Entrepreneurial Innovativeness in Small and Medium Scale Enterprises: Lessons from Some Selected SMES in Mangu LGA of Plateau State-Nigeria

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Abstract: This paper sets to examine factors inhibiting entrepreneurial innovative in Plateau State, Nigeria. In recent times, stagflation and high unemployment has caused a renewed interest in the factors determining economic growth. The years 2008 and 2009 have seen a reevaluation of the role of small firms and a renewed attention for entrepreneurial innovativeness (i.e. introduction of new products, new methods of marketing, adopting new method of technology, and new ways of resources combination). As the 21st century unfolds, entrepreneurial innovativeness is viewed as critical pathway to enhancing economic growth (particularly, employment). To effectively measure the extent to which the factors impede entrepreneurial innovativeness, relevant information concerning these variables from 120 owners of SMEs in Mangu LGA of Plateau State was obtained through Questionnaires. The result from the analysis revealed that entrepreneurs in Plateau State have not operated innovative entrepreneurship that could enhance employment. We recommended that SMEs in Mangu LGA should design a standard information and technology system that could aid their entrepreneurial innovativeness that will translate in enhancing employment generation.

Keywords: Entrepreneurial Innovativeness, Employment generation, Poverty

1. INTRODUCTION

With a population of 148 million and the second largest economy in the continent after South Africa, the state of Nigeria's economy is a bundle of extreme contradictions. Despite her natural endowments, Nigeria is crippled with rampant poverty and depressing macroeconomic indicators and human development indices. Unemployment is endemic and more than 54% of its population lives on less than $1 per day. The bulk of the problem has been Nigeria’s overdependence on oil and gas exports that fetched it an estimated $600 billion (about N90,000 billion) in the last five decades, but made little difference to the non-oil sector (especially entrepreneurship), which floundered in a climate of policy negligence and inadequate financial and technical support (http://entrepreneurship, 2010).

In order to address the problem of poverty (vis-à-vis unemployment) and promote sustainable development, the United Nations Millennium Declaration was adopted in September 2000 at the largest ever gathering heads of States committing countries both rich and poor to do all they can to eradicate poverty, promote human dignity and equality and achieve peace, democracy and environmental stability (MDGs report, 2004). The goals include those dedicated to eradicating poverty, achieving universal primary education, promoting gender equality and empowering women, reducing child mortality, improving maternal health, combating HIV/AIDS, malaria and other diseases, ensuring environmental sustainability and developing a global partnership for development.
According to Abani, Iguzor and Moru (2005), the situation of MDG in Nigeria can be seen from two main sources: the Nigeria MDG report 2004 and the Nigeria MDG report 2005. It can also be assessed from MDG office especially the Debt Relief Gains as provided in the 2006 annual budget. The 2004 report which was Nigeria’s first report on the MDG states that, “based on available information it is unlikely that the country will be able to meet most of the goals by 2015 especially the goals related to eradicating extreme poverty and hunger, reducing child and maternal mortality and combating HIV/AIDS, malaria and other diseases”. Salil (2005), further states that for most of the goals, up-to-date data exist which shows that if the current trend continues, it will be difficult for the country to achieve the MDG targets by 2015.

According to Dakung (2009), one factor that links many of the highly successful entrepreneurs’ impact on their economies is their innovative ideas and efforts. Following Schumpeter (1911), novel combinations may take form as new products or services, new geographical markets, new raw materials, new methods of production and new ways of organising. Hence, weaning away dependence on non-renewable resources with the simultaneous promotion of innovative entrepreneurship is crucial to achieving both the 2020 objective and Nigeria’s Millennium Development Goals.

Entrepreneurial actions are any newly fashioned behaviors through which companies exploit opportunities others have not noticed or aggressively pursued. Novelty, in terms of new resources, customers, markets, or a new combination of resources, customers, and markets, is the defining characteristic of entrepreneurial actions (Sharma & Chrisman, 1999). Entrepreneurship includes acts of creation, renewal, or innovation that occur within or outside an organization. According to Inguar (1985), through “memories of the future” entrepreneurs mentally rehearse “path ways” into the future and “envision” a new world for business that stimulates economic growth (i.e. wealth creation, generation of employment, revenue creation).

Entrepreneurship has been responsible for the rapid growth of a multitude of economies around the world, historically beginning with the UK and America to gradually Europe, Latin America and lately in considerable parts of South and East Asia. Currently, more than 90% of all enterprises in the world are estimated to have embraced entrepreneurship, accounting for up to 80% of total employment prospects (Inguar, 1985). Indeed there is no doubt that entrepreneurship has moved into the era of global competition. This movement has brought about new opportunities and awareness for economic growth. It has also brought with it enormous complexity to the entrepreneurial landscape.

According to Ireland (2001), entrepreneurship is especially important for firms facing economic recession, rapid changes in industry and market structures, customers’ needs, technology, and societal values. The key role that the alert entrepreneur plays in discovery, and, in particular, in the development of ideas for how to pursue and launch them to market should be underlined. According to Dakung (2009), the position of entrepreneurship today is a necessary ingredient for stimulating economic growth and employment opportunities in all societies. Hence, today, many people have chosen entrepreneurial career because doing so seems to offer greater economic and psychological rewards than does the large company route. In developing countries such as Nigeria, Ghana, Zamia, Togo and Namibia, successful small businesses are the primary engines of job creation, income growth, and poverty reduction. Therefore, government support for entrepreneurship is a crucial strategy for economic development (Bank of Industry, 2010).

At the policy level, Nigeria has taken proactive steps to promote entrepreneurship initiatives, the most notable being a legislative amendment that requires commercial banks operating in the country to set aside 10% of pre-tax profits for investment in smaller businesses. The effectiveness of these measures has been borne out to some extent by recent developments. For instance in June, 2010, the Nigerian government announced the disbursement of $20 million in small-scale industry loans Programmes (Bank of Industry, 2010). Also, programmes such as the NAEP, NDE, NEEDS (2003-2007), SEED, Better Life for Rural Women, FEEP, Peoples’ Bank, Community Banking, and NMGN (2000-2015) introduced by the government strive to identify potential entrepreneurs from within the target group of unemployed graduates and, to a certain extent, teach entrepreneurs. The OECD (2003), further observes that such programmes, albeit are aimed at fostering innovative entrepreneurship, are also very essential to job creation and economic growth.
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2. PROBLEM STATEMENT

The effect of increased unemployment on innovative entrepreneurship may be positive (according to the push effect theory of income choice) or negative (according to the pull effect theories on entrepreneurial capability and risk attitude). New start-up firms provide employment opportunities in themselves and also create employment in existing firms (Fritsch and Muller, 2004). However, the low survival and growth rates of new firms suggest that their contribution to reducing unemployment would be limited. Empirical studies find support for differing relationships in both directions of causality. An early survey by Storey (1991) documents the ambiguous empirical evidence on the unidirectional impact of unemployment on firm start-up. Some studies such as Picot and Lin (1998), have found a "Schumpeter" effect where new firms enhance employment levels by stimulating economic activity and creating new jobs. On the other hand, a "refugee" or "shopkeeper" effect was discovered by Evans and Leighton (1990) and Reynolds et al. (1994) among others, where unemployment leads to individuals seeking self-employment, thus stimulating entrepreneurial activities. Van Stel and Storey (2004), further emphasized that this "refugee" push effect coupled with low entry barriers may lead to start-ups that guarantee employment for the entrepreneurs but generate no economic growth.

Predominantly the impacts and success of innovation are difficult to pinpoint and measure exactly. In research the success of an innovation is commonly approached at the firm level, i.e. increase in market share, profitability, productivity or technical novelty (Niininen & Saarinen 2000; Palmberg 2006). The above mentioned measures cannot though alone explain the value of innovation to the innovative firm. Innovation activity is such a multidimensional phenomenon that economic or technical attributes reveal only partially its effects. Hence, operating innovative entrepreneurship that could enhance economic growth requires that an entrepreneur ought to first, realize that something has gone wrong somewhere. This has to be fully followed by identifying what needs to be done, why it should be done and how the innovative entrepreneurship should be adopted and effected in order to stimulate economic growth. Sadly, most of the Nigeria entrepreneurs view this as costly/risky and time consuming. With this position of most of the Nigerian entrepreneurs, their abilities to explore and apply innovation into entrepreneurship that would bring about improvement in the level of economic status of the nation have increasingly been a challenge to them.

It is upon this backdrop that the study evaluates the factors inhibiting entrepreneurial innovativeness in Small and Medium Scale Enterprises in Mangu LGA of Plateau State.

3. RESEARCH QUESTIONS

i. How do SMEs in Mangu LGA promote entrepreneurial innovativeness?

ii. To what extent does entrepreneurial innovativeness enhance economic growth in Mangu LGA?

iii. What are the inhibiting factors to entrepreneurial innovativeness of SMEs?

4. RESEARCH OBJECTIVES

i. To investigate how SMEs in Mangu LGA promote entrepreneurial innovativeness

ii. To ascertain the extent to which entrepreneurial innovativeness enhanced employment generation in Mangu LGA

iii. To examine the inhibiting factors to entrepreneurial innovativeness of SMEs.

5. HYPOTHESIS

H0: There is no significant relationship between Entrepreneurship innovation and employment generation

6. REVIEW OF LITERATURE

The early work of Schumpeter established conceptually the "entrepreneur as innovator" as a key figure in driving economic development. The innovative activity of entrepreneurs feeds a creative "destruction process" (Schumpeter, 1942) by causing constant disturbances to an economic
system in equilibrium, creating opportunities for economic rent. In adjusting to equilibrium, other innovations are spun-off and more entrepreneurs enter the economic system. In this way, Schumpeter's theory predicts that an increase in the number of entrepreneurs leads to an increase in economic growth. This theory, while influential, is largely descriptive and difficult to formalize empirically. Consequently, entrepreneurship is missing from most empirical models explaining economic growth. Arising from Schumpeter's original theory, subsequent empirical economic literature have seized on the idea of innovation as a source of economic growth. A considerable body of empirical evidence now exists across countries (Lichtenberg, 1993; Guillec and van Pottelsbergh de la Potterie, 2001). In contrast, conceptual and descriptive literature on the role of entrepreneurs has flourished, but the empirical literature has for a long time remained mute on this subject. This is in part due to the difficulty in measuring and operationalising entrepreneurial activities.

7. INNOVATION AND ECONOMIC GROWTH

The attraction of innovation as a determinant of growth in empirical research is its straightforward measurement. Researchers may use either input measures such as R&D expenditures or innovation outcomes such as patent. A large body of empirical work has evolved from this focus on technological progress and innovation. These studies have established that the level of innovation contribute significantly to economic performance, particularly in the area of employment generation. Nadiri (1993), provided a summary of studies in this tradition, where a Cobb-Douglas production function is used to link innovation to output and employment growth. Permanent long-run growth depends on the growth rate of inventions, which is exogenously determined. More recently, researchers have begun to examine growth that is endogenously determined by technical change resulting from decisions of profit-maximizing agents. Verspagen (1992) and Ruttan (1997), provide surveys of such innovation and R&D based endogenous growth models. In contrast to the Solow-like models, employment growth results from intentional innovation by rational, profit-maximizing agents and is therefore endogenously determined. Endogenous growth models emphasize the importance of knowledge, knowledge spillovers and technological substitution in the process of economic growth, conceptually parallel to Schumpeter's early growth theory. Such research, especially the Solow (1956) neo-classical models of economic growth, does not explicitly address the issue of entrepreneurship, which is the underlying cause for technological innovation in the Schumpeterian context. The new class of endogenous growth model pioneered by Romer (1990), recognizes some aspect of entrepreneurship by modeling the process of invention and deriving the motives for invention from the microeconomic level. We can summarize that the Schumpeterian tradition has given rise to models that are focused on innovation as a source of economic growth. Unlike the original Schumpeterian theory, however, these models do not provide any direct test of the effect of entrepreneurial firm-formation activities on economic growth.

8. ENTREPRENEURSHIP AND ECONOMIC GROWTH

Davidson (2003), discusses various current views of entrepreneurship from different perspectives. This view includes any introduction of new economic activity to the marketplace as an instance of entrepreneurship. As such, entrepreneurship is manifested not only by market entry of new firms, but also by innovative and imitative entries into new markets by established firms. Stemming from the historical views of entrepreneurship, theoretical and descriptive arguments linking entrepreneurship and economic growth have emerged from various fields of economics and management study, including economic history, industrial economics and management theory. Carree and Thurik (2003), provide extensive surveys of the diverse literature on the relationship between entrepreneurship and economic growth. In essence, the literature suggests that entrepreneurship contributes to economic performance by introducing innovations, creating change, creating competition and enhancing rivalry. Writings on pre-20th century economic history offer the strongest descriptive affirmation that entrepreneurship is crucial to long-term economic growth (Cipolla, 1981; Lazonick, 1991), showing that entrepreneurs adopted new production techniques, reallocated resources to new opportunities, diversified output and introduced competition by penetrating new markets.

The general role of innovative entrepreneurship that does not only include newness (implementing inventions), but also employment generation. In their final framework for linking
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entrepreneurship to economic growth, they show the myriad effects and conditions taking place at different levels for entrepreneurial activities to have ultimate impact on economic growth. The direction of the impact is not a foregone conclusion in this framework. However, a working assumption is that ceteris paribus, a rise in the number of entrepreneurs should lead to increased economic growth at the national level. Schmitz (1989), conceptualized a model motivated by the endogenous growth models developed by Romer (1986). In the spirit of such models, new firm formation is an indigenized determinant of economic growth and arises from rational decision-making on the part of individuals who choose between the roles of employee or entrepreneur. This theoretical model concludes that increasing levels of entrepreneurship in an economy generates additional input in the economy (i.e. employment generation). This result is however a theoretical derivation and not based on empirical data.

9. Empirical Evidence Linking Entrepreneurship to Economic Growth

There are only a limited number of empirical studies devoted to the econometric link between economic growth at the national level and entrepreneurship in the form of new firm start-ups. This has been partly due to the difficulty in obtaining a measure of the national level of entrepreneurship that can be appropriately correlated to national economic growth as measured in terms of output, productivity or wealth. The macro measurement of entrepreneurship needs to operationalize entrepreneurship as a multi-dimensional concept from typologies that are developed at the micro-level. While not always couched in the language of economic growth, the literature on job creation provides ample empirical evidence that small businesses and newly formed firms create a substantial number of new jobs, with some studies showing that small and new firms are the source for the majority of new jobs created. This conclusion has been reached in studies on job creation in numerous countries such as the United States (Birch, 1987), Sweden and Canada (Baldwin and Picot, 1995). Several authors have conducted within-country regional-level studies linking economic growth and well-being with business dynamism in terms of firm entry and exit. These studies however, offer the closest parallels to this present study’s effort to establish a link between innovative entrepreneurship with economic growth in Plateau State, Nigeria.

10. Inhibiting Factors of SMEs’ Innovation

Furthermore, new product development always remains at the top of the agenda for both large and small- and medium sized organizations. However, compared to large firms, SMEs have a number of typical problems with regard to their innovation process, especially during the period of the development stages to the commercialization stages (Hanna & Walsh, 2002). In those stages, they are more challenged by financial constraints, in addition to other bottlenecks such as lack of qualified personnel and low possibility to substitute relevant products in the market and sufficient fixed asset in terms of cash (Kaufmann & Tödtling, 2002).

<table>
<thead>
<tr>
<th>External barriers</th>
<th>Internal barriers</th>
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<tbody>
<tr>
<td>Supply</td>
<td>Demand</td>
</tr>
<tr>
<td>Technological information</td>
<td>Customer needs</td>
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<tr>
<td>Raw materials</td>
<td>Customers' perception of the risk of innovation</td>
</tr>
<tr>
<td>Finance</td>
<td>Domestic market limitation</td>
</tr>
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<td></td>
<td>International market limitation</td>
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</tbody>
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Fig1. Barriers to Entrepreneurial Innovativeness for SMEs (Hadjimanolis, 1999; Piatier, 1984; Rush & Bessant, 1992)
On the other hand, however, SMEs have some advantages with regard to new product development that makes them suitable as network partner, as they are usually less bureaucratic, and in general they may have greater incentives to be successful than large firms (Michael & Palandjian, 2004). But as the SME desires to be included in the network to achieve high innovation performance at the individual level, the question arises of how to organize new product development within the network (Pullen et al., 2008). In addition to these, a primary factor that relates to innovation in SMEs is the vision of innovation as perceived by the top management of the firms. Sometimes they may not act as the facilitators, and this perception is rather difficult to measure and motivate the stakeholders (Hadjimanolios, 1999). Moreover, there are other internal barriers and external barriers to innovation for SMES.

11. METHODOLOGY

The study was conducted to identify and evaluate the factors inhibiting entrepreneurial innovativeness in Small and Medium Scale Enterprises, the some selected SMEs in Mangu LGA of Plateau State. The data for the study were collected by means of questionnaires through the survey method from randomly selected 120 owners of SMEs in the area to determine their responses about the firms’ innovative entrepreneurship as well as the factors inhibiting entrepreneurial innovativeness. The linear Regression model was employed to test the relationship between innovation and employment with the aid of the Statistical Package for Social Sciences (SPSS).

12. ANALYSIS AND DISCUSSION OF RESULT

The results of the responses based on the 120 questionnaires are presented here

<table>
<thead>
<tr>
<th>Table1. Objectives of entrepreneurial innovativeness</th>
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<tbody>
<tr>
<td><strong>Options</strong></td>
</tr>
<tr>
<td>Changing Environment</td>
</tr>
<tr>
<td>Economic Advantage</td>
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<tr>
<td>Improve sales/profitability</td>
</tr>
<tr>
<td>Customer Needs</td>
</tr>
<tr>
<td>Competition</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
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</table>

*Source. Field survey, 2013*

<table>
<thead>
<tr>
<th>Table2. Innovativeness and Employment generation in Jos metropolis</th>
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</thead>
<tbody>
<tr>
<td><strong>Indicators of Innovation</strong></td>
</tr>
<tr>
<td>Introduction of new products</td>
</tr>
<tr>
<td>New method of marketing products</td>
</tr>
<tr>
<td>New combination of resources</td>
</tr>
<tr>
<td>Adoption of new technology</td>
</tr>
</tbody>
</table>

*Source. Field survey, 2013*

<table>
<thead>
<tr>
<th>Table3. Factors inhibiting Entrepreneurial innovativeness</th>
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<tbody>
<tr>
<td><strong>Options</strong></td>
</tr>
<tr>
<td>Economic instability</td>
</tr>
<tr>
<td>Poor information/ level of technology</td>
</tr>
<tr>
<td>Cost of innovation</td>
</tr>
<tr>
<td>Resistance to change</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

*Source. Field survey, 2013*
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Summary of Tables 1, 2 & 3

<table>
<thead>
<tr>
<th>Question</th>
<th>Option</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective of entrepreneurial innovativeness</td>
<td>Customer Needs</td>
<td>60</td>
</tr>
<tr>
<td>Indicators of Innovation (Scores of Entrepreneur)</td>
<td>New method of marketing products</td>
<td>52</td>
</tr>
<tr>
<td>Indicators of Innovation (Employment generation)</td>
<td>New method of marketing products</td>
<td>60</td>
</tr>
<tr>
<td>Factor inhibiting SMEs’ Innovation</td>
<td>Poor information/ level of technology</td>
<td>47</td>
</tr>
</tbody>
</table>

From the table and figure above, we could see that 60 of the respondents observed that the main Objective of entrepreneurial innovativeness is to meet the needs of their customers; 52 and 60 of the respondents (Scores of Entrepreneur and Employment Generation) respectively selected new method of marketing products as the key indicator of the SMEs’ innovation in Mangu LGA; Finally, 40 of the respondents identified Poor information/ level of technology as the major factor inhibiting SMEs’ innovation.

13. DATA ANALYSIS

To ascertain whether or not there is a significant relationship between innovation and employment generation, regression statistical tool was employed as stated in the methodology.

\[ y = \text{Employment Generation} \]
\[ x = \text{Indicators of Innovation} \]

The regression line therefore is given as: \( Y = a + bx \)

Where: \( a = \) Estimator of the constant and \( b = \) Estimator of the slope.

Note: \( a \) is a parameter for other factors than \( x \), while \( b \) is the additional increase in \( y \) for every 1.00 increase in \( x \)

The SPSS package was used to analyze the data. The results are presented below:

Employment level = 101.23 + 0.329 (innovation)

\[ (1.755) \quad (0.235) \]

\[ R^2 = 0.027 \]
The regression function is thus:
\[ Y = 101.23 + 0.329x \] (see Appendix R)

14. INTERPRETATION

R, which is 0.164 (coefficient of relationship) explains the strength of relationship between innovation and employment generation. This means that there is a weak positive relationship between the two variables. It therefore, implies that if there is a significant increase in innovation there might not be a corresponding increase in employment generation. \( R^2 \) (coefficient of determination) measures forecasting power of the independent variable. Since \( R^2 = 0.027 \), it means that only 2.7% of the total variation in \( y \) (employment) is accounted for by a 100% increase in \( x \) (innovation).

The values of \( t – \) computed for both \( a \) and \( b \) which are 1.755 & 0.235 respectively show that they are less than the \( t – \) tabulated (1.960). This implies that null hypothesis which states that entrepreneurs in Plateau State have not operated innovative entrepreneurship that could enhance economic growth (employment) be accepted, while the alternative hypothesis be rejected.

15. CONCLUSION AND RECOMMENDATIONS

Having a higher degree of entrepreneurship or new business creation prevalence does not guarantee enhanced employment generation and faster rate of economic growth. This paper has investigated the relationship that exists between innovative entrepreneurship and employment in Plateau State, using data obtained from the entrepreneurs. Our result revealed that entrepreneurs in Plateau State have not operated innovative entrepreneurship that could enhance economic growth (employment). Probably this is as a result of poor information/ level of technology as the inhibiting factor. This is in line with the "refugee" or "shopkeeper" effect discovered by Evans and Leighton (1989, 1990) and Reynolds et al. (1994) among others, where unemployment leads to individuals seeking self-employment, thus stimulating entrepreneurial activities/innovativeness; and Van Stel and Storey (2004), who emphasized that the "refugee" push effect coupled with low entry barriers may lead to start-ups that guarantee employment for the business owners but generate no economic growth (employment). We hence recommend that SMEs in Mangu LGA should design a standard information and technology system that could aid their entrepreneurial innovativeness.

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