, as they stated, is a growth incited by an increase in the units of inputs. In essence, growth propelled by quality, efficiency and effectiveness of production inputs – also known as total factor productivity growth is also considered as intensive growth. The merit of intensive growth over extensive growth is that there will be a point where a unit of production inputs will attain the limit of scarce resources and there will be an additional increase

in production and growth will be fixed unless inputs are increased. Intensive growth is the increase in economic activities in an economy, which is measured by Gross National Product (GNP) or Gross Domestic Product (GDP) – depending on the country in question. When GNP is used, it measures the market value of the final products produced by nationals of the country residing home and abroad. But when GDP is used, it measures the market value of the final products produced within the country by nationals and foreigners residing in the country. This study adopts GDP growth to measure intensive growth.

2.1.3 Relationship between Micro, Small and Medium-Scale Enterprises Financing and Intensive Growth

A major reason for supporting the financing of MSMEs is to nurture their development, with the awareness that sustainable long-term economic growth and employment creation is achievable especially through developing a dynamic entrepreneurial sector. There are several channels through which MSMEs can contribute to economic growth. First, MSMEs financing enhances the growth and development of MSMEs and keep them functional in entrepreneurial activities. Economic growth can, then, be affected through innovation creation or diffusion, competition, employment generation, higher productivity, and economic structural change.

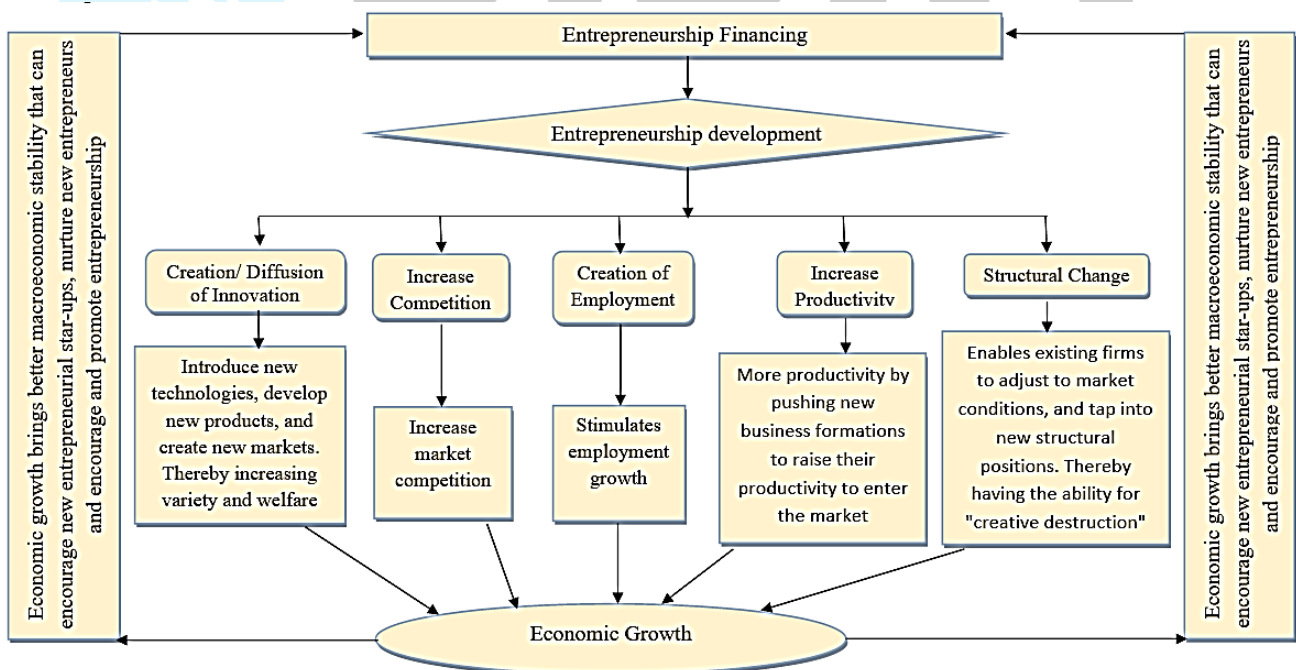


Figure 1: Framework of the dynamic relationship between entrepreneurship financing, entrepreneurship development and economic growth

Source: Nwokoye, Metu, Aduku & Eboh (2020), with modifications

Innovation is created when entrepreneurs (MSMEs) develop and use new technologies and more suitable production techniques with new products and new markets. This will bring about product variety and consumption bundle broadening, and welfare will increase and economic growth will be stimulated. Competition mechanisms will be generated when the entrepreneurial sector develops, which will result in to increase in competition and more products for consumption with lower prices. This will lead to economic growth by expanding the production base of the economy. Although, in the short run, competition may hurt economic growth because most firms may be pushed out of the market as they may not be able to compete. The employment generation channel works by generating new jobs in the economy. Nwokoye, Metu, Aduku & Eboh (2020) stated that the generation of new jobs is possible mostly in the medium run because new employment opportunities are stagnant in the long run. Therefore, the employment channel could be more effective in the medium-run than in the long run. Another channel is through an increase in the productive base.

Also, entrepreneurship development through entrepreneurship financing can raise the productive capacity of the economy and, consequently, economic growth will be affected. This channel according to OECD (2014), is more effective in stimulating intensive growth relative to inclusive growth (measured as real disposable household income), stating that productivity growth does not instigate higher rates of inclusive growth. As regards the structural changes channel, entrepreneurs operate towards meeting new market conditions. This gives them an edge for “creative destruction”, described as a shift from the old production process or innovation to new methods. The old technologies or production processes gradually fade out of the market as new production processes that compete with the old processes are introduced. This form of structural change is associated with entrepreneurship development. And, for the fact that it comes with more adequate production techniques, higher rates of production and reduced prices, it leads to higher consumption among other factors that leads to economic growth.

2.2 Empirical Literature

Gherghina, Botezatu, Hosszu & Simionescu (2020), examined the impact of investments and innovation of SMEs on territorial economic growth (measured by turnover) in Romanian from 2009 – 2017. The regression technique was employed by the authors. The result showed a positive impact of investments and innovation of SMEs on turnover. Roopchund (2020)

examined the relationship between economic growth, employment and entrepreneurial culture in Mauritius using primary data. The data was analysed using the descriptive statistics technique. SMEs were proxied by SMEs revenue while economic growth was measured by real GDP. The study found that SME revenue had no statistically significant effect on real GDP growth. It was also found that unemployment increases alongside an increase in SMEs, indicating that SMEs do not bring about a reduction in unemployment. Akanbi, Akin & Sodiq (2016) examined the financing options available to SMEs in Nigeria and their contribution to economic growth from 1981 – 2012 using the ordinary least square technique. It was found that SMEs financing had a positive and insignificant effect on Economic growth. Using an autoregressive distributed lag approach, Oyeniran, David & Ajayi (2015) examined how small and medium enterprises (SMEs) had contributed to the economic growth of Nigeria from 1981 – 2013. The study found a significant and positive impact of SMEs on economic growth. Etuk, Etuk, & Baghebo (2014) examined the relationship between SMEs and Nigeria's economic development. Primary data was used for the study. The findings showed that SMEs are beneficial in alleviating poverty through wealth and job creation. The impact of SMEs on the economic development of Ekiti State was examined by Opafunso & Omoseni (2014). 150 respondents comprising of traders, artisans, production factories and other small and medium enterprises were selected for the study using multi-stage sampling. The study found a positive and significant relationship between SMEs and poverty reduction, employment generation and improvement in the standard of living. Haltiwanger, Jarmin & Miranda (2013) examined the relationship between young SMEs and economic growth in the US using data from a longitudinal database. The authors controlled for the age of enterprises. They found that young SMEs significantly determine employment. It was also found that the age of enterprises plays a significant role in determining employment generation in the US economy. Mawoli, Sarkin-Daji, & Wushishi (2013) examined the problems and challenges that impede MSMEs from contributing meaningfully to the economic growth and development of Nigeria. The study found inadequate and sporadic electricity and water supply, poor road network, outdated and grossly inadequate railway systems, and undeveloped inland waterway systems as basic problems faced by SMEs in Nigeria. Uzoma (2012) examined the impact of SMEs on the Nigerian economy from 1986 – 2010 using the Ordinary Least Square (OLS) technique. SMEs were found to have significantly contributed to the economic growth of Nigeria.

A lot has been done on MSMEs generally, but just a handful of empirical studies are found especially in Nigeria. The reason for the large theoretical studies over the empirical studies could be attributed to data challenges. The empirical studies especially in Nigeria that are closely related to this study include (Akanbi, Akin & Sodiq, 2016; Oyeniran, David & Ajayi, 2015; Etuk, Etuk & Baghebo, 2014; Opafunso & Omoseni, 2014; Anigbogu, Onwuteaka, Edoko, & Okoli, 2014; and Uzoma, 2012). All the studies focused on the effect of MSMEs on economic growth. However, most of the studies used survey design and, are not macro studies. Also, most of the studies of MSMEs financing did not use our measures of MSMEs financing, therefore, making our study differ from most of the related studies in Nigeria. Since the definition of MSMEs differs in different countries, the enterprises considered for MSMEs financing also differ across the country. This marks the uniqueness of a country-level study such as our study in the MSMEs financing literature. The availability of empirical evidence at the macro level will go a long way in facilitating government efforts in MSMEs growth and development for intensive economic growth.

3. DATA AND METHODOLOGY

The data is annual data drawn from the Central Bank of Nigeria (CBN) statistical bulletin and the World Development Indicators (WDI). The data on the labour force is drawn from the WDI, while the rest of the data is drawn from the CBN statistical bulletin. The period covered is 1981 – 2020. The study anchored on the neoclassical growth theory as its framework of analysis. The theory explains that output is dependent on labour, capital and technological progress. The model following Oyeniran, David & Ajayi (2015) is presented as follows:

$$Y = AK^\alpha L^\beta \tag{1}$$

where:

Y = output growth

K = capital stock

L = labour endowment

A = total factor productivity (productivity of existing technology, and technical process or innovation, etc).

Technological progress and innovation by entrepreneurs contribute to economic performance, as commonly argued in the literature. Therefore, total factor productivity (A) in equation (1) is substituted with MSMEs development (measured by government support for MSMEs – government loan to MSMEs). That is;

$$A = (GOVS_MSMEs) = GOVS_MSMEs^\varphi \tag{2}$$

Where GOVS_MSMEs is government support for MSMEs. For this study, output growth is taken to be intensive growth. We substitute equation (2) into (1) and represent the capital stock (K) with external debt stock (EXD), labour (L) with labour force (LFORCE) and output growth (Y) with intensive growth (INT_GROWTH), measured by GDP growth and add domestic investment (DINV), measured by gross fixed capital formation as:

$$INT_GROWTH = GOVS_MSMEs^\varphi, EXD^\alpha, LFORCE^\beta, DINV^\vartheta \tag{3}$$

Taking logs of equation (3) results in equation (4) as:

$$INT_GROWTH = \varphi GOVS_MSMEs + \alpha exd + \beta lforce + \vartheta dinv \tag{4}$$

The variables in small case letters are logged variables. Intensive growth is not logged because the variable is already taken in rate. The parameters, φ , α , β , and ϑ measure the output elasticities of MSMEs, capital, labour and domestic investment respectively. Equation (4) is re-specified in autoregressive distributed lag (ARDL) form as follows:

$$INT_GROWTH = b_0 + \alpha_1 INT_GROWTH_{t-1} + b_2 govmsmes + b_3 exd + b_4 lforce + b_5 dinv + \sum_{j=1}^p \phi_1 INT_GROWTH_{t-j} + \sum_{s=0}^q \phi_2 govmsmes_{t-s} + \sum_{m=0}^q \phi_3 exd_{t-m} + \sum_{z=0}^q \phi_4 lforce_{t-z} + \sum_{z=0}^q \phi_5 dinv_{t-z} + \mu_{21t} \tag{5}$$

In equation (5), the different terms are the short-run variables while the lag terms are the long-run process. The small lettered variables are logged variables. INT_GROWTH is not logged since the variable is already in rates. μ_{21t} is the error term, and b_i ($i = 1, 2, 3, \dots, 5$) and ϕ_i are the long and short-run parameters of the variables respectively. The optimal lag length is to be determined using the Akaike information lag length selection method. If cointegration is found among the variables, then it means that the variables adjust to equilibrium, to be captured by an error correction model, specified as

$$\Delta INT_GROWTH = a_0 + \sum_{j=1}^p \phi_1 INT_GROWTH_{t-j} + \sum_{s=0}^q \phi_2 govmsmes_{t-s} + \sum_{m=0}^q \phi_3 exd_{t-m} + \sum_{z=0}^q \phi_4 lforce_{t-z} + \sum_{z=0}^q \phi_5 dinv_{t-z} + \varphi ECM_{t-1} + \mu_{1t} \tag{6}$$

Where ECM_{t-1} is the error correction term

First, the order of the ARDL will be determined. Thereafter, the models can be estimated using the Ordinary Least Square (OLS) technique. The OLS technique is the Best Linear and Unbiased Estimator (BLUE). The OLS estimator is BLUE in the class of all available estimators if it is: linear, that is, a linear function of a random variable, such as the dependent variable, Y in a regression model; unbiased, that is, its average or expected value $E(\hat{a}_i)$ is equal to the true value a_i and has minimum variance in the class of all such linear unbiased estimators; an unbiased estimator with the least variance is known as an efficient estimator. Estimation of the ARDL model in this study shall begin with the test for the appropriate lag order using Akaike information model selection criteria. *Most macroeconomic time series are trended and therefore, in most cases are non-stationary.* Thus, Augmented Dickey-Fuller (ADF) and Philips Peron (PP) unit root

tests would also be carried out to test for the stationarity of the variables. Thereafter, a test for the long-run relationship among the variables would be carried out. If the calculated F-statistics lies above the upper level of the band, the null hypothesis of the non-existence of long-run relationship among the variables would be rejected, implying that there is co-integration, if, on the other hand, it lies below the lower level of the band; the null hypothesis would not be rejected, meaning there is no cointegration. If the F-statistics falls within the upper and lower bands, then the result would be inconclusive. That is, the presence or absence of cointegration would not be ascertained.

4. RESULTS

4.1 Unit Root Test

The Augmented Dickey-Fuller and the Phillips-Perron tests were employed to test the variables for unit root. The result is reported in Table 1 below.

Table 1: Augmented Dickey-Fuller and Philips-Perron unit root test results

Variable	Augmented Dickey-Fuller Result		Philips-Perron Result		Lag order	~I(d)
	Level	1 st Difference	Level	1 st Difference		
govs_msmes,	-1.641	-3.925 *	-1.630	-4.318*	2	I(1)
exd	-2.389	-5.170*	-2.549	-4.684*	2	I(1)
lforce	1.467	-4.390*	-0.576	-5.268*	2	I(1)
RGDPG	-3.474	-3.884*	-1.922	-4.280*	2	I(1)
dinv	-4.634*	-	-5.312*	-	2	I(0)

Where * denotes significance at 5% and the rejection of the null hypothesis of the presence of unit root. The optimal lag length was chosen according to Akaike's Final Prediction Error (FPE), and Akaike's information criteria. The ADF 5% critical value at levels is -3.556 and at the 1st difference is -3.560, while the Philips-Perron critical value at levels is -3.548 and at the 1st difference is -3.552. A trend is included in both the Augmented Dickey-Fuller and Philips-Perron unit root test models that were estimated.

Source: Author's Computation

The Augmented Dickey-Fuller and Philips-Perron unit root test showed that the variables are not stationary at a level except domestic investment.

This is because the test statistics of the Augmented Dickey-Fuller and Philips-Perron tests of the variables respectively except domestic investment is lower than the respective ADF and Philips-Perron critical values at the level.

Therefore, the null hypothesis that the variables contain a unit root at level is accepted at the 5 per cent level except for domestic investment.

The variables that contain a unit root were, therefore, differenced once and the test was conducted again. At

the 1st difference, the test statistics of both the Augmented Dickey-Fuller and Philips-Perron tests for all the variables showed test statistics that are greater than the 1st differenced critical value.

For this reason, the null hypothesis of the presence of unit root is rejected at the 5 per cent level. Thus, we say that domestic investment is stationary at level – integrated of order 0, I(0), while the rest of the variables are stationary at 1st difference – integrated of order 1, I(1).

4.2 Effect of SMEs on Intensive Growth

We begin by discussing the Pesaran, Shin & Smith (2001) Bounds test result for the existence of a level

form relationship (cointegration) of the variables in the model. The result is reported in Table 2.

Table 2: Bounds test result for level form relationship of the variables in the model

Critical Values (0.1-0.01), F-statistic, Case 3							
90%		95%		97.5%		99%	
I(0)	I(1)	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
2.45	3.52	2.86	4.01	3.25	4.49	3.74	5.06
Critical Values (0.1-0.01), t-statistic, Case 3							
90%		95%		97.5%		99%	
I(0)	I(1)	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
-2.57	-3.66	-2.86	-3.99	-3.13	-4.26	-3.43	-4.60
K	4						
F	4.712						
t	-4.578						

Source: Author's computation

We compare the F-value of 4.712 with the 5 per cent critical value and found that it is greater than the lower and upper bounds critical values of 2.86 and 4.01. Since it is greater than the upper bound, we reject the null hypothesis of a level form relationship. That is, the variables are cointegrated. Similarly, the t-value (-4.578) fall outside the 5 per cent upper bounds critical

values of -2.86 and -3.99 in an absolute sense. Since the t-value falls outside the upper bound, it means that we can also accept the presence of cointegration. In order words, the test using the t-value also shows that there is a long-run relationship. We present the error correction result in Table 3.

Table 3: Error correction estimates of the effect of MSMEs on intensive growth

The dependent variable is an intensive growth				
D.RGDPG	coefficients	Standard Errors	t-Statistics	P-value
Adjustment	-0.6923	0.2685	-2.58	0.017
Long-Run				
govs_msmes	6.6016	2.3074	2.86	0.009
exd	-1.5485	1.3914	-1.11	0.278
lforce	-2.8015	1.8802	-1.49	0.152
dinv	10.2413	3.3859	3.02	0.006
Short-Run				
RGDPG	0.2503	0.1892	1.32	0.200
govs_msmes	3.6390	1.5998	2.27	0.033
exd	-1.3009	1.2869	-1.01	0.323
lforce	-9.3323	2.6588	-3.51	0.002
dinv	16.3922	5.2418	3.13	0.005
Constant	563.378	442.5283	1.27	0.216
R2	0.7624			
Adjusted R-Squared	0.6112			
F-statistics	5.04(0.0004)			
Durbin-Watson d-statistic (15, 37)	1.8827			
Breusch-Godfrey LM Chi-square Statistics	0.026(0.8726)			

Source: Author's computation

The result showed an error correction adjustment coefficient of -0.6923 with a t-value of -2.58. The significant negative value of -0.6923 means that when there is disequilibrium in the short run, the variables in

the model for objective two adjust back to equilibrium in the long run at a significant speed of 69.23 per cent per annum.

In the long run, the MSMEs coefficient is 6.6016 with a t-value of 2.86. Since the t-value is greater than 2 in an absolute sense, we reject the null hypothesis of no significant effect of MSMEs on intensive growth in Nigeria. The significant p-value ($0.009 < 0.05$) also supports the rejection of the null hypothesis, which means that there is no significant error in rejecting the null hypothesis. Therefore, MSMEs have a positive and statistically significant effect on intensive growth in the long run. In specific terms, percentage growth in MSMEs through government support for MSMEs in the form of loans to MSMEs brings about 6.60 per cent significant intensive growth in the long run. Also, in the short run, the coefficient of MSMEs is 3.6390 with a t-value of 2.27. The significant t-value also suggests the rejection of the null hypothesis in the short run. The significant p-value of 0.033 means that there is no significant error in rejecting the null hypothesis at the 5 per cent level. This means that in the short run, MSMEs have a positive and statistically significant effect on intensive growth. Specifically, percentage growth in MSMEs leads to 3.64 per cent significant intensive growth in the short run. The finding that MSMEs had a positive and significant effect on intensive growth in the long and short-runs implies that MSMEs promote intensive growth. MSMEs are innovators and innovativeness is a tool for intensive growth. Therefore, the positive and significant effect of MSMEs on intensive growth is not surprising.

Regarding government external debt, the result showed a negative coefficient of -1.5485 with a t-value of -1.11. Since the t-value of -1.11 is statistically insignificant, we accept the null hypothesis that government external debt has no significant effect on intensive growth. The insignificant p-value of 0.278 also supports the acceptance of the null hypothesis at the 5 per cent level. Therefore, government external debt has a negative and insignificant effect on intensive growth in Nigeria in the long run. It shows that a percentage increase in external debt results in a 1.55 per cent insignificant decrease in intensive growth in the long run. Also in the short run, external debt showed a negative and statistically insignificant coefficient. Therefore, the null hypothesis is accepted in the short run. It shows that a percentage increase in external debt leads to 1.30 per cent insignificant intensive growth in the short run. Thus, both in the long run and short-run government external debt have a negative and statistically insignificant effect on intensive growth. This implies that foreign debt is detrimental to intensive growth. The huge foreign debt may not have been used for enhancing drivers of intensive growth, therefore, making foreign debt not to be intensive growth-enhancing.

The labour force also showed a negative coefficient of -2.8015 with a t-value of -1.49 in the long run. The insignificant t-value makes us accept the null hypothesis at the 5 per cent level in the long run. The insignificant p-value of 0.152 means that there is no significant error in accepting the null hypotheses. Therefore, in the long run, an increase in labour force participation leads to a 2.80 per cent insignificant decrease in intensive growth. A similar result showed up in the short run. The short-run coefficient and t-value are -9.3323 and -3.51. Since the t-value is significant, we reject the null hypothesis that labour force participation has no significant effect on intensive growth. This means that labour force participation has a negative and significant effect on intensive growth. Specifically, a percentage increase in labour force participation leads to a 9.33 per cent decrease in intensive growth. The finding that labour force participation had a negative effect on intensive growth in the long and short-run – significant in the long run and insignificant in the short run could be due to a large number of people especially the youth who are in the labour force are unemployed and some are underemployed. Their contribution to employment is below maximum.

The long-run coefficient for domestic investment is 10.2413 with a t-value of 3.02. The t-value of 3.02 is statistically significant. For this reason, we reject the null hypothesis that domestic investment has no statistically significant effect on intensive growth in the long run. The p-value of 0.006, which is significant at the 5 per cent level means that the rejection of the null hypothesis does not have a significant error. Therefore, an increase in domestic investment brings about 10.24 per cent significant intensive growth. Also, in the short run, domestic investment has a positive value of 16.3922 with a t-value of 3.13. Therefore, the null hypothesis that domestic investment has no statistically significant effect on intensive growth is also rejected in the short run. The significant p-value of 0.005 also confirms the rejection of the null hypothesis at the 5 per cent level. Specifically, if domestic investment increases by a percentage, there will be significant intensive growth by 16.39 per cent in the short run. Domestic investment propels intensive growth. This is because investment special innovative investments such as research and development bring about innovativeness that can lead to intensive growth.

The coefficient of determination, R^2 tells us the explanatory power of the independent variables on the dependent variables. That is the ability of the independent variables to explain the dependent variables. It is also called the goodness of fit test. The R^2 coefficient is 0.7624. This means that the independent

variables explain about 76.24 per cent change in intensive growth in Nigeria. The remaining percentage change in intensive growth is due to other variables that are not included in our model. F-statistics, on the other hand, explains the joint effect of the independent variables on the dependent variable. The F-value is 5.04 ($p = 0.0004$). The p-value is significant since it is less than 0.05. Therefore, the null hypothesis that the independent variables have no joint effect on the dependent variables is rejected. Thus, the independent variables have a joint significant effect on intensive growth. The Durbin-Watson d-statistic is approximately 2. Therefore, the null hypothesis of no autocorrelation is accepted. Similarly, the insignificant Breusch-Godfrey LM Chi-square Statistics of 0.026 ($p = 0.8726$) means that the independent variables are not serially correlated.

5. CONCLUSION AND POLICY RECOMMENDATIONS

The effect of micro, small and medium enterprises on intensive growth in Nigeria has been examined. Based on the findings, we conclude that micro, small and medium enterprises significantly contribute to intensive growth both in the long and short run, while external debt has not been good to intensive growth both in the long and short run. The labour force, which is more of the young population, is not contributive to significant intensive growth. We can say that most of the labour force is underemployed or unemployed and cannot bring in innovation that can be contributive to intensive growth. Domestic investment significantly determines economic growth. The government can help micro, small and medium enterprises to survive in the long run by ensuring that funds set aside for micro, small and medium enterprises development get to them. Also, training the micro, small and medium enterprises periodically on entrepreneurship management is recommended. Measures should also be taken to encourage domestic investment while the labour force should properly be engaged. Laws can be made to guide against the underemployment of labour by the private sector and control the engagement of the labour force.

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