# Executive Duality and Corporate Entrepreneurial Innovation of Nigerian Listed Corporations: An Impact Assessment

by

Mansur Lubabah Kwanbo Department of Accounting, Kaduna State University, Kaduna, Nigeria E-mail: lubakwanbo@kasu.edu.ng

and

Yusha'u Ibrahim Ango Department of Business Administration, Kaduna State University, Kaduna, Nigeria



## **Executive Duality and Corporate Entrepreneurial Innovation of Nigerian Listed Corporations: An Impact Assessment**

by

Mansur Lubabah Kwanbo Department of Accounting, Kaduna State University, Kaduna, Nigeria E-mail: lubakwanbo@kasu.edu.ng

and

**Yusha'u Ibrahim Ango** Department of Business Administration, Kaduna State University, Kaduna, Nigeria

#### Abstract

Various reforms in the corporate sector has necessitated consequent changes in the pattern of governance in its industries. One of such changes is the bifurcation of executive duality, which implies the power and centrality of the lead entrepreneur has been redefined in the light of corporate entrepreneurial innovation. The objective of this paper was premise in this context, to know whether executive duality significantly relates and impacts on corporate entrepreneurial innovation. Data were collected from 215 financial statements of the corporations that made the sample for the period under review. The one-sample t-test and the Hosmer and lemeshow test was used to test the hypothesis formulated for the study. Findings revealed a significant relationship exists between executive duality and corporate entrepreneurial innovation, as well as a significant impact. The study concludes, bifurcation of executive duality is indifferent to the corporate entrepreneurial innovation process. In this wise, sustaining legitimacy through innovations that translates into huge earnings should be pursued.

Keywords: Executive Duality, Corporate Entrepreneurial Innovation

#### 1. Introduction

Extant literature has shown that, one of the most important factors in any corporation is the power and centrality of the lead entrepreneur. It is this distinguishing characteristic, effectiveness, principles and behavior of this specific person that brings to bear the control and influence of activities of the corporation at any point in time. This influence is precipitated by the energy of advancing innovation in changeable surroundings. Innovation is a series of action that combine worth and originality to the corporation's suppliers and customers through the development of new products, services and new ways of dealings in commercial activities. Amidst this series of action, the principal roles of the corporate entrepreneur are to dare bureaucracy, to determine new opportunities, to support and take advantage of corporate assets and to move the innovation process forward. However, the roles of the corporate entrepreneur were put to bear by the provision of the codes of corporate governance issued in 2003 by the Securities and Exchange Commission (SEC).

73

One of the provisions the code made imperative to comply with includes, that of executive duality. The provision requires that, the responsibilities of the head of the Board, that is the Chairman, should be clearly separated from that of the head of Management, i.e. MD/CEO, such that no one individual/related party has unfettered powers of decision making by occupying the two positions at the same time. From the forgoing, it is clear that the corporate entrepreneur has a bifurcated capacity, i.e power and centrality is divided. This implies daring bureaucracy and determining new opportunities, to support and take advantage of corporate assets and to move the innovation process forward is no longer in the power and centrality of one individual. This by implication can positively or negatively affect corporations as some studies in the united states demonstrated that non- market forces like government regulation can make or break innovation (Christensen , Anthony and Roth 2005). It is within this context that this study seeks to address the following questions; Has the bifurcation of executive duality significantly related and impacted on corporate entrepreneurial innovation of listed corporations in Nigeria?

Besides seeking to address these questions, there is an attempt by the study to contribute to bridging the existing gap on the relationship and impact of executive duality on corporate entrepreneurial innovation in Nigerian listed corporations. The remaining part of this paper is structured into five sections, section one is the introduction including this paragraph. Section two, presents the literature review highlighting; concepts, prior studies and theoretical review. Immediately after that is the methodology, presenting how the study defined and measured it variables. Afterwards, is the discussion of findings and based on the findings the paper concludes and highlights the study's implication in the last section of the paper.

#### 2. Literature Review

#### 2.1 Concepts

Corporate entrepreneurial Innovation (CEI): The need to comprehend innovation is of paramount importance to the understanding of CEI. Innovation is the response to environmental challenges or future opportunities (Hitt, Hoskisson, and Kim 1997 and Atuahene-Gima, 2001). An innovation may be determined by scientific research resulting in new technology, by individual entrepreneurship, or by a strategic decision and further development of the innovation throughout the entire company (Sundbo, 1997). Hence entrepreneurial philosophy, which stimulates change, and the provision of a supportive environment, is most likely to foster innovation which invariably needs a and therefore, the introduction and identification of a new consumer need or the purpose development of additional technology within the market place usually initiates the process (Shaw, O'loughlin, and Mcfadzean, 2005). The initiated process, is more commonly identified as the pushpall process (Tidd, Bessant, and Pavitt, (2001)). Hence, the key precipitating environmental factors for the innovation process are uncertainty, risk, and change (Amit et al, 1993 and Braganza and Ward, 2001). In the same vein, Robert, (1988) emphasizes that, new technology also impacts innovation. According to Dosi, Freeman, Nelson, Silverberg and Soete (1988) technological development is core to innovation process. For Porter, (1998) new technology has the potential to alter industry structure thereby changing the market place and hence influencing consumer needs. This implies an entrepreneur organization that is proactive when it comes to innovation earns the potential of a competitive advantage (Miller, 1983).

Furthermore, Robert, 1988; Porter, 1998; Means and Fulkner, 2000 and Dooley and O'sullivan, 2001 observes that, recognition and exploitation of the competitive significance of technological change is important, as this can also change the rules and parameters under which

organizations operate. Emphasizing further, (Shaw, O'loughlin, and Mcfadzean, 2005) argues entrepreneurial activity might not be deliberate, opportunity recognition is clearly determined by entrepreneurial alertness and intuition. More so, other prerequisites for opportunity recognition include a wide social network and prior knowledge of markets and consumer problems (Ardichvili and Cardozo, 2000). Similarly, Shane (2000) establish, while examining technology entrepreneurs exposed to an MIT invention, that major dimensions of prior knowledge were required and combined with technology knowledge to facilitate opportunity recognition. These include prior knowledge of ways to serve markets, prior knowledge of customer problems, and prior knowledge of markets. Prior knowledge of how to serve markets entails how technologies can be packaged to meet the needs of a particular market. Aldrich and Wiedenmayer (1993) showed that, the product or service lines entrepreneurs establish are related to the organizational units for which they previously worked. Buttressing this position, Shane (2000) revealed an entrepreneur who had experience in machine design would package the potentially profitable technology through a machine rather than a service.

From a different perspective there are a handful of studies that demonstrated that, specific type of knowledge and human capital had influence on opportunity recognition and venture creation, this have a way of enhancing the entrepreneurial process. Christensen and Peterson (1990) examined technology and market knowledge as prerequisites for recognizing opportunities. They presented opportunity recognition as a problem-solving process that calls on both kinds of knowledge. Their findings revealed that technology and market knowledge allows for individuals to identify both problems and potential opportunities to solve problems with technology. In the same vein Leonard & Sensiper, 1998; O'Connor & Veryzer, 2001 were emphatic on the role of specific and divergent knowledge types in recognizing and developing opportunities. Furthermore, Amabile (1999) posits that, combining market knowledge and technology knowledge is advantageous for developing new ideas, hence an individual's creativity is enhanced if his or her cognitive style facilitates the ability to link divergent knowledge types. This according to (Leonard & Sensiper, 1998; Leonard & Straus, 1997) is often referred to as creative abrasion, which is the group dynamics of different ideas coming together and undergoing constructive criticism to develop new products. This process is enhanced when individuals within the group provide different types of knowledge (Amabile, 1999; Leonard & Sensiper, 19989; O'Conner & Veryzer, 2001). The results of the innovation process, whether success, indirect or unintended consequences (O'Loughlin, 2001) or failure, should form the basis for further learning, leading to improved knowledge (McGrath, 1999; Schaffer and Paul-Chowdhury, 2002) and in some cases resulting in re-innovation (Rothwell and Gardiner, 1989). On the other hand there are a few studies like that of Marvel and Lumpkin (2007) that establish the effect of specific knowledge or human capital on innovation that is radical in nature as a product or service too far ahead of its time to gain initial sales and penetrate markets.

Corporate entrepreneurial innovation (CEI), could mean the effort of promoting innovation in an uncertain environment, innovation is the process that provides added value and novelty to the organizations and its suppliers and customers through the development of new procedures, solutions, products and services as well as new methods of commercialization (Shaw, O'loughlin, and Mcfadzean, 2005). Explaining further, they posit that, within the innovation process, the principal roles of the corporate entrepreneur are to challenge bureaucracy, to assess new opportunities, to align and exploit resources and to move the innovation process forward. The corporate entrepreneur's management of the innovation process will lead to greater benefits for the organizations. From another perspective, corporate entrepreneurialship innovation is an independent process (Cunnigham and Lischeron, 1991; Jin, 2000; Dooley and O'sullivan, 2001; Baun et al, 2001 and Chesbrough, 2003). The entrepreneurial function within this independent process lies with the executive function of management (Schumpeter, 1934 Hagedoorn, 1996).

This only implies the lead entrepreneurs resides within the policy formulation segment and implementation segment of the organization, as Kent, Sexton and Vesper, (1982) posits that entrepreneurs act is core in the innovation process. In this wise, Hekker, Suursa, Negro, Kuhlmann, and Smits, (2007) were emphatic to reveal that, there is no such thing as an innovation system without entrepreneurs. Entrepreneurs are essential for a well-functioning innovation system. The role of the entrepreneur is to turn the potential of new knowledge, networks, and markets into concrete actions to generate-and take advantage of-new business opportunities. Entrepreneurs can be either new entrants that have the vision of business opportunities in new markets, or incumbent companies who diversify their business strategy to take advantage of new developments referred to as entrepreneurship within existing organizations (Kanter, 1983; Pinchot, 1985) or group entrepreneurship within existing organizations (Stewart, 1989). From the foregoing what has been made clear from these studies is that, the CEI process needs attributes like independence, being a function of the executive management, prior knowledge, specific knowledge or human capital through a dynamic group of teamwork that is capable of yielding an edge over other organizations in the same industry, in terms of new products, better services that enhances the value of the corporation.

#### 2.2 Corporate Entrepreneurial Innovation in Nigerian listed corporations

A lot of innovation has been witnessed in the Nigerian corporations. These innovations are seen in the products and services they roll out to customers. For example, most of these corporations have been able to communicate the nature and importance of their products or services through billboards, social networks, print and mass media. For example on the service segment, decades ago, the opening of savings account requires cash deposit but nowadays it is on zero balance, i.e the customers are not required to open an account with immediate cash deposit. Also cheques can be paid into savings account not drawn. Still on services, technology has brought about easy cash withdrawals and transfers through e-banking, internet and mobile banking. On the product segment, especially in the consumer goods sector, almost all the corporations in the sector have been able to demonstrate their sense of innovative capabilities in the products they roll out to their customers. For example, house hold durables, non-alcoholic beverages and personal house hold products to mention but a few. It is important to note that, different organizations possess different levels of creativity and innovative ability (Gundry and Prather; 1994; Amabile and Mcfadzean, 1996; Hoegl, Gemuender and O'loughlin, 2001). This creative and innovative ability produces a large growth in turnover and profit for firms (Sundbo, 1995). Entrepreneurship is held to promote wealth creation through innovation (Drucker, 1985; Ireland et al., 2001), and manifests itself through the development of new markets for differentiated or improved products and new applications, value creation, growth and organizational renewal (Aldred and Unsworth, 1999; Zahra, 1991). Renewal in this regard must be able to produce or add value to the organization (Wetlaufer, 1997) if otherwise, innovation falls short of expectations (McGrath, 1999; Rogers, 1995).

#### 2.3 Prior Studies on Executive duality (ED) and Corporate Entrepreneurial Innovation

Studies conducted on executive duality and corporate entrepreneurship are few and having inconclusive findings some of these studies includes that of Daily and Dalton, 1993; Certo, Lester, Dalton, and Dalton, and Hung and Mondejer (2005) they had an objective of establishing the association between corporate governance and entrepreneurial innovation. They identified three attributes; risk taken, acceptance of changes and development of new initiatives. They found that chief executive officer and chairman duality was found to be positively related to preference for risk-taking and development of new initiatives of firms but not to the acceptance of changes in firms. However, they found share ownership of directors was related to risk-taking preference, but not to

acceptance of changes and development of new initiatives of firms. Hung and Mondejer (2005) went further to establish that, directors being executive or non-executive had no impact on entrepreneurial innovation. Similarly, Zahra, et al, (2000) studied entrepreneurship and the effects of ownership and governance structure. Their sample consisted of 231 manufacturing firms in existence for at least eight years and having assets totaling twenty five million dollars to five hundred million dollars for the period 1991 to 1993. Their findings indicate that commitment to corporate entrepreneurship is high when the board chair and the chief executive officer are different individuals.

From a different angle, there are some studies that had proved that regulations can alter the direction of innovation. For example, Christensen, Scott, and Roth (2005) demonstrated that, Non-market forces, such as government regulations, can make or break innovation. Nonmarket forces can have a major impact on innovation. Government regulation or policy can push an industry toward or away from innovation. The 1996 Telecommunications Reform Act in the United States was intended to encourage competition through deregulation. However, market uncertainties, technical challenges and the popularity of the technology false confidence led to disorder in the telecommunications market and left policy makers confused and frustrated. It is important to note here that, making innovation legal does not make it happen. However, innovations can translates into huge turnover.

#### 2.4 Theoretical Background

An attempt is made in this section to review the entrepreneurialship and innovation theory as well as the legitimacy theory in order to set the frame work in which the mathematical model of the study is deduced. The theory of entrepreneurialship and innovation simply proposes that, the health of any economy depends on the pursuit of opportunities by prospective entrepreneurs in which entrepreneurs preference to pursue the possibility of making profit is an individual difference (Schumpeter, 1934;Kirzner, 1973; and McMullen, and Shepherd, 2006). The fact that the theory is focused on individualism makes it handicapped as far as the objectives of this study is concerned. In this wise, the study uses Stolper (1994) modified Schumpeter's theory of entrepreneurialship and innovation as its framework. The theory proposes that, the role of entrepreneurial activities highlighted in the traditional theory are worthwhile in understanding the dynamics of innovation and are important features in considering the fact that, entrepreneurial activities ranges from single person economic agent to a collective entrepreneurial function in large companies. This implies, the creativity of collective entrepreneurialship function that reflect firm specific advantages that are created through innovative capabilities (Dosi and Teeci, Kogur and Zander 1993). In that context, collective entrepreneurialship is not a magic phenomenon or a deus ex machine but primarily an endogenous factor that combines the application of innovative capabilities based on tacit knowledge with well-developed internal search routines, firm specific skills and organizational learning (Hagedoorn, 1996). Innovation is a radical act which is the introduction of a new element or a new combination of old elements Schumpeter, 1934. This element produces a large growth in turnover and profit for the firm (Sundbo, 1997). The corporate entrepreneur's management of the innovation process will lead to greater benefits for the organizations. This position is in line with the organizational legitimacy theory. Legitimacy is important to organizations because of the access it provides to key resources (Parsons, 1960; Pfeffer & Salancik, 1978).

Suchman (1995) sees organizational legitimacy as the generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions. Stakeholders are more likely to associate with groups deemed proper and appropriate and to support organizations that embody prevailing social norms and values (Certo, Lester, Dalton, and Dalton, 2005). Legitimate organizations are viewed as inherently more trustworthy (Suchman, 1995); this trust can, in turn, be leveraged to facilitate

77

increased access to resources (Pfeffer & Salancik, 1978). In contrast, even the threat of loss of legitimacy can disrupt the flow of necessary resources into the firm. As noted by Suchman (1995), the negative effects of firm failure are felt even more acutely when legitimacy is at stake. External constituents are likely to distance themselves from organizations suffering legitimacy losses to avoid the risk of negative contagion taking with them the financial, social, and intellectual capital that the damaged firm needs to recover and survive (Suchman, 1995; Deephouse and Carter (2005). Organizations that deviate from normal behaviour violate cultural or legal expectations and theories of organizing. They are subject to legitimacy challenges and may be deemed unacceptable by stakeholders. It is important to note here that, the reforms in the Nigerian corporate sector is a pointer to this position. The bifurcation of the responsibilities of the head of the Board, that is, the Chairman clearly separated from the head of Management, i.e. MD/CEO, such that no one individual/related party has unfettered powers of decision making by occupying the two positions at the same time. This is deemed a corrective measure promoting a normal behavior, in order not to violate cultural or legal expectations so as to be acceptable to a coalition of stakeholders. Furthermore, legitimacy serves as a medium for enhancing corporate entrepreneurial innovations. From the explanation so far, bifurcation of executive duality is expected to go in the same direction with the corporate entrepreneur's management of the innovation process that will lead to greater benefits for the organizations. This is the stem of the hypothesis of the study.

#### 3. Methodology

Methodologies for investigating innovation are based both on information directly provided by firms themselves and on various other sources, such as assessment by experts or historical literature (Kleinknecht, 1993; Pavitt., Robson, Townsend, 1987). Some researchers are concerned about the fact that innovation is often measured on the basis of perceptual, self-reported data (Hoffman et al., 1998), even if multi-item scales are often used in questionnaires in order to have a higher reliability. In any case, the problem of ambiguity is difficult to eliminate even though the wordings of interviews and questionnaires are commonly adapted in order to be easily understandable by different interviewees. Also face-to-face interviews are adopted to facilitate item interpretation. Rather than indicating the futility of self-reporting surveys, however, the conflicting results may be a function of conceptual, operational and measurement issues (Stewart and Roth, 2001). Furthermore, it is worth noting that self-reporting surveys have been the most commonly used methods for testing innovation issues (Sonfield, Lussier,, Corman, McKinney, 2001). While some authors report a strong correlation between perceptual and objective measures of innovation (Kahn and Manopichetwattana, 1989; Jennings and Young, 1990), others underline the possibility of over assessment of innovation activities when the interviewees are describing their own results (Flor and Oltra, 2004; Coombs and Tomlinson, 1998). Also in statistical and quantitative research, the difficulty of quantifying innovation performance remains a major hurdle (Romijn and Albaladejo, 2002).

It is clear from the foregoing that, primary sources of data are the tools used to collect the data used in measuring or investigating innovation. Furthermore, reliability of data have always been questioned. However, this study relies on secondary sources of data extracted from the income statement and value added statements in the financial reports and accounts of the corporations that made the sample of this study. These data are the framework of the financial ratios employed as proxies for corporate entrepreneurial innovation. A handful of studies demonstrated the importance of the value added disclosure in the statement as a tool for measuring performance. For example, Sinha (1983) submits that the statement of value added provides a useful measure to help in gauging performance and activity. The figure of value added can be a pointer to the net output of the firm;

and by relating other key figures (for example, capital employed and employee costs) significant indicators of performance may be obtained. Cruns (1982) mention its occasional use in the context of the performance of British industry, in reforming company-wide profit-sharing schemes, and in facilitating financial performance analysis.

The objectives of this study is; to establish whether or not there is a relationship between bifurcation of executive duality and corporate entrepreneurial innovation. Secondly to determine whether executive duality impacts on corporate entrepreneurial innovation. To achieve these objectives, 43 corporations were studied for the period 2007-2011. The choice of this period is influenced by the fact that, it is in the era of post consolidation. The study specified two accounting ratios; Gross earnings margin (GEM) and Value added margin (VAM) as proxies for the independent variable, corporate entrepreneurial innovation (CEI). The choice of these proxies is based on the assertions that, CEI is not measurable directly but can be measured through what it achieves for an organizations, like innovative products and services brings in more customers, investors which in turn yields huge gross earnings. On the other hand value added is the wealth the reporting entity has been able to create by its own and its employees' efforts during a period (Morley, 1978; Sizer 1994; and Riahi-Belkaoui, 1999). This effort could be translated to mean the innovative capabilities of these corporations. For the dependent variable, Executive duality was identified and it was measured as a dichotomous variable. SPSS version 16 was used to aid the analysis of data collected.

#### **3.1 Population and Sample of the Study**

The population of the study is all the 218 corporations listed on the Nigerian stock exchange as at December 2012. The study adopted the following Yamane (1967) formula to determine the sample of the study.

$$\mathbf{n} = \frac{\mathbf{N}}{\mathbf{1} + \mathbf{N} (\mathbf{e})^2}$$

The choice of this sampling technique is based on the fact that, the population of the study is finite. In the formula: **n** is the sample, N(218) is the population and **e** is the level of precision or sample error. This was considered at 0.152%, as the data sought are sampled on a heterogeneous population. Arising from the above, substituting into the formula the sample is arrived at.

n	=	$\frac{218}{1+218(0.152)^2}$
n	=	$\frac{218}{219(0.023)}$
n	=	$\frac{218}{5.037} = 43$

The selection of the 43 corporations for the period of 5years, that made the sample of the study, was simply based on the availability of the financial reports and accounts for the period under review. These reports were gotten from the Nigerian stock exchange, Kaduna state branch and the website of African financials. Based on the number of corporations and period a total of 215 financial reports and accounts for the following corporations were used; Livestock feeds plc, Okomu

oil palm plc, Presco plc, Cocoa processors plc,National salt company plc, Vita foam plc, 7up bottling company, Dn meyer plc, Flour mills of Nigeria plc, United African company plc, African paints plc, Sandtex Portland paints and products plc, Chellarams plc, Nestle plc, Cadbury Nigeria Plc, Uniliver Nigeria plc, First bank of Nigeria plc, Access bank plc, Sterling bank plc, First city monument bank, Zenith bank plc, Wema bank plc, Consolidated hall mark insurance plc, Lasaco assurance plc, Niger insurance plc, Nem insurance plc, Mutual benefits assurance plc, Standard alliance insurance plc, prestige assurance plc, American international insurance company plc, Regency alliance plc, Oando Nigeria plc, Total Nigeria plc, Mrs oil Nigeria plc, Mobil oil Nigeria plc, Eterna plc, Conoil Nigeria plc, Studio press Nigeria plc, Morrison industries plc, Pharma deko plc, Evans medical plc, Fidson health care plc, and Glaxo smithkline Nigeria plc.

#### 3.2 Variable Specification

Based on the theoretical framework of this study, a hypothesis was formulated. The dependent variable proxy (executive duality) was treated as a dichotomous variable, i.e binary number 1 was assigned to the years within the period under review, were the directives in the code for executive duality bifurcation was observed, if other wise 0 was assigned.

For the independent variable; Gross Earnings margin (GEM) and Value added margin (VAM) are specified as proxies for corporate entrepreneurial innovation (CEI). GEM is calculated by dividing profit before tax by Earning or turnover, while VAM is arrived at by dividing value added arrived at with gross turnover, after deducting gross turnover from services brought in. The following mathematical model:  $ED_{\Box} = {}^{b}_{0} + {}^{b}_{1}{}^{x}_{i1} + {}^{b}_{2}{}^{x}_{i2} + {}^{b}_{GEM}{}^{x}_{iGEM} + {}^{b}_{VAM}{}^{x}_{iVAM}$  was developed to test the following null hypothesis:

**Ho**<sub>1</sub> executive duality do not significantly relate and impact on corporate entrepreneurial innovation (Gross earnings margin and value added margin) of listed corporations in Nigeria.

#### 3.3 Techniques of Data analysis

Two techniques were employed Logistic regression was used to analyze the data. This due to the fact that, the dependent variable is measured as a dichotomous variable and the technique can reveal whether a relationship exist. Secondly, the one sample t-test was also employed. The technique was chosen because it can indicate whether there is a possible impact. In order to test for the impact, the study considered using VAM, this is influenced by the fact that, value added is the wealth the corporations under study have been able to create on their own and their employees' efforts during the period under review and this effort could be translated to mean the innovative capabilities of these corporations. The study considered whether the VAM of the 43 corporations that made the sample differs from the test value of 4.00. The test value is the average rate of the VAM across the industries.

#### 4. Discussion of Findings

Hypothesis was formulated to achieve the objective of this study, which is to assess the relationship and impact of executive duality on corporate entrepreneurial innovation of listed corporations in Nigeria. Tables 1-7 presents the findings.

## Table 1 Classification Table

		Predicted			
		Executive Duality (ED)		Percentage	
	Observed	0		Correct	
Step 0	Executive Duality 0	0	5	.0	
	(ED) ED	0	38	100.0	
	Overall Percentage			88.4	

Source: Spss output listing 2013

In Table 1, the overall percentage is at 88.4% this is large indicating that the model from the perspective of the dependent variable ED is correct.

Table 2 Variables in the Equation

	В	S.E.	Wald	df	Sig.	Exp(B)
Step 0 Constant	2.028	.476	18.175	1	.000	7.600

Source: Spss output listing 2013

In Table 2 , the wald is at 18.17 with a significant level of less than 5%. This implies the parameter is useful to the model.

Table 3 Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	1.822	2	.402
	Block	1.822	2	.402
	Model	1.822	2	.402
Step 2	Step	034	1	.854
	Block	1.788	1	.181
	Model	1.788	1	.181

Source: Spss output listng 2013

In the Table 3 at step 1 the chi-square is at 1.822 with a significant value of 0.402. At step 2 the chi-square is -0.034 with a significant value of 0.854. The significant values at each step falls within the framework of data fit adequacy, since it is not less than 5%.

Table 4 Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	5.446	8	.709
2	5.534	8	.699

Source: Spss output listng 2013

In the Table 4 at step 1 and 2, the chi-square value is at 5.446 and 5.534 with a significant level of 0.709 and 0.699. This further implies that the data adequately fits the model.

 Table 5 Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	29.090	.041	.081
2	29.124	.041	.079

Source: Spss output listng 2013

In Table 5, the 2 log likelihood is at 29.09 and 29.12 for step 1 and 2 respectively.  $R^2$  for cox and snell is at 0.041 in both steps. This implies a significant relationship. For  $R^2$  Nagelkerke, it is at 0.081 for step 1 and 0.079 for step 2. This further implies the adequacy of the model, as the values are not less than 5%.

Table 6 One-Sample Statistics

	N			Std. Error Mean
Value Added Margin (VAM)	43	26.9927	18.58545	2.83425

Source: Spss output listng 2013

The Table 6 is the one sample statistics. The mean is at 26.99, the standard deviation is at 18.58 and the standard error mean is 2.83.

## Table 7 One-Sample Test

	Test V	Test Value = 4					
	Sig. (2-			95% Confidence Interv the Difference			
	Т	df		Mean Difference	Lower	Upper	
Value Added Margin (VAM)	8.112	42	.000	22.99270	17.2729	28.7125	

Source: Spss output listng 2013

The one-sample test is Table 7. This table contains the information about the impact. The t-value is 8.11 and the p-value is 0.000. Since the p-value is less than 0.05, the difference between the mean (26.99) and the test value (4.00) is statistically significant. The 95% confidence interval of the difference is 17.27 to 28.71. From the findings in Table 3 and 5, the null hypothesis formulated for this study, which states:

**Ho**<sub>1</sub> executive duality do not significantly relate and impact on corporate entrepreneurial innovation (Gross earnings margin and value added margin) of listed corporations in Nigeria, is rejected.

## 5. Conclusion

The power and centrality of the lead entrepreneur lies in the distinguishing characteristic, effectiveness, principles and behavior that brings to bear the control and influence of activities of the corporate at any point in time. Amidst this series of activities, the principal roles of the corporate entrepreneur are to dare bureaucracy, to determine new opportunities, to support and take advantage of corporate assets and to move the innovation process forward. However requirement of the corporate governance code bifurcated executive duality. This is power and centrality is divided, implying daring bureaucracy and determining new opportunities, to support and take advantage of corporate assets and to move the innovation process forward is no longer in the power and centrality of one individual. This study set out to find out whether the bifurcation of executive duality significantly related and impacted on corporate entrepreneurial innovation of listed corporations in Nigeria? findings of this study revealed that; bifurcation of executive duality significantly relates to corporate entrepreneurial innovations of listed corporations in Nigeria. This finding is in line with Zahra, et al, (2000). Secondly, there is a significant impact of bifurcated executive duality on corporate entrepreneurial innovations of listed corporations in Nigeria.

The implication of these findings is that bifurcation of executive duality is indifferent to the corporate entrepreneurial innovation process (i.e, separating the capacity of the board chair from executive management promoted the entrepreneurial innovation process of Nigerian listed corporations). But it is important to note that, this study being a multiple sector research may have prevented the recognition of specific sector effects and actual relationship and impact of executive duality on corporate entrepreneurial innovation of individual sector. This is a possible area for future research in Nigeria. Secondly, there is the need to carry out a similar research using both secondary and primary sources of data in order to achieve robust findings or results. Based on this conclusion, it is imperative to recommend that, sustaining legitimacy through innovations that translates into huge earnings should be pursued.

## References

Afuah., A. (2003). Innovation management, open university press, New York.

Aldred, C. and Unsworth, E. (1999). Lloyds history intertwined with America's. Business Insurance, 33( 52), 17-19.

Aldrich, H.E. and Wiedenmayer, G. (1993). From traits to rates: An ecological perspective on organizational founding. In J.A. Katz & R.H. Brockhaus (Eds.), Advances in entrepreneurship, firm emergence, and growth, 1, 145–195. Greenwich, CT: JAI Press.

Amiabile., T.M.C. (1996). Creativity and innovation in organizations, Harvard Business school case, Cambridge, M.A , 1-15.

Amabile, T. (1999). How to kill creativity. Harvard Business Review on breakthrough thinking, 1–59. Boston: Harvard Business School Press.

Amit, R.G., and Muller E. (1993). Challenges to theory development in entrepreneurship research. Journal of management studies, 30(5), 815-34.

Ardichvili, A., and Cardoza R.N (2000). A model of the entrepreneurial opportunity recognition process. Journal of enterprising culture, 8(2), 103-19.

Baum, J.R., Locke, E.A., and Smith, K.G (2001) A multidimensional model of venture growth. Academy of management Journal, 44(2), 292-303.

Braganza, A., and Ward, J. (2001). Implementing strategic innovation : Supporting people over the design and implementation boundary. Strategic change, 10 (2), 103-13.

Certo, S. T., Lester, R. H., Dalton, C. M., and Dalton, D. R. (2005). Top Management Team Demographics, Strategy, and Financial Performance: A Meta-Analytic Review. Journal of Management Studies.

Chesbrough, H.W. (2003). The era of open innovation. Sloan management review, 44(3), 35-41.

Christensen, C.M., Anthony, S.D and Roth, E.A (2005) Seeing What's Next. www.get abstract.org.

Christensen, P. S. & Peterson, R. (1990). Opportunity identification: Mapping the sources of new venture ideas. Paper presented at the 10th annual Babson Entrepreneurship Research Conference. Denmark: Aarhus University Institute of Management.

Coombs, R., Tomlinson, M., 1998. Patterns in UK company innovation styles: new evidence from the CBI innovation trends survey. Technological Analysis of Strategic Management 10, 295–310.

Cunningham J.B., and Lischeron, J. (1991). Defining entrepreneurship. Journal of small Business management, 29(1), 45-61.

Daily, C. M., and Dalton, D. R. (1993). Board of directors leadership: Control and performance implications. Entrepreneurship Theory and Practice, 17(3), 65-81.

Deephouse, D. L., and Carter, S. M. 2005. An examination of differences between organizational legitimacy and organizational reputation. Journal of Management Studies, (42), 329-360.

Dooley, L., and O'sullivan, D. (2001). structuring innovation: a conceptual model and implementation methodology. Enterprise and innovation management studies, 2(3), 177-94.

Dosi, G., C.Freeman, R.Nelson, G.Silverberg and L.Soete (eds.), 1988, Technical Change and Economic Theory, London.

Dosi, G., and Teece, D.J (1993) Organisational competencies and boundries of the firm. CCC working paper.

Drucker, P.F. (1985), Innovation and Entrepreneurship: Practice and Principles, Heinemann, London.

Flor, M., Oltra, M., 2004. Identification of innovating firms through technological innovation indicators: an application to the Spanish ceramic tile industry. Research Policy 33 (2), 323–336.

Grundry, L.K., Prather C.W., and Kickul, J.R. (1994). Building the creative organization. Organizational Dynamics, 22(4), 22 - 36.

Hagedoorn, J. (1996) Innovation and Entrepreneurialship: Schumpeter revisited. Indusrial and Corporate change 5(3) 883-896.

Hekkert a, M.P., Suursa, R.A.A. Negro a, S.O. Kuhlmann a,b S., Smits, R.E.H.M.(2007) Functions of innovation systems: A new approach for analyzing technological change. Technological Forecasting & Social Change 74, 413–432.

Hitt, M.A., Hoskisson, R.E., and Kim H (1997). International diversification: efforts on innovation and firm performance in product diversified firms. Academy of management journal 40(4), 767-98.

Hoegl, M., and Gemuenden, H.G (2001). Team work quality and the success of innovative projects: a theoretical concept and empirical evidence. Organization science, 12(4), 435-49.

Hoffman, K., Parejo, M., Bessant, J., Perren, L., 1998. Small firms, R&D, technology and innovation in the UK: a literature review. Technovation 18 (1), 39–55.

Hung, H., Mondejar, R (2005) Corporate directors and Entrepreneurial innovation: An empirical study. Journal of Entrepreneurship, 14(2), 117-129.

Ireland, R.D., Hitt, M.A., Camp, M. and Sexton, D.L. (2001). Integrating entrepreneurship and strategic management actions to create firm wealth. Academy of Management Executive, 15(1), 49-63.

Jennings, D.F., Young, D.M., 1990. An empirical comparison between objective and subjective measures of the product innovation domain of corporate entrepreneurship. Entrepreneurial Theory & Practice 15, 53–66.

Jin, Z. (2000) How product newness influences learning and probing and the linearity of the development process. Creativity and innovation management, 9(1), 21-45.

Kahn, A., Manopichetwattana, V., 1989. Innovative and non innovativesmall firms: types and characteristics. Journal of Management 18 (4), 791–803.

Kanter, R.M., 1983, The Change Masters, New York.

Kent, C.A., D.L- Sexton and K.H. Vesper (eds.), 1982, Encyclopedia of Entrepreneurship, Englewood Cliffs.

Kleinknecht, A., 1993. Why do we need new innovation output indicators? In: Kleinknecht, A., Bain, D. (Eds.), New Concepts in Innovation Output Measurement. St Martin's Press, NY, 42–84.

Kogur, B. and Zander, U (1993) Knowledge of the firm and the evolutionary theory of multinational Corporation. Journal of international business studies, 24, 625-645.

Leonard, D. & Sensiper, S. (1998). The role of tacit knowledge in group innovation. California Management Review, 40(3), 112.

Li, H., and Auaheve – Gima, k. (2001) product innovation strategies and the performance of new technology ventures in China. Academy of management Journal, 44(6), 1123-34.

Marvel, M.R., and Lumpkin, G.T (2007) Technology entrepreneurs' human capital and its effect on innovation radicalness. Entrepreneurship theory and practice 807-828.

Massa, S., and Testa, S (2008) Innovation and SMEs: Misaligned perspectives and goals among entrepreneurs, academics, and policy makers. Technovation, 28, 393–407.

Mcfadzean E.S., Briggs, R., Bulcock, D and Berry, N. (1996) Creativity in organizations: Peoplebased solutions. Working paper Hwp (9624), working paper series Henley management college, Henley-on-Thames.

McFadzean, E.S. (1998), Enhancing creative thinking within organizations. Management Decision, 36(5), 309-15.

McFadzean, E.S. and O'Loughlin, A. (2000). Five strategies for improving group effectiveness. Strategic Change, 9(2), 103-14.

McGrath, R.G. (1999). Falling forward: real options reasoning and entrepreneurial failure. Academy of Management Review, 24(1), 13-30.

Mcmullen, J. S., and Shepherd, D.A (2006) Entrepreneurial action and the role of uncertainty in the theory of Entrepreneur. Academy of Management review, 31(1) 132-152.

Means, G.E., and Faulkner M. (2000) Strategic innovation in the new economy. Journal of Business strategy, 21(1), 25-9.

Miller, D. (1983) The correlates of entrepreneurship in three types of firms. Management science, 29(7), 770-91.

Morley, M.F. (1978), The Value Added Statement: A review of its uses in corporate Reports. The Institute of chartered Accountants of Scotland, London.

O'Connor, G.C. & Veryzer, R.W. (2001). The nature of market visioning for technology-based radical innovation. Journal of Product Innovation Management, 18, 231–246.

O'Louglin, A.M. (2001) An investigation into the role of the facilitator and the processes that they use to support problem solving in teams. Doctoral dissertation, university, Henley-on-thames.

Parsons, T. 1960. Structure and process in modern societies. Glencoe, IL: Free Press.

Pavitt, K., Robson, M., Townsend, J., 1987. The size distribution of innovating firms in the UK: 1945–1983. Journal of Industrial Economics 35 (3), 297–316.

Pfeffer, J., and Salancik, G. R. 1978. The external control of organizations: A resource dependence perspective. New York: Harper and Row.

Pinchot, G., 1985, Intrapreneuring, New York.

Porter, M.E. (1998) Competitive Advantage: creating and sustaining superior performance, free press, New York, NY.

Robert, E.B. (1988) Managing invention and innovation. Research Technology management, 31(1), 11-29.

Rao, P.M. (2000). Value Added Reporting in Theory and Practice of Research, Deep and Deep Publications, New Delhi.

Riahi-Belkaoui, A. (1996). Performance Results in Value Added Reporting, Quorum Books, Westport.

Rogers, E.M. (1995), Diffusion of Innovation, Free Press, New York, NY.

Romijn, H., Albaladejo, M., 2002. Determinants of innovation capability in small electronics and software firms in southeast England. Research Policy 31 (7), 1053–1067.

Rothwell, R. and Gardiner, P. (1989). The strategic management of re-innovation. R&D Management, 19(2), 147-61.

Schaffer, R.H. and Paul-Chowdhury, C.M. (2002). Implementation: there's more to innovation than great ideas. Ivey Business Journal, 1-6.

Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunities. Organization Science, 11(4), 448–469.

Shaw, E., O'loughlin, A., and Mcfadzean, E (2005) Corporate entrepreneurialship and innovation part 2: a role and process based approach. European Journal of innovation management 8(4) 393-408.

Sizer, J. (1994), An Insight into Management Accounting, Pitman Publishing Ltd, London.

Sonfield, M., Lussier, R., Corman, J., McKinney, M., 2001. Gender comparison in decision making: an empirical analysis of the entrepreneurial strategy matrix. Journal of Small Business Management 39 (2), 165–173.

Stewart, A., 1989, Team Entrepreneurship, Newbury Park, CA.

Stewart, W., Roth, P., (2001). Risk propensity differences between entrepreneurs and managers. A meta analytic review. Journal of Applied Psychology 86 (1), 145–153.

Stolper, W.F (1994). Joseph Alois Schumpeter: The public life of a private man, Princeton university press. Princeton NJ.

Suchman, M. C. 1995. Managing legitimacy: Strategic and institutional approaches. Academy of Management Review, (20) 571-610.

Sundbo, J., (1997). Management of Innovation in Services . The Service Industries Journal, 17(3), pp.432-455.

Tidd, J., Bessant, J., and Paritt, K. (2001) managing innovation. Integrating Technological market and organizational change 2<sup>nd</sup> edition, John Wiley and Sons, Chichester.

Wetlaufer, S. (1997). What's stifling the creativity at Cool Burst. Harvard Business Review, 75(5), 36-51.

Yamane, T. (1967). Statistics: An introductory analysis, 2<sup>nd</sup> Edition, New York. Harper and Row.

Zahra, S. A., Neubaum, D. O., & Huse, M. (2000). Entrepreneurship in medium-size companies: Exploring the effects of ownership and governance systems. Journal of Management, 26(5), 947-976.