

Effects of Innovation and Pro-Activeness as Components of Corporate Entrepreneurship Dimensions on the Profitability of Quoted Manufacturing Companies in Nigeria

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Abstract

The harsh operating environment, in which many manufacturing firms found themselves has a negative effect on the profit of the manufacturing companies. This is because statistics from the Manufacturing Purchasing Managers' Index (PMI) of 2016 revealed a declining manufacturing economy at less than 50 per cent. The index has not changed in recent years. This has resulted in folding-up of many manufacturing companies which apparently, pose challenges for sustainability and by extension for the economy. This study examines the effects of innovation and pro-activeness on the profitability of quoted manufacturing companies in Nigeria. Data for the study was obtained from the administration of questionnaire. The data was subjected to statistical cleansing to ensure reliability and validity. The applied structural equation model, PLS-SEM. The justification for PLS-SEM is based on sample size, which is below 200, was used to analyze the data generated. The findings reveal that innovation has negative and insignificant effect on the profit of selected manufacturing firms, entailing that increase in the innovation negatively influence profitability and there is a positive relationship between proactiveness and profitability. This study recommends that there should be improved and sustained innovative activities by manufacturing firms and every manufacturing firm should always be pro-active in every way and department. This will prompt them to be ahead of their competitors in introducing new products and services which increases firms' effectiveness and efficiency.

Keywords: *Profitability, Innovation, Pro-activeness, Structural Equation Model, PLS-SEM*

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Background to the Study

The engine that drives enterprise is not thrift but profit (Keynes, 1936). Every business must earn sufficient profits to survive and grow over a long period. Profitability is the proof of economic progress, improved national income and rising standard of living. However, statistics shows that the manufacturing sector is experiencing a decline in the sector with its Manufacturing Purchasing Managers' Index (PMI) at less than 50 per cent (Okoro, 2016). Even in terms of employment generation, the manufacturing sector currently employs fewer than two million people and created a paltry 19,647 new jobs in the First Quarter of 2015 (Okoro, 2016). The global economic meltdown from 2006 affected the profitability of many listed firms on the Nigerian Stock Exchange (Okoro 2016). Given this situation, many manufacturing firms are under pressure to survive in the Nigerian capital market.

To this end, Vuuren, Groenwald and Gantsho, (2009) posited that organizations (manufacturing firms) must review practices and actively search for new ways to practice flexibility, increase in the level of innovation and show more competitiveness. To achieve this objective, a transformation is required toward strengthening entrepreneurship within organizations. Thus, the far-reaching impact of globalization, in terms of market, consumers, competitors and technologies on businesses has made corporate entrepreneurship as a relevant phenomenon to organizational performance in general and profitability in particular (Kemelgor, 2002).

In the last 30 years, the focus of research in the field of entrepreneurship has changed dramatically. Concepts such as risk, innovation and standard research at the individual level have been dropped in favour of researching the ability of large organizations to determine factors of improvement, innovation and performance (Lumpkin & Dess, 1996). Reinforcing this paradigm, Kuratko & Hodgetts, (2004) enthuse that corporate entrepreneurship is a dynamic process of vision, change, and creation which requires an application of energy and passion towards the creation and implementation of new ideas, creative solutions to withstand pressures. Similarly, researchers like Zahra, Neubaum and Huse (2000), focus on the ability of the company to create new ventures, hence they argue that corporate entrepreneurship can include formal or informal activities aimed at creating new businesses inside established companies through product and process innovations and market development. Explaining the concept further, Ling, Simsek, Lubatkin and Veiga (2008) brought up the various perspectives by approaching corporate entrepreneurship as the sum of a company's innovation, renewal and venturing efforts. Furthermore, corporate entrepreneurship is also beneficial to specialized business organizations and for national economies too, since it can improve an economy by increasing productivity, improving best practices, creating new industries, and raising international competitiveness (Wennekers & Thurik 1999).

Innovativeness indicates an organizational tendency to offer newness and originality via experimentation and research services and new process development (Dess & Lumpkin, 2005). It is clear that today's environment is filled with many contradictions; and dealing

with paradox becomes a critical aspect of managing in the new innovative landscape (Kuratko & Morris, 2018). Therefore, innovation, a dimension of corporate entrepreneurship (CE) involves new ideas, originality, and creative processes as well as trends related to technologies which are separate issues from current practice (Lumpkin & Dess, 2001). On the other hand, proactiveness is a search for opportunity, future outlook including services ahead of competitors and acting with the thought of future need to create alteration and shape the environment (Lumpkin & Dess, 2001).

Several studies have been conducted on the subject matter of corporate entrepreneurship by reputed scholars, a great majority of these studies were conducted in strong, developed and advanced economies. However, there are strong indications that there are few researchers on corporate entrepreneurship and performance in the developing countries and economies, hence the need for this study, and yet another major justification and motivation for the research. Based on this information, the purpose of this study is to investigate the effects of the dimensions of corporate entrepreneurship (innovation and pro-activeness) on Nigerian manufacturing company's profitability.

Statement of Problem

The consequences of the financial crises at the international level during the recession of 2008 transferred shocks from one country to another. Nigeria also caught in the trend of declining stock prices which influences and creates associated crises in the industries (banking, oil sector, manufacturing among others). This trend resulted in closing-up of various businesses which pose a challenge to the economy. It is thus, noticeable in developing countries like Nigeria is faced with seeming volatile pressures from increased worldwide competition stemming from globalization, constant technological changes, customers' demand, foreign competition, legal environment and so on, require new ways of managing human resource to cushion the effects on organizational performance. To face these vicious competitions, Vuuren, et al (2009) stated that manufacturing firms must review practices and actively search for new ways to practice flexibility, increase level of innovation and show more competitiveness. To achieve this objective, a transformation is required toward strengthening entrepreneurship within organizations. Thus, the far-reaching impact of globalization, in terms of market, consumers preferences, competitors and technologies on businesses has made corporate entrepreneurship as a relevant phenomenon to organizational performance in general and profitability in particular (Kemelgor 2002). Thus, the aforementioned trend resulted in close-up of many manufacturing companies which apparently pose a challenge to sustainability and by extension to the economy.

Objectives of the Study

The objective of the study is to:

- I. Evaluate the effect of innovation on the profitability of manufacturing companies in Nigeria.
- ii. Analyze the effect of pro-activeness on the profitability of Nigeria manufacturing companies.

Hypotheses

- H₀₁:** Innovation has no significant effect on the profitability of manufacturing companies in Nigeria.
- H₀₂:** Pro-activity has no significant effect on the profitability of manufacturing companies in Nigeria.

Literature Review

Innovation

Innovativeness reflects a firm's tendency to engage in, and support new ideas, uniqueness, experimentation and creative processes that may result in new products, services, or technological processes (Clark 2010; Lumpkin and Dess 1996). Innovative firms have capabilities to monitor the market changes and respond quickly, thus capitalizing on emerging opportunities (Wiklund, 1999). Lekmat & Selvarajah (2008) notes that all factors of organizational entrepreneurship have direct effects on organizational performance and that variable such as innovation, self-emergence and organizational support are also beneficial. Hisrich, Peters and Shepherd (2008) assert that resistance against flexibility, growth, and diversification facing business organization is on how to create and manage an organizational environment, where multiple innovations can occur on a sustained basis which can be surmounted by developing a spirit of entrepreneurship within the existing organization, called corporate entrepreneurship.

Pro-activeness

Pro-activeness shows a firm's aggressive pursuit of market opportunities and a strong emphasis on wanting to be among the very first to implement innovation in its industry (Rauch, Wiklund, Lumpkin and Freese, 2009). Pro-activeness is seen as opportunity-seeking, forward-looking perspective characterized by the introduction of new products and services ahead of the competitors and acting in anticipation of future demand (Lumpkin & Dess 1996; Rauch et al 2009). Proactivity also refers to the influential aspects of creativity, risk assumption and competitive aggressiveness - which are reflected in the actions of the organization's members (Lumpkin & Dess 1996). Strategic changes in employees' new ideas generation for the transformation of the company.

According to Zahra and Garvis (2000), proactive corporate entrepreneurship, such as first entry, can improve a firm's performance. The first entrants tend to exploit opportunities before their rivals and enjoy substantial strategic advantage in the markets (Zahra and Garvis, 2000). In fostering entrepreneurial intention and proactiveness within the organization, environmental conditions that motivate individuals to act entrepreneurially need to be understood. The underlying assumption is that acting entrepreneurially according to Hisrich, Peters & Shepherd (2008) is something that people choose to do, and top management of an organization can influence that choice by the corporate environment that it creates. Such development has been characterized by, for example, appropriate rewards system, management support among others which was found to be consistent with individual perceptions of entrepreneurial actions both feasible and desirable. Consequently, pro-activeness can be conducive to a company's viability.

Profitability

Profit is an excess of revenues over associated expenses for any business activity over a given period of time. The engine that drives enterprise is not thrift but profit (Keynes, 1936). Every business should earn sufficient profits to survive and grow over a given period of time. It is the index to the economic progress, improved national income and rising standard of living. No doubt, profit is the legitimate object, but it should not be over-emphasized. Management should try to maximize its profit keeping in mind the welfare of the society. Thus, profit is not just the reward to owners but it is also related to the interest of other segments of the society. Profit is the yardstick for judging not just the economic, but the managerial efficiency and social objectives also (Weston & Brigham 1993).

Profitability is the primary goal of trading business ventures. Without profit, businesses will not survive in the long run. So, measuring current and past profitability and projecting future profitability is very important (Hofstrand, 2009). Profitability means earnings from all the business activities of an organization, company, firm, or an enterprise. It shows how efficiently the management can earn by using all the resources available in the market. Profitability is the ability of a given investment to earn a return from its use (Harward & Upton 1961). Sometimes, the terms 'Profit' and 'Profitability' are used interchangeably and this also applies in this research.

There are two approaches to the concept of profit "Accounting" and "Economic". Accounting profit is based on the matching principle which holds that income and expenditure should be matched so far as their relationship can be established or justifiably assumed to be different. Put differently, profit is the difference between the revenue and expenses and expired costs of a particular period (Okwoli, 1998). Accounting profit uses realized or actual gains and losses and is calculated according to generally accepted accounting principles. It is a company's total income reduced by the explicit costs of producing goods or services. These explicit costs involve direct monetary movement and include expenses such as the cost of raw materials, employee wages, transportation, rent and interest on capital. Usually, accounting profit is limited to time, such as a fiscal quarter or year. Accounting profit computations are primarily used for income tax purposes, financial statement preparations and to review financial performance. There are also two forms of accounting profit- gross profit or margin and net profit or margin (Okwoli, 1998).

Gross profit margin and net profit margin are two separate profitability ratios used to assess a company's financial stability and overall health. Profit margin is a percentage measurement of profit that expresses the amount a company earns per dollar/naira of sales. For instance, if a company makes more money per sale, it has a higher profit margin. The gross profit margin shows total revenue minus the cost of goods (the amount it cost the company to produce the goods or services that it sold, commonly referred to as the cost of goods sold, or COGS). This is calculated as: $\text{Gross profit margin} = (\text{revenue} - \text{cost of goods sold}) / \text{revenue}$ (Horton, 2015). The net profit margin is a more accurate measure of

a company's profitability, as it reveals the percentage of revenue that reflects a company's profit per dollar/naira of sales. Net profit is important, since increases in revenue do not necessarily translate into increased profitability. Net profit is the gross profit (revenue minus cost of goods) minus operating expenses and all other expenses, such as taxes and interest paid on debt. The formula for net profit margin is as follows:

Net profit margin = (revenue - cost of goods - operating expenses - other expenses - interest - taxes) / revenue (Peavler, 2016). Profit can help a company gain a much clearer picture of its overall expenses compared to revenue. It is often much easier for a company to increase its profitability by reducing costs than by increased sales, especially if the company operates in a very competitive market.

The economist has a contrary view of the concept of profit from the accountant. The economist approach is based on Hick's classical view on income which he explains that a man's income is the maximum value which he can consume during a week and still expects to be as well-off at the end of the week as he was at the beginning (Hicks,1946). Therefore, an economic profit is the difference between the revenue received from the sale of an output and the opportunity cost of the input used (Horton, 2015). Economic profit is determined by economic principles, not GAAP. Just like accounting profit, costs are deducted from revenues. Economic profit uses implicit costs, not just explicit costs. Implicit costs are considered opportunity costs and are normally the company's resources. Examples of implicit costs include company-owned buildings, equipment and self-employment resources. Economic profit computations are not normally limited to time like accounting profit. Economic profit is used more to judge value of the company a bit like the performance metric economic value added (EVA), which indicates total production costs (Horton,2015).

The Nigerian Manufacturing Sector

In Nigeria, the subsector is responsible for about 10% of GDP annually. In terms of employment generation, manufacturing activities account for about 12% of the labour force in the formal sector of the nation's economy. (MAN 2012). Total manufacturing output in the formal sector in Nigeria was N6,845,678.59 million in 2010. It increased over the following two years, by N1,326,277.80 million or 19.37% in 2011 to reach N8,171,906.39 million and by N1,652,610.80 million or 20.22% in 2012 to reach a total of N9,824,517.19 million (MAN, 2011). In all three years (2010-2012), the formal manufacturing sector was dominated by output from the food beverages and tobacco activity, with N4,930,494.55 million or 72.02% of output contributed in 2010. Despite the activity's growth of N488,855.06 million or 9.91% in 2011 and N712,759.35 million or 13.15% in 2012, this total output share declined to 66.32% and 62.42% in 2011 and 2012 respectively (MAN 2013). The major contributor to manufacturing output was the textile, apparel and footwear activity, which at N792,693.12 million in 2010, represented 11.58% of total output. With increase of N398,019.65 million or 50.21% in 2011, the total output of N1,190,712.77 million represented 14.57% of total output. This share increased further in 2012, with value of N1,652, 840.71 million representing 16.82% of the total, due to output

growth of N462,127.94 million or 38.81%. Other manufacturing and non-metallic products were the third and fourth greatest contributors to manufacturing output, representing N392,317.00 million or 11.58% of the total and N187,709.52 million or 5.73% of the total in 2010.

The level of growth in the manufacturing sector in the country has been affected negatively by high interest on lending rate and this is responsible for the high cost of production in the country's manufacturing sector (Adebiyi,2001). Okafor (2012) further observes that the level of Nigerian manufacturing industries performance will continue to decline because of low implementation of the government budget and difficulties in assessing raw materials. Thus, changes in the manufacturing share of the GDP and capacity utilization shows that manufacturing firms that are efficient can contribute to job creation, technology promotion and as well as ensuring equitable distribution of economic opportunities and the macroeconomic stability of the country.

Theoretical Review

The study is anchored on the opportunity based theory. Major proponents of the opportunity-based theory are Peter Drucker and Howard Stevenson (Kwabena, 2011). Drucker (1985) posit that entrepreneurs do not cause change as claimed by the Schumpeterian school but exploit the opportunities that change in technology, consumer preferences and many others creates. He further maintained that, the entrepreneur always searches for change, responds to it, and exploits it as an opportunity. Drucker's opportunity construct indicates that entrepreneurs have an eye more for possibilities created by change than the problems. Stevenson (1990) is a major contributor to this theory and he extends Drucker's opportunity-based construct to include resourcefulness. This is based on research to determine the differences between entrepreneurial management and administrative management.

Empirical Review

Several studies have been carried to ascertain the effect of innovation and competitive aggressiveness on profitability. Nkosi (2011) studied corporate entrepreneurship and organizational performance in the information and communication technology industry in South Africa. The research aims at finding out the link between Corporate Entrepreneurship (CE) and organizational performance in Information and Communication Technology (ICT). The results show that there is a positive relationship between corporate entrepreneurship dimensions (innovation, pro-activeness, and entrepreneurial culture) each of which is linked to a hypothesis and company performance (measured in sales growth, market value growth, employment rate, return on investment, return on equity, return on assets, return on sales and operating profit).

Linyiru (2015) studied the Influence of corporate entrepreneurship on the performance of state corporations in Kenya. The aim of the study is to establish the influence of corporate entrepreneurship on performance of state corporations. The study is guided by specific objectives which include: to establish the effect of proactiveness on performance of state

corporations, to determine the influence of on performance of state corporations, to evaluate the effect of innovativeness on performance of state corporations, to establish the influence of competitive aggressiveness on performance of state corporations, and to determine the effect of organization factors on the performance of state corporations. The study findings indicated that there is improved firm performance which is linked to corporate entrepreneurship. Results show that companies initiate actions to which competitors responded to, the firms tendency to be ahead of other competitors in introducing novel ideas or products and the companies strived in identifying new markets to sell products. Results, also indicated that innovativeness, competitive aggressiveness and organizational factors were key determinants of firm performance for commercial state corporations in Kenya.

Karacaoglu, Bayrakdaroglu and San (2013) studied the impact of corporate entrepreneurship on firms' financial performance; evidence from Istanbul stock exchange firms. The study aims to show the interaction between financial performance and CE, which the authors identified as whole activities of new product, process, market, technology, strategy and improving management techniques. The research findings indicate dimensions of corporate entrepreneurship such as innovation, and proactiveness has positive relation and interaction with performance of the firms, while autonomy and competitive aggressiveness did not show any relation with financial performances of the firms.

Kolakovic, Sisek and Milovanovic (2008) investigated the influence of corporate entrepreneurship on the performance of Croatian large companies. The study defined CE, explore its characteristics and to contribute to understanding of the relationship between corporate entrepreneurship and company's performance measured by value-added. Findings of the study indicated that pro-activeness has negative relationship. On the other hand, innovativeness shows positive values, which means firms are trying to be innovative and so it can be said that only innovativeness, as a dimension of CE, influences the performance of Croatian large companies.

The review of literature in this area shows that research areas have focused more on developed economies while developing economies like Nigeria have been neglected. More appalling is the fact the no study in this area has investigated the manufacturing sector in Nigeria which of course gives more credence to this study.

Methodology

Research Design

This study adopted the causal/quantitative research design. The causal research design is appropriate to find the impact of variables. Jeremy (2006) opines that causal design is useful to studies that explore the effect of independent variables on the dependent variable. This research explores the effects of corporate entrepreneurship dimensions (innovation and proactiveness) on profitability.

The nature of the questionnaire used for this study was a five-point Likert-scale, ranging from “strongly agree” to “strongly disagree” (5 = 'Strongly Agree', 4 = 'Agree', 3 = 'Undecided', 2 = 'Disagree' and 1 = 'Strongly Disagree') to reflect the agreement of the respondents on the issues raised. The population for this study is made up of 109 manufacturing companies which are further classified into agricultural sector, construction sector, electronic sector, chemical sector, energy sector, textile sector, food and beverage sector, plastic sector, transport and telecommunication sector. A total of 109 questionnaires was administered i.e. two copies of questionnaire were given to each firm. Only a total of 104 were returned giving a response rate of 95.4%. The data for this study were subjected to data cleaning tests and certified for the final analysis.

Method of Analysis

Structural Equation Modeling (SEM) method of analysis was applied. Cohen, West and Aiken (2003), stated that SEM is a multivariate analysis, and is used to determine the relationship among variables. The SEM is an extension of the general linear model (GLM) that enables a researcher to test a set of regression equations simultaneously. SEM is of two methods; Variance Based Structural Equation Modelling (VB-SEM) and the Covariance Based Structural Equation Modelling (CB-SEM) (Esposito, 2009). While the VB-SEM is known as Partial Least Square Structural Equation Modelling (PLS-SEM) requires small sample size and little or no fitness tests. There are four critical issues relevant to the application of PLS-SEM.

- (1) The data: PLS-SEM works efficiently with small sample sizes,
- (2) Model properties: and complex models and makes practically no assumptions about the underlying data (in terms of data distribution)
- (3) The PLS-SEM algorithm: can easily handle reflective and formative measurement models
- (4) Model evaluation issues: PLS-SEM as well as single-item construct, is a tool with no identification problems. It can therefore, be applied in a wide range of research situations.

Model Fit

To ensure that the final estimated result from the PLS is true, it is important to determine the fitness of the model. The fitness of the model can be assessed in the following ways; testing for collinearity of the structural model, assessing the significance and relevance of the structural model relationships, the level of the R^2 values, and the f^2 effect size (Tenenhaus, Vinzi, Chatelin & Lauro 2005).

Model Assessment

The assessment of the constructs involves determining indicator reliability, internal consistency reliability, convergent validity and discriminant validity, as described by Hair et al. (2011), Hair, Sarstedt, et al. (2012) and Henseler, Ringle, and Sinkovics (2009).

Table 1: Convergent Validity

	INN	PRA	PRO
INN1	0.792		
INN2	0.809		
INN3	0.775		
INN4	0.782		
INN5	0.826		
INN6	0.769		
INN7	0.775		
PRA1		0.771	
PRA2		0.880	
PRA3		0.862	
PRA4		0.761	
PRA5		0.752	
PRO3			1.000

The result in table 1 shows the convergent validity for the constructs under study. The results thus demonstrated a high level of convergent validity of the latent construct and used in the model. An AVE value of at least 0.5 indicates sufficient convergent validity, meaning that a latent variable can explain at least half of the variance of its indicators on average.

Table 2: Discriminant Validity

	INN	PRA	PRO
INN	(0.790)		
PRA	0.683	(0.807)	
PRO	-0.285	-0.234	(1.000)

Table 3: Reliability Test Result

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
INN	0.900	0.921	0.624
PRA	0.866	0.903	0.651
PRO	1.000	1.000	1.000

Table 3 shows the result of the reliability test. Recommendation by Hinton, Brownlow, McMurray, & Cozens (2004) stated that an “Alpha score above 0.75 is generally taken to have high reliability, 0.5-0.75 indicate a moderate reliable instrument, and a value below indicates low reliability”. This indicates a reliable instrument. The result indicated that all the variables are reliable and are certified for further analysis.

Confirmatory Factor Analysis

This study carried out several criteria for assessing model structures. This was carried out in a two-step process, (1) the assessment of the measurement model and (2) the assessment of the structural model.

1) Assessment of the measurement models

The confirmatory factor analysis (CFA) was applied to establish whether the measurement items converge to the corresponding constructs (factors). An item loading is usually thought to be high if the loading coefficient is above 0.5, and considered low if the coefficient is below 0.4 (Gefen& Straub, 2005).

Table 4: Outer VIF Values

	VIF
INN1	2.098
INN2	2.203
INN3	2.027
INN4	1.905
INN5	2.384
INN6	1.961
INN7	1.851
PRA1	2.007
PRA2	2.781
PRA3	2.378
PRA4	1.838
PRA5	1.758
PRO3	1.000

Table 4 also presents the VIF diagnostic and estimated PLS weights for the indicators of all the items from the questionnaire. A common rule of thumb is that problematic multicollinearity may exist when the variance inflation factor (VIF) coefficient is higher than 4.0 (some use the more lenient cutoff of 5.0). None of the original indicators had VIF greater than four, and no indicator variable was discarded due to their negative weights .

(2) The assessment of the structural model

Table 5: F-Square

	INN	PRA	PRO
INN			0.029
PRA			0.000
PRO			

The f-square effect size measure is another name for the R-square change effect. The f-square coefficient can be constructed equal to $(R^2_{\text{original}} - R^2_{\text{omitted}}) / (1 - R^2_{\text{original}})$. The denominator in this equation is "Unexplained". The f-square equation expresses how large a proportion of unexplained variance is accounted for by R^2 change (Hair et al.,

2014). Following Cohen (1988), .02 represents a “small” f^2 effect size, .15 represents a “medium” effect, and .35 represents a “high” effect size. Here, it can be said that the f-squared values for innovation (INN), and proactiveness (PRA) have small effect sizes.

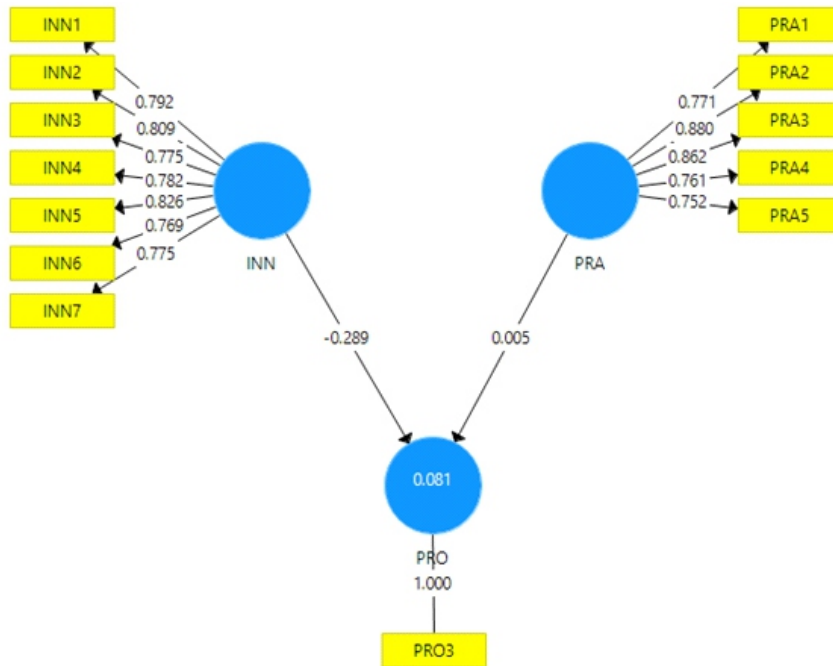


Figure 1: PLS-SEM structural model with Bootstrapping result

Test of Hypotheses

Table 6: Regression estimates of direct latent constructs

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
INN -> PRO	-0.289	-0.282	0.118	2.453	0.015
PRA -> PRO	0.005	-0.013	0.115	0.043	0.966

H_{0i} . Innovation has no significant effect on the profitability of manufacturing companies in Nigeria.

H_{1i} . Innovation has a significant effect on the profitability of manufacturing companies in Nigeria.

As shown in table 6, the standardized regression weight and T-statistic for INN to PROF are -0.289 and 2.453 respectively, suggesting that this path is statistically significant at $\alpha = 0.05$. The result demonstrates a negative support for the alternate hypothesis (H_1). This

indicates that the innovation has a negative and significant effect on profitability of selected manufacturing firms, indicating that increase in the innovation then it would negatively influence profit of the manufacturing firms. In summary, these results further suggest that Innovation was a major determinant of manufacturing firms' profitability.

Decision

Given that the p-value of 0.015 is less than the significance level of 0.05 as shown in Table 6, the null hypothesis is rejected, while the alternate hypothesis which states that innovation as a dimension of Corporate Entrepreneurship (CE) has significant effect on the profitability of manufacturing companies in Nigeria is accepted, concluding that innovation as a dimension of Corporate Entrepreneurship (CE) has a significant effect on the profitability of manufacturing companies in Nigeria.

H₀₂: Proactiveness has no significant effect on the profit of manufacturing companies in Nigeria.

H₁₂: Proactiveness has significant effect on the profit of manufacturing companies in Nigeria.

As shown in table 6, the standardized regression weight and T-test for PRA to PROF is 0.005 and 0.043, indicating that the path is statistically insignificant at $\alpha = 0.05$. The results demonstrate that there is a positive effect of proactiveness on profitability. This result implies that increase in proactiveness, it would positively influence the profit of the manufacturing firms. Thus, the result suggested that proactiveness is not a major determinant of manufacturing firms' profitability.

Decision

Given that the p-value 0.966 is greater than the significance level of 0.05 as shown in Table 6, the null hypothesis is upheld. While the alternate hypothesis, which states that proactiveness as a dimension of Corporate Entrepreneurship (CE) has no significant effect on the profitability of manufacturing companies in Nigeria, is rejected. Concluding that proactiveness as a dimension of corporate entrepreneurship has no significant effect on profitability of manufacturing companies in Nigeria.

Discussion of Findings

In this hypothesis, the null hypothesis was rejected and the alternate hypothesis which states that innovation has a significant effect on profitability of selected manufacturing firms is accepted indicating that the more manufacturing firms innovate, the more they are likely to make profit. This finding disagrees with the study of Karacaoglu, Bayrakdaroglu and San (2013). It shows that innovation has positive relation with financial performance of the firms. Also, the finding is inconsistent with, Wiklund, (1999) and Lekmat & Selvarajah (2008), which states that innovative firms have capabilities to monitor the market changes and respond quickly, thus capitalizing on emerging opportunities and noted that all factors of organizational entrepreneurship have direct effects on organizational performance and that variable such as innovation, self-

emergence and organizational support are also beneficial. Also, Hisrich, Peters and Shepherd (2008) assert that resistance against flexibility, growth, and diversification facing business organization is on how to create and manage an organizational environment, where multiple innovations can occur on a sustained basis which can be surmounted by developing a spirit of entrepreneurship within the existing organization, called corporate entrepreneurship.

Furthermore, this finding disagrees with the anchored theory of the study, which is resourced based theory as it relates to Schumpeter's characterization of an entrepreneur as an innovator and stressed the need to be innovative and creative to be successful as encapsulated in the socio-economic theory. This theory suggests that entrepreneurship is the fundamental phenomenon, the decisive factor in the process of economic development and that entrepreneurship is broadly the same as innovation. On the other hand, the finding agrees and stress that innovation has significant effect on manufacturing companies' profitability

The implication of this finding on the manufacturing sector and by extension on the economy is that operators must strive to be consistent in their innovative endeavours if they want to remain competitive and achieve profitability. Profitability will no doubt lead to expansion and growth in capacity and operation of the firms. Therefore, manufacturing companies that constantly embrace innovation, all things being equal, will remain profitable and this will in turn boosts the country's economy.

In hypothesis two, we fail to reject the null hypothesis which states that pro-activity has no significant effect on the profitability of manufacturing companies in Nigeria. We rejected the alternate hypothesis. This result is consistent with the finding of Karacaoglu, Bayrakdaroglu and San (2013) in which pro-activeness has a positive relationship with performance of the firms under study. This was also consistent with Zahra and Garvis (2000), who asserted that proactive corporate entrepreneurship, such as first entry, can improve a firm's performance. Furthermore, pro-activeness shows a firm's aggressive pursuit of market opportunities and a strong emphasis on wanting to be among the very first to implement innovation in its industry (Rauch, Wiklund, Lumpkin and Freese, 2009). Pro-activeness creates opportunity, forward-looking perspective by the introduction of new products and services ahead of the competitors and acting in anticipation of future demand.

Similarly, the finding is in support of the opportunity based entrepreneurship theory with Stevenson (1990) as one of the proponents. He agrees that entrepreneurs must be resourceful, search for change, responds to it and exploit it as an opportunity. Proactiveness is very much similar to being resourceful and as the finding suggests, there is a positive relationship between pro-activeness and profitability.

Pro-activeness shows a firm's aggressive pursuit of market opportunities and a strong emphasis on wanting to be among the very first to implement innovation in an industry.

The implication on the manufacturing sector is that the finding indicates a positive but insignificant relationship between proactiveness and profitability. It re-emphasizes the need for manufacturing companies to further enhance proactivity as a corporate entrepreneurship dimension if they must further improve on the firm's profitability. Strengthening the firm's profitability will enable the operators to embark on capacity building for greater production and enhancement of the manufacturing companies.

Conclusion and Recommendation

The main objective of this study is to examine the effects of innovation and pro-activeness on the profitability of quoted manufacturing companies in Nigeria. From the findings and discussions, the following conclusions were derived. On examining the effect of innovation on profitability, it was established that innovation has a significant effect on the profitability of selected manufacturing firms. Likewise, the study established that pro-activity has no significant effect on the profitability of manufacturing companies in Nigeria.

This implies that, most manufacturing firms in Nigeria are not first movers and they are not highly competitive and enterprising enough, and this ultimately makes the companies less productive and unprofitable. This study recommends that there is need to improve and sustain innovative activities by manufacturing firms. Manufacturing firms in Nigeria should be flexible to change through innovative ideas. This will drive profitability and every manufacturing firm should always be pro-active in every way and department. This will prompt them to be ahead of their competitors in introducing new products and services which increases firms' effectiveness and efficiency.

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