Small and Medium Scale Enterprises Financing and Economic Growth in Nigeria

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ABSTRACT

This study examines the impact of financing small scale enterprises on economic growth in Nigeria, using a quarterly time series data from 1992 to 2009. The study combined several econometric estimation techniques. The findings show that loan to small scale entrepreneurs have a positive impact on the economic performance while interest rate has a negative impact on economic growth. The study thereby concludes that the greatest or worst problem confronting SMEs in Nigeria is managerial capacity. Access to capital or finance is necessary but not a sufficient condition for successful entrepreneurial development.

Keywords: Enterprises, Loan, OLS Estimates, Economic Performance, Nigeria

1.0 Introduction

The important role played by Small and medium enterprises (SMEs, thereafter) in the growth and development of developing countries is well rested in the literature. SMEs have been reported by Ayozie and Latinwo, (2010), Safiriyu and Njogo, (2012) to encourage entrepreneurship. In addition, Muritala, et al.(2012) posit that there is the greater likelihood that SMEs will utilise labour-intensive technologies thereby reducing unemployment particularly in developing countries and thus have an immediate impact on employment generation (Ariyo, 2008; Ayozie and Latinwo, 2010).

According to the United Nations Industrial Development Organization UNIDO (2001), for developing countries, integration into the global economy through economic liberalization, deregulation, and democratization is seen as the paramount way to triumph over poverty and inequality. The importance of this process is the development of a vibrant private sector, in which small and medium enterprises can play a central role.

The problems bedeviling the SMEs in Nigeria are multi-faceted. Ekpenyong (1997) and Utomi (1997) identified inadequate capital, inaccessible credit facilities. Long term development institutional credit was known not to be available to SMEs because they are generally considered high credit risks by financial institutions. The study by Evbuomwan, et al. (2012) indicated that 75.7% of their survey respondents relied mostly on own funds to finance their businesses. A widespread concern is that the banking system in the sub sector (which supposed to be the major financier of SMEs) is not providing enough support to new economic initiatives and in particular to the expansion of SMEs and agriculture sector. It is noted that commercial and the hitherto merchant banks which retained liquidity levels in excess of regulation have shown reluctance in financing SMEs (Sacerdoti, 2005). While Micro Finance Institutions (MFIs) have expanded vigorously in a number of countries, the size of their credit remains limited, so that their support is not on the scale needed for many medium sized projects. Also, the interest rate on micro-credits is very high, due to large administrative costs in relation to their scale of operations. (Mahmoud, 2005). Other
This in-depth study into the essential features of the existing micro, small and medium scale industries is justified on the grounds that many policies in the past, which sought to address the problems of the real sector of the Nigerian economy, seemed to have failed. This, it has been realized, was due mainly to their reliance on big "white elephant" projects, which appeared physically impressive but had no linkages with the rest of the economy. In addition, the industrialization strategy adopted then, was neither resource-based nor was it technology-based. It simply relied on the blind optimism that the establishment of these industries would eventually lead to the transfer of appropriate technology and its adaptation to suit the Nigerian environment. Needless to say, these strategies have failed (Kayode, 2004). The failure of the past industrialization policies favoring medium and large enterprises to stimulate economic growth and development has generated a renewed interest in the SMEs as a catalyst to industrialization quest and its resultant effect on economic growth in Nigeria (World Bank, 1995; Chizea (2002). The Nigerian economy in pursuing this agenda placed SMEs development and promotion a top priority. The SMEs constitute the foundation for the sustained growth and development of the economy.

Over the years, research on financing small scale enterprises has been carried out with the use of primary data, which at best captures the perception of respondents but with a lot of inconsistencies in estimation procedure. The objective of this study is to empirically evaluate the impact of SMEs financing on Economic growth in Nigeria with the use of time series data covering the period of 1992-2009 Nigeria. The remainder of the paper is organized as follows. Section two deals with the literature review. In Section three, the methodological framework of the study is pursued while the empirical results are discussed in section four. Section five concludes the paper.

2.0  Literature Review

Small and Medium business constitute the very foundation upon which the large businesses were built, however, small and medium have been identified differently by various individuals and organization such that an enterprise that is considered small and medium in one place is seen differently in another. Even within a country, the definition changes over time. Although, the pro-SME view argues that small firms are more innovative than large firms; the micro economic evidence is at best inconclusive. Examining US firms, Acs and Andretch (1987) find small firms have higher innovation rates in high technology, capital intensive industries. For a sample, Schivardi (2001) study on European industries show a larger average firm size is associated with faster innovation rates. Kumar, Rajan and Zingales (2001) shows that countries with better institutions as measured by judicial system tend to have larger firms.

Histrich and Peters (1998) explained that the study of entrepreneurship has relevance today, not only because it helps small business or entrepreneurs better fulfill their personal needs, but also because of the economic contribution of the new ventures. Their study therefore sees SMEs as a positive force in Economic growth and development. Ekanem (2006) summarizes the importance of SMEs to include ensuring rapid development, increased utilization of local resources and provision of a training ground for indigenous managers and semi-skilled workers, reduction of the rural-urban drift, development of indigenous technology and raising the living standard of rural dwellers and so on. In fact, SMEs accounts for the economic development in most developed economies of the World today. It has helped in the balance of payment position of countries; it reduces over dependence on inputs relative to their capital investment. A study by Ekpenyong (1997) showed that very little financial supports have been provided by the traditional financial institutions (the commercial banks) to the SMEs. The reasons are that small businesses have serious inherent structural defects that make them high risk borrowers, and the traditional banks are not structured to cater for the type of credit demanded by the small businesses owing to the nature of their credit assessment procedures(Hammond, 1995).

Okraku and Crockif (1997) argued that in Ghana, SMEs rely primarily on personal savings of owners, business profits, family members or friends for their financial needs. They have little or no access to external credit. The effect of this is inadequate fixed capital as well as working capital. The consequences of these are very slow growth rate and frequent failures among small businesses. Adoyi and Agbo (2009) adopt the descriptive research method and employ both primary and secondary data to determine the extent to which small business firms have developed Benue State of Nigeria and found that 86.3% of the small business firms pay their taxes regularly. These taxes increase the revenue base of the State which is used for development purposes.
Akingunola (2011) assesses specific financing options available to SMEs in Nigeria and contribution with economic growth via investment level. The Spearman’s Rho correlation test is employed to determine the relationship between SMEs financing and investment level. The analysis reported a significant Rho value of 0.643 at 10% which indicated that there is significant positive relationship between SMEs financing and economic growth in Nigeria via investment level. The relevance of small and medium scale enterprises as a means of generating employment and reduction of poverty in the country in Nigeria was examined by Aremu and Adeyemi (2011). After a deep review of the literature, the authors concluded that the SME sector is the main driving force behind job creation, poverty reduction, wealth creation, income distribution and reduction in income disparities.

Finance availability has been touted as one of the constraints of SMEs (Evbuomwan et al., 2012). However, Azende (2011) in the empirical evaluation of the performance of the Small and Medium Scale Enterprises Equity Investment Scheme in Nigeria (SMEEIS) in Benue and Nassarawa States of Nigeria utilised secondary data of total credit to SMEs as percentage of banks total credit for a period from 1993 to 2008 and paired sample t-test to test the significance of bank loans before and after the introduction of SMEEIS. In addition, mean scores and standard deviation was used to analyze the primary data obtained via questionnaires reported no significance difference between the loans disbursed by banks to SMEs before and after the introduction of SMEEIS due largely to the fact that the conditions for accessing SMEEIS funds was beyond the reach of the targeted SMEs.

Safiriyu and Njogo (2012) utilised two primary data instruments (questionnaires and interview) to gather information on the study impact of small and medium scale enterprises in the generation of employment in Lagos State, Nigeria. Two different statistical methods (simple percentage and chi-square) were employed to analyze data. The results show that small and medium scale enterprises and sustainable development of the Nigerian economy are related, just as promotion of SMEs and improvement in employment generation are related.

3.0 Methodology and Data

We have adopted the model of Wen-Hu (2010) which formulated a relationship model between the real GDP and bank credit. The following equation is then derived.

\[ \log (RGDP) = \lambda_0 + \lambda_1 \log (CRG) + \lambda_2 INT + \lambda_3 (CRG)^2 + \lambda_4 RGDP(-1) + \epsilon_t \]

Where:
- \( RGDP \) refers to Real Gross Domestic Product
- \( CRG = \text{Loans to SME} \)
- \( INT = \text{Interest Rate} \)
- \((CRG)^2 = \text{an absorptive capacity which is “U” shaped in nature to determine the impact of the flow of loans to SMEs} \)
- \( \epsilon = \text{the error term} \).

In order to develop strong, robust and reliable models that capture the relationship between SME financing and economic growth, the research work adopts the econometric techniques of the Ordinary Least Square (OLS) is used as the estimation technique. The method of OLS is extensively used in regression analysis primarily because it is inititatively appealing and mathematically much simpler than any other econometric technique (Gujarati, 2003). In order to test the implications of our model, we collected quarterly data on all variables used from the Central Bank Statistical Bulletin for the period 1992 to 2009.

4.0 Discussion of Results

4.1 Unit Root Test Result

Time series properties of all variables used in estimation were examined in order to obtain reliable results. Thus, this exercise was carried out through Augmented Dickey Fuller (ADF) test as articulated by Engel and Granger (1987) and Phillip-Perron (PP test). This development arises from the prevalence of substantial co-movements among most economic time series data, which has been argued in the literature as undermining the policy implications that
could be inferred from such modelling constructs, Engel and Granger (1987). The ADF and PP tests are used to
determine the order of integration. That is, the number of times a variable has to be differenced before it becomes
stationary.

Table 1: Augmented-Dickey Fuller (ADF) Test

<table>
<thead>
<tr>
<th>Variables</th>
<th>ADF Values</th>
<th>Mackinnon Critical Values</th>
<th>Order of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGDP</td>
<td>-5.2108*</td>
<td>-3.9203</td>
<td>I(2)</td>
</tr>
<tr>
<td>CLS</td>
<td>-4.1991*</td>
<td>-3.8867</td>
<td>I(1)</td>
</tr>
<tr>
<td>INT</td>
<td>-3.3577**</td>
<td>-3.0403</td>
<td>I(0)</td>
</tr>
<tr>
<td>CLS2</td>
<td>-4.1991*</td>
<td>-3.8867</td>
<td>I(1)</td>
</tr>
</tbody>
</table>

*SOURCE: Computed by the Researchers, 2012

Note: One, two and three asterisk denotes rejection of the null hypothesis at 1%, 5% and 10% respectively based on Mackinnon critical values.

Table 2: Phillip-Perron Test (PP)

<table>
<thead>
<tr>
<th>Variables</th>
<th>PP Values</th>
<th>Mackinnon Critical Values</th>
<th>Order of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGDP</td>
<td>-5.2108*</td>
<td>-3.9203</td>
<td>I(2)</td>
</tr>
<tr>
<td>CLS</td>
<td>-4.1985*</td>
<td>-3.8867</td>
<td>I(1)</td>
</tr>
<tr>
<td>INT</td>
<td>-3.3677**</td>
<td>-3.0403</td>
<td>I(0)</td>
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<tr>
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</tr>
</tbody>
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*SOURCE: Computed by the Researchers, 2012

Note: One, two and three asterisk denotes rejection of the null hypothesis at 1%, 5% and 10% respectively based on Mackinnon critical values.

The two tests produce similar results. Therefore, both methods are adopted for the research work where the
results show that all most all the variables are found to be stationary at 99 percent significance level in their first
difference from with the assumption of constant. Therefore, all variables are non-stationary and integrated of order 1,
I(1).
Table 3: Ordinary Least Square Estimate

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(CLS)</td>
<td>0.062765</td>
<td>0.031370</td>
<td>2.000776**</td>
<td>0.0467</td>
</tr>
<tr>
<td>INT</td>
<td>-0.000859</td>
<td>0.000740</td>
<td>-1.160734</td>
<td>0.2666</td>
</tr>
<tr>
<td>CLS2</td>
<td>1.57E-11</td>
<td>7.85E-12</td>
<td>1.999918***</td>
<td>0.0669</td>
</tr>
<tr>
<td>RGDP(-1)</td>
<td>2.51E-06</td>
<td>7.19E-08</td>
<td>34.83753*</td>
<td>0.0000</td>
</tr>
<tr>
<td>C</td>
<td>11.20605</td>
<td>0.330159</td>
<td>33.94135</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

R-squared 0.992813     Mean dependent var 12.95558
Adjusted R-squared 0.990602     S.D. dependent var 0.372885
S.E. of regression 0.036148     Akaike info criteri on -3.572243
Sum squared resid 0.016987     Schwarz criterion -3.324917
Log likelihood 37.15018     Hannan-Quinn -3.538140
F-statistic 448.9844     Durbin-Watson stat 2.397853

SOURCE: Computed by the Researchers, 2012

Note: One, two and three asterisk denotes rejection of the null hypothesis at 1%, 5% and 10% respectively.

The impact of financing small and medium scale enterprises on economic growth in Nigeria is presented in the table above. The results obtained from the static model indicates that the overall coefficient of determination (R^2) shows that the equation has a good fit with 99.28 percent of growth rate of RGDP explained by the variables in the equation. The reason for being a good fit is that it is statistically above the bench mark of 50 percent. As the adjusted (R^2) tends to purge the influence of the number of included explanatory variables, the (R^2) of 0.9906 shows that having removed the influence of the explanatory variables, the model is still of good fit and the dependent variable explained by the equation by 99.06 percent, hence, in terms of the goodness of fit we can say that the test is very good. This result means that (R^2) and the adjusted (R^2) are highly significant. The Durbin Watson (D.W) statistics of 2.39 as it is significantly above the bench mark of 2, we can conclude that there is a sign of auto-correlation or serial correlation in the model specification; hence the assumption of linearity is violated which may be as a result of squaring one of the explanatory variables of interest.

In terms of the signs and magnitude of the coefficients which signify the impact of bank loans on economic growth, it can be seen that all the variables RGDP, CLS, INT and CLS^2 concur with a’priori theoretical expectation. The significant coefficients of all exogenous variables clearly state that Nigeria’s economic growth rate of RGDP depends on loans that are given to the Small and Medium Scale Enterprises (CLS) in the long run. Above all, loans to small and medium scale enterprises have positive impact on growth of RGDP, though minimal but still significant. From the table a percent increase in CLS brings about 0.06 percent increases in growth of RGDP. Also, interest rate (INT) has a negative impact on the growth of RGDP and this is because the CBN policy on interest rate has not been consistent over time. A unit change in INT brings about 0.08% decrease in the growth of RGDP. Interest rate is important but it does not significantly affect the growth of RGDP positively. Also the previous output shows a negative relationship to the rate of current development. It should also be noted that the CLS^2 is to linearize the model; and it conforms to the theoretical expectation. In terms of the t-statistic, all the explanatory variables are statistically
significant with the exception of INT. From the table, loans from commercial banks to small and medium scale enterprises (CLS) and CLS² is significant at 5%; while past output levels is significantly at 1%. The tabulated F-statistic is 4.50 while the calculated is 448.98; hence, the calculated is greater than the tabulated which means that the F-statistic is statistically significant. Conclusively, the explanatory variable used to capture the interest of this research, do explain significantly an important part of the model.

5.0 Conclusion

The development of SMEs and its effective promotion have not been approached seriously in Nigeria; hence, the lack of their impact in the economy. In Nigeria, various governments instituted various programs aimed at developing SMEs sector. Most of the programs were not given the appropriate backing and as such the impact of the programs could not be felt in the economy. The Non-Governmental organization and donor agencies are currently involved in the promotion of SMEs in Nigeria. Access to credit continues to pose a major problem to SMEs sector in Nigeria since the traditional financial institutions have not been able to meet their credit needs.

Another problem confronting SMEs in Nigeria is managerial capacity. Access to capital or finance is necessary but not a sufficient condition for successful entrepreneurial development. If one has the entire funds in the world and does not have the capacity to manage that fund and does not have the necessary information as to what he/she should do, the money would go down the drain.

REFERENCES


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