Artículo de investigación

Attaining Inclusive Growth in a Developing Economy on the Wings of Micro, Small and Medium Scale Enterprises

Достижение инклюзивного роста в развивающейся экономике на крыльях микро-, малых и средних предприятий

Lograr un crecimiento inclusivo en una economía en desarrollo en las alas de las micro, pequeñas y medianas empresas

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Abstract

A typical disturbing feature of most developing countries is a sprawling disparity between economic growth as measured by increase in gross domestic product and concrete progress in real welfare of the citizenry measured by standard of living, access to employment and poverty reduction. Contrary to natural logic, available evidence suggests that both variables are inversely related. There is equally a consensus among scholars of inherent potential of micro, small and medium enterprises (MSMEs) as a veritable agency for income and prosperity spread and thus a vehicle for inclusive growth. This paper empirically investigates the nexus between MSMEs and inclusive economic growth. With data ranging from 1980 to 2016, it specifically built econometric model to capture the link between Gini coefficients (proxy for inequality gap) and identified key determinants of viable MSMEs sub-sector: volume of credit to MSMEs, MSMEs' contribution to national output, lending cost, cost of doing business, and infrastructural financing. With error correction model technique of analysis, findings revealed that MSMEs has the potential to provide growth that will spread prosperity to the majority of citizenry thereby narrowing inequality gap and reducing poverty. The paper recommends policy

Аннотация

Типичной тревожной чертой большинства развивающихся стран является растущее несоответствие между экономическим ростом, измеряемым увеличением валового внутреннего продукта, и конкретным прогрессом в реальном благосостоянии граждан, измеряемом уровнем жизни, доступом к занятости и сокращением бедности. Вопреки естественной логике имеющиеся данные свидетельствуют о том, что обе переменные имеют обратную связь. В равной степени существует консенсус между учеными о внутреннем потенциале микро-, малых и средних предприятий (ММСП) в качестве подлинного агентства для распределения доходов и процветания и, следовательно, средства для инклюзивного роста. Эта статья эмпирически исследует связь между ММСП и инклюзивным экономическим ростом. Имея данные за период с 1980 по 2016 год, он специально построил эконометрическую модель для определения связи между коэффициентами Джини (прокси для неравенства) и определил ключевые детерминанты жизнеспособного подсектора ММСП: объем кредита для ММСП, вклад ММСП в национальный результат, стоимость кредитования, стоимость ведения бизнеса и

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shift in favour of creating environment to promote the growth of MSMEs.

Key Words: Inclusive-growth; Micro, Small and Medium Enterprises; Interconnectivity, Inequality, Causality, Sustainability.

инфраструктурное финансирование. Используя метод анализа с использованием модели коррекции ошибок, результаты показали, что ММСП обладают потенциалом для обеспечения роста, который распространит благосостояние для большинства населения, тем самым сужая разрыв в неравенстве и сокращая бедность. В документе рекомендуется изменить политику в пользу создания среды, способствующей росту ММСП.

Ключевые слова: Включено-рост; Микро-, малые и средние предприятия; Взаимосвязанность, неравенство, причинность, устойчивость.

Resumen

Una característica perturbadora típica de la mayoría de los países en desarrollo es una gran disparidad entre el crecimiento económico medido por el aumento del producto interno bruto y el progreso concreto en el bienestar real de la ciudadanía medido por el nivel de vida, el acceso al empleo y la reducción de la pobreza. Contrariamente a la lógica natural, la evidencia disponible sugiere que ambas variables están inversamente relacionadas. Existe igualmente un consenso entre los académicos sobre el potencial inherente de las micro, pequeñas y medianas empresas (MIPYMES) como una verdadera agencia para la distribución de ingresos y prosperidad y, por lo tanto, un vehículo para un crecimiento inclusivo. Este documento investiga empíricamente el nexo entre las MIPYME y el crecimiento económico inclusivo. Con datos que van desde 1980 hasta 2016, construyó específicamente un modelo econométrico para capturar el vínculo entre los coeficientes de Gini (proxy de la brecha de desigualdad) e identificó los determinantes clave del subsector viable de las MIPYME: volumen de crédito a las MIPYMES, la contribución de las MIPYMES al producto nacional, costo de préstamo, costo de hacer negocios y financiamiento de infraestructura. Con la técnica de análisis del modelo de corrección de errores, los hallazgos revelaron que las MIPYME tienen el potencial de proporcionar un crecimiento que extenderá la prosperidad a la mayoría de la ciudadanía, reduciendo así la brecha de desigualdad y reduciendo la pobreza. El documento recomienda un cambio de política a favor de crear un entorno para promover el crecimiento de las MIPYME.

Palabras clave: Crecimiento inclusivo; Micro, Pequeñas y Medianas Empresas; Interconectividad, Desigualdad, Causalidad, Sostenibilidad.

Introduction

Background to the Study

The growth trajectory of most countries in Sub-Saharan Africa is fraught with challenges and paradoxes. Persistent disturbing trends in these countries are situations where the economy is growing in nominal terms and yet does not translate to any meaningful improvements in the welfare of citizenry of these nations. A typical example is the Nigerian nation that attained an average economic growth rate of about 6% over a fifteen year period (2000-2015) and yet unemployment and poverty spiraled out of control within the same period (Onodugo et al, 2017). Consequently, the country within this time and few years after, assumed the contradictory position as the largest economy in Sub-Saharan Africa and the country with the highest destination of extreme poor people in world, surpassing India in the process (Kazeem, 2018). These mixed economic results began to call to question the assumption of economists and development experts that economic growth is supposed to create income and jobs in such a way as to lift the poor and less privileged out of poverty and deprivations (Ogbu, 2012; Onodugo, Kalu, & Anowor, 2013; Agbarakwe & Anowor, 2018; Kord et al., 2017).

The culprit for this scenario of economic growth without commensurate increase in the quality of life of citizens is dysfunctional economic

structure that confers the bulk of income generated mainly through extraction and sale of mineral resources on a few state actors at the exclusion of the rest of the people (see: Betz et al, 2015; Bhattacharyya et al, 2014). As a result, a notable characteristic of developing economy is huge income inequality and social gulf between the poor and the rich. This trend seems to provoke global attention of scholars towards the underlying causes of income inequality and factors that promote inclusiveness. Inclusive growth is defined by Organization for Economic Cooperation and Development (OECD, 2012) as a situation where the growth outcomes is distributed fairly across various strata of society such that the gap between the rich and the poor is less pronounced, and leads to improvements in living standards that matter for general quality of life (e.g. good health, jobs and skills, clean environment, and community support). Anowor, Ukweni, Ezekwem and Ibiam (2013), Mukhtari (2017), and Oluwasogo, Oduntan & Oluwatoyi (2017), all agree that the concept of "inclusive growth" is a term whose time has fully come and holds the aces for driving sustainable development in the years ahead. Bringing a lot of people into the theater of productive activity as espoused by inclusive growth does the economy two simultaneous good. It increases more hands in the production and income while at the same time reducing the number of people that are available for social nuisance and economic disruptive behaviours (see: McKinley, 2010; Aoyagi and Ganelli, 2015).

Several studies in the literature (see for instance, Oni, Oni & Daniya,2012; Onodugo, Kalu &Anowor, 2013; Onodugo, Anowor, Ukweni & Ibiam 2014; Edom, Inah & Emori, 2015; Abdulrahman & Olofin, 2017; Mukhtari 2017; and Ibor, Offiong &Mendie, 2017; Adaboh et al., 2017) suggest that there is enormous potentials in micro, small and medium enterprises (MSMEs) as agencies and drivers of inclusive growth. In particular, the proponents argue that MSMEs, based on the philosophy of switching from capital-intensive production process to labour-intensive process, have the desirable prospects of developing the domestic economy via reducing unemployment, alleviating poverty and closing income inequality gap. They also argue that MSMEs encourage self-reliance and foster linkages among the various sectors of the economy because they mostly use locally sourced materials. Since MSMEs by definition comprises above 90 percent of domestic private enterprises in developing (especially Sub-Saharan African) economies and accounts for the largest share of the number of participants in the domestic private sector of the developing economies, there is little doubt about its potential of being a major driver of the domestic private sector of these economies. Thus MSMEs merits the current attention it is receiving as a major plank for sustainable economic growth and development (Abdulraham & Olofin, 2017).

There have been a substantial number of studies in the literature that investigated various aspects of MSMEs. Some focused on the environment that makes for good business start-ups, some others on causes of high mortality of MSMEs and still many more focus on issues pertaining to access to credit and its management (see: Tambunan, 2008; Pandya, 2012; Oba and Onuoha, 2013; Rutendo, 2016; Ibor, Offiong and Mendie, 2017). There is however, paucity of studies that sought to establish logical connections between inequality gap and various key determining variables of MSMEs. Further rationale for focusing on this vital link is that there appear to be marginal contribution of MSMEs to GDP among developing countries despite an avalanche of monetary policy guidelines that mandate banks to channel credits to MSMEs. Available evidence suggests that MSMEs in Sub-Saharan Africa contributes approximately 1% of GDP compared to 40% in Asia and 50% in Europe/US (Oyelaran-Oyeyinka, 2017). Equally, Nigeria, which is one of the leading countries in terms of the economy in West and Sub-Saharan Africa recorded substantial GDP growth rates of 7.4% in 2011, 7.5% in 2012 and 7.6% in 2013, but was correspondingly ranked low by the United Nation Development Programme (UNDP) report of Human Development Index (HDI) for the same period (UNDP,2018). Specifically, Nigeria's abysmal HDI performance showed that it scored 0.484 in 2010, 0.519 in 2013, 0.527 in 2015, 0.53 in 2016 and 0.532 in 2017 placing the country at 157th position out of 189 countries sampled. Worse still, inequality gap using Gini Coefficient (Gini Index) has as well increased from 39.85 in 2007 to 43.82 in 2013 and to 51.9 in 2017. All these signposts huge disconnect between nominal economic growth and real human development progress among developing countries.

The above context highlights the need for a study that seeks to deepen the relationship between economic growth and other indices of welfare such as income, employment and access to public goods and services by the majority of the citizenry. Specifically, there is need to explore if and how MSMEs would be able to engender all inclusive economic growth and development.

The latter constitutes the central focus of this paper. The paper is divided into five sections. Next to this introduction is the review of related literature; this will be followed by model specification and methodological approach to data collection. The fourth section deal with analysis, presentation and discussion of findings and the last section concludes the paper and proffer some recommendations.

Review of related Literature

Perspectives on Economic and Inclusive Growth Concepts

Economic growth, indexed by the gross domestic product (GDP), is central in the development literature discourse. In spite of its flaws, it still remains an unassailable yardstick for assessing the performance of an economy overtime and between economies at any given point in time. Agwal (2019) defines economic growth as an increase in the market value of the goods and services provided by an economy over time. It is a result of the rearrangement of resources of a country in ways that are more valuable (Romer, 2018). Economic growth does not occur by accident or in isolation, but by the conscious effort made by people in a nation to alter their resource to make them more valuable.

Modern development experts have begun to highlight the shortcomings of using economic growth in assessing the wider ramifications of development in a country and in the welfare of its individual members. The measuring benchmarks of economic growth largely fail to show how growth has improved an individual's welfare in society. As Aleksey and Yuner (2015) observed, economic growth is essential but not sufficient on its own in improving the welfare of a population. There may be growth, but income is unequally distributed, creating a wider gap between the rich and the poor, and unemployment still on the increase. Proponents of new economic growth claim that economic growth is useful when measuring the economic performance of a country but argue that it is not a comprehensive performance measurement. In order words, the growth is not inclusive in the sense that it fails to take into consideration every individual in society. It is a kind of growth that does not improve the welfare of all groups of the population (Romer, 2018; Aleksey & Yuner, 2015). It does not assure equal financial security; instead, it is concerned with the increase in production and consumption of goods and services.

United Nations Development Programme (UNDP, 2017), states that economic growth can reduce inequality and extreme poverty only if its benefits are spread widely across the population. Following these shortcomings of economic growth some researchers like Van den Berg (2017) called for a development approach that goes beyond growth and income and ensures that all the benefits of growth are spread equitably across all parts of society unusually large groups of vulnerable poor populations. Consequently, he daubed such a growth 'inclusive growth', which is broad-based growth that cuts across sectors of the country. Inclusive growth is that which encompasses all excluded people, especially the poor and vulnerable in society and focuses on the distribution of social and material benefits across social group and categories (Felife, 2012; Aleksey & Yuner, 2015; Van, 2017; Romer, 2018). Inclusive growth is best defined as:

"when it takes place in the sectors in which the poor work (agriculture), occurs in places where the poor live (undeveloped areas with few resources), uses the factors of production that the poor possess (unskilled labour) and reduces the prices of consumer items that the poor consume (e.g. food, fuel and clothing)" (Paloma, 2015: 3).

The means to achieve all-inclusive growth is by embarking on economic development that deals with the improvement of the welfare of all groups of people in society. The feature of economic development is in improving the welfare of all groups of the population to increase financial security. This suggests that growth is inclusive when it initiates socio-economic possibilities that ensure fair access and opportunities to them. The assumption as captured in Ogujiuba and Alehile (2011) postulates that inclusive growth is an extension of the pro-poor growth hypothesis because it entails expanding the size of the middle class. The supposition is that this type of growth is economically and politically favourable to the majority of the participants in an economy. Notably, inclusive growth is distinct from income redistribution because while the latter, as stressed by Deaton (2005), reduces income disparities in the short run the former takes a long-term perspective that creates productive employments that allows more people to contribute and to benefit from economic growth.

In the year 2015, the world leaders presented 2030 agenda for sustainable development, and it was adopted. The 8th of the sustainable development goals (SDGs) is sustainable growth, which UNDP (2017) interpreted as growth in the

three dimensions of economic, social and environmental. That is translated to mean full productive employment and decent work for all (UNDP, 2017). The aim of the society is no longer only for economic growth but an economic development that is sustainable, which increases the level and quality of life, reduces the share of expenses on food, and income inequality in the society. These world agenda aim to end poverty, fight inequality and injustice and tackle climate change. The means of achieving this is by providing youth empowerment and women economic empowerment and decent work for all. Others are by building a dynamic, sustainable, people-oriented economy.

Growth exhibits some quantitative characteristics when it results in changes in the number of goods and services and reflects the dynamics of these changes. Growth can also have some qualitative characteristic when it exhibits the possibilities of the economic system to meet the new growing needs of the society. Intensive economic growth can be achieved when there are qualitative improvements in the factors of production. Examples are the use of ultra-modern equipment in the production of goods, cost-effect production, non-waste technologies, skilled workforce and others (Aleksey & Yuner, 2015). Extensive economic growth is characterised by a quantitative increase in the use of one or more factors of production.

Micro, Small and Medium Enterprises (MSMEs) and Economic Development

World Bank (2006) defines medium enterprises as those enterprises that have at most three hundred (300) employees with an annual turnover not exceeding fifteen (15) million US dollar, while small enterprises have fewer than fifty (50) staff members and up to three (3) million US dollars turnover, while micro-enterprises have up to ten (10) staff members and one hundred (100,000) US dollar turnover. The European States traditionally have their own definition of what constitutes small and medium scale enterprises (SMEs). For instance, the traditional definition in Germany limits Small and Medium Scale Enterprises to two hundred and fifty (250) employees while in Belgium it is limited to one hundred (100) employees. The European Union (EU) regulated the concept by categorizing enterprises with less than ten (10) employees as micro and those with fewer than fifty (50) employees as small while those with fewer than two hundred and fifty (250) employee as medium. According to 2010 document of the Central Bank of Nigeria, small scale enterprises

are those enterprises that have a total asset base (excluding real estate) which is less than one million naira, and employing or recruiting less than fifty (50) full-time staffs. While medium scale enterprises are those enterprises that have a total asset base (excluding real estate) of less than fifty (50) million naira, and employing less than one hundred (100) full-time workers. The Small and Medium Industries Enterprises Investment Scheme (SMIEIS, 2005) defines SME as any enterprises with a maximum asset base of N200 million (excluding land and working capital) and with a number of staff employed not less than 10 or more than 300. Noteworthy is the fact that the definitions of SME above may not accommodate many small businesses, which may be known as micro-enterprises.

According to National Policy on MSMEs, a micro enterprise is defined as an entity employing less than ten persons with less than five million Naira value of assets, while a small enterprise has 10 to 49 employees and between five and fifty million Naira assets, and then a medium enterprise employs 50 – 199 persons and posts assets worth of between N50 and N500 million (Ibor, Offiong and Mendie, 2017). The Policy defines MSMEs based on the dual perspective of employment and assets (excluding land and buildings). They believe that inflationary pressures make the employment-based criterion more stable than the asset-based definition and where there is a conflict between the two, the employment-derived definition takes precedence.

Small and medium have been identified differently by various individuals and organizations such that an enterprise that is considered small or medium in one place is seen differently in another; even within a country the definition changes over time. So far there is no unified definition of SMEs, however, the basic definitional parameters remain the same; they include number of employees, asset base, turnover and financial strength among others. Therefore, there is no generally accepted definition of a small scale enterprise because the classification of businesses into large scale, medium scale or small scale is highly subjective; as such what may be a working definition of small-scale business in one place may refer to a large-scale in another place or country. It may even be more difficult to draw a line between small scale and medium scale business as they are often lumped together as micro, small and medium scale enterprises (MSMEs).

In their recent pursuit of economic progress, the developing countries have generally come to recognize that the MSME sector may well be the main driving force for growth, due to its potential to providing entrepreneurial resources and employment opportunities (Hu, 2012). Rutendo (2016) affirms that almost every country that has achieved major economic growth had to do that on the platform of MSMEs. China, South Korea and Malaysia are examples of economies which have used MSMEs development as a catalyst for their economic development. Asikhia (2010) recognizes MSMEs as catalysts to the socio-economic growth and development of any country's economy, and they are veritable agency for the achievement of macroeconomic objectives in terms of employment generation at low investment cost and development of entrepreneurial capabilities, stopping rural–urban migration, promoting indigenous technology, local resource utilization, and poverty alleviation. Tambunan (2008) notes that MSMEs play a crucial role in economic development, as they are the main source of employment generation and output growth, both in developing as well as in developed countries. It is a general belief that MSMEs in developing nations have potential to enhance income redistribution (reducing income inequality), employment creation, poverty reduction and export growth as well as development of entrepreneurship, industry and the rural economy. Meanwhile Kachembere (2011) acknowledges that MSMEs play very important role in promoting grassroots economic growth and equitable sustainable development. He is of the opinion that although it is believed that high rates of economic growth is expected to foster socio-economic development and poverty reduction; it is however, dependent on the quality of growth, which consist of the composition of growth, its spread and distribution and most importantly, the degree of sustainability. Hence, it becomes imperative to understand various factors responsible for quality growth through the route of MSMEs.

In US, MSME enterprises called foundation enterprises are the core of the country's industrial base and account for more than 99 percent of U.S. businesses. Similarly, in Japanese economy, the contribution of small or medium-sized enterprises is more than 99% of total business (Pandya, 2012). This resulted in employment for majority of the population and accounted for a large proportion of economic output. Pandya (2012) further points out that even though most of the MSMEs are not as well known as Japan's giants, but they play significant role as the backbone of the service sector and support as an essential part of the manufacturing and especially as strong export supply chain. According to the World Bank report, MSMEs in the People Republic of China (PRC) accounted for 99.9% of the total number of businesses, employing 84% of the nation's workforce, and responsible for 71% of total sales (World Bank, 2017).

MSMEs in Nigeria according to Oba and Onuoha (2013) have performed below expectation. , The poor performance of the sector has added to the high rate of unemployment, poverty, and low standard of living in the country. They further stated that although MSMEs provide seventy percent (70%) industrial sector and sixty percent (60%) of agricultural sector employment it only account for ten (10%) – fifteen percent (15%) of the total industrial output with a capacity utilization of over thirty percent (30%). While Eniola (2014) adds that micro, small and medium scale Enterprises in Nigeria has accounted for over 90% of Nigerian business, 95% of formal manufacturing activity and 70% of industrial businesses, but in spite of this dominance, their contribution to the GDP is below 5%. The results of the study according to Eniola (2014) show that several policies directed at MSMEs development did not stand the test of time due to administrative bottlenecks which constraints the sector from deriving maximum benefits from them. Olowe, Moradeyo and Babalola (2013) supporting this, agree that the contribution of MSMEs to Nigeria economy has not been heavily felt, according to them many MSMEs in Nigeria do not reach the growth stage of their life cycle due to lack of access to finance. This Olowe, et al (2013) believe is because MSMEs are strongly constrained in accessing the needed capital required for growth and expansion, with nearly half of MSMEs in developing countries suffering the same fate.

John-Akamelu and Muogbo (2018) examined the role of small and medium enterprises in poverty eradication in Nigeria. The result of the study revealed that small and medium enterprises provided employment opportunities, training ground, and optimal utilization of local resources. The study concluded that a good development strategy if employed by these industrialists will grow to large-scale capital intensive firms. The study recommends that MSMEs should source their loans from the financial institutions where interest rates are low.

Model, Method and Data

Since the primary aim of this study is to ascertain whether enhancing the identified determinants of viable MSMEs could ensure achieving an inclusive growth, the Theory of Production is adopted. This is because the starting point of growth in output is production. This Production Theory describes the relationship between inputs and output which governs the level of production (i.e. whether output is growing or declining). The functional relationship between inequality gap and the sources of growth like MSMEs across countries and regions can be appreciated within the context of neoclassical growth/production model of Solow (1956). Reasons are that it presents the understanding of the sources of growth and the consequences of changes in economic setting and policy in the long-run; it allows one to break-down growth into constituents to enable one observe the portion of growth that is left unexplained (Solow's residual); and finally it is a production matrix which helps in the calculation of the impact multipliers from a basic theoretical economic model. This model was used by scholars like Feeder (1983), Fosu (1990), Obwona (2011), and Egwaikhide (2012) as adopted in Onodugo, Ikpe and Anowor (2013) as specified below:

$$Q = f(A, L, K,) \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where:

Q = Aggregate output
A = Total Factor Productivity (TFP) of growth in output
L = Labour force
K = Capital stock

Traditionally as noted by Ajide (2014), changes in A are thought to captures technological changes in Solow (1956) but these may not necessarily be due to technology. The effects of other factors like lending cost (COLE proxied by interest rate), and cost of doing business (CODB proxied by inflation rate) could also stem from "A" channels.

Aggregate output (Q) is substituted with Inequality Gap (INEG) using Gini Coefficient, L is substituted with MSMENQ which is MSMEs contribution to national output, and K is substituted by credit to MSMEs (CMSME) and Infrastructural financing proxied by capital expenditure (INFRF).

Therefore,

$$Q = f((INEG) \ldots\ldots\ldots\ldots\ldots\ldots (2)$$

$$A = f(COLE, CODB) \ldots\ldots\ldots\ldots\ldots\ldots (3)$$

$$L = f(MSMENQ) \ldots\ldots\ldots\ldots\ldots\ldots (4)$$

$$K = f(CMSME, INFRF) \ldots\ldots\ldots\ldots\ldots\ldots (5)$$

The Augmented Solow's model adopted for this study is specified thus:

$$INEG = f(CMSME, MSMENQ, COLE, CODB, INFRF) \ldots\ldots\ldots\ldots\ldots\ldots (6)$$

The modeling framework and the estimation adopted in this study are as stated in equation 7 below:

$$INEG = \varpi_0 + \varpi_1 CMSME + \varpi_2 MSMENQ + \varpi_3 COLE + \varpi_4 CODB + \varpi_5 INFRF + \varepsilon_t \ldots\ldots\ldots (7)$$

To remove variances inherent in the variables by taking the logarithm (Log) of (7), we rewrite equation 7 as:

$$INEG = \varpi_0 + \varpi_1 LogCMSME + \varpi_2 LogMSMENQ + \varpi_3 COLE + \varpi_4 CODB + \varpi_5 ILogNFRF + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots (8)$$

Equation (8) was expressed in natural log forms in order to control for the outliers in data sets and equally mitigates the impact of heteroskedasticity (Box & Cox, 1964; Layson, 1983; Shahbaz, Shabbir, & Butt, 2011).

All the variables are as earlier defined while ε is an error term which is identically and independently distributed with mean zero and constant variance. In summary, the elasticities of CMSME, MSMENQ, COLE, CODB and INFRF are respectively: ϖ_1, ϖ_2, ϖ_3, ϖ_4 and ϖ_5. While ϖ_0, is the intercept of the function. Where, $\varpi_1 > 0$; $\varpi_2 > 0$; $\varpi_3, < 0$ $\varpi_4 < 0$ $\varpi_5 > 0$

All the data ranging from 1980 to 2016 were sourced from 2017 edition of the Statistical Bulletin of the Central Bank of Nigeria.

Before actual estimation, a unit root and stationarity tests were performed on the variables. This study uses Augmented Dickey-Fuller (ADF) unit root test to examine the stationarity of the data series. This can be expressed as follows:

$\Delta Y_t = 0 + 1t + 2 Y_{t-1} + \Sigma i \Delta Y_{t-1} + \mathcal{E}_t$ …………………………….……………….. (9)

Where:

Δ is the difference operator
Δy is the first difference of the series
t is the time trend
$\mathcal{E}_t$ is the pure white noise

Analysis and Discussion

Table 1: Unit Root Test Results: Augmented Dickey Fuller

Series	5% Critical Value	ADF Test at first difference (Prob.)	Order of integration
INEG	-2.948404	-8.659571 (0.00)	I(1)
LCMSME	-2.948404	-5.637841 (0.00)	I(1)
LMSMENQ	-2.948404	-5.774805 (0.00)	I(1)
COLE	-2.948404	-5.625554 (0.00)	I(1)
CODB	-2.948404	-5.278523 (0.00)	I(1)
LINFRF	-2.948404	-6.080757 (0.00)	I(1)

Source: Authors computation using E-Views 8.0

The result in table 1 above shows that all the variables are stationary at first difference at 5% significance level. This indicates that the null hypothesis of no unit root among any of these variables cannot be rejected and hence, there is need to conduct a co-integration test between the explanatory variables (CMSME, MSMENQ, COLE, CODB, INFRF) and the dependent variable (INEG), hence, subjected to co-integration test as shown on table below.

Table 2: Result of Co-integration Test

Series	Coefficient	5% Critical Value	Standard Error	t-Statistics (Prob.)	Order of integration
RESIDUAL	-0.1219056	-1.950687	0.200909	-6.067691 (0.00)	I (0)

Source: Authors computation using E-Views 8.0

It is shown in table 2 above that the calculated value of the residual (-6.067691) is greater in absolute term than the tabulated value (-1.950687). This means that the null hypothesis for unit root is rejected for the residual. Therefore, there are long-run relationships

among the variables in the model, which indicates that linear combinations

of the variables in the model were found to be stationary and co-integrated. The coefficient of the first lag of the residual which is known as the adjustment parameter indicated that 12% discrepancy between dependent and independent variables was being adjusted within the same period.

Table 3: Regression result

Dependent Variable	Explanatory Variables & Intercept (ϖ_0)	Coefficients	Standard Error	t-Statistics (Prob.)
INEG				
	Intercept	13.68848	1.700362	8.050333 (0.000)
	LCMSME	-0.227243	0.109815	2.069333 (0.047)
	LMSMENQ	-0.47399	0.310567	0.152621 (0.879)
	COLE	0.790219	0.269482	-2.932362 (0.006)
	CODB	0.051758	0.182076	-0.284266 (0.778)
	LINFRF	-0.143667	0.186775	0.769200 (0.447)

$R^2 = 0.601$; Adj $R^2 = 0.734$; F-stat = 9.02; Prob(F-statistic) = 0.000; D-W stat = 2.012
Source: Authors computation using E-Views 8.0

The estimated long run model is shown in equation 10 below:

$$INEG = 13.688 - 0.227LCMSME - 0.473LMSMENQ + 0.790COLE + 0.051CODB - 0.143LNFRF + \mu$$
.... (10)

The result in Table 3 as linearly stated in equation (10) signifies that:

A negative relationship exists between credit to MSMEs (LCMSME) and inequality gap (INEG). This implies that an increase in credit to MSMEs will bring about decrease in inequality gap over time. This relationship is statistically significant at 5 percent since the probability of its t statistic is less than 0.05. There is equally a negative relationship existing between MSMEs contribution to national output (LMSMENQ) and inequality gap (INEG). This implies that an increase in MSMEs contribution to national output will bring about reduction in inequality gap over time. This relationship is however not statistically significant at 5 percent since the probability of its t statistic is greater than 0.05.

There is a direct relationship existing between cost of lending (LCOLE) and inequality gap (INEG). This implies that a rise in cost of lending especially for MSMEs will bring about an increase in inequality gap over time. This relationship is statistically significant at 5 percent since the probability of its t statistic is less than 0.05. There is a positive relationship existing between cost of doing business (CODB) and inequality gap (INEG). This implies that an increase in cost of doing business especially for MSMEs will bring about an increase in inequality gap over time. This relationship is however not statistically significant at 5 percent since the probability of its t statistic is greater than 0.05.

There is a negative relationship existing between infrastructural financing (LNFRF) and inequality gap (INEG). This implies that increased availability of infrastructure to the MSMEs will bring about reduction in inequality gap. This relationship is however not statistically significant at 5 percent since the probability of its t statistic is greater than 0.05.

The F-test which measures an overall fitness of the model and the result indicates that the model is a good fit because the Prob(F-statistic) = 0.000 is lower than 0.05. The Adjusted R-squared indicates that approximately 73.4% of the variations in inequality gap are explained by the identified determinant of viable MSMEs (explanatory variables). More so, the Durbin Watson statistics (D-W stat = 2.012) reveals the absence of autocorrelation problem in the model.

Table 4: Granger causality test result (inequality gap and all the explanatory variables)

Null Hypothesis:	Obs.	F-Stat	Prob.
INEG does not Granger Cause LCMSME	37	12.5987	0.0021
LCMSME does not Granger Cause INEG	37	3.2478	0.0301
INEG does not Granger Cause LMSMENQ	37	14.0762	0.0002
LMSMENQ does not Granger Cause INEG	37	4.0206	0.0258
INEG does not Granger Cause COLE	37	1.8613	0.7234
COLE does not Granger Cause INEG	37	4.2572	0.0194
INEG does not Granger Cause CODB	37	2.0615	0.6367
CODB does not Granger Cause INEG	37	5.2458	0.0246
INEG does not Granger Cause LNFRF	37	11.1479	0.0074
LNFRF does not Granger Cause INEG	37	12.1834	0.0056

Source: Authors computation using E-Views 8.0

Table 5: Granger causality test result (MSMEs contribution to national output and the rest of the explanatory variables)

Null Hypothesis:	Obs.	F-Stat	Prob.
LMSMENQ does not Granger Cause LCMSME	37	9.3745	0.0002
LCMSME does not Granger Cause LMSMENQ	37	6.4183	0.0156
LMSMENQ does not Granger Cause COLE	37	8.3125	0.0002
COLE does not Granger Cause LMSMENQ	37	7.6461	0.0018
LMSMENQ does not Granger Cause CODB	37	5.6024	0.0042
CODB does not Granger Cause LMSMENQ	37	7.7542	0.0132
LMSMENQ does not Granger Cause LNFRF	37	8.5019	0.0015
LNFRF does not Granger Cause LMSMENQ	37	9.4375	0.0021

Source: Authors computation using E-Views 8.0

The results of the causality tests as presented in tables 4 and 5 show that causality really exists between inequality gap (INEG) and between MSMEs' contribution to national output and the rest of the explanatory variables. These revealed an all-inclusive interconnectivity between MSMEs and the inequality gap (INEG).

Results and Discussion of Findings

Given the objective of this study which is to ascertain whether inclusive growth can be attained on the wings of MSMEs, and adopting the theoretical postulation within the context of neoclassical growth-production model of Solow (1956), this study therefore established that MSMEs have the potential to reduce income inequality and poverty level which incidence and prevalence are high in the developing countries

and can as well advance entrepreneurship development. The policy implication of the above statement is that development of viable MSMEs will contract the inequality gap, expand opportunities of livelihood and empowerment and growth capability, ensure pro-poor economic growth, lower unemployment rate, diminish dependency ratio and enhance social inclusion.

The results from the analysis show that inclusive growth which entails reduction in inequality gap would be attained as long as the signs of the parameters estimated for this study remain constant. The signs of the parameters estimated are consistent with literature as it concerns reduction in inequality gap. Instances can be drawn from the works of: Felife (2012); Pandya (2012); Rutendo (2016); and John-Akamelu and Muogbo (2018). Also the results suggest that there is hope of achieving inclusive growth because the study built a model that shows how the real determinants of viable MSMEs, as explanatory variables, could ensure inclusive growth. More so, the causality tests further confirmed the above statement.

Evidence from the literature showed that MSMEs comprise over 90 percent of domestic private enterprises in developing economies and accounts for the largest share of the number of participants in its domestic private sector. It equally accounts for the bulk of the employment in the private sector of most developing economies (see Pandaya, 2012; Eniola, 2014; World Bank, 2017). MSMEs also has the widest spread because there are traces of MSMEs in virtually all sectors of the economy which implies that larger chunk of the population is involved and whatever affects the MSMEs also touches larger proportion of the society. Hence MSMEs most likely is certain to posses the potential of the major driver of the domestic private sector of these economies.

There are certain characteristics of MSMEs that predisposes it to be pro-people and pro-poor oriented. First, it is easy to form MSMEs in terms of capital requirement and registration formalities. It is labour-intensive and thus interfaces with people rather than with complex machines and artificial intelligence and provides a lot of links and support to large scale businesses.   MSMEs act as suppliers, distributors, consultants and service providers to large scale businesses and in the process free the latter to concentrate on its core area of comparative productive jurisdiction.   In other words, for every large business there are several micro and small businesses that exist to support

and complement its activities in the production value chain.

The only challenge with MSMEs in most developing countries is their inability to contribute significantly to the overall GDP of their respective economies. Several reasons have been adduced for this dismal output performance ranging from high cost of doing business as a result of absence of requisite infrastructure through inadequate access to capital to poor investment habits. The reasons adduced for poor contribution to GDP notwithstanding, it is our considered opinion that MSMEs will be more effective in realizing inclusive growth and income spread they are more productive.

Conclusion and Recommendations

This study investigated the contribution of MSMEs in building inclusive economic growth and income spread among developing countries. The propelling motive for the study is the obvious inequality between the poor and the rich, such that more people slide into poverty even when there are increases in GDP. With data ranging from 1980 to 2016, the study with the aid of econometric models and e-view data analytical tool was able to establish that MSMEs has the potential to provide growth that will spread prosperity to the majority of citizenry thereby narrowing inequality gap and reducing poverty.

Based on the findings of the study, the following recommendations are made:

a) There is the need to adopt a proactive and holistic MSMEs promotion plan that will identify areas of specific needs such that schemes adopted may be desirable and appropriate.
b) There is the need to invest in the building of infrastructures because it will help MSMEs participants to improve on their outputs and as well add value to narrowing the inequality gap as well as national output.
c) There is the need to grant subsidies to MSMEs to boost macroeconomic aggregate production since the largest share of the number of participants in the domestic private sector are from the MSMEs. This will likely increase incomes and generate employments and reduce poverty and inequality gap substantially.
d) Since the MSMEs has the widest spread because there are traces of micro, small

and medium scale enterprises (MSMEs) in virtually all sectors of the economy, supporting MSMEs will definitely ensure strengthening of the intersectoral linkages among all sectors.

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