

**ROLE OF ENTREPRENEURIAL ORIENTATION ON  
PERFORMANCE OF FIRMS IN THE NIGERIAN STOCK  
EXCHANGE**

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**Role of entrepreneurial orientation on performance of firms in the  
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## DECLARATION

This research thesis is my original work and has not been presented for a degree in any other University.

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This PhD research thesis has been submitted for examination with our approval as University Supervisors.

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**J K U A T, Kenya**

## **DEDICATION**

This thesis is dedicated, first and foremost, to the Almighty God for His grace and mercies upon my life, my wife, Stella, and children, particularly, my daughter, Abiola who have been upholding our home and the work of Christ while I am away. God bless you all.

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## **ABBREVIATIONS AND ACRONYMS**

<b>E.O.:</b>	Entrepreneurial Orientation.
<b>S.O.:</b>	Strategic Orientation.
<b>S.L.:</b>	Strategic Levers.
<b>E.M.:</b>	Enterprise Management.
<b>S.A.P.:</b>	Structural Adjustment Program.
<b>N.D.E.:</b>	National Directorate of Employment.
<b>N.O.A.S.:</b>	National Open Apprenticeship Scheme.
<b>S.M.E.D.A.:</b>	Small and Medium Enterprises Development Association of Nigeria.
<b>C.E.D.:</b>	Centre for Entrepreneurship Development.
<b>N.S.E.:</b>	Nigerian Stock Exchange.
<b>L.S.E.:</b>	Lagos Stock Exchange (changed to NSE since 1977).
<b>F.P.:</b>	Firm Performance.
<b>T.Q.M.:</b>	Total Quality Management.
<b>R.O.A.:</b>	Returns on Assets.
<b>R.O.E.:</b>	Returns on Equity.
<b>S.P.S.S.:</b>	Statistical Package for Social Sciences.
<b>A.G.M.:</b>	Annual General Meeting.
<b>I.C.T.:</b>	Information Communication Technology.

## DEFINITION OF TERMS

**Entrepreneurial Orientation:** A firm's product innovativeness, process innovation, technological innovation, and management proclivity or propensity for risk taking and pro-active competitive posture (Wang, 2008).

**Innovation:** A strong organizational commitment to engage in and support new ideas, novelty, experimentation and creative processes (Lumpkin and Dess, 1996).

**Risk-taking:** This is the degree to which managers are willing to take bold action by venturing into the unknown by for example borrowing heavily or committing resources to venture in an unknown environment (Rauch, et al, 2013).

**Pro-active Competitive Posture:** An opportunity seeking and forward looking perspective involving introducing new product or service ahead of other competitors, and acting in anticipation of future demand to create change and shape the environment (Lumpkin & Dess, 2001).

**Aggressiveness:** A trait in a firm that is reflected in its

propensity to face up and challenge its rivals, directly and intensely and to outperform them in the market place. This include the use of strategies such as low price products, and targeting competitors weaknesses (Lumpkin and Dess, 1996), or in outspending competitors on marketing, product or service quality sales promotion, advertising or manufacturing capacity ( Oscar, 2013).

**Firm Performance:**

This is the process of quantifying the efficiency and the effectiveness of past actions (Neely, et al 2002) or the process of evaluating how well organizations are managed and the value they deliver for customers, and other stakeholders (Moullin, 2007).

**Entrepreneurship:**

This represents a process whereby an individual or group of individuals, in association with existing organization, instigate renewal or innovation for the purpose of revenue growth or profitability (Zahra and Covin, 1996).

**Nigerian Stock Exchange (NSE):**

The leader in the capital market segment of the Nigerian financial system.

**Listed Firms:**

Companies quoted on NSE. NSE is a source for long term funding for its members.

**Role:**

A prescribed or expected behavior associated with a particular position or status in a group or organization ( Oxford English Dictionary)

## **ABSTRACT**

This study examines the role of Entrepreneurial Orientation in performance of firms on the Nigerian Stock Exchange. This study was based on positivism philosophy whereby the research design approach will be exploratory combine both qualitative and quantitative research designs, techniques and measures. This approach provides the basis for navigating the empirical, construct, and the reality approaches. The target population was 176 firms listed in Nigerian Stock Exchange with financial returns as at August, 2014. Out of the population, a sample of 60 firms were selected. Secondary data collection instruments were applied on the sampled firms. Tools used in the analysis included frequency tables, mean, standard deviation and correlation coefficient. SPSS Version 20 was also used in the analysis of the data. The study took critical interest in the contents of a number of studies which concluded that among Nigerian managers, aversion to risk-taking, lack of innovation and pro-activeness, which are critical factors for growth of SMEs, were found to be high in 2007. Other methods of statistical analyses were Pooled, Random and Fixed regression models based on the preferences suggested by the Hausman specification test results. The results of panel analysis of the relationship between Entrepreneurial Orientation dimensions – Innovation, Risk-taking, Pro-active Posture and Aggressiveness; and performance of firms listed in the Nigerian Stock Exchange, with Returns on Assets and Returns on Equity as proxy, showed a negative relationship between Innovation and Returns on Equity

and Innovation and Returns on Equity. It also revealed a negative relationship between Risk-taking and Returns on Assets, but a positive relationship between Risk-taking and Returns on Equity. Other dimensions of entrepreneurial orientation such as pro-active posture and aggressiveness had positive relationships with Returns on Assets and Returns on Equity. This results, confirmed a study conducted in 2007 in Nigeria on 88 SMEs earlier mentioned; however, two dimensions of Entrepreneurial Orientation – Proactive posture and Aggressiveness have been widely adopted having positive relationship with Returns on Assets and Returns on Equity. But, contrary to the outcome of a study carried out among Kenya's manufacturing firms operating under the EAC in 2012, which showed that there existed a positive relationship between entrepreneurial orientation adoption and firm performance, only two of the entrepreneurial orientation dimensions exhibited similar characteristics in Nigeria; while Innovation and Risk-taking had negative relationships with both Returns on Assets, and Returns on Equity. The implication of this study results is that, in Nigeria, though entrepreneurial orientation has been widely adopted and practiced, innovation and risk-taking are yet to have positive relationship with Returns on Assets and Returns on Equity. This may be due to the fact that Innovation and Risk-taking may be at infancy stage and cosmetic as revealed in previous studies or the firms were operating, essentially, in a seller's market or both.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

In a dynamic, fast-changing, and intense worldwide competitive environment of today, the importance of entrepreneurial orientation (EO) is manifest in its rapid diffusion throughout the strategy literature (Corbo, 2012; Carton, 2004; & Rauch *et al*, 2009, Soininem, *et al*, 2013). Different strategic orientation of businesses such as market, customer, learning, technology and EOs have gained considerable attention from both management and management scholars (Hakala, 2011). Entrepreneurial orientation has been noted as a key ingredient for organizational success and has been found to lead to higher performance (Wiklund & Shepherd, 2005, Soininem, 2013). It is further argued that firms that possess higher levels of entrepreneurial orientation will perform better than those with lower levels of entrepreneurial orientation (Rauch, 2009, & Dada, 2012). Higher levels of entrepreneurial orientation allows firms to have the ability to identify and seize opportunities in a way that differentiates them from non-entrepreneurial firms (Covin, Slevin & Shephard, 2006; Soininem, 2013).

Entrepreneurial orientation represents strategy making processes that provide organizations with a basis for entrepreneurial decisions and actions (Rauch & Wiklund, 2009). It encompasses specific organizational-level behavior to perform risk-taking, self-directed activities, engage in innovation and react proactively and aggressively to out-perform the competitors in the marketplace and hence enhance firm performance (Lumpkin & Dess, 1996; Hakala, 2011). According to Gathenya (2012), the practice of entrepreneurship focuses on the exploitation of opportunity through creativity and innovation to maximize on potential profits and growth. The academic interest in entrepreneurship has virtually exploded in recent years, especially in developing economies of the

world including Nigeria. For example, (Rauch, 2014; Covin, Green, 2006) averred that the number of studies on EO and performance increased more than five-fold in the past decade compared to the previous one. At the same time, the field is struggling with establishing a common body of knowledge. Does the concept represents a promising area for building such a body of knowledge? Controversies and conflicting results on how it relates to performance and the dimensionality of the construct hampers further development. Moreover, moderators have not yet been sufficiently emphasized in literature. This situation-controversy, different results, lack of research on moderators, conceptual imprecision, and a substantial number of empirical studies suggest that meta- analysis is a promising way forward and a natural next step (Soininen, 2013).

In a study carried out on Malaysia public enterprises by Sumon, *et al* (2010), the researchers agreed with Wiklund (1999) who stated that Scholars and practitioners often associate the entrepreneurial orientation (EO) of a firm with private owned business entities. Within the context of organizational entrepreneurship, research shows that EO of a firm has a significant relationship with its performance (Wiklund, 1999). EO is the demonstration of a firm's innovativeness, proactiveness and risk-taking (Covin & Slevin, 1989; Miller, 1983). On the other hand, the overall performance of public enterprises in Malaysia continues to be a major concern. Perhaps, the under performance of these enterprises is due to low degree of their entrepreneurial orientation. Innovativeness portrays organizational willingness and a tendency to achieve the desired innovation demonstrated in terms of behaviours, strategies, activities and processes. As a consequence, innovativeness usually result in new products and services or changes in service and product lines, developing new R&D processes, new methods of production, developing new systems/applications or introducing, as well as implementing, new procedures. Accordingly, the impact of organizational innovativeness on its performance depends on the degree of innovation that is being pursued. It has been argued that more substantial and radical types of innovation tend to have a significant impact on

organizational overall performance, while incremental innovation seems to have a low and short term impacts because such innovation usually concentrate on minor or process improvement initiatives or activities. Given this, when there is a major disruption occurs, organizations concentrating too much on incremental innovation initiatives may find themselves less competitive and lack of sustainability

In a study in South Africa, (Kroop, *et al* 2006) discovered that international entrepreneurial business venture performance is positively related to the innovative component of EO. And, exploring the entrepreneurial underpinning of low export involvement level of manufacturing firms in Nigeria, (Kelvin & Young, 2006) discovered from the study of a 78-firm representative sample that high export entrepreneurial firm are typically more innovative in developing export, less averse to exporting risk and have more proactive motivations for export. Investigations, however, show that majority of studies carried out in Nigeria are on the areas of: exports (Kevin, & Young, (2006), Kevin (2010), entrepreneurial burnout (Shepherd *et al*, 2010) and the role of technology in firms' performance (Prodromos *et al*, 2011).

Nigeria is naturally endowed with entrepreneurship opportunities; however the realization of the full potential of these opportunities has been dampened by the adoption of inappropriate industrialization policies at different times. Though several policy interventions that were aimed at stimulating entrepreneurship development via small and medium scale enterprises (SMEs) promotion have failed to achieve the desired goals, as it has produced indigenous entrepreneurs who are basically distribution agents of imported products, as opposed to the desired objective of building in-country entrepreneurial capacity for manufacturing, mechanized agriculture, improved outputs and experts needed for rapid industrialization. EO as the process, practice, and decision-making activity that leads to new entry. Scholars have delineated five dimensions of EO including innovativeness, risk taking, pro-activeness, competitive aggressiveness and autonomy, which underlie nearly all entrepreneurial processes. Innovativeness is

an organization's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, process or service (Mehrddad, *et al*, 2011).

Recent developments in the previously less-explored areas of telecom, transport, hospitality, entertainment and food processing has a high probability of success, hence, the need for a concerted effort by government and an organized private sector and well motivated entrepreneurs to create the enabling environment to support the exploration of opportunities in these areas (Ebiringa, 2012). However, available evidence shows that Nigerians are not lacking in EO traits. The Igbos in the East, commonly likened to the Kikuyus of Kenya, the Ijebus and the Ijesas of the South Western Nigeria have exhibited certain entrepreneurial traits over the years. For example, the Ijesas are regarded as the 'Osomaalos' of Nigeria (Aluko, 1993, Namusonge, 1998). The appellation was initially a term of abuse to characterize the aggressive Ijesha textile traders. The word 'Osomaalo' is tied to the process of debt collection by the traders. It simply means 'I will not sit down until i have collected my money' demonstrating or showing an inflexible determination to succeed in the face of all odds. It can also be interpreted as 'I will not allow bad debts to cripple my business'. So, undoubtedly, this posture constitutes a form of aggressiveness and pro-activeness, which are two of the dimensions of EO.

Quoting Miller (1983), Campos et al, 2013 agreed that there are three dimensions of EO that have been used consistently in the literature: innovativeness, risk- taking and pro-activeness. Innovativeness indicates the firms tendency to support new ideas and foster creative processes that aim to develop new products and services. Risk taking is the firm tendency to support projects in which profits are uncertain. Pro-activeness means taking initiative and pursuing new business opportunities in emerging markets. Lumpkin & Dess (1996) distinguish two new variables, competitive aggressiveness and autonomy. Competitive aggressiveness refers to taking more initiative towards customers, so that competition leads to the challenges encountered in seeking a new

market or to improve their competitive position. Autonomy is the degree to which organizational actors (people and equipment) remain free to act independently, make decisions and pursue opportunities. The behavior of a business can be classified along a continuum from highly conservative to highly entrepreneurial and the firm position in this continuum describes its EO (Lumpkin & Dess, 1996). The relationship between EO and performance has shown that companies that adopt an EO perform better than firms that adopt a conservative orientation (Rauch *et al.*, 2009). EO studies differ using the combined five variables mentioned previously, but the majority still focus on the three original variables. Today, there are many studies that develop the aspects that determine the EO and its implications for the firm performance. The vast majority of researchers study the EO on firm performance effects. In the case of small companies, this relationship has been studied directly (Wiklund & Shepherd, 2005; Tan *et al.*, 2008; XIE & LI, 2011), in combination with other variables, Parida *et al.*, 2010), under different environments and strategies. Several policy interventions of the Federal government of Nigeria that were aimed at stimulating entrepreneurship development through SMEs development have failed. Instead of building in-country entrepreneurial capacity, entrepreneurs in the country have become distributors of manufactured products and agents of multi-national corporations. In view of this development, government and the organized private sector need to increase their support for entrepreneurial and vocational training programs. Relevant government institutions like the Standard Organization of Nigeria (SON) and the Raw Material Development Council of Nigeria need to provide assistance to entrepreneurs regarding product quality and sales of such products within the country. Basic infrastructure, easy business registration processes, tax holidays, highly secured business environment should be provided by the government to encourage the growth and expansion of entrepreneurial ventures in Nigeria.

The role of government in entrepreneurship development in Nigeria became significant only after the Nigeria civil war (1967-1970). Since the mid 1980s there has been an increased commitment of government to entrepreneurship development especially after the introduction of the Structural Adjustment

Program (SAP) in 1986. Added to this is the establishment of the National Directorate of Employment (NDE), National Open Apprenticeship Scheme (NOAS) and the Small and Medium Enterprise Development Association of Nigeria (SMEDAN). Fundamentally, the Nigerian government promotes entrepreneurial culture through initiatives that build business confidence, positive attitude, pride in success, support and encouragement of new ideas, social responsibility, providing technological supports, encouraging inter-firm linkages and promotion of research and development. In the early 2000s, entrepreneurship studies were introduced into the Nigerian educational system especially in higher institutions as a mandatory course. The Centre for Entrepreneurship Development (CED), which has the objective of teaching and encouraging students of higher institutions (especially, in science, engineering and technological (SET)) to acquire entrepreneurial, innovative, and management skills was established. The Centre's goal was to make graduates self-employed, create job opportunities for others and to generate wealth (Ebiringa, 2014). A study of 88 SMEs conducted by Adegbite & Abereijo (2007) confirms the assertion that the development of EO is at infancy stage among Nigerian corporate firms. The outcome of the study on the three entrepreneurial orientation factors shows a very great disparity from the personality traits expected of a good entrepreneur. The study concludes that aversion to risk taking, lack of innovation and pro-activeness by the respondents, which are critical factors necessary for the growth of small enterprises is very high among the respondents. Therefore, there is an urgent need to evolve a comprehensive training package for entrepreneurs in Nigeria to develop and sharpen their entrepreneurial orientation so as to enhance their competitiveness particularly in this age of globalization and market driven economy.

The Nigerian Capital market represents the arm of the Nigerian financial system that is responsible for the listing, supervision and management of business in Nigeria. It came into existence in 1960 under the nomenclature of Lagos Stock Exchange (LSE) and later came to be known as the Nigerian Stock Exchange

(NSE) in December 1977. NSE began operations in 1961 other branches that were later opened include: Kaduna (1978), Port Harcourt (1980), Kano (1989), Onitsha (February 1990), Ibadan (August 1990), Abuja (October 1999), Yola (April 2002), Benin (January 2005), Uyo (2007), Ilorin (2008), and Abeokuta (2008). The NSE continues to evolve to meet the needs of its valued customers, and to achieve the highest level of competitiveness. With about 200 companies and 258 Securities listed, the Exchange operates fair, orderly and transparent markets that bring together the best of African enterprises and the local and global investor communities. The Nigerian Stock Exchange is currently championing the acceleration of Africa's economic development and poised to become 'the Gateway to African Markets'.

## **1.2 Statement of the Problem**

Entrepreneurial Orientation (EO) is found to play a key role in enhancing firm Performance (Soininem, 2013). EO represents an articulated theoretical framework built in different variables regarding strategic posture and behavior that captures the entrepreneurial attitude of a firm and aims at explaining firm's performance, such as innovation, risk-taking, and pro-activeness,(Wang, 2008). Storey, et al (2013) discovered that culture (entrepreneurial culture) has a positive impact on entrepreneurial orientation of an entrepreneur. A study of 88 SME's conducted by Adegbite & Abereijo (2007) confirmed the assertion that the development of EO was at infancy stage among Nigerian corporate firms. The study revealed great disparity between the personality traits expected of a good entrepreneur. Factors such as aversion to risk, lack of innovation and pro-activeness which are detrimental to rapid growth of SMEs was high among the respondents.

In addition, investigations also show that majority of studies carried out in Nigeria are concentrated on areas such as exports (Kevin, & Young, (2006), Kevin (2004), market orientation (Sanjaya A , 2011), entrepreneurial burnout (Shepherd, *et al*, 2010) and the role of technology in firms performance (Prodromos, *et al*, 2011).

Business firms in Nigeria have been found to record comparatively low performances in the recent past. Available literature had attributed this development to a number of factors such as low export volume (Kevin and Young, (2006), Kevin (2009), level of technology (Prodromos, 2010) while leaving critical factors like EO out of such studies.

Moreover, Since Miller (1983) introduced the concept into business research, entrepreneurial orientation (EO), scholars agreed that has become a highly influential model of western strategy-making which bridges different areas of management; in particular entrepreneurship and strategy (Lumpkin & Dess, 1996, Sumon,*et al*, (2012). Traditional EO theory incorporates three core dimensions; risk-taking, pro-activeness and innovativeness (Covin & Slevin, 1989, Sumon, *et al*, 2012). The extent to which an organization is entrepreneurial, in the sense of taking risks and creating new products, manufacturing techniques and markets (Schumpeter, 1934), has been found to have significant and beneficial consequences for the performance of a large variety of western firms (Rauch, Wilklund, Frese & Lumpkin, 2009) and business units (Wales, Monsen & McKelvie, 2011).

Campos *et al*, (2013) argues that firms with higher Entrepreneurial Orientation (EO) perform better, however, an important message from past research efforts is that this relationship is more complex. The notion that the relationship between an EO and performance is different for many types of businesses, especially small business, is not new. There are two explanations for these inconclusive results: the performance implication of EO is context-specific and the relationship between EO and performance is moderated by internal factors. In a study of 164 small manufacturing businesses in Mexico, Campos, et al (2013) discovered that performance was positively influenced by EO, but the findings also indicate that time orientation moderates the relationship. The EO-performance link is stronger for long-term orientation than for short-term orientation. Campos *et al*, 2013 concluded their study by stating that it is necessary to continue the study of EO and its peculiarities in the small businesses context because these businesses acquire certain peculiarities that distinguish them from the large company. The internal contingent factors may be helpful to better understand the

relationship between EO and firm performance. This work was supported by the concept of dominant logic, which in the context of a small business is essential. In the same vein, through the concept of dominant logic, future research can contribute to a greater understanding in regard to decision making within a company. This in turn could generate benefits for both theory and practice.

As is well known, these are often but not always embedded within business groups, and may have a significant degree of family control ( Khanna & Yafeh, 2005, Sumon, *et al*, 2012). The analysis of the relationship between EO and the performance of firms in this context enables us to provide a point of comparison with "western" EO strategies (e.g. Miller & Le Breton Miller, 2011).

The effects of EO on company performance are not always the same in western firms and eastern emerging markets. Importantly, the different components of EO may have differential impacts on firm performance in emerging markets, making it impossible to think of EO as the integrated construct which has become stylized in the EO literature based on western contexts. Consider first risk taking; one of the three core elements of the EO concept. Greater corporate risk taking is usually associated in western firms with enhanced company performance, but in the eastern emerging market context, capital markets are weak and business environment is volatile. As a consequence, managers who adopt risky strategies are exposed to relatively greater downside risks, and may be unable to borrow to smooth cash flows. Hence risk taking may actually undermine rather than improve business performance in eastern emerging markets. Similarly, it is usually argued that managers who follow intensive innovation based strategies in western economies (the second core dimension of EO) will enhance the performance of their companies. However, in eastern emerging markets, firms can make significant market gains while still not operating as innovation

Hence, bricolage – combining existing knowledge to match specific needs and conditions – may supplement innovation as the key driver of business performance in these business contexts. Relying more heavily on pro-activeness, the third

element of EO, may more than substitute for the weaker impact of innovativeness in eastern emerging markets. When considering corporate strategies in eastern emerging market firms, one must also take into account the greater variety of ownership arrangements compared with western economies, most significantly the widespread prevalence of business groups as well as conventional independent private firms and state owned ones.

EO has become a central concept in the domain of entrepreneurship that has received a substantial amount of theoretical and empirical attention and more than 100 studies on it have been conducted, which has led to wide acceptance of the conceptual meaning and relevance of the concept (Rauch, *et al*, 2014). It refers to the strategy making processes that provide organizations with a basis for entrepreneurial decisions and actions (Soininen, 2013). Thus, the concept represents one of the areas of entrepreneurship research where a cumulative body of knowledge is developing. Consequently, this study belief that the time has come to document, review, and evaluate the cumulative knowledge on the relationship between EO and business performance, more importantly in the emerging markets of Africa, south of Sahara.

Entrepreneurial Orientation (EO) and Market Orientation (MO) are two prevalent types of Strategic Orientations (SO) (Hakala, 2011 & Chrisna, 2014). They are related constructs that capture distinct aspects of business philosophy. Relationships between them are capable of highlighting and explaining the traditional five types of Strategic Orientations, which include; prospector, analyzer, proactive defender, reactive defender, and reactor. So, in a study on changing world of Business in South Africa, Petzer (2012) stated that in the African regulatory environment, financial institutions are much more exposed to scrutiny and regulations than ever before, and this is said to inhibit the development of entrepreneurial orientation (EO) and consequently hinders that performance of corporate firms.

In recent times, firms in Nigeria have actively utilized the NSE to raise funds for business expansion. In 2007, a third- tier market was introduced by the NSE which in effect, has small and medium enterprises more opportunity to raise funds. Some real sector operators are already taking advantage of this opportunity. One of the major reforms in the NSE is the granting of SMEs the privilege of raising capital from the public domain. This development has provided a boost to the operations and capabilities of SMEs in employment generation, payment of taxes to governments and overall contribution to the nation's GDP.

In Kenya, however, Otieno (2012) discovered a high level of influence of EO among Kenya's manufacturing firms operating under EAC regional integration. EO and Strategy influence performance of manufacturing firms under EAC regional integration in terms of sales, profits and employment (Otieno, 2012). In addition, Petzer (2012) discovered that in the current African regulatory environment, financial institutions are much more exposed to scrutiny and regulations than ever before and this is said to inhibit the development of EO and consequently hinders the performance of corporate firms.

The literature review identified the gaps between EO on one hand, and listed firm's performance in Nigeria on the other hand, more so when EO is considered as key factor that may influence firms' performance. Recent research findings on EO-Performance include Okeyo (2014) on the impact of EO on Kenya's SMEs and Gathungu (2014) studies on the relevance of EO on Kenya's networking capabilities. The coverage of this research endeavor is much wider, covering four sub-sectors of the economy of Nigeria. Consequently, the findings of this study will be a reflection of current EO-Performance situation in Nigeria and would have far-reaching implications for corporate firms in Nigeria, Africa and other emerging markets. However, the focus of this study in particular, is to carry out similar to Otieno (2012) study on EO-Performance of Kenya's manufacturing firms operating under EAC- (i.e East African Community) with a view to know the relationship between EO

dimensions and firm performance in Nigeria.

### **1.3 Objectives of the Study**

#### **1.3.1 General Objective**

The general objective of this study is to investigate Entrepreneurial orientation (EO) and performance of listed firms in the Nigerian Stock Exchange (NSE).

#### **1.3.2 Specific Objectives**

The study is targeted at achieving the following specific objectives:

1. To establish the role of Innovation on Performance of firms listed in the Nigerian Stock Exchange.
2. To determine the role of Risk-taking on Performance of firms listed in the Nigerian Stock Exchange.
3. To establish the role of Pro-active competitive posture on Performance of firms listed in Nigerian Stock Exchange.
4. To establish the role of Aggressiveness on Performance of firms listed in the Nigerian Stock Exchange.

### **1.4 Research Questions**

1. What is the role of Innovation on Performance of firms listed in the Nigerian Stock Exchange?
2. What is the role of Risk-taking on Performance firms listed in the Nigerian Stock Exchange?
3. What is the role of Pro-activeness on Performance of firms listed in the Nigerian Stock Exchange?
4. What is the role of Aggressiveness on Performance of firms listed in the Nigerian Stock Exchange?

## 1.5 Hypotheses

For the purpose of this study, the following hypotheses were formulated to answer the research questions:

Ho1: There is no significant association between Innovation and performance of firms listed in Nigeria Stock Exchange.

Ho2: There is no significant association between Risk-taking and performance of firms listed in Nigerian Stock Exchange

Ho3: There is no significant association between pro-active posture and performance of firms listed in Nigerian Stock Exchange

Ho4: Aggressiveness has no significant association with performance of firms listed in Nigerian Stock Exchange.

## 1.6 Significance of the Study

According to (Norman & Nieuwenhuizen, 2009; Osoro, 2012) model of entrepreneurship development implies that for entrepreneurship to thrive within a National economy, it would take the entire society- governments, academic institutions, scholars, finance institutions, the NGOs and communities in general to carve an overall social environment that is conducive to entrepreneurship. Based on the above, the under listed are some of the potential beneficiaries of the findings of this research work.

This study will, expectedly, contribute to the entrepreneurship literature especially for those institutions that constitute the core of entrepreneurship research, such as the SMEs, researchers, corporate entities, and people in the academic world (Osoro, 2012). The study, would also make available, relevant and up to date knowledge to scholars, and researchers and thereby contribute to the body of academic knowledge in Nigeria, Africa and indeed other parts

of the world. The combination of beneficiaries - Scholars, Researchers, the academia, entrepreneurs, enterprise management, governments and even private sector policy makers provide sufficient justification for this research endeavor. At the level of business firms, this study will sensitize the enterprise managers and entrepreneurs in various sectors to understand those factors that shape entrepreneurial behavior and enhance business performance, facilitate growth and development of their enterprises. The study will also enable firms' top executive and management staff have access to appropriate tools for making enduring decisions and consequently enhance competitive postures and abilities of such firms. Another key contribution by this study is that the outcome would provide government with information that can be used as inputs for policy development that are focused on entrepreneurship and entrepreneurial orientation development.

### **1.7 Scope of the Study**

The study will cover a sample of the firms that are listed on Nigerian Stock Exchange (NSE). Firms listed on the Nigerian stock exchange (NSE) and these are in the categories of medium and large scale firms, according to NSE annual report, totaled 176 as at August, 2014. These companies are distributed across the following sectors of the economy: Financial Services (58) Manufacturing (40) Building and Construction (14) Petroleum, Gas and Allied services (9) Breweries and Soft drinks (4), ICT (4), Hospitality and Transport (5), and Others (42). However, the sample size is 60 firms made up Financial Services (29), Manufacturing (20), Building and Construction (7), and Beverages and Hospitality (4).

The study only investigated firms which are listed in the Nigerian Stock Exchange, majority of which are located in Lagos and its immediate environment. And, based on the available data, about 60% of operating firms are in this catchment area (NSE, 2014), with others spread across the other five geo-political entities of the country. It is believed, however that these results might be indicative of the major

entrepreneurial orientation prospects and challenges facing quoted firms in Nigeria and other emerging markets of the world.

### **1.8 Limitations and delimitation of the Study**

Since it is globally agreed that it is not possible, in practical research undertakings to study all variables influencing or having relationship with firm performance at once, this study was designed to generate considerable understanding on the relationship between entrepreneurial orientation and performance of firms especially those listed in the Nigerian Stock Exchange. The targeted respondents varies, cutting across four strategic sectors of the economy of Nigeria, including Financial Services, Manufacturing, Building and Construction, and Beverages and Hospitality. This coverage is by no means the most adequate representative of all sectors of the Nigerian economy. A major limitation to this study was finance which came as a result of Osun state government's inability to pay workers salaries regularly. The problems of irregular payment of workers' salaries and allowances in many state in Nigeria was due to a sharp decrease in global crude oil prices. Nigeria has operated as a mono-product economy in the last three decades or more, drawing over 70% percent of her annual income from petroleum. Again, the use of four out of five dimensions of EO in measuring firm performance may also constitute some limitations to the outcome of this study. Another limitation was the respondents' negative attitudes towards researchers. Nigerians in position are scared and quite often unwilling to divulge information even when they are assured of the confidential usage of such information.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter is an overview of the effect of Entrepreneurial Orientation on performance of listed firms on the Nigerian Stock Exchange. Areas to be discussed will include the theoretical framework, basic theories of entrepreneurship, such as Schumpeter and McClelland's theories of entrepreneurship. The dimensions of EO- innovation, risk-taking, pro-active posture, and management aggressiveness, as depicted in the conceptual framework, shall be covered. Others are firm performance, critique of literature review, research gaps and summary of the literature review.

#### **2.2 Theoretical Framework**

According to Schumpeter (1934, 1942) entrepreneurship is about combining resources in new ways such as introduction of new products with better attractions, new methods of production, discovery of a new market(s), identification of new source (s) of supply of raw materials and alteration of existing market arrangements through innovation that brings about radical changes in the market.

Relying on Miller (1983), Soininen (2013), confirmed that the three focal dimensions of EO include innovativeness, risk taking and pro-activeness. These three dimensions have been consistently used by numerous researchers and scholars such as Naldi, 2007, Osoro, (2012); Otieno, (2012), Lumpkins and Dess (1996), Soininen, (2013). They described innovativeness as including firms support for novelty, new ideas, experimentation and creative process that may result or alter product, services or technological processes. Risk taking, as

involving venturing into the unknown, heavy borrowing and/or committing large portion of a corporate assets in uncertain environments, while pro-activeness entails opportunity seeking, forward looking perspective that is characterized by introduction of new products, process, and services ahead of the competitors with a view to anticipating future needs and demands (Baird & Thomas, 1985, Lumpkin & Dess, 1996; Soininen, (2013).

The results of a study of 500 Small, Micro, and Medium size enterprises (SMME) in South Africa by Radikere (2014) strongly confirms Wiklund and Shepherd's (2005:90) finding that entrepreneurial orientation leads to higher performance and that businesses that adopt a strong entrepreneurial orientation perform better than ones that do not. The findings of this article suggest that entrepreneurial orientation (pro-activeness, innovativeness and risk taking) positively influence small business performance. Entrepreneurial orientation is not a luxury of firms in high growth industries with abundant financial capital but entrepreneurial orientation can be used to overcome environmental and resource constraints. Firms in these situations can be superior performers if they have a high entrepreneurial orientation (Wiklund & Shepherd, 2005). Entrepreneurial orientation provides the business with the ability to find or discover new opportunities that can differentiate them from other firms and create a competitive advantage. EO is substantially influenced by entrepreneurial interest and intention.

Issues relating to entrepreneurial interest and intention to start business have been handled by previous studies; prominent among which is Ajzen (1991)'s Theory of Planned Behavior. This theory is normally used to explain human behavior which consists of attitude towards behavior, subjective norm and perceived behavioral control. Attitude towards behavior means the degree to which an individual has a favorable or unfavorable evaluation of behavior, subjective norm is the perceived social pressures to perform or not to perform the behavior, and perceived behavioral control refers to the perceived ease or difficulty of performing the behavior. The theory states that intentions are the best predictors of behavior; as such

entrepreneurial intentions become the central point in understanding entrepreneurial process and eventual development of EO (Kruger, 2004; Soininen, 2013). The performance of a particular behavior also depends on other non-motivational factors such as availability of opportunities and resources like money, time, skills and cooperation of other people. This represents actual control over the behaviour. That is, the performance of behaviour is a joint function of intention and perceived behavioral control (Ajzen, 1991). Therefore, entrepreneurial intentions model is employed to investigate the moderating effect of social environment on the relationship between entrepreneurial orientation and entrepreneurial intention.

### **2.2.1 Theories on Entrepreneurship**

The following theories will be discussed; Entrepreneur Innovation theory, Theory of High Achievement/Achievement Motivation, and McClelland (1917-1998) Acquired Needs theory.

### **2.2.2 Schumpeter's Theory**

The theory of entrepreneurship innovation was propounded by Joseph Schumpeter (1949). According to him, entrepreneurs help the process of development in an economy, entrepreneurs are the people who are innovative, creative, and with foresight in a given community. Schumpeter went further and added that innovation occurs when the entrepreneur introduce a new product or a new production system, open a new market, discover a new source of raw materials or introduce a new organization in to the industry. He further stated that entrepreneurship is about combining resources in a new way such as introducing new products, new method of production, identify new source or source (s) of raw materials/inputs and setting a new standard either in the market or the industry that alters the equilibrium in the economic system. However, Schumpeter's entrepreneurs are, essentially, large scale businessmen/ women which are common in the advanced economies. The class of entrepreneurs common in developing countries are entrepreneurs who needs to imitate, rather than innovate to survive.

### **2.2.3 McClelland Theories**

The theory of high achievement motivation was propounded by McClelland. Here, he identified two characteristics of entrepreneurship, namely; (1) Doing things in a new and better way and (2) Making decisions under uncertainty. He stated further that people with high achievement motivation were likely to become entrepreneurs. That these people are not influenced by money or external incentive, but consider profit making in any venture as a measure of success or competency. Achievement motivation can be measured by the achievement motivation inventory which is a drive that is developed from emotional state. One may feel to achieve by get striving for success and avoiding failure. Another theory developed by McClelland was the theory of Acquired Needs motivation. He categorized a person's needs into three; (1) Need for Achievement- success with individuals own effort (2) Need for Power- need to dominate and influence others, and, (3) Need for Affiliation -to maintain friendly relations with others. McClelland concluded by stating that the need for achievement is essential for successful new entrepreneurship. McClelland also carried out an experiment which is popularly known as Kakinada studies. The study was conducted in an industrial town in Andhra Pradesh between January and March 1964. In that study, young adults were selected and put through three months training program at Small Industry Extension Training Institute (SIETI). The program was designed to induce achievement motivation in them.

The program subjected the trainees to control their thinking and talk to themselves positively, imagined themselves in need for challenge to succeed, set planned and achievable goals, strive to get concrete and frequent feedback and imitate their role model. The experiment revealed the following results (1) that traditional belief do not inhibit an entrepreneur or destroy entrepreneurial orientation (2) that sustainable training can supply the required motivation to an entrepreneur (3) that achievement motivation has a positive impact on performance of participants. The general conclusion was that it was the Kakinada studies that made people realize the

importance of EDP-Entrepreneurial Development Program. Other writers have defined entrepreneurship as the ability to exploit creative innovations, create and sell new ideas or build new businesses (Wood, et al, 2009). Schumpeter (2005) also opined that entrepreneurship is about combining resources in new ways, such as introducing new products, new method of production, discovery of new market, identify new sources of raw materials/inputs and setting a new standard in the market or industry that alters the market equilibrium in the economic systems.

Drucker (2005) holds innovation, resources and an entrepreneurial behavior as key to entrepreneurship. According to him, entrepreneurship involves increase in value or satisfaction to the customer from the resources, creation of new values, and combining existing material and resources in a new and productive way. Esbach (2009) claims that despite the huge interest in the subject of entrepreneurship since its inception, no single definition of entrepreneurship has been found acceptable to all. However, this is typical or common in the field of the social sciences. In addition, there are a number of shortcomings in the application of these theories to situations in developing countries. It should be noted that these theories emphasize innovation, but ignores risk- taking and organizing ability of an entrepreneur. However, Schumpeter's entrepreneurs, essentially, are large scale business men which are rarely found in developing economies.

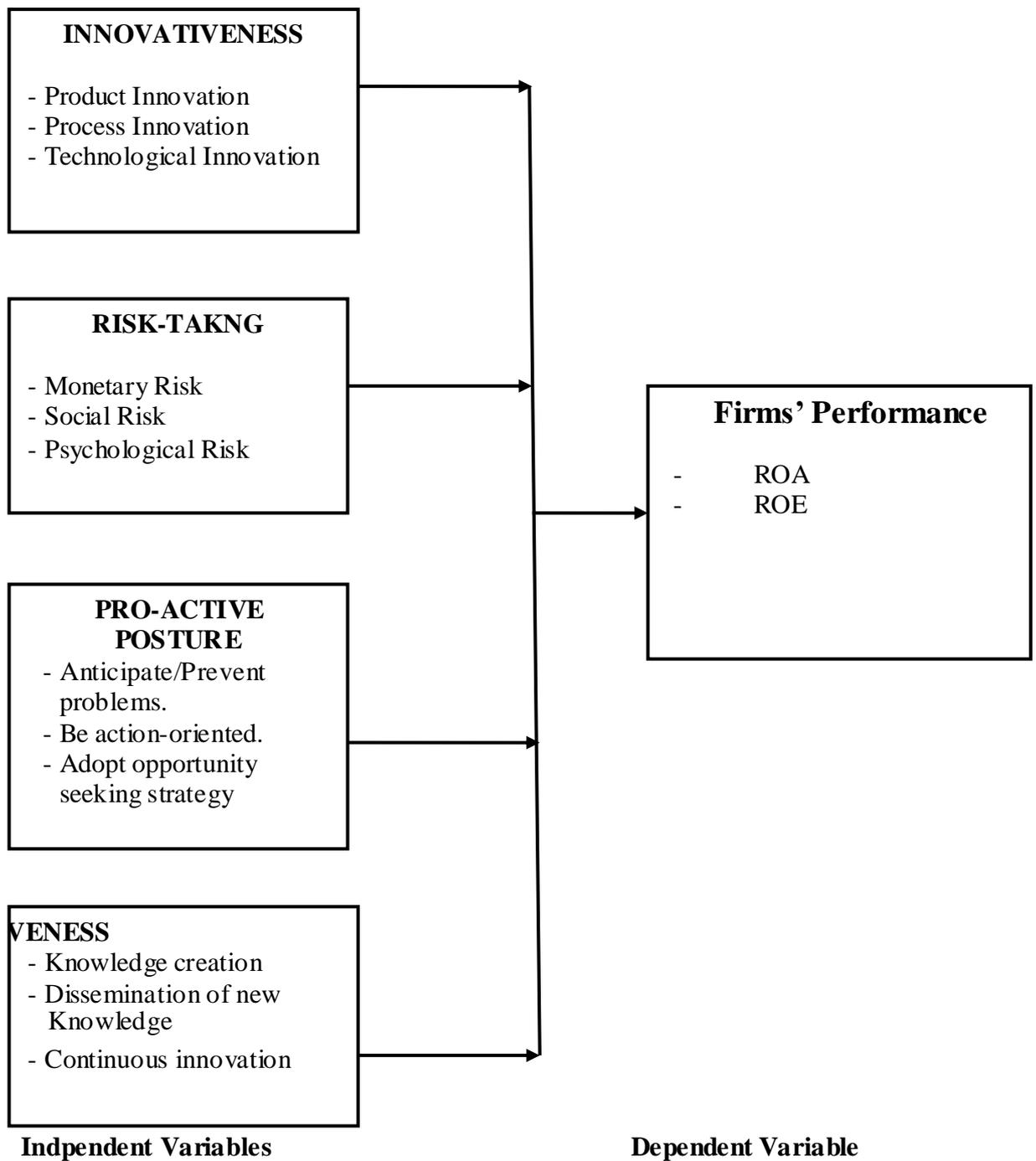
### **2.3 Conceptual Framework**

Studies have shown the relevance of entrepreneurs in guaranteeing performance and survival of corporate firms, more so when entrepreneurial orientation is brought in focus. This researcher is in agreement with Schumpeter's assertion that availability of entrepreneurs in an economy will increase the pace of economic growth and development through effective management of business ventures. The conceptual framework (Figure 2.1) below shows the relationship between the dependent variable and the independent variables. The dependent variable is firm performance and it is defined as, the variable we wish to predict or explain, according to Curtin University

of Technology (2013). It is also known as the predicted variable. Petzer (2012) discovered that African regulatory environment inhibits the adoption of EO by financial institutions in South Africa. Otieno (2012) in a study of manufacturing firms in Kenya discovered that EO adoption improved sales, profits and employment.

Umaru & Obeleagwu (2014) discovered, in a study that high performing entrepreneurial-oriented firms were those which were quick in recognizing and exploiting business opportunities. Owoseni and Adeyeye (2012) in a study of 310 SME's in Nigeria discovered that innovativeness, risk-taking and pro-activeness jointly and independently predicted organizational performance.

Isidore and Norsiah (2012) discovered, in a study of female business students in Nigerian Universities that EO (self-efficacy and education) had positive influence on their entrepreneurial intention (EI). Ashikia and Binuyo (2012) in a study of 62 firms producing house-hold goods, discovered that competitive intensity affects customer orientation-firm performance relationship in Nigeria. The issue being advanced here is that .certain internal and external forces affect the performance of business organization. Below is the conceptual framework



**Figure 2.1: The Conceptual Framework**

The independent variables also defined as the variable we use to help us predict the dependent variable is also known as the predictor variables. Parameters of the dependent variable, firm performance (FP), are returns on assets (ROA) and

returns on equity (ROE) while the parameters for EO include innovativeness, risk-taking and pro-activeness and aggressiveness. The figure further shows the relationship between the dependent variable and the independent variables. The dependent variable is Firm performance and it is defined as, the variable we wish to predict or explain, according to Curtin University of Technology (2013). It is also known as the predicted variable and it is commonly depicted as Y. The independent variables which is also defined as the variable we use to help us predict the dependent variable and also known as the predictor variables with a common symbol X Curtin University of Technology (2013) include innovativeness, risk-taking, pro-activeness and aggressiveness.

#### **2.4 Review of Study Variables**

The importance and influence of Entrepreneurial Orientation (EO) on the behavior of enterprises, their results and effectiveness, is one of fundamental areas of interest of scientists, as well as single- and multi-dimensionality of this concept (Campos, *et al*, 2013). Other constructs, such as entrepreneurial intentions, activities and opportunities seem to be derivatives of entrepreneurial orientation, without which none of these elements could appear in this area of studies (Campos, 2013). From a practical point of view, entrepreneurial orientation, entrepreneurial intentions and opportunities offered by entrepreneurship, have becomes an effective alternative to unemployment and social exclusion in the advanced and emerging markets. Over the past 30 years research on Entrepreneurship Orientation (EO) has provided valuable information regarding strategy, entrepreneurship and aspects of performance at the firm-level. In the entrepreneurial universe, micro enterprises play a very special role in the business context of the economy. However, they have not been relatively present in the EO research (Isidore & Norsiah, 2012). The variables to be reviewed in this study include Innovation which is divided into product, process and technological innovations. Risk-taking which is divided into monetary, social and psychological risks. Pro-active posture which is divided into anticipating and prevent problem, be action- oriented and adopt opportunity seeking

strategy. The last under the independent variables is aggressiveness and it is divided into knowledge creation, dissemination of new knowledge, and continuous innovation. The dependent variable- sales, profitability and gross earnings is proxied by returns on assets (ROA) and returns on equity (ROE)

#### **2.4.1 Innovation**

Quoting Drucker (1909-2005); Schillo (2011) stated that innovation is the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or a different service. It is capable of being presented as a discipline, capable of being learned, capable of being practiced. Entrepreneurs need to search purposefully for the sources of innovation, the changes and their symptoms that indicate opportunities for successful innovation. And they need to know and to apply the principles of successful innovation.

Innovative or die. Since the beginning of the recent decade when the competitive environment went through a major transformation due to globalization, business organizations have intensified their search for strategies that will give them a sustainable competitive advantage. Such strategies generally require that the firm continuously differentiates its products and process, that is, firms must constantly be innovative ( Popadiuk & Choo, 2007; Mehrdad, *et al*, 2011). In such condition, where innovation in products and process regarded as an essential prerequisite for the organizational survival and success, attention to entrepreneurship orientation and change to an entrepreneur organization attracted the much attention of academic researchers and organizational members (Wang and Ahmed, 2004, Mehrdad, *et al* 2011). Ireland and Webb (2007) confirmed that Entrepreneurial orientation is manifest in product and process innovations. Lumpkin and Dess (1996) described EO as the process, practice, and decision- making activity that leads to new entry. They delineated five dimensions of EO including innovativeness, risk taking, pro-activeness, competitive aggressiveness and autonomy, which underlie nearly all entrepreneurial processes. Innovativeness is an organization's tendency to engage in

and support new ideas, novelty, experimentation, and creative processes that may result in new products.

The organization researchers are of the view that adoption of innovation is a main vehicle for organization adaptation and change to improve firm performance especially under the conditions like scarce resources, dynamic business environment, intense competition and changing customers demand for better quality (Jansen et al, 2006; Oscar et al, 2013). Schumpeter (1934; 1942) emphasized the role of innovation in the entrepreneurial process. He stated that this was a process of “creative destruction” where wealth was created when existing market structures were disrupted by the introduction of new goods or service that shifted resources away from existing firms and caused new firms to grow. Innovativeness has become an important factor used to identify entrepreneurship. Drucker (1985); Oscar (2013) believe that innovation is the specific tool for entrepreneurs, the means by which they exploit change as an opportunity for a different business or a different service. The scholars further believe that innovation is better practiced in phases. Innovation involves the exploitation of new ideas. Oscar, et al (2013), claimed that innovation is the ability to take quick advantage of scientific or technological discoveries, commercializing them in ways that translate the new discoveries into added-value goods and services and processes for their customers/clientele.

In its original sense, innovativeness can be defined as the degree to which an individual or other entity is relatively earlier in adopting new ideas than the other members of a system (Rogers, 2003; Oscar, & Hassan, 2013). Similarly it is the tendency to support new ideas, experimentation and creative processes (Lumpkin & Dess, 1996). Oscar and Mashood Ul-Hassan (2013) also associate innovation closely with creativity; however they suggest that it must be linked to entrepreneurship if the innovation is to become a commercial opportunity to be exploited. Milling and Stumpfe (2000) classified innovations into three: product, process and technological.

According to them, product innovation involves shortening the product life cycle, expand commercial production process, generate sales and revenue and recoup development investments. This also connotes the number of implemented innovations in the product line. Firms' ability to launch new and sophisticated products in increasingly fast cycle is essential to success in the currently dynamic business environment. Process innovation entails the number of innovations implemented in the manufacturing or service process. Product and Process innovations are inter-connected and interwoven in an effort to meet certain production targets. And, according to Kim, *et al* (1992) technological innovation involves acquisition of more and flexible process equipment, in combination with more flexible organization and administrative processes that facilitates or enables frequent changes in the production line. Mahrdad, *et al*, 2011 concluded that firms with greater innovativeness will be more successful in responding to changing environment and in developing new capabilities that allow them to achieve better performance.

According to Muhammad *et al.* (2012), innovation is regarded as an engine for driving economic growth. Innovation is considered equally important for the large enterprises as well as the Small and Medium Enterprises (SMEs). Role of innovation becomes of even greater importance in the context of the business environment of developing countries such as Pakistan, where most of the SMEs do not embrace rigorous innovation and at the same time there is lack of sufficient external support to encourage innovation. It has been discussed that despite of healthy economic contribution to Pakistan's Economy, SMEs are facing a low growth trap. Innovation can come up as a potential solution specifically for Pakistani SMEs and generally for SMEs in developing countries in other parts of the world. Muhammad *et al.* (2012) stated further that entrepreneurial Orientation can inhibit or foster innovation process. Several studies, according to them have stressed upon the ties between entrepreneurial orientation and innovation arguing that entrepreneurship in itself is a pragmatic manner leading towards innovation and new venture establishment by assuming higher risks and rewards associated with

the new venture. According to the scholars, entrepreneurial orientation refers to the tendency of a firm to indulge in innovative, proactive and risk prone ventures.

In the light of literature, it can be argued with confidence that innovation is a function of entrepreneurial orientation. Similarly the literature asserts a significant relationship between Entrepreneurial Orientation and firm performance. Entrepreneurial Orientation is considered as a behavioral procedure that operates at firm level. If entrepreneurial orientation is prone to wards innovation, there is a greater likelihood that the firm would embrace and manage innovation in more effective manner as compared to those firms where entrepreneurs are less innovative and risk averse; resultantly perform better than the competitors.

Innovativeness is the most discussed EO dimension. Innovativeness, according to Lumpkin and Dess (1996) “reflects a firm’s tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes.” Innovativeness and innovation are two closely related but different concepts. As stated, innovativeness is a tendency, an individual’s or organization’s receptivity and proclivity to adopt new ideas, new thinking or solutions that lead to new opportunities (Eggers *et al.*, 2013; Lee *et al.*, 2012; van Der Lugt *et al.*, 2007). Innovation, on the other hand, is “the implementation of an internally generated or a borrowed idea – whether pertaining to a product, device, system, process, policy, program or service – that was new to the organization at the time of adoption” (Damanpour & Evan, 1984). Innovation, in the electronics manufacturing setting, can be broadly classified into organizational, technical and marketing innovations (Camison & Villar-Lopez, 2011; Damanpour & Evan, 1984; John, 1999; OECD, 2005; Tidd *et al.*, 1997; Wong, 2013).

The outcome of innovation can be an improved or radically innovative product (Song and Thieme, 2009), a revolution or minor adjustment in manufacturing or administrative process (De Luca *et al.*, 2010) or the birth of a whole range of novel products spurred by the application of a revolutionary process, for example 3D printing.

Though no similar classification has been proposed in relation to innovativeness so far, many scholars believe that the disposition to engage in product-market innovativeness is the most definitive test of an entrepreneurial firm (Hughes & Morgan, 2007; Lindgren & O'Connor, 2011). A firm which engages in product-market innovativeness encourages and supports its employees to think differently and do things differently. It is more willing and ready to provide an enabling and incentivized environment for the generation of new or significantly improved products (Wei *et al.*, 2012).

This study classified innovation into product, process, and technological innovations. Product innovation involves the introduction of goods or services that is new or significantly improved with respect to the characteristics or intended uses (OECD, 2012). This includes significant improvement in technical specifications, components and materials, incorporated software, user friendliness and other functional characteristics. Product innovation includes both new products and new uses for existing products. New products are goods and services that differ significantly (OECD of the World Bank Group, 2012). Process innovation on the other hand occurs if innovation, new or significantly improved methods, equipment or skills used to perform the service, it is both product and process innovation. Technological innovation refers to the process in which a new idea is embodied in tools, devices or procedure that are of practical value to the society. It may also be a new process of production, internal function or distribution arrangement leading to increased efficiency, better support for a given product or lower costs.

Technological innovation often involves tools and procedures, product and processes interacting in new ways. It is usually a combination of hard and soft ware. Successful new technology and innovation tend to be inspired by the practical need of individual, people or enterprises or the need of many individuals expressed in market demand or social policy (OECD, 2012). Technological innovation is commonly perceived as driving force of innovation when creating products or providing services. However, what really count in innovation are the quality, creativity involved, comprehensiveness, accuracy and aesthetics (OECD, 2012).

These reasons are often regarded as the pull factors in entrepreneurial activity

The need for achievement and autonomy, risk-taking, control of business and self-efficacy are vital characteristics for entrepreneurial intentions (Shane, 2003). Demography, skills and reputation are also important to successful entrepreneurs (Carter & Shaw, 2006; Gatewood et al; 2004). Other characteristics of entrepreneurial intentions include: strong desire for independence, innovation, risk-taking, resourcefulness, business skills, knowledge, and networks (Salman, 2009). Business knowledge includes knowledge of top players in the industry, knowledge of product range and market trends. Business skills include technical and managerial skills could be acquired through training, seminars and workshops. Experience could be acquired through formal education and business knowledge (Salman, 2009).

Innovation and decision-making ability are other characteristics (Cunha, 2007). Ambition, self-confidence and high level of energy have also been recognized as vital entrepreneurial characteristics (Idris & Mahmood, 2003). Having the right motive of venturing into business has been found to be one of the characteristics of successful entrepreneurs. The right motive should be the first determinant before entering into business (Mitchell, 2004; Porter & Nagarajan, 2005; Shane, 2003). Self-evaluation and intuition are also crucial characteristics (Shane, 2003). Some of the key drivers of entrepreneurial intention include:

In this context, education is the training that students received in entrepreneurship.

It is reported that entrepreneurs in high-income countries are better educated than those in low income countries (Ibru, 2009). Literature confirmed that skill training and tertiary education has positive relationship with entrepreneurs' performance, especially women (Akanji, 2006; Cheston & Kuhn, 2002; Kuzilwa, 2005). Many entrepreneurs in developing countries lack this especially women (Ibru, 2009), where as the exploitation of entrepreneurial opportunity depends on the entrepreneur's level of education, skills or knowledge acquired through work experience, social network and credit accessibility (Shane, 2003). It has been

suggested that classroom theoretical knowledge should be supported with practical business education through internships in small business firms (Robinson & Malach, 2004; Ying, 2008). Similarly; Lans, Hulsink, Baert and Mulder (2008) suggested that entrepreneurial competence could be acquired through proper education, training and work experience.

Work experience and training connote knowledge or skill gained in a particular job over time. It is reported that entrepreneurs in developing countries lack business experience due to lack of former paid employment especially women, whereas literature asserted that business experience is one of the vital entrepreneurial characteristics (Antoncic, 2006), and evidences support the fact that a minimum of three years business experience is sufficient to assess an entrepreneur (Antoncic, 2006; Carter & Shaw, 2006; Harrison & Mason, 2007; Kuzilwa, 2005; Salman, 2009).

Most entrepreneurs in developing countries lack training especially women (Brana, 2008; IFC, 2007) and entrepreneurial process is a vital source of developing human capital as well as plays a crucial role in providing learning opportunity for individuals to improve their skills, attitudes and abilities (Brana, 2008; Shane, 2003). Again, due to poverty and low educational levels in developing countries (Porter & Nagarajan, 2005; Roomi & Parrot, 2008); training is very necessary for entrepreneurs as it could provide the skills and experience needed for business growth and performance (Akanji, 2006; Cheston & Kuhn, 2002; Kuzilwa, 2005).

Self efficacy connotes an entrepreneur's personality in terms of his/her attitude or ability, readiness and self-confidence to face risk in entrepreneurial venture because entrepreneurship is about risk-taking (Shane, 2003). As discussed in the early part of this literature, attitude towards behavior means the degree to which an individual has a favorable or unfavorable evaluation of the behavior (Ajzen, 1991). For entrepreneurial intentions to be translated into self-employment, it depends on the entrepreneur's personality and abilities (Majumdar, 2008). Notable studies, such as Crisp and Turner (2007), found that attitude and behavioral intentions are positively related; and attitude towards behavior leads to intention which eventually leads to

actual behavior (Ajzen, 1991). Self-confidence is also related to entrepreneurial behavior. For example, self-confidence was found to have a moderating influence on the relationship between loan access, entrepreneurial opportunity and women entrepreneurs' sales performance in Nigeria (Ekpe, 2011).

Several authors, who have evaluated research being done in the entrepreneurship field, have concluded that there is no generally accepted theory due to the lack of consensus on major issues (Grégoire et al., 2006). Although the entrepreneurship field is dealing with central conceptual issues, its development has been more promising in certain areas. Such is the case of those who have studied the concept of Entrepreneurial Orientation (EO). For the past three decades after its conceptualization, EO has become a central concept in research on entrepreneurship and strategy that has received considerable attention, both theoretically and empirically (Covin, Green & Slevin, 2006).

#### **2.4.2 Risk-Taking**

The concept of risk-taking has been long associated with entrepreneurship. Early definition of entrepreneurship centered on the willingness of entrepreneurs to engage in calculated business risks. Lumpkin and Dess (1996), Oscar, *et al*, 2013 identified venturing into the unknown as a generally accepted definition for risk taking, though may be difficult to quantify. This is because, in addition to monetary risk, it typically entails psychological and social risks (Gasse, 1982; Lumpkin & Dess, 1996, Oscar, *et al*, 2013). Recent research indicates that entrepreneurs score higher on risk-taking than do non-entrepreneurs, and are generally believed to take more risks than non-entrepreneurs because the entrepreneur faces a less structured and a more uncertain set of possibilities (Bears, 1982; Oscar, 2013).

Risk taking is also perceived as tendency towards risky projects (Miller 1983, Covin & Stevin, 1988; Mario, 2013). It was expected that firms that have better performance would also have a higher level of risk propensity (Leko-Simic &

Horvat, 2006, 2013). These authors further emphasized that risk-taking propensity can be defined as a tendency to take or avoid risks and it is viewed as an individual characteristic. The positive relationship between risk-taking propensity and risk decision making by individuals is expected to translate to organizations through top management teams. Although there are many ways of conceptualizing risk, Forlani and Mullins (2000) cited in Kropp *et al*, 2005, Oscar, *et al*, 2013) described entrepreneurs perception of risk as the uncertainty and potential losses associated with outcomes which may follow from a given set of actions or behavior. Risk taking depends on risk propensity and risk perception. That is, the higher the risk propensity, the lower the anxiety over risk or risk taking. Landes (2012) identified three types of risks, namely social or market risk (i.e the risk which occurs when a market crash or decline crushes the performance of investment even when the quality of the investment remains the same). Monetary risk- usually the resultant effect of inflation as a phenomenon: Inflation reduces the value of money, that is, the purchasing power of money, making firms to expend more money in production, distribution of their products or services, and consequently impact the level of profits negatively, while psychological risk, is a risk associated with debtors' inability to fulfill or honor their repayment obligations, thereby impair the liquidity position of the firm and consequently its performance. Risk-taking also connotes a tendency to take bold steps such as venturing into unknown and new market as stated by Lumpkin & Dess, 2001, Wiklund and Shepherd, 2005. It can also be associated with willingness to commit large amount of resources to a project which the probable cost and chances of failure are high ( Keh, *et al*, 2007, Baker & Sinkula, 2009).

Firms that adopt EO are often characterized by high risk taking behavior such as taking on large debts or making large resources commitment to projects with a view to make huge returns based on available opportunities. In seizing opportunities in the marketplace, risk-taking concerns firms' tendency to take bold actions such as venturing into unknown markets, committing a substantial amount of resources to ventures with uncertain outcomes, as well as the tendency to borrow heavily hoping

to reap high returns (Dess *et al.*, 2007, Etebang, 2010). They go on to posit that managers and organizations are confronted with three types of risk, namely: Business risk-taking (i.e. venturing into the unknown without knowing the probability of success). Financial risk-taking (i.e. when a company needs to borrow heavily or commit a large portion of its resources in order to grow). Personal risk taking (i.e. the risks that an executive assumes in taking a stand in favour of a strategic course of action). Therefore, in pursuit of organizational innovation, strategic renewal and venturing efforts as part of organizations' growth strategies, organizations may follow the risk-taking path by making decisions and taking action in the context of uncertainty as well as making substantial resource commitments without knowing what the consequences of their decisions and behaviors will be. The standard view is that risk-taking is one of the three key elements of EO, and one that enhances company profitability (Miller, 1983; Miller & Le Bruton-Miller, 2011). It is associated with the willingness of managers to act in a bold and decisive manner in the face of uncertainty. However, we would argue that this plays out somewhat differently in eastern emerging markets. Deficiencies in capital markets and more generally absence of efficient institutions that reduce transactions costs (Khanna & Yafeh, 2007. Wong, 2012) mean that, while potential entrepreneurial gains can be high, the downside risks are high as well because the firm is less able to draw on external finance in case of temporary shocks to cash flow resulting from following risky strategies.

Moreover, these downside risks are relatively higher than in western market economies because of the absence of well-functioning insurance markets and associated financial products. This prevents eastern companies from hedging these risks. In addition, India, for example, despite growth in the foreign exchange and interest rate derivatives market, is by global standards it is still in its nascent stage (Gopinath, 2010). It has been confirmed in prior studies that firms which are strong in innovation are more likely to introduce new and better products ahead of their competitors and enjoy product advantage (Ledwith & O'Dwyer, 2008; Li & Calantone, 1998). However, this advantage does not stem simply from meticulously

planned innovation; the boldness of the firm to take the risk by breaking new ground in product development plays a decisive role in securing the advantage. Risk-taking, as a corporate-level phenomenon, is defined as “the degree to which managers are willing to make large and risky resource commitments – i.e. those which have a reasonable chance of costly failures” (Miller & Friesen, 1978, p. 923). Risk-taking is an essential element of EO and scholars generally believe that risk always exists in conjunction with innovation if the innovation is to be effectual (Dess & Lumpkin, 2005; Stam & Elfring, 2008).

While risk is inherent to innovation as market potential of innovative products is highly uncertain; risk-taking brings about innovation because without risk, innovation is unlikely to happen (Sethi & Sethi, 2009). Studies revealed that the failure rate of innovation attempts could be as high as 50 percent (Nakata & Sivakumar, 1996; Wong & Tong, 2012). However, entrepreneurial firms were not intimidated by the high risks involved and may devote up to one-fourth of their profits to the products developed in the most recent five years (Takeuchi & Nonaka, 1986).

### **2.4.3 Pro-activeness**

The concepts of innovativeness and risk-taking are related to pro-activeness because to innovate and take risks indeed requires no more than the intention to leave the comfort zone and cause change and drive business growth through the launch of a new product or process (Kandemir & Acur, 2012; Talke & Hultink, 2010). Proactiveness as a dimension of EO refers to “the will and foresight to seize new opportunities” (Lumpkin & Dess, 1996). A proactive firm is forward-looking and opportunity-seeking (Talke *et al.*, 2011). It focuses on the future and seeks to capitalize on opportunities it sees by using all its knowledge of the environment, i.e. the needs of customers, supply of resources, technology availability, competitor strategies, etc. Pro-activeness is related to first-mover advantage since a firm which is able to anticipate future needs and develop new products to meet such needs

ahead of competition tends to capture advantageous positions in sourcing, funding, access to markets, etc. (Rauch *et al.*, 2009).

Pro-activeness of a firm determines the attitudes of new product developers toward generation of innovative ideas and bringing these ideas into reality. Prior research shows that firms serving industrial markets or consumer product markets differ from each other in terms of pro-activeness, with the former being more inclined toward standardization and control and less proactive in satisfying current and future customer needs; while the latter being more responsive to changing customer preferences and more ready to meet customer preferences through innovation (Sebora & Theerapatvong, 2010). Within the context of corporate entrepreneurship, pro-activeness is concerned with first mover advantage demonstrated in terms of opportunity-seeking, forward looking perspective ahead of the competition and acting in anticipation of future demand to create change and shape the environment (Lumpkin & Dess, 2001; Wong, 2012).

The consequences of such behavior may lead organizations to realize competitive advantages because they are the first to explore, create, implement and launch something new in their industry. In short, an organization which portrays proactive behavior in exploiting market potential can be described as a leader instead of a follower. Given this, to what extent are government-linked companies in Malaysia proactively engaged in opportunity-seeking or forward looking perspectives that will make them leaders and not followers? More importantly, in search of survivability and sustainability by government-linked companies, does pro-activeness lead to the creation of innovation, strategic renewal and venturing activities in these companies? Pro-activeness is simply the ability to take the initiative whenever the situation demands.

An entrepreneur's risk-handling capability and pro-activeness are the competencies of assessing and addressing in advance from all sources the risks that threaten the achievement of an enterprise's strategic objectives and effectively find solutions in advance to these risks. Cunningham and Lischeron (1991), Lumpkin and Dess, 1996, Naman and Slevin, 1993, assert that entrepreneurs prefer to take moderate

risks in situations where they have some degree of control or skill in realizing a profit. An entrepreneur is also described as a rational decision maker 'who assumed the risk and provided the management of the firm' (Kirby, 1971; Oscar, 2013). Studies have also revealed that entrepreneurs are not merely risk takers, but moderate risk- handlers because they seldom decide to bluntly take risks until a thorough calculation of the potential risk are made. Entrepreneurs, in actuality tend to proactively deal with the risks that are potentially harmful to the growth of their business ventures.

The change in content of dimension from risk taking to proactive risk handling is aimed at portraying more realistically the phenomena existing in the scope of entrepreneurial orientation held by entrepreneurs. Therefore, the pro-activeness will be more pertinent and a more significant topic which is of real worth in the research of entrepreneurial orientation. Pro-activeness, according to Bateman & Crant (1999) is focused on accomplishment, especially on accomplishment with real impact. Entrepreneurs need to ask questions: How do I raise the standard? How do I set the vision above what anyone else has? So, for a successful entrepreneur, he or she must anticipate and prevent problems, take action regularly or be action-oriented, and adopt opportunity seeking strategy. Furthermore, pro-active posture also involves anticipating and acting on future wants and needs in the market place or space, thereby creating a first-mover advantage over competitors. (Lumpkin & Dess, 2009). Pro-activeness essentially describes an opportunity seeking, forward looking perspective involving introduction of new products or services ahead of competitors. It also entails anticipation of future demands to create change and shape the environment. With such a forward looking perspectives, pro-active firms are able to capitalize on emerging opportunities (Keh *et al* 2007; Kai- Ping, 2011).

The arguments from the western literature on the importance of pro-activity (Miller, 1983) apply with similar force in eastern emerging markets. Firms that develop and implement clear managerial strategies to succeed in their markets are more likely to perform well, and this can be measured by the extent to which profits are retained and reinvested back in to the business (Miller & le Breton-Miller, 2011). However,

membership of business groups can exercise a restrictive moderating influence on this relationship. This is because, as with any insurance, there is a trade-off resulting from business group affiliation which creates a form of agency problem. To be precise, the insurance element of business group membership which moderates the impact of risk taking has a negative effect on the incentives of managers (Morck, Wolfenzon & Yeung, 2005). Consistent with the argument above, markets may be too harsh in punishing managers of independent businesses who are take risks and face temporary shocks in a business environment which is volatile and uncertain. However, managers operating independently on the market have the possibility of increasing their returns when outcomes are abnormally positive.

As obtained in the environment of underdeveloped external finance that typically applies in eastern emerging markets, aggressive growth strategies are driven primarily by retained earnings. One of the key issues in pro-activeness is to anticipate and prevent problems. To achieve this, the firm has to increase awareness among staff, develop clear goals, implement scheduled training programs, encourage discourse and develop credible evaluation method (Nelson, 2009).

#### **2.4.4 Aggressiveness**

This connotes a trait in a firm that is reflected in its propensity to face up to and challenge its rivals directly and intensely and to outperform them in the marketplace. These include the use of strategies such as low price, differentiation, and targeting a competitor's weaknesses (Lumpkin & Dess, 1996), or in outperforming competitors on marketing, product service and quality, sales promotion, advertising or manufacturing capacity ( Oscar, 2013). Furthermore, organizations, in their pursuit for aggressive growth, exhibit a clear and pronounced strategic focus of 'beating the competitors'. The push strategy of these sales oriented firms are seldom successful and in fact impede market success in the long run (Wang, 2008). According to Nonaka and Takuechi (1985), Japanese companies remain an enigma to most managers in the western world today. Not because they are terribly efficient or liberated.

Yet, slowly but surely they have advanced their position in international market and international competitive environment. Their success is not based on their production and staff management philosophy like seniority system, cheap capital sources, cooperative relationship with staff and customers, but on skills and expertise at organizational knowledge creation i.e capability of a company as a whole to create new knowledge, disseminate it throughout the organization and embody it in production and services systems. It involves distinctive way of innovation on a continuous basis, incrementally, and spirally (Nonaka & Takeuchi, 1985). Continuous innovation is achieved by looking outside and in to the future, anticipate changes in the market, technology, products and competition, gather information from customers, competitors, government agencies, analysts in times of uncertainty and turbulence, get involved in innovation and adaptation to gain competitive advantage in the market place.

Work experience and training connote knowledge or skill gained in a particular job

Over time. It is reported that entrepreneurs in developing countries lack business experience due to lack of former paid employment especially women, whereas literature asserted that business experience is one of the vital entrepreneurial characteristics (Antoncic, 2006), and evidences support the fact that a minimum of three years business experience is sufficient to assess an entrepreneur (Antoncic, 2006; Carter & Shaw, 2006; Harrison & Mason, 2007; Kuzilwa, 2005; Salman, 2009). Most entrepreneurs in developing countries lack training especially women (Brana, 2008; IFC, 2007) and entrepreneurial process is a vital source of developing human capital as well as plays a crucial role in providing learning opportunity for individuals to improve their skills, attitudes and abilities (Brana, 2008; Shane, 2003). Again, due to poverty and low educational levels in developing countries (Porter & Nagarajan, 2005; Roomi & Parrot, 2008); training is very necessary for entrepreneurs as it could provide the skills and experience needed for business growth and performance (Akanji, 2006; Cheston & Kuhn, 2002; Kuzilwa, 2005).

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Recently, Rauch *et al.* (2009); George and Marino (2011) analyzed studies on the relationship between EO and firm performance concluded that this relationship is

largely moderate and that firms benefit from the EO. An analysis of the direct relationship between EO and firm performance is limited, making it necessary to consider contingent factors, whether internal or external to the EO- performance relationship (Covin & Lumpkin, 2011). This is the basic premise of contingency theory, which states that the relationship between two variables depends on the intervention of a third variable. Introducing variables that moderate bivariate relationships helps to reduce the inference problem and allows better understanding of the contingent relations (Rosenberg, 1968). A variable that has rarely been considered in the context of small businesses is Time Orientation (TO).

The current competitive environment is complex, and complexity is derived from different dimensions, which makes short-term or long-term decisions crucial to maintaining the competitiveness of small businesses. For example, the introduction of new technologies or changes in consumer demand may require that the firm become more entrepreneurial to stay competitive (Lumpkin, Brigham & Moss, 2010).

Since these changes can be costly and risky, it can weaken the financial security or threaten the reputation of the firm. Moreover, some decisions must be short-term to be precedent in the long-term. For example, an investment opportunity may require a quick decision, without too much analysis of its long term consequences. To explore the question of how TO can influence the behavior of a small business, this research used the concept of EO for two reasons. First, previous research suggests that EO is a construct that captures evidence of making business decisions and actions in a variety of organizational and geographical contexts (Kreiser, Marino & Weaver, 2002). Second, EO has its roots in the literature on strategy and not being a homogeneous construct, it is possible to identify the organizational processes that are affected by a TO (Wiklund & Shepherd, 2003). This exploratory work is intended to make two important contributions. The first, attempts to identify how a short-term orientation compared to a long-term orientation may facilitate or inhibit the efforts of a small business for being entrepreneurial. Second, TO is a construct that has been predominantly used in the field of family businesses, more particularly

with a long-term orientation (Lumpkin, Brigham & Moss, 2010). However, this construct is not limited to the context of the family business, so this work can inform small businesses to integrate a TO in their decision-making processes.

The salient dimensions of EO can be derived from a review and integration of the strategy and entrepreneurship literatures ( Miller, 1983; Venkatraman, 1989a). Based on Miller's (1983) conceptualization, three dimensions of EO have been identified and used consistently in the literature: Innovativeness, risk taking, and pro-activeness. Innovativeness is the predisposition to engage in creativity and experimentation through the introduction of new products/services as well as technological leadership via R&D in new processes. Risk taking involves taking bold actions by venturing into the unknown, borrowing heavily, and/or committing significant resources to ventures in uncertain environments.

Pro-activeness is an opportunity-seeking, forward-looking perspective characterized by the introduction of new products and services ahead of the competition and acting in anticipation of future demand. Lumpkin and Dess (1996) suggested that two additional dimensions were salient to entrepreneurial orientation. Drawing on Miller's (1983) definition and prior research (Hart, 1992), they identified competitive aggressiveness and autonomy as additional components of the EO construct. Competitive aggressiveness is the intensity of a firm's effort to outperform rivals and is characterized by a strong offensive posture or aggressive responses to competitive threats. Autonomy refers to independent action undertaken by entrepreneurial leaders or teams directed at bringing about a new venture and seeing it to fruition. The salient dimensions of EO usually show high inter-correlations with each other, ranging, for example, from  $r=.39$  to  $r=.75$ . (Bhuian, Menguc, & Bell, 2005) However, there has been some debate in the literature concerning the dimensionality of EO. Some scholars have argued that the entrepreneurial orientation construct is best viewed as a uni-dimensional concept (e.g., Covin & Slevin, 1989; Knight, 1997) and, consequently, the different dimensions of EO should relate to performance in similar ways. More recent theorizing suggests that the dimensions of EO may occur in different combinations ( Lumpkin & Dess, 2001; Covin, Greene, & Slevin, 2006), each representing a different

and independent aspect of the multidimensional concept of EO (George, 2006).

As a consequence, the dimensions of EO may relate differently to firm performance (Stetz, *et al.*, 2000). Specifically referring to the dimensionality of EO, Covin *et al.* (2006) note that ‘intellectual advancement pertaining to EO will likely occur as a function of how clearly and completely scholars can delineate the pros and cons of alternative conceptualizations of the EO construct and the conditions under which the alternative conceptualizations may be appropriate.’ While different conceptual arguments can be used for and against treating EO as a uni- or multi-dimensional construct, meta-analysis can establish empirically whether the different dimensions of EO relate to performance to the same or varying extent.

There has been lately some discussion about the terminology regarding firm level entrepreneurship. (Covin & Lumpkin, 2011; George & Marino, 2011). When referring to firm-level entrepreneurship, as Covin & Lumpkin (2011) noted, the concept of EO is well established as a focus of scholarly attention and is a construct used increasingly often when referring to firm-level entrepreneurship. These analyses revealed that among papers published between 2008 and 2010 in this domain, 109 adapted the term ‘entrepreneurial orientation’, while only 66 studies followed the term ‘corporate entrepreneurship’. In spite of the fact that earlier publications (Dess & Lumpkin, 2005) suggest that entrepreneurial orientation (EO) represents a firm’s orientation toward, rather than actual entrepreneurship behavior up-to-date publications imply that ‘occasional exhibition of firm-level entrepreneurial behavior is insufficient to infer the existence of an EO’ (Covin & Lumpkin, 2011,). These specific behavioral patterns are frequently viewed as consisting of three dimensions: innovation, risk-taking and pro-activeness (Miller, 1983). Viewed collectively, they constitute a composite construct indicating a firm’s overall level of EO (Covin & Slevin, 1991).

The traditional 9-item Miller/Covin and Slevin scale incorporated items that reflect both dispositions and behaviors manifested by organizations at different strategic business units (Covin & Lumpkin, 2011). George & Marino (2011) recognizes these widely applied dimensions and acknowledges the line of thought. Marino

(2011) subscribed and continued with the three-dimension definition, which has been used by the majority of researchers, to maintain consistency and avoid confusion within the field.

Performance, on the other hand, has been defined by the Merriam-Webster dictionary ([merriam-webster.com](http://merriam-webster.com)) as the fulfillment of a claim, promise, or request.

There is no consensus to what firm performance is. Firm performance in its broadest sense is perceived as the outcomes of organizational activities measurable in financial and non-financial parameters (Chenhall & Langfield-Smith, 2007).

Financial performance is often measured using traditional accounting key performance indicators (KPIs) such as sales growth, return on assets or return on sales. The advantage of these measurements is their general availability, since every profit-oriented organization produces these figures for the yearly financial reporting. However, balance sheet manipulations and choices of accounting methods may also lead to values that allow only limited comparability of the financial strength of companies (Chenhall and Langfield-Smith, 2007).

The non-financial performance can be measured using operational KPIs. Market share, innovation rate or customer satisfaction are prominent examples. Some non-financial parameters pose a challenge, since there are no universal indicators of, for example, company's social performance. Thus many researchers use self-reported measures to operationalize performance (Chenhall & Langfield-Smith, 2007). EO-firm performance relationship has always been at the heart of EO research. Research into the nature, determinants and effects of firm level entrepreneurship has grown rapidly ever since 1980ies. Opportunity is referred to as the dominant thread in current entrepreneurship research (Venkataram & Saravathy, 2012) and EO is no exception. It is the opportunity for various future gains.

The potential ways in which entrepreneurial activities enhance the overall firm performance have been recognized and depicted by EO literature. First and foremost, opportunity being advantageous circumstances carries the possibility of profit gains. Shane & Venkataram (2000) define entrepreneurial opportunities in a

Schumpeterian tone as “those situations, in which new goods, services, raw materials and organizing methods can be introduced and sold at greater than their cost of production”. Recently Shane has explained that this definition does not imply that entrepreneurship requires profit generation, but only indicates the possibility: “our definition suggests only that the probability new goods, services, raw materials and organizing methods could be introduced and sold at greater than their cost of production exceeds zero” (Shane, 2012). This definition clearly implies potential profit gains as the dominating motive for entrepreneurial opportunity exploitation. Economists very early identified the entrepreneur as bearer of non-insurable uncertainty and thus legitimized the profits collected by him (Say, 200).

Although the majority of scholars agree that entrepreneurial opportunities cannot always be profitable (Singh, 2001), it is clear that profit probability is one of the most important motivation factors for entrepreneurial undertakings and so EO has been traditionally associated with improved financial performance and wealth creation establishing new relations. This is consistent with findings that firms which want to launch innovation often develop networks of partners teaming with new ventures, universities, research laboratories and institutions (Hitt *et al.*, 2011). These partnerships help exchange and develop new know-how and new competencies. Generally speaking, EO plays a notable role EO in organizational learning (Wang, 2008). It has often argued that entrepreneurial behaviors of firms contribute significantly to increased learning within organizations (Dess *et al.*, 2003). There is yet another factor that firms take into account when pursuing EO and that is to create social value and address social or environmental needs. Morris *et al.* (2011) suggest that the social purpose motivation of organizations is a factor too often overlooked by scholars.

Firms may practice corporate venturing for non-profit reasons. These new ventures are often a part of their CSR programs, often initiated and developed by their employees and are referred to as ‘corporate social entrepreneurship’ Entrepreneurship works across different settings and aspects of human activity and offers the opportunity to improve firms, societies and their environments. For the

companies that do engage in social change, it is necessary to measure how corporate venturing impacts all aspects of their performance.

As EO research has spread over numerous settings and contexts (Laukkanen, 2003, Zur,2013)) and attention is drawn to a much more complex set of motivation factors engaging in firm level entrepreneurship, such as creating stakeholder value or improving public image (Lumpkin & Dess, 1996) and employer branding (Morris et al., 2011). Hence, there is a number of potential motivation factors identified by the literature for which organizations engage in EO, as it holds the potential of many areas of growth and development. That is the promise of entrepreneurship. All of the mentioned motivation factors are aspects of the firm's overall performance, since all of them affect the value of the company. The literature overview assess whether all the above mentioned aspects of firm performance have been addressed and included in the EO-performance relationship research.

## **2.5 Entrepreneurial Orientation and Firm Performance**

Business firms' performance is a multi-dimensional issue and therefore requires multiple performance measures. According to Lumpkin and Dess (2008), Choy, (2010) entrepreneurial activities or processes, may, at times lead to favorable outcome on one performance dimension, and unfavorable on a different performance dimension. For example, heavy investment in R and D and product innovation may enable a firm to successfully enter a new product-market domain and consequently enhance sales growth in future. A multi-dimensional measure of firms' performance may include traditional accounting indicators such as sales growth, market share, and profitability aspiration levels. Lumpkin and Dess, (2008) also considered some non-financial issues like company's reputation, public image and good will and the commitment and satisfaction of employees which may be important to new entrants.

Wiklund (2005) believed that performance measures of three key performance indicators- gross profit, return on asset (ROA) and return on investment (ROI) in

measuring firm performance. Specifically in this study, Growth in sales, Profitability (ROI) and Gross earnings shall be considered as yardstick for firm performance. EO, as a dominant concept, has positioned itself as an organizational phenomenon that captures patterns and business processes at the enterprise level (Rauch *et al.*, 2009). Generally, the EO refers to trends, processes and behaviors that lead a company to enter new or established markets with new or existing products (Lumpkin & Dess, 1996).

Entrepreneurial firm is one that engages in product market innovation, undertakes somewhat risky ventures, and is first to come up with proactive innovations, beating competitors to the punch'. The previous ideas do not exclude the realities facing small businesses, which are challenged to recognize opportunities and therefore mobilize the necessary resources to exploit them. Moreover, small businesses can be innovative and favorable for stimulating economic development as their size and simple, flexible structure allows them to respond quickly to change in a competitive environment. To cope with fierce competition, small businesses must review their practices and constantly seek new ways to exercise flexibility, and improve their ability to become innovative and more competitive, that is, they acquire greater EO. Based on the conceptualization of Miller (1983), there are three dimensions of EO that have been used consistently in the literature: innovativeness, risk taking and pro-activeness. Innovativeness indicates the firm trend to support new ideas and foster creative processes that aim to develop new products and services. Risk taking is the firm tendency to support projects in which profits are uncertain. Pro-activeness means taking initiative and pursuing new business opportunities in emerging markets.

Lumpkin & Dess (1996) distinguish two new variables, competitive aggressiveness and autonomy. Competitive aggressiveness refers to taking more initiative towards customers, so that competition leads to the challenges encountered in seeking a new market or to improve their competitive position. Autonomy is the degree to which organizational actors (people and equipment) remain free to act independently, make decisions and pursue opportunities. Based on the conceptualization of Miller (1983),

there are three dimensions of EO that have been used consistently in the literature: innovativeness, risk taking and pro-activeness. Innovativeness indicates the firm trend to support new ideas and foster creative processes that aim to develop new products and services. Risk taking is the firm tendency to support projects in which profits are uncertain. Pro-activeness means taking initiative and pursuing new business opportunities in emerging markets. studies differ using the combined five variables mentioned previously, but the majority still focused on the three original variables.

Today, there are many studies that develop the aspects that determine the EO and its implications for the firm performance. The interest in studying the effect of EO in the field of small business has become more popular over the last years. However, the results appear not to be conclusive, and although differences in results can be attributed to different research designs and methodologies, the differences reflect the fact that the EO sometimes, not always, helps improve the firm performance. Lumpkin and Dess (1996) mentioned that the complexity of the EO-performance relationship is context specific. That is, the strength of this relationship depends on the characteristics of the external environment and internal organizational characteristics.

Therefore, the ratio of EO and performance can apparently be more complex than a simple direct relation. That is why, the EO can create conditions conducive to a company in a better scenario compared with the small business case where the decision making made by the founder-manager is crucial because of the dominant effect it has on performance. The conceptual arguments of previous research converge on the idea that firms benefit from highlighting newness, responsiveness, and a degree of boldness. Extensive discussion of the arguments can be found in Lumpkin and Dess (1996). Indeed, these suggestions form the basis for the interest in studying the relationship between EO and performance (Miller, 1983). In an environment of rapid change and shortened product and business model lifecycles, the future profit streams from existing operations are uncertain and businesses need to constantly seek out new opportunities. Therefore, firms may benefit from adopting an EO.

Such firms innovate frequently while taking risks in their product market strategies

(Miller & Friesen, 1982). Efforts to anticipate demand and aggressively position new product/service offerings often result in strong performance (Ireland, Hitt, and Sirmon, 2003). Thus, conceptual arguments suggest that EO leads to higher performance. However, the magnitude of the relationship seems to vary across studies

Performance is a multi-dimensional concept and the relationship between EO and performance may depend upon the indicators used to assess performance (Lumpkin & Dess, 1996). The empirical literature reports a high diversity of performance indicators (Combs, Crook, & Shook, 2005; Venkataraman & Ramanujam, 1986); a common distinction is between financial and non-financial measures. Non-financial measures include goals such as satisfaction and global success ratings made by owners or business managers; financial measures include assessments of factors such as sales growth and ROI (Smith, 1976). Regarding financial performance, there is often a low convergence between different indicators (Murphy, & Hill, 1996). On a conceptual level, one can distinguish between growth measures and measures of profitability. While these concepts are empirically and theoretically related, there are also important differences between them (Combs et al., 2005). For example, businesses may invest heavily in long term growth, thereby sacrificing short-term profits. The conceptual argument of the EO–performance relationship focuses mainly on financial aspects of performance. Businesses with high EO can target premium market segments, charge high prices and “skim” the market ahead of competitors, which should provide them with larger profits and allow them to expand faster (Zahra & Covin, 1995).

The relationship between, the EO construct and non-financial goals, such as increasing the satisfaction of the owner of the firm, is less straight forward. We argue that there is little direct effect of EO on non-financial goals because this relationship is tenuous. For example, if non-financial goals are of prime importance, the uncertainty associated with the bold initiatives and risk taking implied by an EO could potentially lead to agony, sleepless nights, and less satisfaction. However, satisfaction may increase because of better financial performance. However indirect effects are usually smaller than direct effect. Therefore, it appears reasonable to assume that the relationship should be higher for EO and financial performance than

for EO and non-financial performance. In terms of financial performance, studies can rely on self-report or archival data collected from secondary sources.

While self-reported data may offer greater opportunities for resting multiple dimensions of performance, such as comparisons with competitors (e.g., Wiklund & Shepherd, 2005), such measures may be subject to bias because of social desirability, memory decay and/or common method variance. Therefore, an important task of this meta-analysis is to establish the effect size of EO on performance for self-reported financial performance, archival financial performance, and non-financial performance measures.

Firms' top managers need appropriate recognition of their firm situation for decision-making. Firm performance is the best criteria for measuring and determining the rate of firm efficiency and effectiveness in a specific time period that is determined by some signs in the market, customer and amount of income (Adams & Sykes, 2003). Measurement of firm performance is not a simple task and requires collection of comprehensive information (Covin & Slevin, 1989). However, many researchers have addressed the issue of firm performance measurement, since it is the most appropriate criteria to identify organization situation. Firm performance dimensions are also of the topics that each of the researchers has introduced specific dimensions. Hudson *et al.*, (2001), overall, introduce three dimensions of time, quality and flexibility as the most cases that researchers have referred to them.

Moreover, they consider financial, customer satisfaction and human resources dimensions as next important ones. They believe that these six dimensions cover all the firm performance dimensions; such that first three factors evaluate firms operational performance, the customer indicates firm performance from outside and organization employees (human resources) are also the assessment criteria for cultural aspects which focus on the work environment inside the firm. These five dimensions of firm performance are valid for service and non-service organizations. While the sixth dimensions (financial) is not considered in the performance of some service organizations (Hudson *et al.*, 2001). Hooley *et al.* (2005) have investigated

firm performance in three dimensions: customer performance, market performance and financial performance. Customer performance refers to the loyalty and satisfaction of the customer. In market performance the focus is on sales amount, sales growth and market share and financial performance pertains to profit, profit margin and financial ratios like ROI. However, for this study we used Flatten et al, (2011) performance dimensions including: growth in sales, return on investment, operating profit margin, return on equity, and customer retention.

In the course of investigating EO and firm performance relationship, existing research reflects a clear focus on financial performance. Sales growth clearly stands out as the most common and widespread indicator of firm performance, much widely employed than profit growth. This occurs for a number of reasons. Since EO often involves costly venturing into dynamic markets, it might increase company sales, even though profits may suffer (Zahra & Garvis, 2000). Moreover, EO often involves R&D long-term investment and innovation effecting negatively short-term profitability. Furthermore, sales growth is very likely to be driven by increased demand for the firm's products or services (Wiklund, 1999, & Zur, 2013). An insightful meta-analysis conducted by Rauch *et al.* (2009) revealed the correlation between EO and growth at a level of 0.245 and the correlation between EO and profitability at .259. It is a common practice among researchers to examine growth and profitability jointly (for example, Antoncic, 2006; Kreiser & Davis, 2010), as well as introducing other financial performance measures.

As noted in the nineties, entrepreneurial activity may at times lead to different outcomes in various performance dimensions (Lumpkin & Dess, 1996) and since single financial indicators of performance portray a very narrow area of performance, most of the papers rely on three or more financial indicators. Authors attempt to capture not only the growth, but the development of the firm as well. Return on assets is most commonly employed measure of development driven investment. Authors argue that ROA reflects the redeployment of firm's assets in innovative ways (Zahra & Garvis, 2008s, Zur, 2013). Another way of tackling the problem of fragmented financial performance measurement is suggested by Vozikis

*et al.* (1999), who suggest a model of evaluating EO impact on firm performance through additional value creation: greater than expected dividend growth rate. These authors merge efficient market theory and financial theory with EO to suggest that corporate entrepreneurial activities are more accurately evaluated by the market stock value.

The commonly used indicators of market performance are market share growth (Obłój *et al.*, 2010) and competitive advantage (Covin & Miles, 1999). These are however applied as complimentary measures of performance; no research relies solely on market measures for evaluating performance. Employment, as an important aspect to capture, is problematic in EO context, since there is to some extent an inverse relationship between capital investment and employment growth, suggesting employment growth of assets should be measured at the same time.

Concluding, the existing body of research suggests that EO leads to higher performance. However the strength of this relationship varies among studies, with a moderate level on average.

Entrepreneurship has become an important issue for policy. At one level, enterprise creation is recognized as important for employment growth and affecting structural change; at another, there is concern to encourage existing firms to become more entrepreneurial as a means of enhancing international competitiveness. In particular increasing attention has been paid to entrepreneurial orientation which is seen as a process reflected in recurring organizational performance rather than the actions of individuals possessing certain attributes or characteristics (Soininen, *et al* 2013).

Entrepreneurial Orientation (EO) is a significant factor for a firm's success (Wang, 2008). Entrepreneurial orientation has been conceptualized as the process and decision making activities used by entrepreneurs that leads to entry and support of business activities (Lumpkin & Dess, 2001; Kropp, Lindsay and Shoham, 2006). EO has been conceptualized as comprising three dimensions namely innovativeness, risk-taking and pro-activeness (Naaman & Slevin, 1993, Soininem, 2013). These three components of entrepreneurship are argued by Miller (1983) to comprise a basic, dimensional strategic orientation. Innovativeness involves seeking creative or unusual solution to problems and needs. This dimension includes product innovations, the development of new markets and new processes and technologies for performing organizational functions. The risk-taking dimension refers to the willingness of management to commit significant resources to opportunities in the face of uncertainty.

Pro-activeness refers to the ability to take the initiative, the ability to take the initiative whenever the situation demands. EO has emerged as a major construct within management research over the past two decades, and it has become a widely accepted means of explaining the diversity in firm performance (Keh *et al.*, 2007). Entrepreneurial orientation is necessary for firms to prosper and flourish in competitive and uncertain environments because entrepreneurial attitudes and behaviours facilitate the utilization of knowledge-based resources to discover and exploit opportunities. Entrepreneurial orientation can be viewed as a strategic preference, and it reflects how business to utilize its opportunities. Wiklund and Shepherd (2003) assert that entrepreneurial orientation enhances the relationship between knowledge-based resources, such as marketing capabilities and technology capabilities, and performance of small businesses. In fact, highly entrepreneurial orientated firms are likely to make the most of their internal resources to create better performance. As a result, the dimensions of entrepreneurial orientation, such as innovation, and risk-taking, assist entrepreneurs to anticipate new markets, to support innovative ideas, and to have positive impacts on new venture performance:

## **2.6 Research Gaps**

This study is aimed at addressing the gap in research on the relationship between performance of corporate firms in Nigeria on one hand and entrepreneurial orientation and strategy on the other hand. Many business firms in Nigeria have recorded low profitability and performance in recent years. Available literatures on a number of studies have attributed this development to a number of factors such as low export volume and global economic down-turn (Kevin & Young, 2006, Kevin, 2009), low level of technology (Prodromos, 2010), market orientation (Sanjaya & Ajayi, 2011) leaving critical factor like EO on performance out of such research studies. Research efforts in Kenya include Otieno (2012) on the positive effect of EO on performance of Kenya's manufacturing firms operating under EAC regional integration, Osoro (2012) on the significant effect of EO on performance of Kenya's firms, Okeyo (2014) relevance of EO on performance of Kenya's SMEs and Gathungu (2014) study of EO and networking configuration. The situation in Nigeria is that EO was at infancy stage as per the study of EO-Performance of firm carried out by Adegbite, *et al*, in 2007. Essentially, however, this study intends to carry out a study similar to that of Otieno (2012) study among Kenya's manufacturing companies operating under the EAC, with a view to ascertain the current EO-Performance situation in Nigeria.

## **2.7 Critique of Literature Review**

Based on the literature reviewed under theoretical, literature review and conceptual framework, it can be inferred that EO has significant association with performance of firms listed in the Nigerian Stock Exchange. The result of this study provides extremely important and valuable information that would assist listed firm's up-scale their competitiveness and improve their performance when they adopt EO dimensions such as innovativeness, risk-taking, competitiveness, and aggressiveness as management policy and strategy. This study noted that there was a few local literatures on EO-Performance in Nigeria. Majority of existing literature

were on export and performance (Kevin & Young 2006, Kevin 2010), entrepreneurial burnout (Shepherd *et al.*), role of technology (Prodromos *et al* 2011). This study was therefore important in enhancing an indepth understanding of the association between EO and performance of listed firms on NSE. The study to the growing body of literature and knowledge on the role of entrepreneurial orientation adoption in performance of listed firms in Nigeria.

It has been empirically noted in this literature that very little has been done in the areas of EO and performance of listed firms in Nigeria Stock Exchange. This study has developed a conceptual framework or model to ascertain the current of EO and performance among Nigerian listed firms. The conceptual model has four independent variables and expectedly one dependent variable. Each of the independent variables has three components and the variables for measuring the dependent variable were returns on assets (ROA) and returns on equity (ROE). Furthermore the, the theoretical framework, the literature review, and the conceptual model provide a wealth of knowledge and understanding on the association between EO and performance of firms on NSE. It should be noted that literature under this research study are in consonance and consistent literature of research studies undertaken in other parts of the world, which presents the association between EO and performance of corporate firms.

## **2.8 Summary**

It has been noted in this literature review that very little has been done in the area of EO and the performance of listed firms on the Nigerian Stock Exchange. Available studies include market orientation and firm performance, EO and performance of SMEs, EO and performance of SMEs operating under EAC regional integration in Kenya who undertook a study on financial institutions regulatory environmental impact on EO and firms performance in South Africa. This study has developed a conceptual model to ascertain the current situation of EO and performance of firms listed on the Nigerian Stock Exchange (NSE). The

conceptual framework has four independent variables, and expectedly one dependent variable. Each of the independent variables has three components. The variables for measuring firm performance are returns on assets (ROA), and returns on equity (ROE)

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter focuses on the research design that was used in conducting the study. It highlights the type of research, the sample, the population, the instruments, pilot test, sampling techniques and data analysis methods.

#### **3.2 Research Design**

. This study adopted mixed research design approach which involves the use of qualitative and quantitative sampling techniques. Qualitative approaches are useful in conducting studies that seeks to enhance an in-depth understanding of social constructs and meanings (Kothari, 2007). Quantitative approach, on the other hand, focuses on the design, techniques and measures that produced discreet numerical or quantifiable data (Kothari, 2007). The sample selected had the attributes of the population from which it was obtained. The researcher used a two stage sampling approach; the first will be stratified sampling method which enabled the researcher divided the firms according to sub-sectors, and the second stage involved application of random sampling technique. One of the characteristics of Small and medium firms in Nigeria is that they employ between 10 and 100 employees. However, majority of listed firms in Nigeria employ far in excess of 100 employees. These firms are either autonomous or running branch entities in other cities or towns, but they must be registered by the Registrar of Companies as private limited companies.

#### **3.3 Target Population**

The population consisted of all the elements from which the sample was

drawn and which had similar characteristics, according to (Mugenda & Mugenda, 1999). The targets populations in this study consist of firms listed on the Nigerian stock exchange (NSE) and were in the category of medium and large scale firms. According to NSE annual report (2014), the total number of listed companies in Nigeria that submitted its five year financial reports as at 2nd August, 2014 was 176. It should be noted that identification of target population for this study was hinged on each sub-sector potential for contributing to the nation's economic growth, firm performance, job creation and contribution towards sustainable development and improved gross domestic product (GDP).

These companies were distributed across the following sectors of the economy: Financial Services (58) Manufacturing (40) Building and Construction (14) Petroleum, Gas and Allied services (9) Breweries and Soft drinks (4) ICT (4) Hospitality and Transport (5) and others (42).

### 3.4 Sample Size

This study sample was limited to four (4) sectors of the Nigerian economy in view of the concentration of the firms in those sectors. These include: Financial Services, Manufacturing, Building and Construction, and Hospitality and Beverages. See the table below

**Table 3.1 Sample size**

<b>Sector</b>	<b>No of Firms</b>	<b>Sample size</b>	<b>Percentage (%)</b>
Financial Services	58	29	50
Manufacturing	40	20	50
Building and Construction	14	7	50
Petroleum and Gas	9	-	-
Beverages and Hospitality	9	4	50
ICT	4	--	--
Others	<b>42</b>	-	
<b>Total</b>	<b>176</b>	<b>60</b>	<b>34</b>

### 3.5 Sampling Technique

The population targeted was sizeable and stratified and therefore to get the sample size adequate for this study, the researcher adopted a statistical expression developed by Kothari (2007) since it provided a good representation of the population. The formula is as stated below:

For example, if;

$$N = 176$$

$$n = \frac{Z^2 pqN}{e^2(N-1) + Z^2 pq}$$

Where;

$n$  = the sample size;

$Z^2$  = the normal distribution;

$e$  = the standard error = 0.05;

$p$  = the estimated proportion of attribute that is present in the population taken as 0.03 and in this case  $q = 1-p$ .

Assuming a 95% confidence level, the value of :

$$Z = +1.96n = \frac{1.96^2(0.3)(0.7)(176)}{0.05^2(176-1) + 1.96^2(0.3)(0.7)} = 114.12 \cong 114$$

According to Chung-Wen (2009), quoting Gay & Airasian (2003), a sample should be large enough to provide a credible result and therefore when the population is about 5000 or more, a sample size of about 400 should be

adequate, that is 8%. In this study, the population was 176, and 8% of the population is 14. Therefore, considering the two researchers opinions, 65% (Kothari, 2007), and 8% (Chung-Wen, 2009), this study selected 60 firms or 34% randomly from the Nigeria Stock Exchange official register. During the initial contact segment, the researcher established rapport with some of the company's representatives such as administrators or secretaries, to ease contacts with the targeted respondents.

### **3.6 Data Collection Procedure**

#### **3.6.1 Primary Data Sources**

The primary sources of research data collected included the use of questionnaire and interview guide designed to facilitate face-to-face contacts with the respondents. Questionnaire was divided into sections designed to extract personal data from respondents. Some questionnaire were mailed or administered by researchers. However, the critical issue in questionnaire design was to avoid questions that attract subjective answers to ensure reliability of research outcomes and results.

#### **3.6.2 Secondary Data Sources**

This researcher made use of primary and secondary data obtained from administered interviews, telephone calls and published financial records of the listed firms. These instruments proved very effective and appropriate since the respondents were basically concentrated in the southern and north central parts of Nigeria. This was adopted based on business performance construct developed by Chung-Wen (2009) and cited by Wiklund and Shepherd, (2005). It emphasized the need for performance measures to include both growth and financial performance. Indicators of growth were sales growth (deposit growth in case of firms in the financial services industry), financial growth included Gross earnings, and Profits made. Data collection strategy also included information from target companies AGMs and Auditors' reports which normally highlight a company's innovativeness,

risk-taking, competitive postures, and aggressiveness blue-prints. The Lagos Chamber of Commerce and Industry (LCCI), and the Manufactures Association of Nigeria (MAN) were also credible sources of data for this study.

### 3.7 Pilot Test

Before questionnaires were administered to the top and middle level management of the selected firms, the researcher tested its reliability by conducting a pilot study on twenty (20) middle and top management staff of the targeted firms. The selection was done 50-50 to acknowledge the growing influence of middle level managers in influencing management policy formulation and execution of formulated policies in the Nigerian corporate world. The findings of this pilot test revealed the practicability of administering the constructed data collection instrument. The popular Cronbach's alpha coefficient, with a recommended minimum level of 0.70 (Nunally, 2008) was achieved for reliability, and adequacy of the research instrument. The statistical expression for measuring Cronbach's ( $\alpha$ ) is as stated below:

$$\alpha = \frac{NC^*}{(V^* + (N-1)C^*)}$$

Where

N = Number of items or components

C\* = Average inter-item covariance among the items/  
component

V\* = Average Variance

#### 3.7.1 Reliability Test

The findings of pilot test revealed the practicability of administering the constructed data collection instrument. The popular Cronbach's Alpha coefficient, with a recommended minimum coefficient of 0.70 was achieved. The reliability of

each construct was examined to ensure the items collectively measured their intended construct consistently (Lewis & Thornhill, 2003 and Wanjau, 2010).

### **3.7.2 Validity test**

Validity test connotes the degree to which the test actually measures what it is intended to measure. It is a direct check on the capability or how well the measure fulfils purported function (Kothari, 2003). A test of validity is therefore designed to know whether a measure of a concept actually measure that concept. To ascertain the validity and reliability of a questionnaire, interview guide or observation schedule, a pre-test /pilot survey were necessary. Convergent validity exists if a group of indicators are measuring common factor. This can be assessed at individual and construct levels by examining individual item loadings-squared multiple correlations. Individual item loading of 0.70 or higher implies that the indicators share more variance with its construct more than error variance (Kumar, 2000, & Wanjau, 2010).

### **3.7.3 Cronbach's Alpha.**

In the computation of Cronbach's alpha, the data collection instrument satisfied all the four aspects of qualitative accruals quality required for consistency. The average time taken to complete the questionnaire was fourteen minutes and the result was satisfactory for all variables.

**Table 3. 2 Cronbach's Alpha.**

<b>Factor</b>	<b>Cronbach's Alpha</b>	<b>Cronbach's Alpha on Standardized Items</b>
Relevance	0.824	0.822
Understandability	0.732	0.730
Comparability	0.810	0.823
Reliability	0.580	0.624

### **3.8 Data Analysis and Presentation**

The researcher used the SPSS Version 20 software to analyze the data. Both descriptive and inferential statistical data analyses were also performed. The researcher measured firms' performance on the performance indicators and attributes such as returns on assets (ROA) or returns on equity (ROE). Table below provides a summary of key variables, components and measurement tools.

**Table 3.3: Summary of Variables in the Research Study and their Measuring Tools**

<b>Variable Type</b>	<b>Name of Variable</b>	<b>Indicators</b>	<b>Tools for Measurement</b>
Dependent Variable	Performance of Firms	Sales, Profitability and Gross Earnings	Returns on Assets(ROA) and Returns on Equity(ROE)
Independent Variable 1	Innovativeness	Product,/Process/ Technological Innovations	Frequency of new products.
/Independent Variable 2	Risk-taking	Monetary/Social/ Psychological risks	Price leadership, Uniqueness of products in the market
Independent Variable 3	Pro-activeness	Problem anticipation/Prevention, action-oriented policy and Opportunity-seeking strategy	Newness of technology and process, Use of state- of- the-art equipment, Market survey and studies
Independent Variable 4	Aggressiveness	Knowledge creation, Dissemination of Knowledge, and Continuous Innovation	Published data by market AGM /Auditor's reports

### 3.8.1 Justification of Data Analysis Method

This analysis is carried out within a panel data estimation framework. The preference of this estimation method is not only because it enables a cross-sectional time series analysis which usually makes provision for broader set of data points, but also because of its ability to control for heterogeneity and endogeneity among panel groups. Panel data estimation allows for the control of individual-specific effects usually unobservable which may be correlated with other explanatory variables included in the specification of the relationship between dependent and explanatory variables (Hausman & Taylor, 1981). With additional, more informative data, one can get more reliable estimates and test more sophisticated behavioral models with less restrictive assumptions (Baltagi, 2005). Pooling data across different countries allows for increasing the degrees of freedom on one hand; and offers a better way of comparing the results than running separate regressions. Another advantage of panel data set is its ability to give more informative data, more variability, less collinearity among the variables, more degrees of freedom and more efficiency. In addition, it is better able to identify and measure effects that are simply not detectable in pure cross-section or pure time-series data (Baltagi, 2005).

### 3.8.2 Estimation Technique

The basic framework for panel data regression takes the form:

$$Y_{it} = \beta X'_{it} + \alpha Z'_i + e_{it} \dots \dots \dots (1)$$

In equation 1 above, the heterogeneity or individual effect is  $Z'_i$  which may represent a constant term and a set of observable and unobservable variables (Individual effect). When the individual effect  $Z'_i$  contains only a constant term, OLS estimation provides a consistent and efficient estimates of the underlying parameters (Kyereboah-Coleman, 2007); but if  $Z'_i$  is un-observable and correlated with , then emerges the need to use other estimation method because OLS will give rise to

biased and inconsistent estimates.

Similarly for endogeneity issues, it is generally assumed that the explanatory variables on the right hand side of the regression equation are statistically independent of the disturbance  $\varepsilon_{it}$  such that the disturbance term  $\varepsilon_{it}$  is assumed to be uncorrelated with columns of the parameters  $X'_{it}$  and  $Z'_i$  as stated in equation (5), and has zero mean and constant variance  $\sigma^2\eta$  (Hausman and Taylor, 1981; Nakamura & Nakamura, 1981). If this assumption is violated, then OLS estimation will yield biased estimates of the underlying parameters of  $\beta$  (Mayston, 2002). This condition is also applicable regardless of the infinite large sample of observations taken during the estimation process, because the OLS estimation will not be a consistent estimator of the true underlying values (Gujarati, 1995; & Johnston, 1984).

Hence, endogeneity problems arise when the explanatory variables are correlated with the disturbance term  $\varepsilon_{it}$  (Mayston, 2002; Nakamura & Nakamura, 1981; Hausman & Taylor, 1981). In order to circumvent these problems, panel estimation techniques of fixed and random effects will be adopted in this study, in addition to the traditional pooled regression estimation. The random effect estimator is used if the individual specific component is assumed to be random with respect to the explanatory variables. The fixed effects estimator is used if the individual specific component is not independent with respect to the explanatory variables. Decisions will be made between the fixed and random effect models using the Hausman specification test.

In order to examine the entrepreneurial orientation and performance of firms listed in Nigerian Stock Exchange, we specify the model in a functional form to capture this relationship. This is shown below;

$$ROA/ROE_{it} = f (INNV_{it}, RSKT_{it}, PRAP_{it}, AGGR_{it}) \dots\dots\dots(2)$$

Where

ROA/ROE = Company's return

INNV = Innovativeness

RSKT = Risk taking

PRAP = Pro-active posture

AGGR = Aggressiveness

The above equation shows the functional relationship between the dependent variable; firm performance proxied by company's performance (ROA/ROE) and entrepreneur orientation captured by company's innovativeness, risk taking, pro-active posture, and aggressiveness. The subscript *i* represents the number of companies (60 companies), while subscript *t* represents the year, *t* = 2006, ..., 2014. The explicit models for Pooled, Fixed and Random effects models are presented below;

The starting model is the pooled panel model where it is assumed that any heterogeneity across companies has been averaged out. Thus the pooled estimation is given as:

$$ROA/ROE_i = \beta_0 + \beta_1 INNV_i + \beta_2 RSKT_i + \beta_3 PRAP_i + \beta_4 AGGR_i + \varepsilon_i \dots\dots\dots(3)$$

The fixed effect model assumes that individual heterogeneity is captured by the intercept term. This means every individual is assigned its intercept  $\alpha_i$  while the slope coefficients are the same, and the heterogeneity is associated with the regressors on the right hand side. In the model also we assign a dummy to every individual.

$$ROA/ROE_i = \beta_0 + \beta_1 INNV_{it} + \beta_2 RSKT_{it} + \beta_3 PRAP_{it} + \beta_4 AGGR_{it} + \sum_{i=1}^{84} \alpha_i idum \varepsilon_i \dots$$

.....(4)

The random effect model assumes that the individual heterogeneity is uncorrelated with (or, more strongly, statistically independent of) all the observed variables. Going by this assumption we specify the following model;

$$ROA/ROE_i = \beta_0 + \beta_1 INNV_{it} + \beta_2 RSKT_{it} + \beta_3 PRAP_{it} + \beta_4 AGGR_{it} + V_{it}$$

.....(5)

Where

$$V_{it} = \alpha_i + \varepsilon_{it}$$

### 3.8.3 Hausman tests

Hausman tests (Hausman 1978) are tests for econometric model mis-specification based on a comparison of two different estimators of the model parameters. The estimators compared should have the properties that (1) under the null hypothesis of correct model specification both estimators are consistent for the “true parameters” of the model (those corresponding to the data generating process), whereas (2) under mis-specification (the alternative hypothesis) the estimators should have differing probability limits. The former property ensures that the size of the test can be controlled asymptotically, and the latter property gives the test its power.

Heuristically, the key idea is that when the model is correctly specified, the compared estimators will be close to one another, but when the model is mis-specified, the compared estimators will be far apart.

### 3.8.4 Lagrange Multiplier (LM) test

The Lagrange Multiplier (LM) test was named after Joseph Louis Lagrange, who discovered the test in the 18<sup>th</sup> century. It is a general principle for testing hypotheses about parameters in a likelihood framework. It is a statistical test of a simple null hypothesis that a parameter of interest  $\theta$  is equal to some particular value  $\theta_0$ . It is the most powerful test when the true value of  $\theta$  is close to  $\theta_0$ . The main advantage of the LM test is that it does not require an estimate of the information under the alternative hypothesis or unconstrained maximum likelihood. This makes testing feasible when the unconstrained maximum likelihood estimate is a boundary point in the parameter space. This test compares specifications of nested models by assessing the significance of restrictions to an extended model with unrestricted parameters.. If *LM* exceeds a critical value in its asymptotic distribution, then the test rejects the null, restricted (nested) model in favor of the alternative, unrestricted model. The asymptotic distribution of *LM* is chi-square. Its degrees of freedom (dof) are the number of restrictions in the corresponding model comparison. The nominal significance level of the test ( $\alpha$ ) determines the critical value ( $c$  Value).

### 3.8.5 Statistical Model

For the purpose of this study, both descriptive and inferential statistics shall be used.

Specifically for this study, frequency tables, charts, percentages, mean, variance and standard deviation shall be employed and applied as tools of analysis. Others will include pooled, random and fixed regression models to ascertain the relationship between EO dimensions and the dependent variable. The statistical regression or econometric model to test the effect of Innovation, Risk taking, Pro-activeness, and Aggressiveness on firm performance is represented by the statistical expression below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e \dots \dots \dots (1)$$

Where;

$Y_i$  represents Firm Performance;

$\beta_0$  represents Constant or Regression coefficient

$\beta_1$  represents Regressor for  $X_1$

$\beta_2$  represents Regressor for  $X_2$

$\beta_3$  represents Regressor for  $X_3$

$\beta_4$  represents Regressor for  $X_4$

$X_1$  represents Innovativeness;

$X_2$  represents Risk-taking;

$X_3$  represents Pro-activeness;

$X_4$  represents Aggressiveness; and;

$e$  = Error Term

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSION**

#### **4.1 Introduction**

This chapter presents and discusses the result of responses on ‘Entrepreneurial Orientation and Performance of firms listed in Nigerian Stock Exchange. The information gathered in this study through the data are reported and critically analyzed for the purpose of easy evaluation of the research which was analyzed using simple frequency tables, descriptive statistic and dynamic panel analysis. Furthermore, firms were distributed based on the rate or numbers of times they undertake EO components such as innovation which is divided into product, process, and technological innovations, risk taking which was divided into three which includes monetary risk, social risk and psychological risk, pro-active posture, which has anticipate and prevent problems, be action oriented and adoption of opportunity seeking strategy as its components, and aggressiveness with knowledge creation, dissemination of knowledge, and continuous innovation as its components. In addition, in the chapter, the characteristics of the unit of analysis, the results associated with the testing of the hypotheses are reported according to each hypothesis tested; the process followed is outlined, this including the statistical procedures followed in terms of the testing the formulated hypotheses.

#### **4.2 Rate of Adoption (Response rate) of EO Components by Sampled Firms**

This subsection deals with the distribution of sampled firms based on the number of times they undertake or adopt components of EO dimensions during the period covered by this study. Table 4.1 reveals that 28 (46.7%) firms took monetary risk in all the period understudy while only 2 (3.3%) were not and 29 (48.3%) firms engaged in social risk while two firms out of sixty (60) failed to undertake social risk. Also, 25 (41.7%) firms involved in psychological risk throughout the periods

understudy while 2 (3.3%) firms did not. Considering the pro-active posture of the firms which was further categorized into three, anticipate and prevent problem, be action oriented and adopt opportunity seeking strategy the table shows that 30 (50%) firms anticipate and prevent problem in all the periods considered. Other dimensions of EO such as Innovativeness, and Aggressiveness are analyzed.

**Table 4.1: Rate of Adoption of Entrepreneurial Orientation by Firms**

Entrepreneurial Orientation	Period									Total
	0	2	3	4	5	6	7	8	9	
<b>INNOVATIVENESS</b>										
<b>Product Innovation</b>	4(6.7)	3(5)	5(8.3)	6(10)	12(20)	11(18.3)	4(6.7)	2(3.3)	13(21.7)	60(100)
<b>Process Innovation</b>	4(6.7)	3(5)	5(8.3)	6(10)	12(20)	11(18.3)	4(6.7)	2(3.3)	13(21.7)	60(100)
<b>Technological Innovation</b>	4(6.7)	3(5)	5(8.3)	6(10)	12(20)	10(16.7)	4(6.7)	2(3.3)	14(23.3)	60(100)
<b>RISK TAKING</b>										
<b>Monetary Risk</b>	2(3.3)	-----	2(3.3)	4(6.7)	7(11.7)	6(10)	7(11.7)	4(6.7)	28(46.7)	60(100)
<b>Social Risk</b>	2(3.3)	-----	2(3.3)	4(6.7)	6(10)	6(10)	7(11.7)	4(6.7)	29(48.3)	60(100)
<b>Psychological Risk</b>	2(3.3)	-----	3(5)	4(6.7)	6(10)	8(13.3)	9(15)	3(5)	25(41.7)	60(100)
<b>PRO-ACTIVE POSTURE</b>										
<b>Anticipate and Prevent Problem</b>	2(3.3)	2(3.3)	3(5)	4(6.7)	11(18.3)	4(6.7)	1(1.7)	3(5)	30(50)	60(100)
<b>Be Action Oriented</b>	5(8.3)	7(11.7)	6(10)	6(10)	8(13.3)	2(3.3)	2(3.3)	2(3.3)	22(36.7)	60(100)
<b>Adopt Opportunity Seeking Strategy</b>	-----	-----	4(6.7)	5(8.3)	7(11.7)	4(6.7)	1(1.7)	4(6.7)	35(58.3)	60(100)
<b>AGGRESSIVENESS</b>										
<b>Knowledge Creation</b>	48(80)	5(8.3)	3(5)	3(5)	1(1.7)	-----	-----	-----	-----	60(100)
<b>Dissemination of New Knowledge</b>	47(78.3)	5(8.3)	3(5)	3(5)	1(1.7)	-----	-----	-----	1(1.7)	60(100)
<b>Continuous Innovation</b>	-----	-----	4(6.7)	5(8.3)	7(11.7)	4(6.7)	1(1.7)	4(6.7)	35(58.3)	60(100)

Table below shows the descriptive statistic of some variables and the results shows that ROA ranges from -0.390 to 0.265 with an average of 0.068 and standard deviation of 0.084 during the period under consideration. ROE has a minimum of -20.877 and maximum of 28.971 with an average of 0.223 and standard deviation of 2.721. On average, firm size is 16.704 and its ranges from 13.362 to 19.671 with standard deviation of 1.599

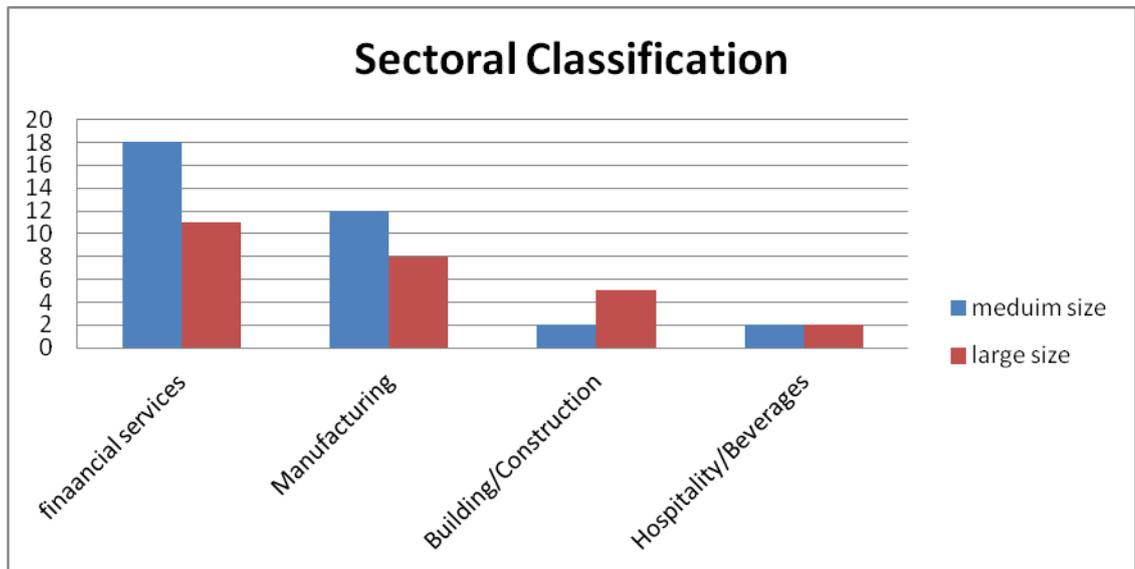
**Table 4.2 Descriptive statistics**

Variable	Minimum	Maximum	Mean	std
ROA	-0.390`	0.265	0.068	0.084
ROE	-20.877	28.971	0.0223	2.7.21

### 4.3 Demographic Characteristics of Respondents

**Table 4.3 Demographic Characteristics of Respondents**

Sector	Medium Size	Large Size	Total
Financial Services	18	11	29
Manufacturing	12	8	20
Building/ Construction	2	5	7
Hospitality/ Beverages	2	2	4
	24	26	60



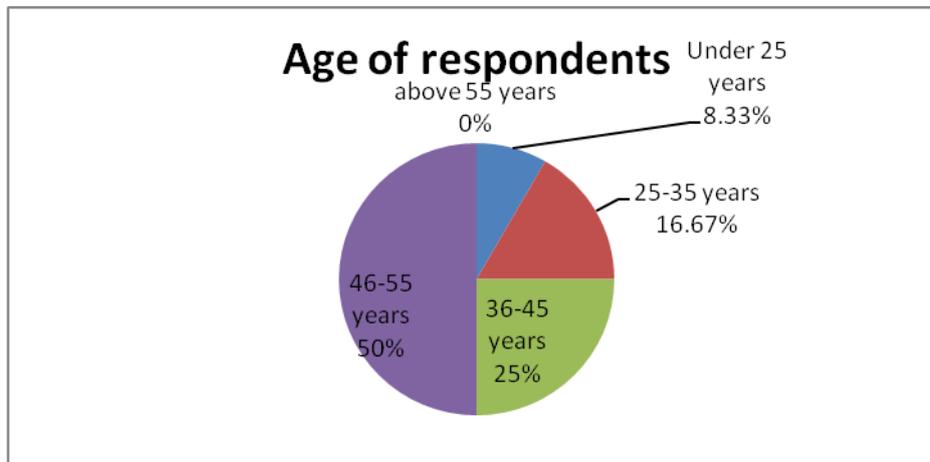
**Figure 4.1: Sectoral Classification of Sampled firms**

A sample of sixty firms were taken which spread over four sectoral areas- the Financial services, the Manufacturing sector, Building and Construction sector, and Hospitality and Beverages sector. These sectors were selected based on the fact that the biggest financial allocation has been targeted at this sector in the last two or three decades. Thirty four firms or 56.67% were medium sized, and the remaining 26 firms or 43.33 were in large scale category.

#### 4.3.1 Age of Respondents

**Table 4.4 : Age of Respondents**

Age	No	Percentage (%)
Under 25 years	5	8.33
25-35 years	10	16.67
36-45 years	15	25
46-55 years	30	50
Above 55 years	-	-
	60	100



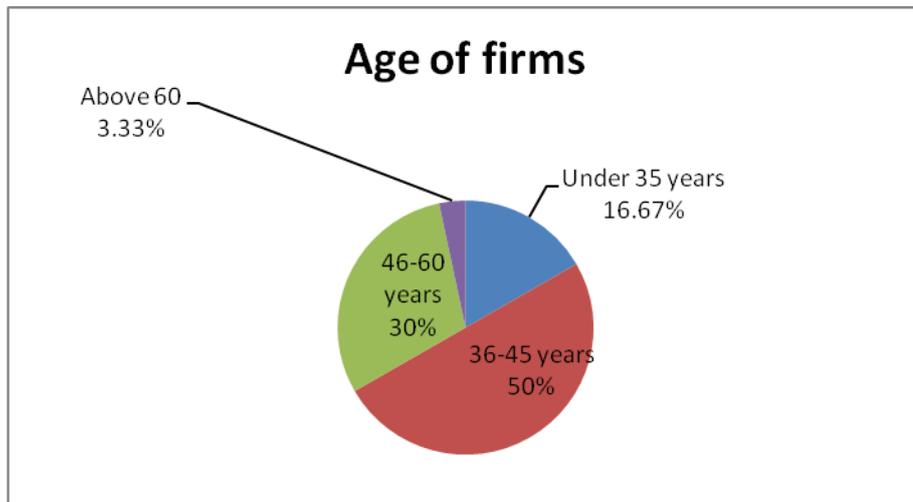
**Figure 4.2 :Age of Respondents**

The age structure of the respondents reveals that none of the respondent exceeds the age of 55 years. Five percent were below 25, 10% fell between 25 and 35 years, 15% were between 36 and 45 years, while the remaining 50% were between 46 and 55 years.

#### 4.3.2 Age of Firms

**Table 4.5 Age of Firms**

Age	No	Percentage (%)
Under 35 years	10	16.67
36-45 years	30	50
46-60 years	18	30
Above 60	2	3.33
	60	100



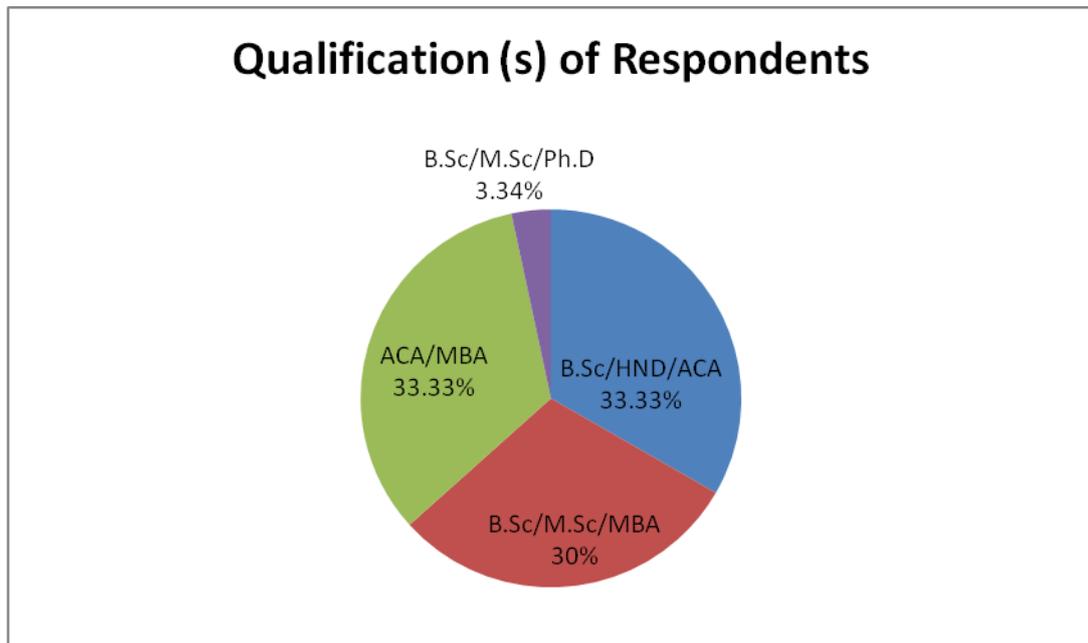
**Figure 4.3: Age of Sampled firms**

Based on the year of incorporation, ten firms or 16.67% were under 35 years, thirty firms or 50% were between 36 and 45 years old, eighteen firms or 30% fell between 46 and 60 years and only two firms or 3.33% exceeded sixty one years of age.

#### 4.3.3 Qualification (s) of Respondents

**Table 4.6 Qualification (s) of Respondents**

Qualification	No	Percentage (%)
B.Sc/ HND /ACA	20	33.33
B.Sc/ M.Sc/ MBA	18	30
ACA/ MBA	20	33.33
B.Sc/ M.Sc /Ph.D	2	3.34
-	60	100



**Figure 4.4 : Qualification (s) of the Respondents**

The study revealed that respondents were adequately educated. Twenty or 33.33 had at least B.Sc/HND and a professional qualification, eighteen or 30% had BSc/ M.Sc or MBA, twenty or 33.33% had MBA and professional qualification, while only two or 3.33% had doctorate degrees.

#### **4.4: Inferential Statistics**

This section presents the effects of entrepreneurial orientation on firm performance using ROA and ROE as proxies of firm performance and panel analysis is employed. Panel analysis consists of pooled regression, random regression and fixed regression. LM test is used to select the best model between pooled regression and random regression model. When LM test is significant this implies that pooled regression is better than random model and if otherwise random regression model is better than pooled model, then we will proceed to estimate fixed regression. In order to select between random model and fixed model we employed Hausman (1978) specification test and if test is significant it indicates that fixed model is better than random regression model.

Table below presents the result of panel analysis of the effects of entrepreneurial orientation on ROA as a proxy of firm's performance. The standard errors are reported in parentheses below the coefficients. Based on Hausman specification test, fixed regression is selected as best model and therefore it is interpreted. The result shows that there exist a positive and significant relationship between entrepreneurial orientation and ROA

#### 4.5 Role of Entrepreneurial Orientation on ROA

**Table 4.7 Entrepreneurial Orientation on ROA**

VARIABLE	PR	RR	FR
Innovativeness	-0.006 (-0.006)	-0.005 (-0.006)	-0.013** (-0.006)
Risk-taking	-0.01 (-0.008)	-0.01 (-0.008)	-0.005 (-0.008)
Pro-active posture	0.01 (-0.01)	0.004 (-0.011)	0.007 (0.011)
Aggressiveness	0.012 (-0.014)	0.011 (-0.015)	0.02 (-0.014)
Constant	0.078 (-0.062)	0.331*** (-0.095)	2.267*** (-0.179)
R2	0.022		0.336
F	1.864		37.244

However, innovation, risk taking, proactive posture aggressiveness have no significant effect on performance proxy by return on asset, only aggressiveness has a positive and significant relationship with ROA.

#### 4.5.2 Role of Entrepreneurial Orientation on ROE

The table below shows the result of panel analysis of entrepreneurial orientation on firm performance proxied by ROE. The Hausman specification model selected fixed regression as best model and thus fixed model is explained. The result of fixed model shows that in examining the role of entrepreneurial orientation on ROE, out of entire entrepreneurial orientation variables, risk taking, pro-active posture, and aggressiveness have positive and significant relationship with ROE.

**Table 4.8 Entrepreneurial Orientation on ROE**

VARIABLE	PR	RR	FR
Innovativeness	0.012 (-0.067)	0.012 (-0.067)	-0.03 (-0.08)
Risk-taking	0.022 (-0.09)	0.021 (-0.09)	0.018 (-0.108)
Pro-active Posture	-0.074 (-0.109)	-0.071 (-0.109)	0.139 (-0.149)
Aggressiveness	0.147 (-0.152)	0.145 (-0.152)	0.081 (-0.19)
Constant	0.427 (-0.674)	0.434 (-0.683)	6.287*** (-2.755)
R2	0.004		0.025
F	0.309		1.824

In addition, it was found that none of the entrepreneurial orientation variables have significant impact on performance captured by return on equity, and ROA.

#### 4.5.3: Role of Entrepreneurial Orientation of Financial Services on ROA

**Table 4.9 Entrepreneurial Orientation of Financial Services on ROA**

VARIABLE	PR	RR	FR
Innovativeness	-0.002 (-0.014)	-0.004 (-0.0140)	-0.013 (-0.011)
Risk-taking	-0.004 (-0.016)	-0.01 (-0.017)	0.017 (-0.013)
Pro-active Posture	0.001 (-0.019)	-0.005 (-0.022)	-0.005 (-0.018)
Aggressiveness	0.011 (-0.024)	0.01 (-0.024)	0.019 (-0.019)
Constant	0.339*** (-0.111)	0.865** (-0.181)	3.674*** (-0.259)
R2	0.039		0.567
F	1.593		44.696

The relationship between entrepreneurial orientations of financial services and firm performance (ROE), is stated the table below, Table 4.6 presents the detailed and Hausman test favoured fixed regression and therefore it is interpreted. Based on the selected model, it was found that entrepreneurial orientation variables are not significant in explaining firm performance of financial services. However,

innovativeness is negatively related to with ROE, risk-taking, pro-active posture and aggressiveness are positive but insignificantly related to ROE.

#### 4.5.4: Role of Entrepreneurial Orientation of Financial Services on ROE

**Table 4.10 Entrepreneurial Orientation of Financial Services on ROE**

VARIABLE	PR	RR	FR
Innovativeness	-0.041 (-0.024)	-0.037 (-0.025)	-0.039 (-0.027)
Risk-taking	0.033 (-0.028)	0.031 (-0.029)	0.039 (-0.034)
Pro-active Posture	0.014 (-0.034)	0.015 (-0.036)	0.019 (-0.045)
Aggressiveness	0.065 (-0.04)	0.057 (-0.041)	0.046 (-0.046)
Constant	-0.346* (-0.197)	-0.296 (-0.227)	1.821** (-0.772)
R2	0.062		0.069
F	2.437		2.41

#### 4.5.5 Role of Entrepreneurial Orientation of Manufacturing Firms on ROA

**Table 4.11 Entrepreneurial Orientation of Manufacturing Firms on ROA**

VARIABLE	PP	RR	FR
Innovativeness	-0.003 (-0.004)	-0.003 (-0.004)	-0.001 (-0.005)
Risk-taking	-0.01 (-0.008)	-0.009 (-0.007)	-0.006 (-0.007)
Pro-active Posture	0.013 (-0.008)	0.015* (-0.009)	0.013 (-0.01)
Aggressiveness	0.018 (-0.013)	0.012 (-0.014)	0.009 (-0.015)
Constant	-0.235*** (-0.065)	-0.262** (-0.113)	-0.421 (-0.193)
R2	174		174
F	0.236		0.096

The relationship between entrepreneurial orientation on manufacturing and firm performance have been examined and below presents the detail of the results. In selection of the model, Hausman (1978) model is employed and fixed regression model is selected as best model. The result of the panel analysis shows a negative and significant relationship between innovativeness and ROE, other components of EO had positive and significant relationship with ROE in the manufacturer firms.

#### 4.5.6: Role of Entrepreneurial Orientation of Manufacturing Firms on ROE

**Table 4.12 Entrepreneurial Orientation of Manufacturing Firms on ROE**

VARIABLE	PR	RR	FR
Innovativeness	0.07 (-0.165)	0.07 (-0.165)	-0.085 (-0.198)
Risk-taking	0.002 (-0.289)	0.002 (-0.289)	0.336 (-0.327)
Pro-active Posture	-0.123 (-0.311)	-0.123 (-0.311)	0.607 (-0.416)
Aggressiveness	0.415 (-0.487)	0.415 (-0.487)	0.362 (-0.649)
Constant	2.715 (-2.409)	2.715 (-2.409)	12.203 (-8.429)
R2	0.013		0.077

Table 4.13 Variables Definition

<b>X1</b>	Product Innovation
<b>X2</b>	Process Innovation
<b>X3</b>	Technological Innovation
<b>X4</b>	Monetary Risk
<b>X5</b>	Social Risk
<b>X6</b>	Psychological Risk
<b>X7</b>	Anticipate and Prevent Problem
<b>X8</b>	Be Action Oriented
<b>X9</b>	Adopt Opportunity Seeking Strategy
<b>X10</b>	Knowledge Creation
<b>X11</b>	Dissemination of New Knowledge
<b>X12</b>	Continuous Innovation

Based on Hausman test, fixed model is selected as best model. Therefore, fixed model results are interpreted. The results show that for monetary risk (X4), social risk (X5) and adopt opportunity seeking strategy (X9); firm size and firm's age have a significant effect on firm performance. There is positive and significant relationship between ROA and monetary risk (at 5% level), adopt opportunity seeking strategy (at 5% level) and firm's age (at 1% level). Conversely, there is negative and significant influence between ROA and Social Risk (at 10% level) .

#### 4.5.7 : Role of Entrepreneurial Orientation on ROA

**Table 4.14 Entrepreneurial Orientation on ROA**

VARIABLE		PR	RR	FR
Innovativeness	X1	-0.105 (0.094)	-0.083 (0.101)	0.011 (0.095)
	X3	0.90 (0.095)	0.072 (0.103)	-0.044 (0.097)
Risk-taking	X4	0.121 (0.098)	0.096 (0.108)	0.218** (0.103)
	X5	-0.136 (0.109)	-0.115 (0.117)	-0.201* (0.110)
	X6	-0.004 (0.044)	-0.008 (0.045)	-0.037 (0.040)
Pro-active Posture	X7	0.023 (0.031)	0.003 (0.035)	-0.045 (0.034)
	X8	0.029 (0.019)	0.024 (0.021)	-0.021 (0.021)
	X9	-0.031 (0.039)	-0.016 (0.043)	0.099** (0.041)
Aggressiveness	X10	-0.109* (0.061)	-0.122 (0.101)	0.039 (0.029)
	X11	- 0.134** (0.055)	0.150 (0.097)	0.000 (.)
Constant		0.091 (0.062)	0.345*** (0.096)	2.375*** (0.186)
N		507	507	507
R2		0.043		0.043
F		1.827		21.127

**Standard errors in parentheses\* p<0.10, \*\* p<0.05, \*\*\* p<0.01**

The table below, Table below shows the results of the role of entrepreneurial orientation on firm performance using ROE as a proxy. Fixed model is selected as best model using Hausman test thus it is explained. Four out of the entire entrepreneurial orientation variables is found to be significantly related to firm performance. The coefficient of anticipate and prevent problems (X7) has a negative and significant effect on firm performance at 1 percent level. This indicates that as firms increase their problem prevention activities, this could result in 1.105 reductions in firm's ROE. The coefficient of adopt opportunity seeking strategy (X9)

has a positive and significant relationship with ROE. This implies that as the firm seeks to adopt opportunity seeking strategy could result in 1.663 increases in ROE.

#### 4.5.8: Role of Entrepreneurial Orientations on ROE

**Table 4.15 Entrepreneurial Orientations on ROE**

<b>VARIABLE</b>		<b>PR</b>	<b>RR</b>	<b>FR</b>
<b>Innovativeness</b>	X1	-0.072 (1.216)	-0.066 (1.221)	0.313 (1.473)
	X3	0.157 (1.227)	0.148 (1.233)	-0.402 (1.498)
<b>Risk- taking</b>	X4	1.628 (1.042)	1.630 (1.630)	1.945 (1.415)
	X5	-1.398 (1.159)	-1.401 (1.170)	-1.784 (1.513)
	X6	-0.148 (0.467)	-0.144 (0.470)	-0.117 (0.551)
<b>Pro-activeness</b>	X7	-0.097*** (0.337)	1.101*** (0.341)	-1.247*** (0.475)
	X8	0.112 (0.201)	0.116 (0.204)	0.045 (0.291)
	X9	0.898** (0.425)	0.920** (0.429)	1.663*** (0.575)
<b>Aggressiveness</b>	X10	-0.522 (0.647)	-0.524 (0.666)	0.057 (0.394)
	X11	0.730 (0.583)	0.728 (0.604)	0.000(.)
<b>Constant</b>		0.444 (0.608)	0.465 (0.698)	8.218*** (2.866)
<b>N</b>		496	496	496
<b>R2</b>		0.028		0.046
<b>F</b>		1.146		1.880

Standard errors in parentheses  
 \* p<0.10, \*\* p<0.05, \*\*\* p<0.01

#### 4.6 Role of Entrepreneurial Orientation on Performance of Financial Services

##### Firms ROA

Table below presents the results of panel analysis of effect of entrepreneurial orientation of financial services on the firm performance using ROA a proxy. The Hausman test is significant at 5 percent indicating that fixed regression is the best and thus fixed model is explained. The table below, Table shows that four out of the entire entrepreneurial orientation variables are significantly related to firm performance. The coefficient of anticipate/prevent problems (X7) and firm's size have a negative and significant impact on ROA. More so, the coefficients of adopt opportunity seeking strategy (X9) has positive and significant relationship with ROA.

**Table 4.16 Entrepreneurial Orientation on Performance of Financial Services Firms ROA**

VARIABLE		PR	RR	FR
Innovation	X1	-0.078 (0.126)	-0.039 (0.136)	-0.033 (0.107)
	X3	0.082 (0.132)	0.039 (0.144)	-0.063 (0.113)
Risk-taking	X4	-0.061 (0.162)	-0.018 (0.160)	0.062 (0.120)
	X6	-0.041 (0.158)	0.008 (0.157)	-0.021 (0.119)
Pro-active Posture	X7	-0.030 (0.064)	-0.072 (0.068)	-0.116** (0.056)
	X8	0.011 (0.037)	0.004 (0.041)	0.020 (0.034)
	X9	0.029 (0.073)	0.061 (0.079)	0.135** (0.065)
Aggressiveness	X10	0.024 (0.049)	0.020 (0.050)	0.031 (0.038)
Constant		0.339*** (0.1150)	0.991*** (0.200)	3.875*** (0.284)
R2		0		1
F		1.025		27.393

Standard errors in parentheses

\* p<0.10, \*\* p<0.05, \*\*\* p<0.01

This next table, Table 4.12 presents the examination of the effect of entrepreneurial orientation on ROE as a proxy of Financial Services firm performance and the results

are presented in the Table 4.12. Based on Hausman model specification test, fixed regression was selected as the best model and therefore fixed regression model is interpreted. Two out of the entire entrepreneurial orientation variables are found to be statistically significantly related to ROE: That is adopt opportunity seeking strategy, and knowledge creation

#### 4.6.1: Role of Entrepreneurial Orientation of Financial Service Firms on ROE

**Table 4.19 Role of Entrepreneurial Orientation of Financial Service Firms on ROE**

VARIABLE		PR	RR	FR
Innovation	X1	-0.129 (0.258)	-0.110 (0.263)	-0.030 (0.300)
	X3	0.041 (0.266)	0.030 (0.273)	-0.062 (0.314)
Risk-taking	X4	-0.011 (0.274)	0.001 (0.278)	0.063 (0.299)
	X6	0.090 (0.266)	0.075 (0.271)	0.020 (0.299)
Pro-active Posture	X7	-0.118 (0.111)	-0.119 (0.115)	-0.141 (0.143)
	X8	0.066 (0.064)	0.085 (0.068)	0.116 (0.087)
	X9	0.150 (0.130)	0.122 (0.135)	0.124 (0.167)
Aggressiveness	X10	0.138* (0.082)	0.126 (0.085)	0.199 (0.096)
Constant		-0.330 (0.202)	-0.266 (0.244)	1.838** (0.850)
R2		0		0
F		1.700		1.821

**Standard errors in parentheses**

**\* p<0.10, \*\* p<0.05, \*\*\* p<0.01**

This subsection examined the effect of entrepreneurial orientation on ROA at manufacturing level. The result shows in Table 4.13 that pooled regression model is the best model of the estimation using ROA as a proxy of firm performance and thus pooled regression is explained. The result shows that there is a positive and significant impact between ROA and Anticipate and Prevent Problem (X7),

Dissemination of New Knowledge (X11), On the other hand, there exist a negative and significant relationship between ROA and Knowledge Creation (X10).

#### 4.6.2 Role of Entrepreneurial Orientation of Manufacturing Firms on ROA

**Table 4.20 Role of Entrepreneurial Orientation of Manufacturing Firms on ROA**

VARIABLES		PR	RR	FR
Innovation	X1	-0.001 (0.014)	-0.006 (0.014)	-0.005 (0.015)
Risk-taking	X4	0.032 (0.027)	-0.005 (0.028)	-0.020 (0.030)
	X6	-0.033 (0.022)	-0.012 (0.023)	0.004 (0.24)
Pro-active Posture	X7	0.044** (0.022)	0.040 (0.025)	0.020 (0.029)
	X8	0.008 (0.018)	0.016 (0.021)	0.041* (0.024)
	X9	-0.016 (0.033)	-0.005 (0.037)	-0.021 (0.041)
Constant		-0.207*** (0.068)	-0.225** (0.107)	-0.410 (0.194)
N		174	174	174
R2		0.331		0.106
F		8.060		1.910

**Standard errors in parentheses**

**\* p<0.10, \*\* p<0.05, \*\*\* p<0.01**

Table 4.14 shows the result of impact of entrepreneurial orientation of Manufacturing on ROE and Hausman test is significant indicating that fixed model is the best model of estimation and thus it is explained. The result of fixed model shows that there exist a negative relationship between anticipate and Prevent Problem, and ROE. This implies that as firm increase their anticipation and prevention of problem resulted in 0.036 reduction in their ROE.

### 4.6.3 Role of Entrepreneurial Orientation of Manufacturing Firms on ROE

**Table 4.21 Role of Entrepreneurial Orientation of Manufacturing Firms on ROE**

VARIABLE		PR	RR	FR
Innovativeness	X1	0.213 (0.529)	0.160 (0.542)	-0.372 (0.652)
Risk-taking	X4	1.065 (1.060)	1.159 (1.159)	1.218 (1.218)
	X6	-0.683 (0.851)	-0.600 (0.881)	-0.108 (1.051)
Pro-active Posture	X7	-1.910** (0.875)	-1.943** (0.905)	-1.323 (1.246)
	X8	0.269 (0.715)	0.277 (0.757)	-0.875 (1.026)
	X9	1.376 (1.275)	1.787 (1.347)	4.874*** (1.746)
Aggressiveness	X10	-0.453 (1.446)	-0.559 (1.588)	-0.066 (1.331)
	X11	0.848 (0.988)	0.900 (1.149)	0.000 (.)
Constant		1.021 (2.654)	1.125 (2.962)	11.580 (8.336)
N		174	174	174
R2		0.044		0.114
F		0.747		2.068

**Standard errors in parentheses**

**\* p<0.10, \*\* p<0.05, \*\*\* p<0.01**

### 4.7 Result of the Hypotheses Tested

The hypotheses proposed in chapter one are reiterated here in order to facilitate the specific testing of the hypotheses. The results as obtained, through statistical regression model are as follows; H1: There is no significant association between innovation and performance of firms on Nigerian Stock Exchange; H2: There is no significant association between risk taking and performance of firms listed on Nigerian Stock Exchange; H3: There is no significant association between pro-active posture and performance of firms listed on Nigerian Stock Exchange; H4: There is no significant association between aggressiveness and performance of firms listed on Nigerian Stock Exchange.

### 4.7.1 Hypothesis 1 (H1)

Using fixed regression model, the table below, shows that there is negative and significant relationship between innovation and ROE. This result implies that as firms increase their innovativeness, returns on equity reduces by 0.03 or by 3%. A three percent reduction in ROE may certainly serve as a discouragement to firms even with high proclivity for innovation.

**Table 4.22 : The Role of Innovativeness on Firm Performance**

VARIABLE	PR	RR	FR
Innovativeness	0.012 (-0.067)	0.012 (-0.067)	-0.03 (-0.08)
Constant	0.427 (0.674)	0.434 (0.683)	6.287** (-2.755)
R2	0.004		0.025
F	0.309		1.824

### 4.7.2 Hypothesis 2 (H2)

The table below, using fixed regression model, indicates that there is a positive not significant relationship between risk-taking and ROE. The result implies that risk-taking efforts by firms only lead to- 0.018 or 1.8 percent decrease in ROE. The level of loss, though may seem insignificant may justify aversion to risk-taking, among the firms.

**Table 4.23: The Role of Risk-taking on Firm Performance**

VARIABLE	PR	RR	FR
Risk-taking	0.022 (-0.09)	0.021 (-0.09)	-0.018 (-0.108)
Constant	0.427 (-0.674)	0.434 (-0.683)	6.287** (-2.755)
R2	0.004		0.025
F	0.309		1.824

### 4.7.3 Hypothesis 3(H3)

Using fixed regression model, the table below shows a positive and significant

relationship between pro-active posture of firms and ROE. The result implies that as firm increases their pro-active strategy, ROE increases by 0.139 or 13.9 percent. This result may serve as a good incentive for management of the firm to constantly take pro-active steps as basis for profits maximization, expansion and survival.

**Table 4.24: The Role of Pro-active posture on Firm Performance**

VARIABLE	PR	RR	FR
Pro-active Posture	-0.074 (-0.109)	0.071 (-0.109)	0.139 (-0.149)
Constant	0.427 (-0.674)	0.434 (-0.683)	6.287** (-2.755)
R2F	0.004 0.309		0.025 1.824

#### **4.7.4 Hypothesis 4 (H4)**

The table below, using fixed regression model, shows that there is a positive and significant relationship between aggressiveness and ROE. Table 4.16(d) presents the summary of the result. This implies that as firms increase their aggressive policies, ROE would increase by 0.081 or 8.1 percent. This percentage increase may energize firms' managers to be more aggressive especially in a highly competitive market economy like that of Nigeria.

**Table 4.25: Role of Aggressiveness on Firm Performance**

VARIABLE	PR	RR	FR
Aggressiveness	0.147 (-0.152)	0.145 (-0.152)	0.081 (-0.19)
Constant	0.427 (-0.674)	0.434 (-0.683)	6.287** (-2.755)
R2	0.004		0.025
F	0.309		1.824

EO Dimension	HO	HA
<b>Innovation</b>	Accept	Reject
<b>Risk-taking</b>	Accept	Reject
<b>Pro-active posture</b>	Reject	Accept
<b>Aggressiveness</b>	Reject	Accept

**Table 4.26 Decision on Hypothesis**

#### 4.7.5 Discussion of the Hypothesis

##### Introduction

This study is designed to establish the effect of entrepreneurial orientation on performance of firms listed on Nigerian Stock Exchange. Four key hypotheses were formulated in consonance with the general objective, the hypothesis were tested and below are the discussion of the results.

**The Null Hypothesis (H1)** states that there is no significant association between innovation and firm performance. The result of the analysis showed a negative and insignificant association between the two variables, hence HO was accepted, while HA was rejected, which implies that there is no significant association between innovation and performance of firms on Nigerian Stock Exchange. This further implies that as firm management increases their innovative efforts, ROE decreases by 0.03 or by 3 %.

**Null Hypothesis Two (H2)** states that there is no significant association between risk-taking and performance. The result of statistical analysis showed a positive and insignificant relationship between the two variables, hence this study rejected HO, and accepted HA, which implies that there is no significant association between risk-taking and performance of firms on Nigerian Stock Exchange. The result of panel analysis, using fixed regression model shows that as firms' increase their innovation efforts and strategy, returns on equity nose-dive by 0.018 or by 1.8%. A loss of about 2 percent in ROE would discourage management from further risks-taking.

**Null Hypothesis Three (H3)** states that there is no significant association between pro-active posture and performance of firms on Nigerian Stock Exchange. Result of the statistical test revealed a positive and significant association between the two variables, hence this study reject HO and accept HA, which implies that there is a positive and significant association between pro-active posture and performance of firms on Nigerian Stock Exchange. This is certainly good news for listed firms in Nigeria in view of this research result- an increase in pro-activeness as management policy would lead to 0.139 or 13.9% increase in ROE.

**Null Hypothesis Four (H4)** states that there is no significant association between aggressiveness and performance of firm on Nigerian Stock Exchange. Result of statistical analysis however revealed a positive and significant association between the two variables, hence this study reject HO and accept HA, which implies that there is a positive and significant association between aggressiveness and performance of firm listed in the Nigerian Stock Exchange. A consistent aggressive policy of management would trigger 0.081 or 8.1% increase in ROE.

The overall implication of these findings is that contrary to the findings of Otieno (2012) among Kenyans manufacturing firms where EO adoption had positive impact on the firm's sales, profit, and employees, only pro-active posture and aggressiveness exhibited such characteristic among Nigerian firms, while innovation and risk-taking were yet to have such influence. This result also confirmed the outcome of a study by

Adegbite and Abereijo (2007) in Nigeria which concluded that SME growth factors such as risk- taking and innovativeness, pro-active postures, and aggressiveness were lacking and uncommon among Nigerian managers and entrepreneurs. A separate analysis of data on financial institutions in Nigeria also confirmed the findings of Petzer (2012) in South Africa that revealed that none adoption of EO by financial institutions was due to numerous regulatory and instructional guidelines from the monetary authorities in South Africa. The over-bearing role of the Central Bank of Nigeria (CBN) was also inhibiting the adoption of EO by financial institutions in the country.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This study is designed to determine the role of EO on performance of firms listed in the Nigerian Stock Exchange. The study made use of panel data analysis to establish the relationship between EO dimensions-innovativeness, risk-taking, pro-activeness and aggressiveness, and performance of firms listed in the Nigerian Stock Exchange. Statistical tools engaged include pooled, random and fixed regression models based on preferences suggested by either Lagrange Multiplier test or Hausman Specification test. Hypotheses were formulated and tested. Below are the summary of findings, conclusion and relevant recommendation on the study.

The summary of the research findings and conclusions are based on results of data analyzed in chapter 4 while recommendations are drawn from conclusions of the study. Essentially, this chapter presents the summary of the study, the findings, conclusion, interpretation of the results and recommendations for action and directions for further and/or future research.

#### **5.2 Summary**

A quantitative research study was undertaken in respect of the relationship EO and performance of firms listed in Nigerian Stock Exchange (NSE). The objectives of the study were as stated hereunder. The study was targeted at achieving the following specific objectives; (i) To establish the role of Innovation on performance of firms listed on Nigerian Stock Exchange; (ii) To determine the role of risk-taking on performance of firms listed on Nigerian Stock Exchange; (iii) To establish the role of pro-active competitive posture on Performance of firms listed on Nigerian Stock Exchange; and (iv) To establish the role of aggressiveness on performance of firms

listed on Nigerian Stock Exchange. In these objectives, research questions were formulated in consonance with the hypotheses. The study revealed a negative relationship between innovation and ROA and ROE which are the parameters for measuring firm performance in this study. Also the result of the study showed a negative relationship between risk-taking and ROA and ROE. However, the other two (2) dimensions of EO- proactiveness and aggressiveness exhibited positive relationships with ROA and ROE.

Furthermore, the core null hypothesis and alternative hypotheses were developed to answer the research questions. The research questions are; (i) What is the role of Innovation on Performance of firms listed on Nigerian Stock Exchange?; (ii) What is the role of Risk-taking on Performance firms listed on Nigerian Stock Exchange; (iii) What is the role of Pro-activeness on Performance of firms listed on Nigerian Stock Exchange?; (iv) What is the role of Aggressiveness on Performance of firms listed on Nigerian Stock Exchange? Four research hypotheses were formulated out of the research question and subsequently tested. The null hypothesis of hypothesis one (1) on innovation and firm performance was accepted, and the alternative hypothesis was rejected. The null hypothesis on risk-taking and firm performance was also accepted while the alternative hypothesis was rejected. However on the two other dimensions of EO- pro-activeness and aggressiveness, the null hypotheses were rejected, the two having been found to have positive relationships with firm performance.

### **5.3 Research Questions**

On research question 1, this study discovered that the role of innovation in performance of firms listed in Nigerian Stock Exchange was insignificant and negative. A panel analysis of each of the components of Innovation- product, process, and technological innovation on ROA and ROE revealed a negative relationship with both returns on assets (ROA) and returns on equity (ROE). The reason behind this finding may be due to what Abereijo and Adegbite (2007) noted

in their studies that innovation was yet to be rooted among Nigerian firms.

On risk-taking propensity of Nigerian firms, the study revealed a positive relationship between each of the components of this dimension of EO and returns on equity (ROE), but a negative relationship between each of the components and returns on assets (ROA). On the third dimension of EO discussed in this study, that is Pro-active posture, there was a negative relationship between anticipate and prevent problem and ROA, but a positive relationship between action oriented strategy/ adoption of opportunity seeking strategy and ROA/ ROE. The components of aggressiveness- knowledge creation, dissemination of knowledge and continuous innovation were all positively related to both ROA and ROE.

#### **5.4 Conclusions**

This study sought to answer the question of what is the relationship between EO and performance of firms listed in the Nigerian Stock Exchange. The components of EO include: Innovation-Product, Process, and Technological innovation. Risk-taking - economic, social and psychological risks. Pro-active posture - anticipate/prevent problems, be action-oriented and adopt opportunity seeking strategy, and Aggressiveness - knowledge creation, dissemination of knowledge, and continuous innovation. Conclusions, in this study were drawn from study findings and summary in order to address the objectives of the study, which include:

##### **5.4.1 Role of Innovation on firm performance**

This study showed that there is no relationship between innovation and firm performance. The result of the analysis showed a negative and insignificant association between the two variables, hence HO was accepted, while HA was rejected, which implies that there is no significant association between innovation and performance of firms on Nigerian Stock Exchange. This further implies that as firm management increases their innovative efforts, ROE decreases by 0.03 or by 3

percent

#### **5.4.2 Role of Risk-taking on Firm performance**

The result of statistical analysis showed a positive and insignificant relationship between the two variables, hence this study rejected HO, and accepted HA, which implies that there is no significant association between risk-taking and performance of firms on Nigerian Stock Exchange. The result of panel analysis, using fixed regression model shows that as firms' increase their innovation efforts and strategy, returns on equity nose-dive by 0.018 or by 1.8%. A loss of about 2 percent in ROE would certainly discourage management from further risks-taking.

#### **5.4.3 Role of Pro-active posture on Firm Performance**

Result of the statistical test revealed a positive and significant association between the two variables, hence this study reject HO and accept HA, which implies that there is a positive and significant association between pro-active posture and performance of firms on Nigerian Stock Exchange. This is certainly good news for listed firms in Nigeria in view of this research result- an increase in pro-activeness as management policy would lead to 0.139 or 13.9% increase in ROE.

#### **5.4.4 Role of Aggressiveness on Firm Performance**

Result of statistical analysis however revealed a positive and significant association between the two variables, hence this study reject HO and accept HA, which implies that there is a positive and significant association between aggressiveness and performance of firm listed in the Nigerian Stock Exchange. A consistent aggressive policy of management would trigger 0.081 or 8.1% increase in ROE.

As noted by Osoro (2012) that certain learning related factors did potentially contributed to shaping EO and contribute significantly to increase in firms earnings in Kenya, this study also discovered that in Nigeria, there is a negative relationship between Innovation and ROA, but a positive relationship between Innovation and

ROE. Also, a negative relationship is found between Risk-taking and ROA, and also negative relationship is established between Risk-taking and ROE. The overall implications of these findings include the following among others: Investors and entrepreneurs who are intending to operate in Nigeria should exercise caution on innovation, as heavy investment on innovation might not yield corresponding returns on assets and equity. In addition, too much propensity for risk-taking might not increase ROA and ROE. Pro-active postures as management strategy would lead to increases in ROA and ROE, except much effort on anticipation and prevention of problems that may have negative on ROA. Aggressiveness in managing enterprises in Nigeria would impact positively on both ROA and ROE. As stated above, Pro-active posture as a strategy revealed, a positive relationship between both ROA and ROE.

Under firms aggressiveness however, a positive relationship is discovered between aggressiveness and both ROA and ROE. A separate analysis was carried out for firms in the financial services sector, where a negative relationship was established between innovation and ROA/ROE. This finding therefore confirms in Nigeria, the result of a study conducted by Petzer (2012) among financial institutions in South Africa. As it was also discovered by Otieno (2012) among manufacturing firms operating under the EAC (East African Community) under regional integration in Kenya, there exist a positive relationship between EO adoption and performance of manufacturing firms in Nigeria especially when pro-active posture and aggressiveness are considered. However, innovation and risk taking are yet to have positive relationships with firm performance.

## **5.5 Recommendations**

This section presents basic recommendations that emanated from the conclusions drawn from the research findings in the previous chapter. The recommendations are classified into entrepreneurial and policy recommendations. It is hoped that this recommendation will profoundly contribute towards informing the key actors and

players operating within the Nigeria's quoted or listed firms, policy makers and government diktats in the continent of Africa and indeed the emerging markets. Again, these recommendations are targeted to provoking interests of the players and consequently make them appreciate the critical role of EO and EO dimensions in the performance of listed firms.

### **5.5.1 Entrepreneurial Recommendation**

This study is essentially centered on EO and Performance of firms listed in Nigerian Stock Exchange, hence there is the need for the private sector to play a pivotal and lead role in the development and shaping EO dimensions in Nigeria. Osoro (2012), quoting Drucker, 1985, McCormic and Maalu (2011) stated that systematic innovation is an entrepreneur's tool and that innovation process should be taught and learnt in a pedagogic and didactic way. Therefore, the private sector and profit maximizing entities in Nigeria should establish and adequately fund academic and research chairs in Nigerian Universities where EO and Innovation would be taught and learnt especially based on the findings of this research undertaking that shows a negative relationship between innovation and ROA/ROE and negative relationship between risk-taking and ROA. The implication of this finding is that innovation does not increase ROA and ROE, while risk-taking does not increase ROA.

### **5.5.2 Policy Recommendation**

The Federal, State, and Local government efforts on entrepreneurship training development should be stepped up, and revitalized to promote passion for self employment among Nigerians as a reliable way of reducing the current high level of unemployment and under-employment in the country. The intention of the Federal government under the able leadership of the President, Gen. Muhamadu Buhari to begin to pay N5,000= (Five thousand Naira) monthly stipend to each of the unemployed 25,000,000=( Twenty five Million) youths in Nigeria is sign of urgency towards the promotion and development of Entrepreneurship, in general, and entrepreneurial orientation in particular. It is interesting to know that Kenya, a

nation that has a population of about a quarter of Nigeria has been promoting entrepreneurship and entrepreneurship development in the last two decades or more.

### **5.6 Area of Further Research**

Osoro (2012) quoting Rukunga, 2003 and Namusonge, 2006 shared the views of entrepreneurship scholars which agree that, though that entrepreneurship behavior may be an inherent quality, it can also be acquired through receiving knowledge through formal education, and experience. Consequently, the role of education in entrepreneurship orientation development needs to be addressed in Nigeria. A good reference point in Africa is Kenya where entrepreneurship training and research has been in existence in the last two decades or more. A more critical area that requires attention is fact that innovation does not positively influence ROA and ROE and risk- taking having no positive influence on ROA as revealed in this study.

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## APPENDICES

### appendix 1 : letter of introduction



**JOMO KENYATTA UNIVERSITY  
OF  
AGRICULTURE AND TECHNOLOGY  
DEPARTMENT OF ENTREPRENEURSHIP, TECHNOLOGY,  
LEADERSHIP & MANAGEMENT**

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OFFICE OF THE CHAIRPERSON  
P. O. BOX 62000-01200  
NAIROBI

DATE: 18<sup>th</sup> August, 2015

JKU/26/ HD413-1278/2013

**To whom it may concern:**

Dear Sir/Madam,

**RE: PhD RESEARCH PROJECT FOR: OLAWOYE OLANIRAN**

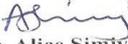
This is to introduce to you **Mr. Olaniran** who is a student pursuing Doctor of Philosophy degree in Entrepreneurship in the Department of Entrepreneurship, Technology, Leadership, and Management in the School of Entrepreneurship, Procurement and Management, College of Human Resource Development at Jomo Kenyatta University of Agriculture and Technology.

The student is currently undertaking a research proposal on: "**Entrepreneurial Orientation and Performance of Firms Listed in Nigerian Stock Exchange**" in partial fulfilment of the requirement for the programme.

The purpose of this letter is to request you to give the student the necessary support and assistance to enable him obtain the necessary data for the research. Please note that the information given is purely for academic purposes and will be treated with strict confidence.

Thank you.

Yours faithfully,

  
Dr. Alice Simiyu

**Postgraduate Research Coordinator**  
**Department of Entrepreneurship, Technology, Leadership and Management**



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## **Appendix 2: Target Population (176)**

- |                                     |                                   |
|-------------------------------------|-----------------------------------|
| (1) Abbey Mortgage Bank Plc         | (25) Zenith Bank Plc              |
| (2) Access Bank Plc                 | (26) Union Homes Plc              |
| (3) African Alliance Insurance Plc  | (27) Stanbic -IBTC Bank           |
| (4) AIICO Insurance Plc             | (28) Guinness Nigeria             |
| (5) Asso Savings and Loans Plc      | (29) African Paints               |
| (6) Cornerstone Insurance Plc       | (30) Aluminium Extrusion Industry |
| (7) Diamond Bank                    | (31) Berger Paints                |
| (8) Ecobank Plc                     | (32) Cadbury Nigeria Plc          |
| (9) Fidelity Bank                   | (33) Champion Breweries           |
| (10) First City Monument Bank       | (34) Dangote Flour Mills          |
| (11) Infinity Trust Mortgage Bank   | (35) DN Tyre and Rubber           |
| (12) International Energy Insurance | (36) Flour Mills of Nigeria       |
| (13) LASACO Assurance               | (37) FTN Cocoa Processors         |
| (14) NEM Insurance                  | (38) Honeywell Flour Mills        |
| (15) Niger Insurance Company        | (39) Livestock Feeds              |
| (16) Oasis Insurance                | (40) Nigeria-German Chemicals     |
| (17) Skye Bank Plc                  | (41) Nigerian Ropes               |

- (18) UBA Plc
- (19) Sterling Bank
- (20) Guarantee Trust Bank
- (21) STACO Insurance
- (22) Sovereign Trust Insurance
- (23) First Bank Plc
- (24) Union Bank Plc
- (49) Unity Bank
- (50) WEMA Bank
- (51) Union Homes REIT
- (52) ARBICO Plc
- (53) Roads (Nigeria)
- (54) Total Nigeria
- (55) BECO Petroleum Company
- (56) Forte Oil
- (57) Mobil Oil Nigeria
- (58) The Tourist Company Nigeria
- (59) Ikeja Hotels
- (42) Pharma-Deco
- (43) Union Dicon Salt
- (44) Vita-foam Nigeria
- (45) Beta Glass Company
- (46) Nigerian Breweries
- (47) Cappa and D'Alberto
- (48) Julius Berger Nigeria
- (74) UAC Property Devt. Co
- (75) Costain (West Africa)
- (76) Tantalizers Nigeria
- (77) Nestle Nigeria
- (78) Lennards Nigeria
- (79) Premier Paints
- (80) SCOA Nigeria
- (81) P Z Cusson Nigeria
- (82) Fidson Healthcare
- (83) Skye Shelter Fund
- (84) May & Baker Nigeria

- (60) ABC Transport
- (61) Academy Press
- (62) Afro-media Plc
- (63) Airline Services and Logistics
- (64) Allumaco Plc
- (65) Ashaka Cement Plc
- (66) C and L Leasing
- (67) Cadbury Nigeria
- (68) Chellarams
- (69) Computer Warehouse Group
- (70) Ellah Lakes
- (71) Tranzact International
- (72) Evan Medicals
- (73) Red Star Express
- (99) Thomas Wyatt Nigeria
- (100) Northern Nigeria Flour Mills
- (101) Studio Press Nigeria
- (102) Secure Electronic Technology
- (85) John Holt Nigeria
- (86) African Prudential Registrars
- (87) Continental Re-Insurance
- (88) Equity Assurance
- (89) Law Union and Rock Insurance
- (90) UBA Capital
- (91) UMC Insurance
- (92) AG Leventis
- (93) Almaco Plc
- (94) DN Meyer
- (95) CAPL Plc
- (96) Dangote Sugar Refinery
- (97) First Aluminium Nigeria
- (98) International Breweries
- (124) UNIC Insurance
- (125) Okumu Oil Palm
- (126) Paints and Coatings Manufac
- (127) MRS Oil Nigeria

(103) BOC Gasses	(128) UAC Nigeria
(104) ConOil	(129) Vono Products
(105) 7-UP Bottling Company	(130) Austin Laz & Company
(106) Capital Hotels	(131) Chams
( 107) Deap Capital Mgt and Trust	(132) Consolidated Hallmark
( 108) Eterna	(133) Courtville Investment
(109) Fidson Healthcare	(134) Crusader Nigeria
(110) Grelf Oil	(135) Vita Foam Nigeria
(111) IHS Nigeria	(136) Curtix
(112) Interlink Technologies	(137) Dangote Cement
( 113) John Holt	(138) Eko Corp.
(114) Learn Africa	(139) Evan Medical
(115) Lennards Nigeria	(140) FBN Holdings
(116) Mass Telecom Innovation Nig.	(141) Fortis Microfinance Bank
(117) May and Baker Nigeria	(142) Glaxo SmithKline Consumer
(118) McNicol Consolidated	(143) Great Nigeria Ins.
(119) Morison Industries	(144) Guinea Insurance
(120) Multiverse Resource	(145) WAPIC Insurance.

- |                                  |                                     |
|----------------------------------|-------------------------------------|
| (121) NCR Nigeria                | (146) Lafarge WAPCO Nigeria         |
| (122) Nestle Nigeria             | (147) Law Union & Rock Ins.         |
| (123) Nigeria Enemelware         | (148) Linkage Assurance             |
| (149) Oando                      | (168) Livestock Feeds               |
| ( 150) Presco                    | (169) Mutual Benefits Assurance     |
| (151) Premier Breweries          | (170) National Salt Company         |
| (152) PZ Cusson Nigeria          | (171) Navitus Energy                |
| (153) Studio Press Nigeria       | (172) Neimeth Int'l Pharmaceutical  |
| (154) Nigerian Ropes             | (173) NPF Microfinance Bank         |
| (155) Unity Capital Insurance    | (174) Trans Nationwide Express      |
| (156) Omatex Ventures            | (175) United Nigeria Textiles       |
| (157) Poly Products Nigeria      | (176) Union Diagn and Chem Services |
| ( 158) RT Brisco Nigeria         |                                     |
| (159) Rak Unity Petroleum        |                                     |
| (160) Regency Alliance Insurance |                                     |
| (161) Resort Savings and Loans   |                                     |
| (162) Royal Exchange Assurance   |                                     |
| (163) Smart Products Nigeria     |                                     |
| (164) Sovereign Trust Insurance  |                                     |

(165) Standard Alliance Insurance

(166) Trans- Corp. Nigeria

(167) Unilever Nigeria

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### **Appendix 3: The Sample Size (60)**

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#### **Name Of Company**

---

- 1) ACCESS BANK PLC
  - 2) DIAMOND BANK PLC
  - 3) ECOBANK NIGERIA PLC
  - 4) FIDELITY BANK PLC
  - 5) FIRST BANK OF NIGERIA PLC
  - 6) FIRST CITY MONUMENT BANK PLC (FCMB)
  - 7) GUARANTY TRUST BANK PLC (GTB)
  - 8) STANBIC IBTC BANK (IBTC-CHARTERED BANK) PLC
  - 9) STERLING BANK PLC (NAL BANK PLC)
  - 10) UNION BANK OF NIGERIA PLC
  - 11) UNITED BANK FOR AFRICA PLC (UBA)
  - 12) UNITY BANK PLC
  - 13) WEMA BANK PLC
  - 14) ZENITH BANK PLC
  - 15) GUINNESS NIGERIA PLC
  - 16) INTERNATIONAL BREWERIES PLC
  - 17) NIGERIAN BREWERIES PLC
  - 18) ASHAKA CEMENT PLC
  - 19) LAFARGE WAPCO PLC (WEST AFRICAN PORTLAND CEMENT)
  - 20) BERGER PAINTS PLC
  - 21) D.N. MEYER PLC (HAGEMEYER NIGERIA LIMITED)
  - 22) PREMIER PAINTS PLC
  - 23) TRANS-NATIONWIDE EXPRESS PLC
  - 24) A.G. LEVENTIS (NIG). PLC
  - 25) JOHN HOLT PLC
-

- 
- 26) PZ CUSSONS NIGERIA PLC (PZ INDUSTRIES)
  - 27) S C O A (NIG). PLC
  - 28) U A C N PLC
  - 29) UNILEVER NIGERIA PLC (LEVER BROTHERS)
  - 30) 7-UP BOTTLING COMPANY PLC
  - 31) CADBURY NIGERIA PLC
  - 32) DANGOTE FLOUR MILLS PLC
  - 33) FLOUR MILLS OF NIGERIA PLC
  - 34) NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG.

LTD)

- 35) NORTHERN NIG FLOUR MILLS PLC
  - 36) IKEJA HOTEL PLC
  - 37) THE TOURIST COMPANY OF NIGERIA PLC
  - 38) FIRST ALUMINIUM NIGERIA PLC
  - 39) NIGERIAN ENAMELWARE
  - 40) VITAFOAM (NIG). PLC
  - 41) AIICO INSURANCE PLC
  - 42) CONSOLIDATED HALLMARK INSURANCE PLC
  - 43) CONTINENTAL REINSURANCE COMPANY PLC
  - 44) CORNERSTONE INSURANCE PLC
  - 45) CUSTODIAN & ALLIED INSURANCE PLC
  - 46) LASACO ASSURANCE PLC
  - 47) LAW UNION & ROCK INSURANCE PLC
  - 48) LINKAGE ASSURANCE PLC
  - 49) NEM INSURANCE PLC
  - 50) PRESTIGE ASSURANCE CO. PLC
  - 51) REGENCY ALLIANCE INSURANCE PLC
  - 52) ROYAL EXCHANGE PLC
  - 53) STACO INSURANCE PLC
-

- 
- 54) STANDARD ALLIANCE INSURANCE PLC
  - 55) UNITYKAPITAL ASSURANCE PLC
  - 56) AVON CROWNCAPS & CONTAINERS (NIG). PLC
  - 57) BETA (DELTA) GLASS CO. PLC
  - 58) GREIF NIGERIA (VAN LEER NIGERIAN) PLC
  - 59) UACN PROPERTY DEVELOPMENT CO. PLC
  - 60) ASSOCIATED BUS COMPANY PLC
-

**Appendix 4: Questionnaire.**

This Interview guide/ questionnaire is designed to collect data regarding Entrepreneurial Orientation (EO) and Performance of listed firms on the Nigerian Stock Exchange (NSE). Please, respond as accurately and honestly as possible to all questions. Be assured that responses shall be treated as confidential and will be used for academic purpose only.

**Section 1: Information about the Company**

Q1.1 Name of the Company

.....

Q1.2 Year of Incorporation of Company/ Age of firm

.....

Q1.3 Age of Respondent Company (*See the table below*)

S/No.	Range inYears	Tick [√] as Appropriate
1	Below 25	
2	25-35	
3	35-45	
4	45-55	
5	Above 55	

<b>Q1.4 Rate of Adoption of EO Components</b>										
<b>Entrepreneurial Orientation</b>	<b>Period (In years)</b>									

0	2	3	4	5	6	7	8	9	
---	---	---	---	---	---	---	---	---	--

<b>INNOVATIVENESS</b>
-----------------------

<b>Product Innovation</b>	<input type="checkbox"/>									
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<b>Process Innovation</b>	<input type="checkbox"/>									
---------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

<b>Technological Innovation</b>	<input type="checkbox"/>									
---------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

<b>RISK TAKING</b>
--------------------

<b>Monetary Risk</b>	<input type="checkbox"/>									
----------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

<b>Social Risk</b>	<input type="checkbox"/>									
--------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

<b>Psychological Risk</b>	<input type="checkbox"/>									
---------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

<b>PRO-ACTIVE POSTURE</b>
---------------------------

<b>Anticipate and Prevent Problem</b>	<input type="checkbox"/>									
---------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

<b>Be Action Oriented</b>	<input type="checkbox"/>									
---------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

<b>Adopt Opportunity Seeking Strategy</b>	<input type="checkbox"/>									
---	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

<b>AGGRESSIVENESS</b>
-----------------------

<b>Knowledge Creation</b>	<input type="checkbox"/>									
---------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

<b>Dissemination of New Knowledge</b>	<input type="checkbox"/>									
---------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

<b>Continuous Innovation</b>	<input type="checkbox"/>									
------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

### Q1.5 Sectoral Classification of Firms

Indicate by ticking the sector of the economy your firm belongs to:

Financial Services.....(    )

Manufacturing .....( )

Building and Construction.....( )

Petroleum and Gas.....( )

Beverages and Hospitality.....( )

### Q1.6 Academic/ Professional Qualification (s) of Respondents

Qualification	No	Percentage (%)
HND/B.Sc/ACA	20	33.33
B.Sc/MBA	18	30
MBA/ACA	20	33.33
B.Sc/M.Sc/PhD	2	3.34
	60	100

## SECTION 2: ENTREPRENEURIAL ORIENTATION (EO)

### Q2.1 INNOVATIVENESS

Q2.1.1 Respond to the questions below by picking Yes or No

S/No.	Statement	Yes	No
1	Adding more features in our products have been emphasized		

2	New processes are introduced in our firm every six (6) months to improve our operations		
3	Every year, management allocate some portion of our budget to Research and Development (R & D)		

### Q2.2 RISK-TAKING

S/No.	Statement	Yes	No
4	Our company has a strong propensity/proclivity for high-risk projects, with chances of high returns.		
5	When confronted with decisions involving uncertainty, our firm typically adopts a bold posture in order to maximize the probability of exploiting opportunities.		
6	Owing to the nature of the environment, bold and wide-ranging actions are required to achieve the firm's objectives.		

### Q2.3 PRO-ACTIVENESS

S/No.	Statement	Yes	No
7	Owing to the nature of the environment, our firm typically takes steps to be able to withstand unexpected turbulence in the market.		

8	Our firm constantly looks for businesses that can be acquired.		
9	Usually our firm is the first to introduce new brands or products or process into the market.		

#### Q2.4 AGGRESSIVENESS

Please answer YES or NO to the following questions:

10. Our firm typically adopt a very competitive “undo-the-competitors”

posture : Yes  No

11. Our firm is aggressively and intensely competitive: Yes  No

12. We often, as a policy:

a) Sacrifice profitability to gain market share. Yes  No

b) Cut prices to increase market share. Yes  No

c) Engage in price war (set prices below competition) Yes  No

d) Often seek increased market share at the expense of cash flow and profitability. Yes  No

#### Q3.1 FIRM PERFORMANCE

a) 21. What has been your firm’s average market share (%) in comparison with your main competitors in the last 9 years?

b) 2006/2007: .....%

c) 2008/2009: .....%

- d) 2010/2011: .....%
- e) 2012/2013:.....%
- f) 2014:.....%

***THANK YOU FOR YOUR PARTICIPATION***



**Appendix 5 detailed anysis of  
data**

S/N	NEWSECTOR_first_1	Categorisation	NEWSUBSECTOR_first_1	Coyle	Year	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	ROA	ROE	SIZE	AGE	I	R	P	A
1	FINANCIAL SERVICES	Financial services	BANKING	ACCESS BANK PLC	2006	1	1	1	1	1	1	1	1	1	1	1	1	0	0	19	17	3	3	3	3
2	FINANCIAL SERVICES	Financial services	BANKING	ACCESS BANK PLC	2007	1	1	1	1	1	1	1	1	1	1	1	1	0	0	20	18	3	3	3	3
3	FINANCIAL SERVICES	Financial services	BANKING	ACCESS BANK PLC	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	0	21	19	3	3	3	1
4	FINANCIAL SERVICES	Financial services	BANKING	ACCESS BANK PLC	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	0	20	20	3	3	3	1
5	FINANCIAL SERVICES	Financial services	BANKING	ACCESS BANK PLC	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	0	21	21	3	3	3	1
6	FINANCIAL SERVICES	Financial services	BANKING	ACCESS BANK PLC	2011	1	1	1	1	1	1	1	0	1	0	0	1	0	0	21	22	3	3	2	1
7	FINANCIAL SERVICES	Financial services	BANKING	ACCESS BANK PLC	2012	1	1	1	1	1	1	1	0	1	0	0	1	0	0	21	23	3	3	2	1
8	FINANCIAL SERVICES	Financial services	BANKING	ACCESS BANK PLC	2013	1	1	1	1	1	1	1	0	1	0	0	1	0	0	21	24	3	3	2	1
9	FINANCIAL SERVICES	Financial services	BANKING	ACCESS BANK PLC	2014	1	1	1	1	1	1	1	0	1	0	0	1	0	0	21	25	3	3	2	1
10	FINANCIAL SERVICES	Financial services	BANKING	DIAMOND BANK PLC	2006	0	0	0	0	0	0	1	0	1	0	0	1	0	0	19	7	0	0	2	1
11	FINANCIAL SERVICES	Financial services	BANKING	DIAMOND BANK PLC	2007	0	0	0	0	0	0	1	0	1	0	0	1	0	0	20	8	0	0	2	1
12	FINANCIAL SERVICES	Financial services	BANKING	DIAMOND BANK PLC	2008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	9	0	0	0	0
13	FINANCIAL SERVICES	Financial services	BANKING	DIAMOND BANK PLC	2009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	10	0	0	0	0
14	FINANCIAL SERVICES	Financial services	BANKING	DIAMOND BANK PLC	2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	11	0	0	0	0
15	FINANCIAL SERVICES	Financial services	BANKING	DIAMOND BANK PLC	2011	0	0	0	1	1	1	0	1	1	0	0	1	0	0	21	12	0	3	2	1
16	FINANCIAL SERVICES	Financial services	BANKING	DIAMOND BANK PLC	2012	0	0	0	1	1	1	0	1	1	0	0	1	0	2	21	13	0	3	2	1
17	FINANCIAL SERVICES	Financial services	BANKING	DIAMOND BANK PLC	2013	0	0	0	1	1	1	0	1	1	0	0	1	0	0	21	14	0	3	2	1
18	FINANCIAL SERVICES	Financial services	BANKING	DIAMOND BANK PLC	2014	0	0	0	1	1	1	0	1	1	0	0	1	0	0	21	15	0	3	2	1
19	FINANCIAL SERVICES	Financial services	BANKING	ECOBANK NIGERIA PLC	2006	1	1	1	1	1	1	1	1	1	1	1	1	0	0	18	20	3	3	3	3
20	FINANCIAL SERVICES	Financial services	BANKING	ECOBANK NIGERIA PLC	2007	1	1	1	1	1	1	1	1	1	1	1	1	0	0	20	21	3	3	3	3
21	FINANCIAL SERVICES	Financial services	BANKING	ECOBANK NIGERIA PLC	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	0	20	22	3	3	3	1
22	FINANCIAL SERVICES	Financial services	BANKING	ECOBANK NIGERIA PLC	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	0	20	23	3	3	3	1
23	FINANCIAL SERVICES	Financial services	BANKING	ECOBANK NIGERIA PLC	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	0	19	24	3	3	3	1
24	FINANCIAL SERVICES	Financial services	BANKING	ECOBANK NIGERIA PLC	2011	1	1	1	1	1	1	0	1	1	0	0	1	0	0	21	25	3	3	2	1
25	FINANCIAL SERVICES	Financial services	BANKING	ECOBANK NIGERIA PLC	2012	1	1	1	1	1	1	0	1	1	0	0	1	0	0	21	26	3	3	2	1
26	FINANCIAL SERVICES	Financial services	BANKING	ECOBANK NIGERIA PLC	2014	1	1	1	1	1	1	0	1	1	0	0	1	0	0	21	28	3	3	2	1
27	FINANCIAL SERVICES	Financial services	BANKING	FIDELITY BANK PLC	2006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	19	0	0	0	0
28	FINANCIAL SERVICES	Financial services	BANKING	FIDELITY BANK PLC	2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	20	0	0	0	0
29	FINANCIAL SERVICES	Financial services	BANKING	FIDELITY BANK PLC	2008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	21	0	0	0	0
30	FINANCIAL SERVICES	Financial services	BANKING	FIDELITY BANK PLC	2009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	22	0	0	0	0
31	FINANCIAL SERVICES	Financial services	BANKING	FIDELITY BANK PLC	2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	23	0	0	0	0
32	FINANCIAL SERVICES	Financial services	BANKING	FIDELITY BANK PLC	2011	0	0	0	0	0	0	0	0	1	0	0	1	0	0	20	24	0	0	1	1
33	FINANCIAL SERVICES	Financial services	BANKING	FIDELITY BANK PLC	2012	0	0	0	0	0	0	0	0	1	0	0	1	0	0	21	25	0	0	1	1
34	FINANCIAL SERVICES	Financial services	BANKING	FIDELITY BANK PLC	2013	0	0	0	0	0	0	0	0	1	0	0	1	0	0	21	26	0	0	1	1



35	FINANCIAL SERVICES	Financial services	BANKING	FIDELITY BANK PLC	2014	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	21	27	0	0	1	1
36	FINANCIAL SERVICES	Financial services	BANKING	FIRST BANK OF NIGERIA PLC	2006	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	20	37	3	3	3	1
37	FINANCIAL SERVICES	Financial services	BANKING	FIRST BANK OF NIGERIA PLC	2007	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	21	38	3	3	3	1
38	FINANCIAL SERVICES	Financial services	BANKING	FIRST BANK OF NIGERIA PLC	2008	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	21	39	3	3	2	3
39	FINANCIAL SERVICES	Financial services	BANKING	FIRST BANK OF NIGERIA PLC	2009	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	21	40	3	3	2	3
40	FINANCIAL SERVICES	Financial services	BANKING	FIRST BANK OF NIGERIA PLC	2010	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	22	41	3	3	2	3
41	FINANCIAL SERVICES	Financial services	BANKING	FIRST BANK OF NIGERIA PLC	2011	1	1	1	1	1	1	1	0	1	0	0	1	0	0	22	42	3	3	2	1	
42	FINANCIAL SERVICES	Financial services	BANKING	FIRST BANK OF NIGERIA PLC	2012	1	1	1	1	1	1	1	0	1	0	0	1	0	0	22	43	3	3	2	1	
43	FINANCIAL SERVICES	Financial services	BANKING	FIRST BANK OF NIGERIA PLC	2013	1	1	1	1	1	1	1	0	1	0	0	1	0	0	22	44	3	3	2	1	
44	FINANCIAL SERVICES	Financial services	BANKING	FIRST BANK OF NIGERIA PLC	2014	1	1	1	1	1	1	1	0	1	0	0	1	0	0	22	45	3	3	2	1	
45	FINANCIAL SERVICES	Financial services	BANKING	FIRST CITY MONUMENT BANK PLC (FCMB)	2006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	24	0	0	0	0
46	FINANCIAL SERVICES	Financial services	BANKING	FIRST CITY MONUMENT BANK PLC (FCMB)	2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	25	0	0	0	0
47	FINANCIAL SERVICES	Financial services	BANKING	FIRST CITY MONUMENT BANK PLC (FCMB)	2008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	26	0	0	0	0
48	FINANCIAL SERVICES	Financial services	BANKING	FIRST CITY MONUMENT BANK PLC (FCMB)	2009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	27	0	0	0	0
49	FINANCIAL SERVICES	Financial services	BANKING	FIRST CITY MONUMENT BANK PLC (FCMB)	2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	28	0	0	0	0
50	FINANCIAL SERVICES	Financial services	BANKING	FIRST CITY MONUMENT BANK PLC (FCMB)	2011	1	1	1	1	1	1	1	0	1	0	0	1	0	0	20	29	3	3	2	1	
51	FINANCIAL SERVICES	Financial services	BANKING	FIRST CITY MONUMENT BANK PLC (FCMB)	2012	1	1	1	1	1	1	1	0	1	0	0	1	0	0	21	30	3	3	2	1	
52	FINANCIAL SERVICES	Financial services	BANKING	FIRST CITY MONUMENT BANK PLC (FCMB)	2013	1	1	1	1	1	1	1	0	1	0	0	1	0	0	21	31	3	3	2	1	
53	FINANCIAL SERVICES	Financial services	BANKING	FIRST CITY MONUMENT BANK PLC (FCMB)	2014	1	1	1	1	1	1	1	0	1	0	0	1	0	0	21	32	3	3	2	1	
54	FINANCIAL SERVICES	Financial services	BANKING	GUARANTY TRUST BANK PLC (GTB)	2006	1	1	1	1	1	1	1	1	1	0	0	1	0	0	20	16	3	3	3	1	
55	FINANCIAL SERVICES	Financial services	BANKING	GUARANTY TRUST BANK PLC (GTB)	2007	1	1	1	1	1	1	1	1	1	0	0	1	0	0	20	17	3	3	3	1	
56	FINANCIAL SERVICES	Financial services	BANKING	GUARANTY TRUST BANK PLC (GTB)	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	0	21	18	3	3	3	1	
57	FINANCIAL SERVICES	Financial services	BANKING	GUARANTY TRUST BANK PLC (GTB)	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	0	21	19	3	3	3	1	
58	FINANCIAL SERVICES	Financial services	BANKING	GUARANTY TRUST BANK PLC (GTB)	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	0	21	20	3	3	3	1	
59	FINANCIAL SERVICES	Financial services	BANKING	GUARANTY TRUST BANK PLC (GTB)	2011	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	21	21	3	3	3	3
60	FINANCIAL SERVICES	Financial services	BANKING	GUARANTY TRUST BANK PLC (GTB)	2012	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	21	22	3	3	3	3
61	FINANCIAL SERVICES	Financial services	BANKING	GUARANTY TRUST BANK PLC (GTB)	2013	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	21	23	3	3	3	3
62	FINANCIAL SERVICES	Financial services	BANKING	GUARANTY TRUST BANK PLC (GTB)	2014	1	1	1	1	1	1	1	1	1	1	1	1	1	0	3	22	24	3	3	3	3
63	FINANCIAL SERVICES	Financial services	BANKING	STANBIC IBTC BANK (IBTC-CHARTERED BANK)	2006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	17	0	0	0	0
64	FINANCIAL SERVICES	Financial services	BANKING	STANBIC IBTC BANK (IBTC-CHARTERED BANK)	2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	18	0	0	0	0
65	FINANCIAL SERVICES	Financial services	BANKING	STANBIC IBTC BANK (IBTC-CHARTERED BANK)	2008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	19	0	0	0	0
66	FINANCIAL SERVICES	Financial services	BANKING	STANBIC IBTC BANK (IBTC-CHARTERED BANK)	2009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	0	0	0	0
67	FINANCIAL SERVICES	Financial services	BANKING	STANBIC IBTC BANK (IBTC-CHARTERED BANK)	2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	21	0	0	0	0
68	FINANCIAL SERVICES	Financial services	BANKING	STANBIC IBTC BANK (IBTC-CHARTERED BANK)	2011	0	0	0	0	0	0	1	1	1	0	0	1	0	0	20	22	0	0	3	1	

69	FINANCIAL SERVICES	Financial services	BANKING	STANBIC IBTC BANK (IBTC-CHARTERED BANK)	2012	0	0	0	0	0	0	1	1	1	0	0	1	0	0	20	23	0	0	3	1
70	FINANCIAL SERVICES	Financial services	BANKING	STANBIC IBTC BANK (IBTC-CHARTERED BANK)	2013	0	0	0	0	0	0	1	1	1	0	0	1	0	0	20	24	0	0	3	1
71	FINANCIAL SERVICES	Financial services	BANKING	STANBIC IBTC BANK (IBTC-CHARTERED BANK)	2014	0	0	0	0	0	0	1	1	1	0	0	1	0	0	21	25	0	0	3	1
72	FINANCIAL SERVICES	Financial services	BANKING	STERLING BANK PLC (NAL BANK PLC)	2006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	46	0	0	0	0
73	FINANCIAL SERVICES	Financial services	BANKING	STERLING BANK PLC (NAL BANK PLC)	2007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	47	0	0	0	0
74	FINANCIAL SERVICES	Financial services	BANKING	STERLING BANK PLC (NAL BANK PLC)	2008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	48	0	0	0	0
75	FINANCIAL SERVICES	Financial services	BANKING	STERLING BANK PLC (NAL BANK PLC)	2009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	49	0	0	0	0
76	FINANCIAL SERVICES	Financial services	BANKING	STERLING BANK PLC (NAL BANK PLC)	2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	50	0	0	0	0
77	FINANCIAL SERVICES	Financial services	BANKING	STERLING BANK PLC (NAL BANK PLC)	2011	1	1	1	1	1	1	1	0	1	1	1	1	0	0	20	51	3	3	2	3
78	FINANCIAL SERVICES	Financial services	BANKING	STERLING BANK PLC (NAL BANK PLC)	2012	1	1	1	1	1	1	1	0	1	1	1	1	0	0	20	52	3	3	2	3
79	FINANCIAL SERVICES	Financial services	BANKING	STERLING BANK PLC (NAL BANK PLC)	2013	1	1	1	1	1	1	1	0	1	1	1	1	0	0	20	53	3	3	2	3
80	FINANCIAL SERVICES	Financial services	BANKING	STERLING BANK PLC (NAL BANK PLC)	2014	1	1	1	1	1	1	1	0	1	1	1	1	0	0	21	54	3	3	2	3
81	FINANCIAL SERVICES	Financial services	BANKING	UNION BANK OF NIGERIA PLC	2006	1	1	1	1	1	1	1	1	0	0	1	0	0	20	37	3	3	3	1	
82	FINANCIAL SERVICES	Financial services	BANKING	UNION BANK OF NIGERIA PLC	2007	1	1	1	1	1	1	1	1	0	0	1	0	0	20	38	3	3	3	1	
83	FINANCIAL SERVICES	Financial services	BANKING	UNION BANK OF NIGERIA PLC	2008	0	0	0	0	0	0	1	1	1	0	0	1	0	0	21	39	0	0	3	1
84	FINANCIAL SERVICES	Financial services	BANKING	UNION BANK OF NIGERIA PLC	2009	0	0	0	0	0	0	1	1	1	0	0	1	0	1	21	40	0	0	3	1
85	FINANCIAL SERVICES	Financial services	BANKING	UNION BANK OF NIGERIA PLC	2010	0	0	0	0	0	0	1	1	1	0	0	1	0	-1	21	41	0	0	3	1
86	FINANCIAL SERVICES	Financial services	BANKING	UNION BANK OF NIGERIA PLC	2011	1	1	1	1	1	1	1	1	0	0	1	0	0	21	42	3	3	3	1	
87	FINANCIAL SERVICES	Financial services	BANKING	UNION BANK OF NIGERIA PLC	2012	1	1	1	1	1	1	1	1	0	0	1	0	0	21	43	3	3	3	1	
88	FINANCIAL SERVICES	Financial services	BANKING	UNION BANK OF NIGERIA PLC	2013	1	1	1	1	1	1	1	1	0	0	1	0	0	21	44	3	3	3	1	
89	FINANCIAL SERVICES	Financial services	BANKING	UNION BANK OF NIGERIA PLC	2014	1	1	1	1	1	1	1	1	0	0	1	0	0	21	45	3	3	3	1	
90	FINANCIAL SERVICES	Financial services	BANKING	UNITED BANK FOR AFRICA PLC (UBA)	2006	1	1	1	0	0	0	1	0	1	0	0	1	0	0	21	45	3	0	2	1
91	FINANCIAL SERVICES	Financial services	BANKING	UNITED BANK FOR AFRICA PLC (UBA)	2007	1	1	1	0	0	0	1	0	1	0	0	1	0	0	21	46	3	0	2	1
92	FINANCIAL SERVICES	Financial services	BANKING	UNITED BANK FOR AFRICA PLC (UBA)	2008	0	0	0	1	1	1	1	0	1	0	0	1	0	0	21	47	0	3	2	1
93	FINANCIAL SERVICES	Financial services	BANKING	UNITED BANK FOR AFRICA PLC (UBA)	2009	0	0	0	1	1	1	1	0	1	0	0	1	0	0	21	48	0	3	2	1
94	FINANCIAL SERVICES	Financial services	BANKING	UNITED BANK FOR AFRICA PLC (UBA)	2010	0	0	0	1	1	1	1	0	1	0	0	1	0	0	21	49	0	3	2	1
95	FINANCIAL SERVICES	Financial services	BANKING	UNITED BANK FOR AFRICA PLC (UBA)	2011	1	1	1	1	1	1	1	1	0	0	1	0	0	21	50	3	3	3	1	
96	FINANCIAL SERVICES	Financial services	BANKING	UNITED BANK FOR AFRICA PLC (UBA)	2012	1	1	1	1	1	1	1	1	0	0	1	0	0	22	51	3	3	3	1	
97	FINANCIAL SERVICES	Financial services	BANKING	UNITED BANK FOR AFRICA PLC (UBA)	2013	1	1	1	1	1	1	1	1	0	0	1	2	2	17	52	3	3	3	1	
98	FINANCIAL SERVICES	Financial services	BANKING	UNITED BANK FOR AFRICA PLC (UBA)	2014	1	1	1	1	1	1	1	1	0	0	1	0	0	22	53	3	3	3	1	
99	FINANCIAL SERVICES	Financial services	BANKING	UNITY BANK PLC	2006	0	0	0	0	0	0	0	0	0	0	0	0	0	19	1	0	0	0	0	
100	FINANCIAL SERVICES	Financial services	BANKING	UNITY BANK PLC	2007	0	0	0	0	0	0	0	0	0	0	0	0	0	19	2	0	0	0	0	
101	FINANCIAL SERVICES	Financial services	BANKING	UNITY BANK PLC	2008	0	0	0	0	0	0	0	0	0	0	0	0	-1	20	3	0	0	0	0	
102	FINANCIAL SERVICES	Financial services	BANKING	UNITY BANK PLC	2009	0	0	0	0	0	0	0	0	0	0	0	0	-2	19	4	0	0	0	0	











139	CONSUMER GOODS	Manufacturing	BEVERAGES BREWERS/DISTILLERS	INTERNATIONAL BREWERIES PLC	2010	1	1	1	1	1	1	0	1	1	0	0	1	0	-2	16	39	3	3	2	1
140	CONSUMER GOODS	Manufacturing	BEVERAGES BREWERS/DISTILLERS	INTERNATIONAL BREWERIES PLC	2011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	40	0	0	0	0
141	CONSUMER GOODS	Manufacturing	BEVERAGES BREWERS/DISTILLERS	INTERNATIONAL BREWERIES PLC	2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	42	0	0	0	0
142	CONSUMER GOODS	Manufacturing	BEVERAGES BREWERS/DISTILLERS	INTERNATIONAL BREWERIES PLC	2014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	43	0	0	0	0
143	CONSUMER GOODS	Manufacturing	BEVERAGES BREWERS/DISTILLERS	NIGERIAN BREWERIES PLC	2006	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	60	3	3	3	1
144	CONSUMER GOODS	Manufacturing	BEVERAGES BREWERS/DISTILLERS	NIGERIAN BREWERIES PLC	2007	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	61	3	3	3	1
145	CONSUMER GOODS	Manufacturing	BEVERAGES BREWERS/DISTILLERS	NIGERIAN BREWERIES PLC	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	1	18	62	3	3	3	1
146	CONSUMER GOODS	Manufacturing	BEVERAGES BREWERS/DISTILLERS	NIGERIAN BREWERIES PLC	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	1	18	63	3	3	3	1
147	CONSUMER GOODS	Manufacturing	BEVERAGES BREWERS/DISTILLERS	NIGERIAN BREWERIES PLC	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	1	19	64	3	3	3	1
148	CONSUMER GOODS	Manufacturing	BEVERAGES BREWERS/DISTILLERS	NIGERIAN BREWERIES PLC	2011	1	1	1	1	1	1	1	1	1	0	0	1	0	0	19	65	3	3	3	1
149	CONSUMER GOODS	Manufacturing	BEVERAGES BREWERS/DISTILLERS	NIGERIAN BREWERIES PLC	2012	1	1	1	1	1	1	1	1	1	0	0	1	0	0	19	66	3	3	3	1
150	CONSUMER GOODS	Manufacturing	BEVERAGES BREWERS/DISTILLERS	NIGERIAN BREWERIES PLC	2013	1	1	1	1	1	1	1	1	1	0	0	1	0	0	19	67	3	3	3	1
151	CONSUMER GOODS	Manufacturing	BEVERAGES BREWERS/DISTILLERS	NIGERIAN BREWERIES PLC	2014	1	1	1	1	1	1	1	1	1	0	0	1	0	0	20	68	3	3	3	1
259	CONSUMER GOODS	Manufacturing	BEVERAGES NON-ALCOHOLIC	7-UP BOTTLING COMPANY PLC	2006	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	47	3	3	3	1
260	CONSUMER GOODS	Manufacturing	BEVERAGES NON-ALCOHOLIC	7-UP BOTTLING COMPANY PLC	2007	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	48	3	3	3	1
261	CONSUMER GOODS	Manufacturing	BEVERAGES NON-ALCOHOLIC	7-UP BOTTLING COMPANY PLC	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	49	3	3	3	1
262	CONSUMER GOODS	Manufacturing	BEVERAGES NON-ALCOHOLIC	7-UP BOTTLING COMPANY PLC	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	50	3	3	3	1
263	CONSUMER GOODS	Manufacturing	BEVERAGES NON-ALCOHOLIC	7-UP BOTTLING COMPANY PLC	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	51	3	3	3	1
264	CONSUMER GOODS	Manufacturing	BEVERAGES NON-ALCOHOLIC	7-UP BOTTLING COMPANY PLC	2011	0	0	0	1	1	0	1	1	1	0	0	1	0	0	18	52	0	2	3	1
265	CONSUMER GOODS	Manufacturing	BEVERAGES NON-ALCOHOLIC	7-UP BOTTLING COMPANY PLC	2012	0	0	0	1	1	0	1	1	1	0	0	1	0	0	18	53	0	2	3	1
266	CONSUMER GOODS	Manufacturing	BEVERAGES NON-ALCOHOLIC	7-UP BOTTLING COMPANY PLC	2013	0	0	0	1	1	0	1	1	1	0	0	1	0	0	18	54	0	2	3	1
267	CONSUMER GOODS	Manufacturing	BEVERAGES NON-ALCOHOLIC	7-UP BOTTLING COMPANY PLC	2014	0	0	0	1	1	0	1	1	1	0	0	1	0	0	18	55	0	2	3	1
205	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	A.G. LEVENTIS (NIG). PLC	2006	1	1	1	1	1	0	1	1	1	0	0	1	0	0	16	48	3	2	3	1
206	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	A.G. LEVENTIS (NIG). PLC	2007	1	1	1	1	1	0	1	1	1	0	0	1	0	0	16	49	3	2	3	1
207	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	A.G. LEVENTIS (NIG). PLC	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	0	16	50	3	3	3	1
208	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	A.G. LEVENTIS (NIG). PLC	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	51	3	3	3	1
209	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	A.G. LEVENTIS (NIG). PLC	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	52	3	3	3	1
210	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	A.G. LEVENTIS (NIG). PLC	2011	1	1	1	1	1	1	0	1	1	0	0	1	0	0	17	53	3	3	2	1
211	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	A.G. LEVENTIS (NIG). PLC	2012	1	1	1	1	1	1	0	1	1	0	0	1	0	0	0	54	3	3	2	1
212	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	A.G. LEVENTIS (NIG). PLC	2013	1	1	1	1	1	1	0	1	1	0	0	1	0	0	17	55	3	3	2	1
213	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	A.G. LEVENTIS (NIG). PLC	2014	1	1	1	1	1	1	0	1	1	0	0	1	0	0	0	56	3	3	2	1
214	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	JOHN HOLT PLC	2006	0	0	0	1	1	1	1	1	1	0	0	1	0	0	16	45	0	3	3	1
215	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	JOHN HOLT PLC	2007	0	0	0	1	1	1	1	1	1	0	0	1	0	0	16	46	0	3	3	1
216	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	JOHN HOLT PLC	2008	0	0	0	1	1	1	1	1	1	0	0	1	0	0	0	47	0	3	3	1

217	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	JOHN HOLT PLC	2009	0	0	0	1	1	1	1	1	1	0	0	1	0	0	17	48	0	3	3	1
218	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	JOHN HOLT PLC	2010	0	0	0	1	1	1	1	1	1	0	0	1	0	0	16	49	0	3	3	1
219	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	JOHN HOLT PLC	2011	1	1	1	0	1	1	0	1	1	0	0	1	0	0	16	50	3	2	2	1
220	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	JOHN HOLT PLC	2012	1	1	1	0	1	1	0	1	1	0	0	1	0	-1	16	51	3	2	2	1
221	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	JOHN HOLT PLC	2013	1	1	1	0	1	1	0	1	1	0	0	1	0	0	16	52	3	2	2	1
222	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	JOHN HOLT PLC	2014	1	1	1	0	1	1	0	1	1	0	0	1	0	0	0	53	3	2	2	1
232	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	S C O A (NIG). PLC	2006	1	1	1	1	1	1	1	1	1	0	0	1	0	1	15	80	3	3	3	1
233	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	S C O A (NIG). PLC	2007	1	1	1	1	1	1	1	1	1	0	0	1	0	1	15	81	3	3	3	1
234	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	S C O A (NIG). PLC	2008	1	1	1	1	1	1	1	0	1	0	0	1	0	0	15	82	3	3	2	1
235	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	S C O A (NIG). PLC	2009	1	1	1	1	1	1	1	0	1	0	0	1	0	0	15	83	3	3	2	1
236	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	S C O A (NIG). PLC	2010	1	1	1	1	1	1	1	0	1	0	0	1	0	0	15	84	3	3	2	1
237	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	S C O A (NIG). PLC	2011	0	0	0	1	1	1	1	0	1	0	0	1	0	0	16	85	0	3	2	1
238	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	S C O A (NIG). PLC	2012	0	0	0	1	1	1	1	0	1	0	0	1	0	0	16	86	0	3	2	1
239	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	S C O A (NIG). PLC	2013	0	0	0	1	1	1	1	0	1	0	0	1	0	0	16	87	0	3	2	1
240	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	S C O A (NIG). PLC	2014	0	0	0	1	1	1	1	0	1	0	0	1	0	0	16	88	0	3	2	1
241	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	U A C N PLC	2006	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	75	3	3	3	1
242	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	U A C N PLC	2007	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	76	3	3	3	1
243	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	U A C N PLC	2008	0	0	0	1	1	1	1	1	1	0	0	1	0	0	18	77	0	3	3	1
244	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	U A C N PLC	2009	0	0	0	1	1	1	1	1	1	0	0	1	0	0	18	78	0	3	3	1
245	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	U A C N PLC	2010	0	0	0	1	1	1	1	1	1	0	0	1	0	0	18	79	0	3	3	1
246	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	U A C N PLC	2011	1	1	1	1	1	1	1	1	1	0	0	1	0	0	19	80	3	3	3	1
247	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	U A C N PLC	2012	1	1	1	1	1	1	1	1	1	0	0	1	0	0	19	81	3	3	3	1
248	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	U A C N PLC	2013	1	1	1	1	1	1	1	1	1	0	0	1	0	0	19	82	3	3	3	1
249	CONGLOMERATES	Manufacturing	DIVERSIFIED INDUSTRIES	U A C N PLC	2014	1	1	1	1	1	1	1	1	1	0	0	1	0	0	19	83	3	3	3	1
277	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	DANGOTE FLOUR MILLS PLC	2006	1	1	1	1	1	1	1	0	1	0	0	1	0	0	17	0	3	3	2	1
278	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	DANGOTE FLOUR MILLS PLC	2007	1	1	1	1	1	1	1	0	1	0	0	1	0	0	18	1	3	3	2	1
279	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	DANGOTE FLOUR MILLS PLC	2008	1	1	1	1	1	1	1	0	1	0	0	1	0	0	18	2	3	3	2	1
280	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	DANGOTE FLOUR MILLS PLC	2009	1	1	1	1	1	1	1	0	1	0	0	1	0	0	18	3	3	3	2	1
281	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	DANGOTE FLOUR MILLS PLC	2010	1	1	1	1	1	1	1	0	1	0	0	1	0	0	18	4	3	3	2	1
282	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	DANGOTE FLOUR MILLS PLC	2011	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	5	3	3	3	1
283	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	DANGOTE FLOUR MILLS PLC	2012	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	6	3	3	3	1
284	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	DANGOTE FLOUR MILLS PLC	2013	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	7	3	3	3	1
285	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	DANGOTE FLOUR MILLS PLC	2014	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	8	3	3	3	1
286	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	FLOUR MILLS OF NIGERIA PLC	2006	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	46	3	3	3	1

287	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	FLOUR MILLS OF NIGERIA PLC	2007	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	47	3	3	3	1
288	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	FLOUR MILLS OF NIGERIA PLC	2008	1	1	1	1	1	1	1	1	1	1	1	1	0	0	19	48	3	3	3	3
289	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	FLOUR MILLS OF NIGERIA PLC	2009	1	1	1	1	1	1	1	1	1	1	1	1	0	0	19	49	3	3	3	3
290	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	FLOUR MILLS OF NIGERIA PLC	2010	1	1	1	1	1	1	1	1	1	1	1	1	0	0	19	50	3	3	3	3
291	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	FLOUR MILLS OF NIGERIA PLC	2011	1	1	1	1	1	1	1	1	1	0	0	1	0	0	19	51	3	3	3	1
292	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	FLOUR MILLS OF NIGERIA PLC	2012	1	1	1	1	1	1	1	1	1	0	0	1	0	0	19	52	3	3	3	1
293	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	FLOUR MILLS OF NIGERIA PLC	2013	1	1	1	1	1	1	1	1	1	0	0	1	0	0	19	53	3	3	3	1
294	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	FLOUR MILLS OF NIGERIA PLC	2014	1	1	1	1	1	1	1	1	1	0	0	1	0	0	20	54	3	3	3	1
304	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	NORTHERN NIG FLOUR MILLS PLC	2006	0	0	0	1	1	1	1	1	1	0	0	1	0	0	14	35	0	3	3	1
305	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	NORTHERN NIG FLOUR MILLS PLC	2007	0	0	0	1	1	1	1	1	1	0	0	1	0	0	14	36	0	3	3	1
306	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	NORTHERN NIG FLOUR MILLS PLC	2008	0	0	0	1	1	0	1	1	1	0	0	1	0	0	15	37	0	2	3	1
307	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	NORTHERN NIG FLOUR MILLS PLC	2009	0	0	0	1	1	0	1	1	1	0	0	1	0	0	15	38	0	2	3	1
308	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	NORTHERN NIG FLOUR MILLS PLC	2010	0	0	0	1	1	0	1	1	1	0	0	1	0	0	15	39	0	2	3	1
309	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	NORTHERN NIG FLOUR MILLS PLC	2011	0	0	0	1	1	1	0	0	0	0	0	0	0	0	15	40	0	3	0	0
310	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	NORTHERN NIG FLOUR MILLS PLC	2012	0	0	0	1	1	1	0	0	0	0	0	0	0	0	15	41	0	3	0	0
311	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	NORTHERN NIG FLOUR MILLS PLC	2013	0	0	0	1	1	1	0	0	0	0	0	0	0	0	15	42	0	3	0	0
312	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS	NORTHERN NIG FLOUR MILLS PLC	2014	0	0	0	1	1	1	0	0	0	0	0	0	0	0	15	43	0	3	0	0
268	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	CADBURY NIGERIA PLC	2006	1	1	1	1	1	1	1	1	1	0	0	1	0	-2	0	41	3	3	3	1
269	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	CADBURY NIGERIA PLC	2007	1	1	1	1	1	1	1	1	1	0	0	1	0	-21	17	42	3	3	3	1
270	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	CADBURY NIGERIA PLC	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	1	17	43	3	3	3	1
271	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	CADBURY NIGERIA PLC	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	44	3	3	3	1
272	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	CADBURY NIGERIA PLC	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	45	3	3	3	1
273	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	CADBURY NIGERIA PLC	2011	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	46	3	3	3	1
274	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	CADBURY NIGERIA PLC	2012	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	47	3	3	3	1
275	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	CADBURY NIGERIA PLC	2013	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	48	3	3	3	1
276	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	CADBURY NIGERIA PLC	2014	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	49	3	3	3	1
295	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. L	2006	1	1	1	0	0	0	1	1	1	0	1	1	0	1	17	37	3	0	3	2
296	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. L	2007	1	1	1	0	0	0	1	1	1	0	1	1	0	1	17	38	3	0	3	2
297	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. L	2008	1	1	1	1	1	1	1	1	1	0	1	1	0	1	18	39	3	3	3	2
298	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. L	2009	1	1	1	1	1	1	1	1	1	0	1	1	0	1	18	40	3	3	3	2
299	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. L	2010	1	1	1	1	1	1	1	1	1	0	1	1	0	1	18	41	3	3	3	2
300	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. L	2011	1	1	1	1	1	1	1	1	1	0	1	1	0	1	19	42	3	3	3	2
301	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. L	2012	1	1	1	1	1	1	1	1	1	0	1	1	0	1	18	43	3	3	3	2
302	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. L	2013	1	1	1	1	1	1	1	1	1	0	1	1	0	1	18	44	3	3	3	2

303	CONSUMER GOODS	Manufacturing	FOOD PRODUCTS DIVERSIFIED	NESTLE NIGERIA PLC (FOOD SPECIALTIES NIG. L	2014	1	1	1	1	1	1	1	1	1	0	1	1	0	1	18	45	3	3	3	2
500	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	BETA (DELTA) GLASS CO. PLC	2006	1	1	1	1	1	1	1	1	1	0	0	1	0	0	16	32	3	3	3	1
501	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	BETA (DELTA) GLASS CO. PLC	2007	1	1	1	1	1	1	1	1	1	0	0	1	0	0	16	33	3	3	3	1
502	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	BETA (DELTA) GLASS CO. PLC	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	0	16	34	3	3	3	1
503	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	BETA (DELTA) GLASS CO. PLC	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	0	16	35	3	3	3	1
504	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	BETA (DELTA) GLASS CO. PLC	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	36	3	3	3	1
505	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	BETA (DELTA) GLASS CO. PLC	2011	0	0	0	1	1	1	1	1	1	0	0	1	0	0	17	37	0	3	3	1
506	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	BETA (DELTA) GLASS CO. PLC	2012	0	0	0	1	1	1	1	1	1	0	0	1	0	0	17	38	0	3	3	1
507	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	BETA (DELTA) GLASS CO. PLC	2013	0	0	0	1	1	1	1	1	1	0	0	1	0	0	17	39	0	3	3	1
508	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	BETA (DELTA) GLASS CO. PLC	2014	0	0	0	1	1	1	1	1	1	0	0	1	0	0	17	40	0	3	3	1
339	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	NIGERIAN ENAMELWARE PLC	2006	0	0	0	1	1	1	0	1	0	0	1	0	0	14	46	0	3	2	1	
340	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	NIGERIAN ENAMELWARE PLC	2007	0	0	0	1	1	1	0	1	0	0	1	0	0	14	47	0	3	2	1	
341	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	NIGERIAN ENAMELWARE PLC	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	0	14	48	3	3	3	1
342	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	NIGERIAN ENAMELWARE PLC	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	0	14	49	3	3	3	1
343	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	NIGERIAN ENAMELWARE PLC	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	0	14	50	3	3	3	1
344	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	NIGERIAN ENAMELWARE PLC	2011	1	1	1	1	1	1	1	1	1	0	0	1	0	0	14	51	3	3	3	1
345	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	NIGERIAN ENAMELWARE PLC	2012	1	1	1	1	1	1	1	1	1	0	0	1	0	0	14	52	3	3	3	1
346	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	NIGERIAN ENAMELWARE PLC	2013	1	1	1	1	1	1	1	1	1	0	0	1	0	0	14	53	3	3	3	1
347	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	NIGERIAN ENAMELWARE PLC	2014	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	54	3	3	3	1
348	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	VITAFDAM (NIG). PLC	2006	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	44	3	3	3	1
349	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	VITAFDAM (NIG). PLC	2007	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	45	3	3	3	1
350	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	VITAFDAM (NIG). PLC	2008	1	1	1	0	0	0	1	1	1	0	0	1	0	0	15	46	3	0	3	1
351	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	VITAFDAM (NIG). PLC	2009	1	1	1	0	0	0	1	1	1	0	0	1	0	0	16	47	3	0	3	1
352	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	VITAFDAM (NIG). PLC	2010	1	1	1	0	0	0	1	1	1	0	0	1	0	0	16	48	3	0	3	1
353	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	VITAFDAM (NIG). PLC	2011	0	0	0	1	1	1	0	0	0	0	0	0	0	0	16	49	0	3	0	0
354	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	VITAFDAM (NIG). PLC	2012	0	0	0	1	1	1	0	0	0	0	0	0	0	0	16	50	0	3	0	0
355	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	VITAFDAM (NIG). PLC	2013	0	0	0	1	1	1	0	0	0	0	0	0	0	0	16	51	0	3	0	0
356	CONSUMER GOODS	Manufacturing	HOUSEHOLD DURABLES	VITAFDAM (NIG). PLC	2014	0	0	0	1	1	1	0	0	0	0	0	0	0	0	16	52	0	3	0	0
491	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	AVON CROWNCAPS & CONTAINERS (NIG). PLC	2006	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	29	3	3	3	1
492	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	AVON CROWNCAPS & CONTAINERS (NIG). PLC	2007	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	30	3	3	3	1
493	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	AVON CROWNCAPS & CONTAINERS (NIG). PLC	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	0	16	31	3	3	3	1
494	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	AVON CROWNCAPS & CONTAINERS (NIG). PLC	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	0	16	32	3	3	3	1
495	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	AVON CROWNCAPS & CONTAINERS (NIG). PLC	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	0	16	33	3	3	3	1
496	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	AVON CROWNCAPS & CONTAINERS (NIG). PLC	2011	0	0	0	1	1	1	1	1	1	0	0	1	0	0	16	34	0	3	3	1

497	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	AVON CROWNCAPS & CONTAINERS (NIG). PLC	2012	0	0	0	1	1	1	1	1	1	0	0	1	0	0	16	35	0	3	3	1
498	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	AVON CROWNCAPS & CONTAINERS (NIG). PLC	2013	0	0	0	1	1	1	1	1	1	0	0	1	0	0	16	36	0	3	3	1
499	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	AVON CROWNCAPS & CONTAINERS (NIG). PLC	2014	0	0	0	1	1	1	1	1	1	0	0	1	0	0	16	37	0	3	3	1
509	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	GREIF NIGERIA (VAN LEER NIGERIAN)PLC	2006	0	0	0	1	1	1	1	0	1	0	0	1	0	1	14	66	0	3	2	1
510	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	GREIF NIGERIA (VAN LEER NIGERIAN)PLC	2007	0	0	0	1	1	1	1	0	1	0	0	1	0	0	14	67	0	3	2	1
511	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	GREIF NIGERIA (VAN LEER NIGERIAN)PLC	2008	1	1	1	1	1	1	0	0	1	0	0	1	0	0	13	68	3	3	1	1
512	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	GREIF NIGERIA (VAN LEER NIGERIAN)PLC	2009	1	1	1	1	1	1	0	0	1	0	0	1	0	0	14	69	3	3	1	1
513	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	GREIF NIGERIA (VAN LEER NIGERIAN)PLC	2010	1	1	1	1	1	1	0	0	1	0	0	1	0	0	13	70	3	3	1	1
514	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	GREIF NIGERIA (VAN LEER NIGERIAN)PLC	2011	0	0	0	1	1	1	0	1	1	0	0	1	0	0	13	71	0	3	2	1
515	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	GREIF NIGERIA (VAN LEER NIGERIAN)PLC	2012	0	0	0	1	1	1	0	1	1	0	0	1	0	0	13	72	0	3	2	1
516	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	GREIF NIGERIA (VAN LEER NIGERIAN)PLC	2013	0	0	0	1	1	1	0	1	1	0	0	1	0	0	13	73	0	3	2	1
517	INDUSTRIAL GOODS	Manufacturing	PACKAGING/CONTAINERS	GREIF NIGERIA (VAN LEER NIGERIAN)PLC	2014	0	0	0	1	1	1	0	1	1	0	0	1	0	0	13	74	0	3	2	1
223	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	PZ CUSSONS NIGERIA PLC (PZ INDUSTRIES)	2006	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	58	3	3	3	1
224	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	PZ CUSSONS NIGERIA PLC (PZ INDUSTRIES)	2007	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	59	3	3	3	1
225	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	PZ CUSSONS NIGERIA PLC (PZ INDUSTRIES)	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	60	3	3	3	1
226	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	PZ CUSSONS NIGERIA PLC (PZ INDUSTRIES)	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	61	3	3	3	1
227	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	PZ CUSSONS NIGERIA PLC (PZ INDUSTRIES)	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	62	3	3	3	1
228	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	PZ CUSSONS NIGERIA PLC (PZ INDUSTRIES)	2011	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	63	3	3	3	1
229	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	PZ CUSSONS NIGERIA PLC (PZ INDUSTRIES)	2012	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	64	3	3	3	1
230	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	PZ CUSSONS NIGERIA PLC (PZ INDUSTRIES)	2013	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	65	3	3	3	1
231	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	PZ CUSSONS NIGERIA PLC (PZ INDUSTRIES)	2014	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	66	3	3	3	1
250	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	UNILEVER NIGERIA PLC (LEVER BROTHERS)	2006	1	1	1	0	0	0	1	1	1	0	0	1	0	0	17	83	3	0	3	1
251	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	UNILEVER NIGERIA PLC (LEVER BROTHERS)	2007	1	1	1	0	0	0	1	1	1	0	0	1	0	0	17	84	3	0	3	1
252	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	UNILEVER NIGERIA PLC (LEVER BROTHERS)	2008	0	0	0	1	1	1	1	1	1	0	0	1	0	0	17	85	0	3	3	1
253	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	UNILEVER NIGERIA PLC (LEVER BROTHERS)	2009	0	0	0	1	1	1	1	1	1	0	0	1	0	0	17	86	0	3	3	1
254	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	UNILEVER NIGERIA PLC (LEVER BROTHERS)	2010	0	0	0	1	1	1	1	1	1	0	0	1	0	1	17	87	0	3	3	1
255	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	UNILEVER NIGERIA PLC (LEVER BROTHERS)	2011	1	1	1	1	1	1	1	1	1	1	1	1	0	1	17	88	3	3	3	3
256	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	UNILEVER NIGERIA PLC (LEVER BROTHERS)	2012	1	1	1	1	1	1	1	1	1	1	1	1	0	1	17	89	3	3	3	3
257	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	UNILEVER NIGERIA PLC (LEVER BROTHERS)	2013	1	1	1	1	1	1	1	1	1	1	1	1	0	0	18	90	3	3	3	3
258	CONSUMER GOODS	Manufacturing	PERSONAL/HOUSEHOLD PRODUCTS	UNILEVER NIGERIA PLC (LEVER BROTHERS)	2014	1	1	1	1	1	1	1	1	1	1	1	1	0	0	18	91	3	3	3	3
152	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	ASHAKA CEMENT PLC	2006	0	0	0	1	1	1	1	1	1	0	0	1	0	0	17	32	0	3	3	1
153	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	ASHAKA CEMENT PLC	2007	0	0	0	1	1	1	1	1	1	0	0	1	0	0	0	33	0	3	3	1
154	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	ASHAKA CEMENT PLC	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	34	3	3	3	1
155	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	ASHAKA CEMENT PLC	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	35	3	3	3	1

156	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	ASHAKA CEMENT PLC	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	36	3	3	3	1
157	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	ASHAKA CEMENT PLC	2011	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	37	3	3	3	1
158	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	ASHAKA CEMENT PLC	2012	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	38	3	3	3	1
159	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	ASHAKA CEMENT PLC	2013	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	39	3	3	3	1
160	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	ASHAKA CEMENT PLC	2014	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	40	3	3	3	1
161	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	LAFARGE WAPCO PLC (WEST AFRICAN PORTLA	2006	1	1	1	0	0	0	1	1	1	0	0	1	0	0	18	47	3	0	3	1
162	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	LAFARGE WAPCO PLC (WEST AFRICAN PORTLA	2007	1	1	1	0	0	0	1	1	1	0	0	1	0	0	18	48	3	0	3	1
163	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	LAFARGE WAPCO PLC (WEST AFRICAN PORTLA	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	49	3	3	3	1
164	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	LAFARGE WAPCO PLC (WEST AFRICAN PORTLA	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	50	3	3	3	1
165	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	LAFARGE WAPCO PLC (WEST AFRICAN PORTLA	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	0	19	51	3	3	3	1
166	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	LAFARGE WAPCO PLC (WEST AFRICAN PORTLA	2011	1	1	1	1	1	1	1	1	1	0	0	1	0	0	19	52	3	3	3	1
167	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	LAFARGE WAPCO PLC (WEST AFRICAN PORTLA	2012	1	1	1	1	1	1	1	1	1	0	0	1	0	0	19	53	3	3	3	1
168	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	LAFARGE WAPCO PLC (WEST AFRICAN PORTLA	2013	1	1	1	1	1	1	1	1	1	0	0	1	0	0	19	54	3	3	3	1
169	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	LAFARGE WAPCO PLC (WEST AFRICAN PORTLA	2014	1	1	1	1	1	1	1	1	1	0	0	1	0	0	20	55	3	3	3	1
170	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	BERGER PAINTS PLC	2006	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	47	3	3	3	1
171	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	BERGER PAINTS PLC	2007	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	48	3	3	3	1
172	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	BERGER PAINTS PLC	2008	0	0	0	1	1	1	1	1	1	0	0	1	0	0	15	49	0	3	3	1
173	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	BERGER PAINTS PLC	2009	0	0	0	1	1	1	1	1	1	0	0	1	0	0	15	50	0	3	3	1
174	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	BERGER PAINTS PLC	2010	0	0	0	1	1	1	1	1	1	0	0	1	0	0	15	51	0	3	3	1
175	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	BERGER PAINTS PLC	2011	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	52	3	3	3	1
176	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	BERGER PAINTS PLC	2012	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	53	3	3	3	1
177	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	BERGER PAINTS PLC	2013	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	54	3	3	3	1
178	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	BERGER PAINTS PLC	2014	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	55	3	3	3	1
179	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	D.N. MEYER PLC (HAGEMEYER NIGERIA LIMITEC	2006	1	1	1	1	1	1	1	0	1	0	0	1	0	0	14	46	3	3	2	1
180	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	D.N. MEYER PLC (HAGEMEYER NIGERIA LIMITEC	2007	1	1	1	1	1	1	1	0	1	0	0	1	0	0	14	47	3	3	2	1
181	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	D.N. MEYER PLC (HAGEMEYER NIGERIA LIMITEC	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	-2	15	48	3	3	3	1
182	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	D.N. MEYER PLC (HAGEMEYER NIGERIA LIMITEC	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	-1	15	49	3	3	3	1
183	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	D.N. MEYER PLC (HAGEMEYER NIGERIA LIMITEC	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	50	3	3	3	1
184	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	D.N. MEYER PLC (HAGEMEYER NIGERIA LIMITEC	2011	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	51	3	3	3	1
185	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	D.N. MEYER PLC (HAGEMEYER NIGERIA LIMITEC	2012	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	52	3	3	3	1
186	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	D.N. MEYER PLC (HAGEMEYER NIGERIA LIMITEC	2013	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	53	3	3	3	1
187	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	D.N. MEYER PLC (HAGEMEYER NIGERIA LIMITEC	2014	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	54	3	3	3	1
188	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	PREMIER PAINTS PLC	2006	0	0	0	1	1	1	0	1	0	0	1	0	0	12	24	0	3	2	1	
189	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	PREMIER PAINTS PLC	2007	0	0	0	1	1	1	0	1	0	0	1	0	0	12	25	0	3	2	1	

190	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	PREMIER PAINTS PLC	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	0	12	26	3	3	3	1
191	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	PREMIER PAINTS PLC	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	0	12	27	3	3	3	1
192	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	PREMIER PAINTS PLC	2010	1	1	1	1	1	1	1	1	1	0	0	1	-1	6	12	28	3	3	3	1
193	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	PREMIER PAINTS PLC	2011	1	1	1	1	1	1	1	0	1	0	0	1	0	1	12	29	3	3	2	1
194	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	PREMIER PAINTS PLC	2012	1	1	1	1	1	1	1	0	1	0	0	1	0	-5	13	30	3	3	2	1
195	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	PREMIER PAINTS PLC	2013	1	1	1	1	1	1	1	0	1	0	0	1	0	2	13	31	3	3	2	1
330	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	FIRST ALUMINIUM NIGERIA PLC	2006	1	1	1	1	1	1	1	0	1	0	0	1	0	0	16	46	3	3	2	1
331	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	FIRST ALUMINIUM NIGERIA PLC	2007	1	1	1	1	1	1	1	0	1	0	0	1	0	-1	16	47	3	3	2	1
332	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	FIRST ALUMINIUM NIGERIA PLC	2008	1	1	1	0	0	0	0	0	1	0	0	1	0	0	16	48	3	0	1	1
333	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	FIRST ALUMINIUM NIGERIA PLC	2009	1	1	1	0	0	0	0	0	1	0	0	1	0	0	16	49	3	0	1	1
334	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	FIRST ALUMINIUM NIGERIA PLC	2010	1	1	1	0	0	0	0	0	1	0	0	1	0	0	16	50	3	0	1	1
335	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	FIRST ALUMINIUM NIGERIA PLC	2011	1	1	1	1	1	1	1	0	1	0	0	1	0	0	16	51	3	3	2	1
336	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	FIRST ALUMINIUM NIGERIA PLC	2012	1	1	1	1	1	1	1	0	1	0	0	1	0	0	16	52	3	3	2	1
337	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	FIRST ALUMINIUM NIGERIA PLC	2013	1	1	1	1	1	1	1	0	1	0	0	1	0	0	16	53	3	3	2	1
338	INDUSTRIAL GOODS	Building materials	BUILDING MATERIALS	FIRST ALUMINIUM NIGERIA PLC	2014	1	1	1	1	1	1	1	0	1	0	0	1	0	0	16	54	3	3	2	1
518	CONSTRUCTION/REAL E	Building materials	REAL ESTATE DEVELOPMENT	UACN PROPERTY DEVELOPMENT CO. PLC	2006	1	1	1	1	1	1	1	1	1	1	1	1	0	0	18	9	3	3	3	3
519	CONSTRUCTION/REAL E	Building materials	REAL ESTATE DEVELOPMENT	UACN PROPERTY DEVELOPMENT CO. PLC	2007	1	1	1	1	1	1	1	1	1	1	1	1	0	0	18	10	3	3	3	3
520	CONSTRUCTION/REAL E	Building materials	REAL ESTATE DEVELOPMENT	UACN PROPERTY DEVELOPMENT CO. PLC	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	11	3	3	3	1
521	CONSTRUCTION/REAL E	Building materials	REAL ESTATE DEVELOPMENT	UACN PROPERTY DEVELOPMENT CO. PLC	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	12	3	3	3	1
522	CONSTRUCTION/REAL E	Building materials	REAL ESTATE DEVELOPMENT	UACN PROPERTY DEVELOPMENT CO. PLC	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	13	3	3	3	1
523	CONSTRUCTION/REAL E	Building materials	REAL ESTATE DEVELOPMENT	UACN PROPERTY DEVELOPMENT CO. PLC	2011	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	14	3	3	3	1
524	CONSTRUCTION/REAL E	Building materials	REAL ESTATE DEVELOPMENT	UACN PROPERTY DEVELOPMENT CO. PLC	2012	1	1	1	1	1	1	1	1	1	0	0	1	0	0	18	15	3	3	3	1
525	CONSTRUCTION/REAL E	Building materials	REAL ESTATE DEVELOPMENT	UACN PROPERTY DEVELOPMENT CO. PLC	2013	1	1	1	1	1	1	1	1	1	0	0	1	0	0	17	16	3	3	3	1
313	SERVICES	Hospitality	HOTEL/LODGING	IKEJA HOTEL PLC	2006	1	1	1	1	1	0	1	1	1	0	0	1	0	0	17	34	3	2	3	1
314	SERVICES	Hospitality	HOTEL/LODGING	IKEJA HOTEL PLC	2007	1	1	1	1	1	0	1	1	1	0	0	1	0	0	17	35	3	2	3	1
315	SERVICES	Hospitality	HOTEL/LODGING	IKEJA HOTEL PLC	2008	1	1	1	1	1	1	1	0	1	0	0	1	0	0	17	36	3	3	2	1
316	SERVICES	Hospitality	HOTEL/LODGING	IKEJA HOTEL PLC	2009	1	1	1	1	1	1	1	0	1	0	0	1	0	0	17	37	3	3	2	1
317	SERVICES	Hospitality	HOTEL/LODGING	IKEJA HOTEL PLC	2010	1	1	1	1	1	1	1	0	1	0	0	1	0	0	17	38	3	3	2	1
318	SERVICES	Hospitality	HOTEL/LODGING	IKEJA HOTEL PLC	2011	0	0	0	1	1	1	1	1	1	0	0	1	0	-2	16	39	0	3	3	1
319	SERVICES	Hospitality	HOTEL/LODGING	IKEJA HOTEL PLC	2012	0	0	0	1	1	1	1	1	1	0	0	1	0	0	17	40	0	3	3	1
320	SERVICES	Hospitality	HOTEL/LODGING	IKEJA HOTEL PLC	2013	0	0	0	1	1	1	1	1	1	0	0	1	0	0	17	41	0	3	3	1
321	SERVICES	Hospitality	HOTEL/LODGING	THE TOURIST COMPANY OF NIGERIA PLC	2006	0	0	0	0	0	0	1	1	1	0	0	1	0	0	16	42	0	0	3	1
322	SERVICES	Hospitality	HOTEL/LODGING	THE TOURIST COMPANY OF NIGERIA PLC	2007	0	0	0	0	0	0	1	1	1	0	0	1	0	0	16	43	0	0	3	1
323	SERVICES	Hospitality	HOTEL/LODGING	THE TOURIST COMPANY OF NIGERIA PLC	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	-7	16	44	3	3	3	1

324	SERVICES	Hospitality	HOTEL/LODGING	THE TOURIST COMPANY OF NIGERIA PLC	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	1	16	45	3	3	3	1
325	SERVICES	Hospitality	HOTEL/LODGING	THE TOURIST COMPANY OF NIGERIA PLC	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	1	16	46	3	3	3	1
326	SERVICES	Hospitality	HOTEL/LODGING	THE TOURIST COMPANY OF NIGERIA PLC	2011	1	1	1	1	1	1	1	1	1	0	0	1	0	-1	16	47	3	3	3	1
327	SERVICES	Hospitality	HOTEL/LODGING	THE TOURIST COMPANY OF NIGERIA PLC	2012	1	1	1	1	1	1	1	1	1	0	0	1	0	0	16	48	3	3	3	1
328	SERVICES	Hospitality	HOTEL/LODGING	THE TOURIST COMPANY OF NIGERIA PLC	2013	1	1	1	1	1	1	1	1	1	0	0	1	0	0	16	49	3	3	3	1
329	SERVICES	Hospitality	HOTEL/LODGING	THE TOURIST COMPANY OF NIGERIA PLC	2014	1	1	1	1	1	1	1	1	1	0	0	1	0	-1	16	50	3	3	3	1
196	SERVICES	Services	COURIER/FREIGHT/DELIVERY	TRANS-NATIONWIDE EXPRESS PLC	2006	1	1	1	1	1	1	1	1	1	0	0	1	0	0	12	22	3	3	3	1
197	SERVICES	Services	COURIER/FREIGHT/DELIVERY	TRANS-NATIONWIDE EXPRESS PLC	2007	1	1	1	1	1	1	1	1	1	0	0	1	0	0	12	23	3	3	3	1
198	SERVICES	Services	COURIER/FREIGHT/DELIVERY	TRANS-NATIONWIDE EXPRESS PLC	2008	0	0	0	1	1	1	1	0	1	0	0	1	0	0	13	24	0	3	2	1
199	SERVICES	Services	COURIER/FREIGHT/DELIVERY	TRANS-NATIONWIDE EXPRESS PLC	2009	0	0	0	1	1	1	1	0	1	0	0	1	0	0	13	25	0	3	2	1
200	SERVICES	Services	COURIER/FREIGHT/DELIVERY	TRANS-NATIONWIDE EXPRESS PLC	2010	0	0	0	1	1	1	1	0	1	0	0	1	0	0	13	26	0	3	2	1
201	SERVICES	Services	COURIER/FREIGHT/DELIVERY	TRANS-NATIONWIDE EXPRESS PLC	2011	0	0	0	1	1	1	1	0	1	0	0	1	0	0	13	27	0	3	2	1
202	SERVICES	Services	COURIER/FREIGHT/DELIVERY	TRANS-NATIONWIDE EXPRESS PLC	2012	0	0	0	1	1	1	1	0	1	0	0	1	0	0	13	28	0	3	2	1
203	SERVICES	Services	COURIER/FREIGHT/DELIVERY	TRANS-NATIONWIDE EXPRESS PLC	2013	0	0	0	1	1	1	1	0	1	0	0	1	0	0	13	29	0	3	2	1
204	SERVICES	Services	COURIER/FREIGHT/DELIVERY	TRANS-NATIONWIDE EXPRESS PLC	2014	0	0	0	1	1	1	1	0	1	0	0	1	0	0	13	30	0	3	2	1
526	SERVICES	Services	ROAD TRANSPORTATION	ASSOCIATED BUS COMPANY PLC	2006	0	0	0	1	1	1	1	0	1	0	0	1	0	0	15	13	0	3	2	1
527	SERVICES	Services	ROAD TRANSPORTATION	ASSOCIATED BUS COMPANY PLC	2007	0	0	0	1	1	1	1	0	1	0	0	1	0	0	15	14	0	3	2	1
528	SERVICES	Services	ROAD TRANSPORTATION	ASSOCIATED BUS COMPANY PLC	2008	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	15	3	3	3	1
529	SERVICES	Services	ROAD TRANSPORTATION	ASSOCIATED BUS COMPANY PLC	2009	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	16	3	3	3	1
530	SERVICES	Services	ROAD TRANSPORTATION	ASSOCIATED BUS COMPANY PLC	2010	1	1	1	1	1	1	1	1	1	0	0	1	0	0	15	17	3	3	3	1
531	SERVICES	Services	ROAD TRANSPORTATION	ASSOCIATED BUS COMPANY PLC	2011	1	1	1	1	1	1	1	0	1	0	0	1	0	0	15	18	3	3	2	1
532	SERVICES	Services	ROAD TRANSPORTATION	ASSOCIATED BUS COMPANY PLC	2012	1	1	1	1	1	1	1	0	1	0	0	1	0	0	15	19	3	3	2	1
533	SERVICES	Services	ROAD TRANSPORTATION	ASSOCIATED BUS COMPANY PLC	2013	1	1	1	1	1	1	1	0	1	0	0	1	0	0	16	20	3	3	2	1
534	SERVICES	Services	ROAD TRANSPORTATION	ASSOCIATED BUS COMPANY PLC	2014	1	1	1	1	1	1	1	0	1	0	0	1	0	0	16	21	3	3	2	1

