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ABSTRACT

The role of entrepreneurship in economic growth cannot be overemphasized. Entrepreneurship has the potentials of improving upon economic growth in Cameroon and for this to be possible, an enabling environment should be created to develop entrepreneurial activities for increased economic growth. Using value added by the agricultural and industrial sectors, and foreign direct investment (FDI), this study sought to assess the role of entrepreneurship on economic growth in Cameroon between 1975 and 2014. The coefficients (A_i) were estimated using the Ordinary Least Squares (OLS) techniques because of its BLUE (Best Linear Unbiased Estimator) property. The statistical (1st order) test was used to evaluate the combined influence of the independent variables. The coefficient of multiple determinations (adjusted R) was also used to determine the level of reliability of independent variables while the F-Statistics test was used to test for reliability of the estimates. The t-statistics was further used to test for the significance of the individual independent estimate. Using the statistical (1st order) test at 1%, 5% and 10% levels of significance, the results reveal that the coefficients of the value added by the agricultural sector, industrial sectors and FDI were all positive, indicating that entrepreneurial activities have the potential to improve upon economic growth in Cameroon. It was also observed that at 1%, 5% and 10% levels of significance, there is a positive significant value added by entrepreneurship in the industrial sector to economic growth, while the agricultural sector and FDI had no significant value added by entrepreneurship to economic growth in Cameroon at all three levels of significance. The study recommended, among others, that since FDI results in high profit repatriation and capital flight in Cameroon, it would be necessary for the government to put in place laws that encourage a 50/50 equity between domestic and foreign entrepreneurship. Also, Value added agriculture should be encourage most especially in the areas of processing and preservation by building the capacities of those along these supply chain the use of state of the arts machines, processing and preservation techniques. This will lead to new emerging agro-enterprises in Cameroon.

Key Words: Entrepreneurship, Economic Growth, Foreign Direct Investment (FDI).

1.0 INTRODUCTION

Africa is the poorest region in the world and the only major developing region with a negative growth in income per capita over the past two decades (Sachs et al., 2004: 117). It is interest to know that compared to research on entrepreneurship elsewhere in the world, and the extensive scientific debate on entrepreneurship in Europe and the United States, entrepreneurship research in Africa is relatively lacking. This lack is reflected in the fact that a number of recent in-depth scientific reports on the causes and remedies of Africa’s slow economic growth performance fails to discuss entrepreneurship at all (Sachs et al., 2004).

In contrast to the relative lack of scientific debate on African entrepreneurship, policy makers in Africa, and some donor countries, are claiming that entrepreneurship can make important contributions to economic growth and development (Naude and Havenga, 2005). For example a recent report by the South African Department of Trade and Industry states, “the government is now turning its attention to looking at entrepreneurship development and the promotion of self-employment as strategies that can help to overcome the unemployment problem and propel the economy to higher rates of growth (DTI, 2000: 4). The case of Cameroon is of essence were these entrepreneurial activities are yet to be well development.
For a quarter of a century, following independence, Cameroon was one of the most prosperous countries in Africa. The drop in commodity prices for its principal exports such as oil, cocoa, coffee and cotton in the mid 1980s, combined with an overvalued currency and economic mismanagement led to a decade-long recession (Tambi, 2014). Real per capita growth domestic product (GDP) fell by more than 60% from 1986-1994 (Molua, 2010). The current account and fiscal deficits widened and foreign debt grew. By 2001, the National Institute of Statistics in Cameroon reported that the private formal and informal sectors employed 88% of the country’s 5,464,883 employed work force. This was divided as 57.2% in agricultural activities, 0.5% in the social economy, 25.4% in the non agricultural handicraft and 4.9% in other activities (NIS, 2001). In 2004, the institute recorded that small and medium size enterprises contributed 56.4% of the country’s 7.583billion FCFA of GDP (NIS, 2004).

However, it should be noted that there is a strong influence by source of funds to the type of entrepreneurship in Cameroon given that only about 19.5% of firms use commercial banks to finance investment in Cameroon that are mostly medium size enterprises (Molua, 2002). 42.11% of firms use micro finance institutions to finance typically small business ventures and most often in the agricultural sector characterized by low productivity (Enterprise survey, 2006). In addition, 11.2% of foreign firms constitute a part of private sector entrepreneurship in Cameroon that is practically very high (Country Entrepreneurship Data; Summary Statitics-2004). In addition, at the level of capital mobility, the De Facto FDI inflow/GDP stood at 0.002% and De Facto foreign liability/GDP at 56.257% (Alfaro L., Kalemli-Ozcan S., & Volosovych, 2004) which reveals a significant contribution by foreign direct investment to Cameroon’s entrepreneurship.

This paper comes at a time when the government of Cameroon intends to make Cameroon an emerging economy come 2035. Entrepreneurial activity development is key to achieving this goal. The development of entrepreneurial activities will lead to wealth, job creation most especially by small businesses started by entrepreneurially minded individuals, many of whom go on to create big businesses, poverty alleviation and consequently, increased economic growth which is one of the objectives of Cameroon emergent plans.

1.1 Problem and objectives of the study

Since Independence in 1960, Cameroon inherited enterprising activities from the French and the British with the objective of either increasing their productivity or number to achieve growth. Most of these enterprising activities were in the primary sector and precisely agriculture. The government’s objective to better harness modern agricultural techniques and encourage large scale production to reap a high level of economic growth through increased sectorial contribution and value adding to Gross Domestic Product (GDP). This was what motivated the government of Cameroon to establish the investment code of 1960, 1984 and 1990. This was to define, categorize and direct entrepreneurial activities to achieve economic progress (Maurice and Pelagie, 2015).

By 1985, there was economic crisis in Cameroon. On the one hand, the government blamed it on the drop in prices of agricultural foreign tradable by about 60% in both cocoa and coffee (MINIEF, 1988). On the other hand, the international community especially the World Bank and The International Monetary Fund (IMF) blamed it on mismanagement on the part of the Cameroon government. This led to the implementation of foreign direct policies such as the Structural Adjustment Programme (SAP) and sterilization, liberalization and privatization, evaluation, devaluation, heavily indebted poor country initiative and the Millennium Development Goals(MDG), all geared towards achieving economic growth via entrepreneurship, the best contemporary engine for growth (Maurice and Pelagie, 2015). Entrepreneurship most especially Small and medium-sized enterprises (SMEs) form the backbone of every economy. In Cameroon and most of the developing world, most SMEs are still part of the informal sector, making it impossible for the government to raise revenue through taxation. By being outside the formal sector, they face tremendous limitations in generating capital for business expansion. Entrepreneurs also face structural and regulatory challenges in starting businesses all together couple with the fact that entrepreneurial activities are not well development in Cameroon. Ample research has been carried out in Cameroon on the development of entrepreneurial activities (Forge, 2009, Molua, 2010 and Tambi, 2014). Also, Elle, 2012 and Warnier, 1993 posit that financial assistance to small and medium size enterprises enhances economic growth.

However, very little is known about the role of entrepreneurship in economic growth in Cameroon with particular emphasis on FDI, Industry and Agriculture. The purpose of this study was to fill this gap in research by investigating the role of FDI, Industry and Agriculture on Cameroon’s economic growth. In this light, this study seeks to determine the value added by entrepreneurship in the Agriculture and Industrial sectors to GDP of the Cameroon economy, and evaluate the contribution of FDI for entrepreneurial activities to economic growth in Cameroon.
2. REVIEW OF LITERATURE

Theoretically, entrepreneurship contributes to economic growth (Reynolds et al., 2002), which in turn reduces inequality and poverty (World Bank, 2001) indicating a connection between entrepreneurship and economic growth. Schumpeter, in various writings proposes that innovation provides this fundamental connection. He argues that innovative entrepreneurs create new firms/processes, which in turn create jobs, stimulate competition and increase productivity through innovation (Schumpeter, 1934). Desai (2009) revealed that there is an important relationship between institutions; entrepreneurial activities and economic growth and that countries wider going planning reforms may be best served by focusing on policies of formalization, where they seek to redirect existing entrepreneurial activities into formal sector to attain high levels of economic growth. Dejardin (2000) revealed in his research of an introductory survey of two fundamental questions regarding the link between entrepreneurship and economic growth, that a positive interaction between growth and entrepreneurship is grounded on the innovation activity that entrepreneurs convey. Also, Lewis (1977) shows that entrepreneurial activities help much in creating employment opportunities, mobilization of local resources and mitigation of rural urban migration. Researchers have mostly defined entrepreneurship as the willingness to take risks and develop, organize and manage a business venture in a competitive global marketplace that is constantly evolving (Gedeon S., 2010). Thus many researchers (Naudé W, 2008, Desai S, 2009, Maurice and Pelagie, 2015, Schumpeter, 1935, Drunker, 1985) share the view that entrepreneurial activities contribute to a countries economic growth. Most existing studies linking entrepreneurship to economic growth revealed that they were restricted to two units of observations at the level of the establishment or enterprise and for regions but not country (Caree & Thurik, 2002; Audretsch 1995; Caves 1998). Nevertheless, most of the research carried out showed that entrepreneurship was positively and significantly related to economic growth.

Most of the literature on entrepreneurship in Africa reveals that entrepreneurial activities would be an important pillar for her economic growth (Kayanula and Quartey, 2000 & Herrington and Kelley, 2013). However, some researchers have found out that entrepreneurship in Africa is still facing some challenges. Herrington and Kelley (2013) posits that most entrepreneurial activities are developed in mining and the agricultural sectors and the lack of well developed industry have an inverse affect on economic growth in African. Entrepreneurship plays a vital role in the economic growth process of a country where environmental conditions are set to support entrepreneurial acts (Maurice and Pelagie, 2015). However, environmental conditions in Africa are still hindering the development of entrepreneurial activities of entrepreneurs. On the other hand, the articles available on entrepreneurship in Cameroon are mainly focused on the challenges of entrepreneurship. Forge (2009) for instance reveals that after the economic crisis in the early and mid- 1980s, entrepreneurial activities started to develop. Also, Forge (2009) proposes entrepreneurship training at all levels of all educational system as a factor to stimulate enterprise creation. Elle, 2012 and Warnier, 1993, shared the opinion that financial resource is one of those constraints that greatly affect the development of entrepreneurial activities and consequently, negatively affects economic growth in Cameroon. However, very little is known about the role of entrepreneurship in economic growth in Cameroon with particular emphasis on FDI, Industry and Agriculture. The purpose of this study was to fill this gap in research by investigating the role of FDI, Industry and Agriculture on Cameroon's economic growth.

3.0 RESEARCH METHODOLOGY

This work covers the Cameroon economy. It covers a period of 39 years starting from 1975 to 2014. This is a 76% proportion of the population time series given that Cameroon gained independence in 1960. This time series will pick on GDP by considering the following indicators; value Added by the Agricultural and industrial sectors, and Foreign Direct Investment. These indicators were chosen because the are key to the economic growth of a developing economy such as Cameroon and very little research have be carried out to ascertain the contribution of these indicators in Cameroon. The area of this study is Cameroon with an approximate surface area of 475,000km² and an estimated population of 18,467,692. Cameroon is the economic giant of the CEMAC region. It is bordered to the North by Chad, East by the Central African Republic, to the west by the Federal Republic of Nigeria, to the south by the Republic of Congo, Gabon and Equatorial Guinea. Cameroon lies in the Equatorial region between latitude 2°N and 3°N and longitude 8°E and 16°E of the Equator. The population of Cameroon is divided among an estimated 250 ethnic groups that form five large regional cultural groups. This work adopted the Ex-post research design. The most important aspect of this design is that it is an analysis of the post trend of the role of Cameroonian entrepreneurial activities and economic growth. This research design allowed for the compilation of data for analysis based on the De jure measure, processed the data and reported the result just as it is. Thus, the work in reporting the results, made some policy recommendation based solely on the result.
Sources of data collection

This work adopted the secondary source of data. It made use of data from table publications and databases of statistic agencies or international organizations like the World Bank Database and the International Monetary Fund (IMF). In addition to these, publications of the Ent erprise survey database were used. The reason for adopting this secondary source of data was for the purpose of reliability and standard quantification given the period of 39 years.

Model specification

The model relating the role of the Cameroon entrepreneurship to economic growth is specified as:

\[ GDP = A_0 + A_1 Vagri + A_2 VAind + A_3 FDI + U \]

Where \( A_1, A_2, A_3 \), are coefficients of the various independent variable with \( A_0 \) being the constant term.

GDP = Gross Domestic Product at current prices in United States dollar ($)

VAagric = Value added by the Agricultural sector to GDP in US dollar ($).

VAind = Value added by the industrial sector to GDP in U.S dollar ($)

FDI = Foreign Direct Investment net inflow of Balance of payment at current prices in US dollar ($).

Estimation and validation

The coefficients \((A_i)\) were estimated using the Ordinary Least Squares (OLS) techniques because of its BLUE (Best Linear Unbiased Estimator) property. This method of estimation has properties such as small variance that makes its estimate reliable and closer to reality.

The validation of this method of estimation will be the BLUE characteristics. That is the BEST Linear unbiased Estimate. The Validation of the estimate Linearized the model by using the Logarithmic function. The natural Log denoted as \((LG)\). With this the model was redefined as:

\[ LG GDP = A_0 + A_1 LGVA agric + A_2 LGVA ind + A_3 LG FDI \]

Where:

\(LG = \) Natural Logarithm and all the parameter as formerly defined.

Consequently, this redefined model was validated using Economic (a priori) test for the magnitude and signs of the estimated parameters. The statistical (1\textsuperscript{st} order) test was used to evaluate the combine influence of the independent variables. The coefficient of multiple determinations (adjusted R\(_2\)), was also used to determine the level of reliability of independent variables. In addition, the F-Statistics test was equally used to test for reliability of the estimates. The t-statistics and p-values as well as the variance were further used to test for the significance of the individual independent estimate.

The econometric (2\textsuperscript{nd} order) test was used to validate the reliability of the a priori and 1\textsuperscript{st} order and the estimates to see that it confirms to the econometric requirement.

4.0 RESULTS

Dependent variable: Economic Growth (GDP)

Method of Estimation: Ordinary Least Square (OLS)

Sample: 1975 – 2012;

Included observations: 37 years
Excluded Observations: 2 after adjusting end points

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>t-statistic</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-4.035405</td>
<td>8.334378</td>
<td>(-0.484188)</td>
<td>0.6330</td>
</tr>
<tr>
<td>LOG (VA agric)</td>
<td>2.031687</td>
<td>1.928741</td>
<td>(1.053375)</td>
<td>0.3036</td>
</tr>
<tr>
<td>LOG (VA ind)</td>
<td>2.476573</td>
<td>0.992118</td>
<td>(2.496248)**</td>
<td>0.0205</td>
</tr>
<tr>
<td>LOG (FDI)</td>
<td>0.144590</td>
<td>0.119323</td>
<td>(1.211752)</td>
<td>0.2385</td>
</tr>
</tbody>
</table>

R-Squared    0.493144
Adjusted (\(R^2\)) 0.377949

F-STATISTICS 4.280964

Note* Significant at 10%; **Significant at 5%; *** Significant at 1%

The Economic (A PRIOR) Test

The coefficient of the independent parameters and their signs are to explain the relationship between the independent exogenous variables; entrepreneurship and the dependent variable; Economic Growth (GDP).

The first of the estimated parameters in the model is the econometric element or the stochastic error term. This term is an absolute value that could be either positive or negative depending on the variables included in the model specified. In this work, the stochastic term is negative and has a magnitude of 4.035405, indicating that there are some variables outside the model which are not included and if included, the constant term becomes insignificant.

The next estimated parameter is the value by VA agric. The coefficient of the value added by entrepreneurship of the Agricultural sector is 2.031687 indicating that there is a positive relationship between the value added by entrepreneurship of the Agricultural sector and economic growth in Cameroon. Furthermore, it indicates that a 1% increase in the value added by entrepreneurship in the Agricultural sector will result in an increase in GDP by 2.031687 the proxy of Economic Growth. This result does not favor the theories of Dualism by Fei – Ranis, 1961 and Lewis (1954). This is because the theories assume that there exists excess employment in the Traditional Agricultural sector and the Modern industrial sector. The third estimated value is the coefficient of the value added by entrepreneurship in the industrial sector and Economic Growth. Moreover, it indicates that a 1 percent increase in value added by entrepreneurship in the industrial sector will result to an increase in GDP by 2.476573 the proxy of Economic Growth. The relationship is in conformity with the theories of Dualism by Lewis and Fei Ranis, that holds that the modern industrial sector has a high marginal productivity and high factor payment, given the ability to absorb the excess labor for the Traditional Agricultural Sector will lead to economic growth.

The last estimated value is the coefficient of Foreign Direct Investment. The estimated coefficient of FDI is positive and has a magnitude of 0.144590. This implies that FDI have a positive relationship with Economic Growth. This implies that a 1 percent increase in FDI will lead to an increase in GDP by 0.144590 the proxy for economy growth. This is in conformity to the pros put forward by some economist of foreign investment. This is so because they see FDI especially the investment seeking FDI as a measure to stimulate the Economic growth process in developing countries. However, Alfaro and Charlton (2006) estimated De Facto capital inflow/GDP to capital mobility at 0.098 significant at 1% and De Facto FDI inflow/GDP to capital mobility at 0.145 significant too at 1% indicating that FDI is an important source of start – ups for entrepreneurship. At the level of De Facto FDI inflow/GDP and GDP growth, the estimated coefficient was 0.101 and significant at 10%. Moreover, the De Facto FDI inflow/GDP estimated against GDP Growth was -0.948 significant at 1%. This confirms the fact that FDI will lead to huge capital flight. Though this does not favor the result above, it is in conformity with the argument put forward by some economist on FDI. This is because in host countries especially Cameroon, it increases the gap between the rich and the poor through the high rate of wage differentials, which leads to inflation and what make things worse is the gross flight disempowering the indigenous entrepreneurship.

The first order test or statistical test

In this part of the interpretation of the estimated variables, the statistical test is aimed at determining the degree of reliability of the estimated coefficients at 1 percent, 5 percent and 10 percent. In addition, since the standard error and the T – statistic are symmetrical, the T-statistic will rather be use for testing the reliability of the estimated coefficients.

The T-statistic for VA agric is /1.053375/
At 1% level of significant /T-Table/ = 2.500
At 5% level of significant /T – Table/ = 1.714
At 10% level of significant /T – Table/ = 1.319
Thus, since 
1.053375/ < /1.319/ then the estimated coefficient for the value added by the agricultural sector is not statistically significant and consequently, we reject the Alternative hypothesis \( H_1 \) thereby accepting the Null hypothesis \( H_0 \).

For the estimated coefficient of the value added by the industrial sector, the \( T\text{-statistic} = 2.496248 \) Thus, since \( 2.496248/ > /1.714/ \) then the estimated coefficient for the value added industry is statistically significant at 5\% level and consequently, we accept the Alternative hypothesis \( H_1 \) thereby rejecting the Null hypothesis \( H_0 \).

For the estimated coefficient of FDI the \( T\text{-statistic} = 1.211752 \) Thus, since \( 1.211752/ < /1.319/ \), the estimated coefficient for FDI is not statistically significant and consequently, we reject the alternative hypothesis \( H_1 \) thereby accepting the Null hypothesis.

For the constant term, the \( T\text{-statistic} = 0.484188 \).

At 10\% level of significance \( T\text{-Table} = 1.319 \). This since \( 0.484188/ < /1.319/ \), then the estimated stochastic element is not statistically significant at 10\% level of significance \( T\text{-table} = 1.319 \). This since \( 0.484188/ < /1.319/ \), then the estimated stochastic element is not statistically significant at 10\% level of significance. This implies that they are other variables that if added will have a negative effect on the role of entrepreneurship in the economic process in Cameroon than what was specified in the model. The low estimate of the stochastic term and the level of significance at 10\% is not very different from the estimate of Thurik, (2004). The estimated the effect of entrepreneurship on national economic growth with adjusted \( R^2 \) of -0.4 at 10\% level of significance.

The Economic (second order) Test

The coefficient of multiple determination or Goodness of Fit test denoted as \( R^2 \) and is represented by the Adjusted \( R^2 \). The Adjusted \( R^2 \) explains that, the role of the Cameroonian entrepreneur in the economic growth process is jointly accounted for by the value Added by the Agricultural and industrial sector and Foreign Direct Investment at 37.7\% with about 62.3\% accounted for by other variables not captured in the model. This value of the Adjusted \( R \) is almost the same as that of Thurik (2004) where he investigated the extent to which the role of entrepreneurship has changed in the last decades of the 20\textsuperscript{th} century using a sample size of 37 and had an Adjusted \( R^2 \) of 37\%.

The degree of reliability of the model specification is tested by the use of F – statistic given that the F-statistic = 4.280964 and the F-statistic table value = / 2.64 / . Thus, since / 4.281/ > / 2.64 / then the F-statistic is statistically significant at a 5\% level. This implies that the model has a 95\% degree of reliability on the prediction when evaluating the role of entrepreneurship in the growth process in the Cameroon economy.

5.0 FINDINGS, POLICY RECOMMENDATIONS AND CONCLUSION

5.1 Findings

With the above method of estimation and the characteristics, there are some major findings given the level of statistical significance of the estimated coefficients and the tested hypotheses.

The results reveal that the coefficients of the value added by agricultural sector, industrial sectors and FDI were all positive, indicating that entrepreneurial activities have the potential to improve upon economic growth in Cameroon. However, the results also revealed that at a 1\%, 5\% and 10\% level of significance, there is a positive significant value added by entrepreneurship in the industrial sector to economic growth, while the agricultural sector and Foreign Direct Investment (FDI) showed from the analyzed data no significant value added by entrepreneurship to economic growth in Cameroon at all three levels of significance.

The low estimate of the stochastic term at the level of 10\% of significance makes the estimated stochastic element not to be statistically significant. The insignificant nature of the constant term implies that entrepreneurship in Cameroon does not contribute significantly to the level of Economic Growth (GDP).

5.2 Policy recommendation

From all indications, entrepreneurship in Cameroon does not significantly affect economic growth positively. This is so because the government has neglected some sectors of the economy which could contribute greatly to economic growth in the country such as the agricultural sector.

The insignificant value added by entrepreneurship in the Agricultural sector in the economic growth process in Cameroon is as a result of government neglects. To improve on this, the government of Cameroon should ensure that value is added at the various stages of the supply chain of the agricultural sector. Also, the government should promote sustainable small holders development schemes for tradable crops such as oil palms, rubber, banana, coffee. The government should also continue to subsidize agricultural inputs and finally improve on the existing
infrastructure particularly constructing new feeder roads and maintaining existing ones, to ensure that they are accessible throughout the year.

The significant value added by entrepreneurship in the industrial sector in the economic growth process in Cameroon, implies that to an extent, the government is trying to improve on investment activities. For the government to further improve on this, she should provide more research institutions, should also establish National Investment Companies which will act as a guarantor to enabling prospective investors to get loans from various financial institutions particularly for small scale industries.

Finally, since FDI results in high profit repatriation and capital flight, it would be necessary for the government to put in place laws that encourage a 50/50 equity between domestic and foreign entrepreneurship.

5.3 Conclusion

The role of entrepreneurial activities on economic growth cannot be overemphasized. However, a lot still has to be done to develop entrepreneurial activities most especially in the agricultural sector in Cameroon. Though the industrial sector to an extent is striving in Cameroon as illustrated in the data analysis which indicates a positive significance, the government and the various stakeholders of this sector still have a huge role to play in the improvement of entrepreneurial activities in this sector. Entrepreneurship has the potentials of improving upon economic growth in Cameroon as shown by the positive coefficients of the value added in the agricultural sector, industrial sector and FDI. For this to be possible, an enabling environment should be created to develop entrepreneurial activities for increased economic growth.

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