

**NEW PRODUCT DEVELOPMENT AS A STRATEGY FOR SALES
GROWTH, PROFITABILITY AND COMPETITIVENESS IN UBA (NIGERIA)
PLC**

BY

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MSc/ADM/38354/2012 -13**

**BEING A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE
STUDIES OF AHMADU BELLO UNIVERSITY, ZARIA IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
MASTER OF SCIENCE (M.Sc) DEGREE IN BUSINESS ADMINISTRATION**

**DEPARTMENT OF BUSINESS ADMINISTRATION,
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JUNE, 2015

DECLARATION

I hereby declare that the work in this thesis titled ‘new product development as a strategy for sales growth, profitability and competitiveness in UBA Nigeria PLC’ has been written by me under the supervision of Prof. Bello Sabo and Dr. AuwalYahya Ahmed. The information derived from the literature has been duly acknowledged in the text and a list of references provided. To the best of my knowledge, no part of this thesis was previously presented for another degree or diploma in any university.

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CERTIFICATION

This is to certify that this thesis titled New Product Development as a Strategy for Sales Growth, Profitability and Competitiveness in UBA (Nigeria) PLC meets the requirement governing the award of the degree of master of science (M.Sc.)in Business Administration of Ahmadu Bello University, Zaria and is approved for its contributions to knowledge and literacy presentation.

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DEDICATION

This thesis is dedicated to the entire members of my family, lecturers, friends and the entire Muslim Umma.

LIST OF ABBREVIATION

ABC	–	African Bank Corporation
NPD	–	New Product Development
EMC	–	Express Marketing Communication
CBN	–	Central Bank of Nigeria
NDIC	–	Nigeria Deposit Insurance Corporation
UBA	–	United Bank for Africa
PLC	–	Public Liability Company
H_0	-	Null – Hypothesis
BCG	–	Boston Consulting Group
BBWA	–	British Bank for West Africa
ABC	–	Africa Continental Bank

LIST OF TABLES

	Page
Table 2.1: The four Ps Components of the Marketing Mix	11
Table 2.2: The BCG Growth	19
Table 4.1: OLS regression result (Sales)	57
Table 4.2a: Coefficient confidence test	58
Table 4.2b: Q – Statistics	59
Diagram 4.1: Reliability Test	60
Table 4.3: Regression Results (Profits)	61
Table 4.4a: Coefficient Confidence Interval test	62
Table 4.4b: Q – statistics	64
Diagram 4.2: Reliability Test	65
Table 4.5: OLS Regression Results (Competiveness)	66
Table 4.6a: Coefficient confidence interval test	67
Table 4.6b: Q – statistics	68
Diagram 4.6b:Reliability Test	69

ACKNOWLEDGMENT

All praises and thanks are due to Almighty Allah (SWA) the most graceful and the most merciful, who creates and disposes everything in the here and hereafter. And there is nothing comparable to Him, He alone we do worship and from Him alone we seek for any guidance. May the peace and blessings of Allah (SWA) be upon His noble Messenger Muhammad (SAW), his house hold, and his faithful companions.

With respect to this research work, it is pertinent to express my sincere appreciation and gratitude to some people whose contributions made it possible for me to complete it in its current state. My appreciation and gratitude goes to my two supervisors in the persons of Prof. Bello Sabo and Dr. AuwalYahya Ahmed,M.ScCoordinator, Mal.GarbaSaiduMasoud,LawalGamboSaulawa, Professor SaniAbdullahi, Mal. AbdullahiYakasai, Mal. Nasiru,MallamaMaimunaAliyuShika, Dr. Abu – Abdussamad, Dr. SuleimanKarwai and the entire members of staff of the Department who are too numerous to be listed.

Many thanks also to my colleagues, particularly my Head of Department, Dr. Abdu J. Bambale),Professor BamideleAdepoju for his fatherly advice and the frequency of his reminders to me; “don’t abandon your programme in Zaria. Others include Professor G. B Bello, Professor K. I.Dandago, Dr. Bala Ado K/Mata, Dr. MukhtarHalliru, Professor M. S Sagagi, Malam Ali M. Garba, Dr. A.B Ahmed (NDA), MalamaAminaMohd. Liman and other members of staff of the Departmentof Business Administration and Entrepreneurship.

Finally, I must acknowledge and appreciate the contributions of some staff members of UBA (Nigeria Plc) who helped particularly in the area of sourcing relevant literature and information that assisted in making the research successful. They include; - Ibrahim Dodo, AminuShettima, Mr. Chinedu N., Mr. Steven Onuh, Bilkisu Isa O., Mr. Ayo B. and Mustapha M. Bida. Others who contributed in the process of typesetting and analysis of the data include Dr. Hassan Suleiman, Mr. Steven K. and Mr. Lazarus WanjuuZungwe

ABSTRACT

The banking industry in Nigeria has become more competitive due to the reorganization of the banking service industry to make it more relevant for financing development projects. This has made the banks to invest more in information technology and introduced more products to ensure not only better returns but to enhance efficiency in service delivery. These explain why this study is designed to investigate the impact of new product development in enhancing sales growth, profitability and competitiveness in UBA as a case study of the firms in the banking sector. To carry out the study, related literatures and some empirical studies were reviewed. The three hypotheses formulated for the study include: New products development has not made any significant impact on sales growth in UBA Nigeria Plc., new products development has not made any significant impact on profitability of UBA Nigeria Plc and new product development has not made any significant impact on competitive effectiveness of UBA Nigeria Plc. All of these hypotheses were tested with parameters which were estimated applying ordinary least square (OLS) regression. The data used in the analysis of data were derived from the financial statements of accounts of the UBA. The period of data used covered the period of 2001-2014. The results obtained using OLS were first subjected to second order tests or diagnostic tests to ensure that they were not spurious regression but realistic estimation of the true parameters of the regression parameters of the population of the study. The study establishes that new product development had not significantly affected the volume of sales of UBA during the period of the study. The study also established that new product development has no substantial impact on the profit making of UBA during the period of this study. The thesis also demonstrated that new product development had not impacted significantly in improving the level of UBA competitiveness in the banking industry. On the basis of these findings the study recommends that since the current new product developed had no significant influence on sales growth probably due to the nature of product being introduced, the company has to introduce a new product that is unique and capable of improving its sales potentials. Since the new product introduced could not improve the profit making of the firm during the period of review, it is important for the bank to introduce the product that is unique in the banking sector that can enhance the bank's profit-making. The thesis also recommends that since the existing new product could not improve the competitive advantage being enjoyed by the firm due to its non-uniqueness in the banking industry, the bank need to come-up with a new product that is unique and capable to enhance the company competitive position.

TABLE OF CONTENTS

Title page	i
Declaration	ii
Certification	iii
Dedication	iv
List of abbreviation	v
List of tables	vi
Acknowledgement	vii
Abstract	vii
Table of contents	viii

CHAPTER ONE:

INTRODUCTION

1.1 Background to the Study	1
1.2 Statement of the Problem	3
1.3 Research Questions	4
1.4 Objectives of the Study	4
1.5 Statement of Hypotheses	5
1.6 Significance of the Study	5
1.7 Scope of the Study	6
1.8 Limitations of the study	6

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction	8
2.2 The Concept of Marketing Strategy	8

2.3	Developing Marketing Strategies and Plan.....	9
2.4	The Marketing Mix Strategy	10
2.5	Organizational Arrangement for New Product Development	12
2.6	Distinctive Characteristics of Services	20
2.7	Innovation and New Product Development in Banking Industry	22
2.8	Achieving New Product Success within the Financial Service Industry	23
2.9	Strategies for Marketing of Banking Products	25
2.10	Technological Innovations and Competition in Banking Industry	27
2.11	Theoretical Frame–Work of the Study	28
2.12	Evaluation of Banking Business	30
2.13	Some Empirical Studies on New Product Development, Sales-Growth, Profitability and Competitiveness	32
2.14	Competitive Advantage and New Product Development	40
2.15	Profitability and New Product Development	42
2.17	History and Structure and New and Existing Products of UBA Nigeria Plc	43

CHAPTER THREE

RESEARCH METHODOLOGY

3.1	Introduction	49
3.2	Population and Sample Size of the Study	49
3.3	Nature of the Data to be Used in the OLS Study.....	49
3.4	sources of data	51
3.5	Measurement of Variables	51
3.6	Classical Normal Linear Regression Model	52

3.7	The Models to be used	55
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CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1	introduction	56
4.2	Presentation of Results	56
4.3	Test of Hypotheses	70
4.4	Discussion of Findings	72

CHAPTER FIVE

5.0	SUMMARY, CONCLUSION AND RECOMMENDATIONS	75
5.1	Summary of the Study.....	75
5.2	Conclusion	78
5.3	Recommendations	79
	REFERENCES	81
	APPENDIX A	87

CHAPTER ONE: INTRODUCTION

1.9 Background to the Study

In Nigeria, the banking industry has been experiencing cyclical movements in its development patterns right from independence in 1960 to date. As a result of the importance of the banking industry in the economic development of the country, successive governments in the nation came up with different policies, programmes, regulations and strategies in the form of financial guidelines with the aim of improving the performance of the industry. These guidelines include: regulation, deregulation, liberalization, globalization, paging of interest rate, consolidation and the like.

In essence, the relevance of any business organization lies in its ability to develop new product in line with the needs, wants, interests and or aspirations of the society or community within which it operates. However, changes in the consumer taste, preferences and aspiration, as well as technological innovations, open market economy, challenges of globalization coupled with the new banking consolidation policy aimed at sanitizing the fragmented and crowded banking industry in the country, have brought in discipline and orderliness in the sector. However, there is no guarantee that a successful product today will remain relevant or success in the near future.

However, with deregulation and liberalization policies, the central bank of Nigeria was able to reduce the number of small indigenous banks from 89 to about 25 mega-sized banks, solely to provide a wide range of new product

lines, including retail and whole sale banking as well as project financing and other investment services. With stiff competition in the industry, banks must do their best to meet the challenges; hence they must come up with projects or programme that includes: researching new products and or services in order to prosper because it is risky for banks to rely only on their existing products in the face of ever changing technological innovations.

Despite all the financial regulations and policies in the industry, its performance or contributions to the economy and customer satisfaction is still quite discouraging and for banks to grow, they must, from time to time, produce new products that lead to customer satisfaction vis-à-vis huge profit attainment within the industry. Sanusi, (2010) gave five measures of enhancing quality of banking in Nigeria. These measures are industry remedial programmes to fix the key causes of the crises; implementation of risk based supervision; reforms to regulation and regulatory frame work; enhancing provision for consumer protection; and internal transformation of Central Bank of Nigeria (CBN).

The survival and growth of commercial banks in Nigeria depend solely on their ability to develop new product and or service in order to cope with the global market challenges, but in the process, care must be taken in order to avoid producing “dogs” which are neither profitable nor satisfying customer needs.

1.10 Statement of the Problem

The introduction of Structural Adjustment Programme (SAP) in 1986 led to the proliferation many of commercial banks in Nigeria. As pointed by Nigerian Deposit Insurance Corporation (2009) that by then there were 89 active banks. The presence of these banks led to intense competition among different banks within the industry (both old and new generation ones). Also with the coming of the new generation banks into the scene, their new and sophisticated products posed a challenge for the old generation banks to adopt to new banking method in order to survive and grow in the new competitive environment.

Competition in the industry makes the old system of “Arm-Chair” banking impossible where bankers normally sit waiting for customers to come. For banks to survive now, they must embrace the “principles of marketing” if at all they want to survive and remain relevant in industry. They must encourage, persuade, motivate, attract and influence both existing and potential customers. They must engage into different promotional efforts such as personal selling, advertising, sales promotion, publicity, mass selling, public relation, branding, packaging and offer variety of products in order to capture large share of the market.

As a result of severe competition, marketing is currently occupying a prominent position in the Nigerian commercial banks where every banker is a “marketer”. This is the reason that led this study of the Assessment of New

product development as a strategy for sales growth in UBA Plc, with the aim of finding out how new product development may lead to sales growth in the banking industry of Nigeria by taking UBA (Nigeria) Plc as a case.

1.11 Research Questions

- i. To what extent has new product development made any significant contribution to sales growth of UBA Nigeria Plc?
- ii. To what extent has new product development made any significant to the profit potentials of UBA Nigeria Plc?
- iii. To what extent has new product development enhance competitiveness in UBA Nigeria Plc?

These are the questions that the researcher was able to address.

1.12 Objectives of the Study

The main objective of this research work is to analyze the contribution of new product development in the survival of UBA Nigeria Plc as one of the organ for commercial banking business in Nigeria. Specifically the study in tends to:

- i. Assess the contributions of new product development as a strategy to the sales growth of UBA Nigeria Plc.
- ii. Assess the contributions of new product development as a strategy to the profitability of the bank.
- iii. Assess the effectiveness or otherwise of new product development as a strategy in competitive effectiveness.
- iv. Suggest comprehensive schemes for effective marketing of banking services particularly new product in UBA Nigeria Plc.

1.13 Statement of Hypotheses

The hypotheses formulated to guide this research work are:

- i. **H₀** New product development has not made any significant impact on sales growth in UBA Nigeria Plc.
- ii. **H₀** New product development has not made any significant impact on profitability of UBA Nigeria Plc.
- iii. **H₀** New product development has not made any significant impact on competitive effectiveness of UBA Nigeria Plc.

1.14 Significance of the Study

This study is designed to assess how new product design has contributed to profit and competitive advantage in UBA. Therefore, the findings of this thesis are expected to be useful to the following:

- i. The work will surely be helpful to the management of the bank in the area of product performance assessment. This will guide the bank in making decision on whether to invest or otherwise on a particular product.
- ii. The findings of this thesis will surely be of greater assistance to the bank as a guide advantage tool to the bank in terms of knowing the products that are doing well or otherwise on comparative basis.
- iii. It will be useful to the government in the assessment of the performance of policy guidelines of CBN on the commercial banks. Based on its

assessment government can easily assess particular policy and decide whether to improve, continue or change the policy pattern.

- iv. This study examined the procedures for new product development in the Nigerian Banking Industry. Therefore, it will assist the banking business planners, marketers and new product designers in coming up with an acceptable product within the banking industry.
- v. And it is strongly believed that the research will be helpful to students and other researchers for further research work in the area so as to guide the industry in determining the new products to introduce within the industry.

1.15 Scope of the Study

The scope of this study is strictly restricted to the assessment of new product development as a strategy for sales growth, profitability and competitive effectiveness in UBA Nigeria Plc. A total number of 724 branches that exist in Nigeria were taken as the population of the study. The period of 2004 to 2014 formed the basis for the analysis where the banks statements of accounts were used for analysis.

1.16 Limitations of the Study

The limitations of this study lay in the following areas:

- i. The scope of this study is limited to investigating the impact of new product development on the sales of UBA in Nigeria;
- ii. The study is also limited to evaluating the impact of new product development on the profit making of UBA;

- iii. The study is also limited to examining the impact new product on the competitiveness of UBA;
- iv. The scope of the study is also limited the application of data for the period of 2001-2014.
- v. The study is also limited to the Nigerian banking sector of the Nigerian society;
- vi. The study is also limited to the use of UBA as the case study;
- vii. The method of analysis employed is the use of ordinary least squares regression in estimating the parameters of the model of this study;
- viii. The study also uses the mean, the median, skewness, kurtosis, Jacque Bera statistic and its probability in estimating the descriptive statistic employed in this study;
- ix. The method of stating the hypothesis is to state only the null without the alternative hypothesis.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This chapter reviews literature related to the study. It examined theoretical evidence and contributions of the previous studies relevant to the subject matter of new product development as a strategy for sales growth in the financial institution of Nigeria where UBA Plc is taken as a case.

2.2 The Concept of Marketing Strategy

Marketing is considered to be the most important element of management. It is really the pivot through which all other management functions revolve. This is true and so apparent because the primary objective of any business organization is to produce and sale product or service at a reasonable profit. It is therefore, increasingly a vital ingredient for the success of any business organization.

Kotler and Keller (2009) define marketing as the “identifying and meeting human and societal needs”. This definition shows that marketing is dynamic in nature because it involves investigating the present and latent needs of the consumers or customers and tries to satisfy these projected needs. American association of Marketing (in Kotler and Keller, 2009) also defines marketing as an organizational function and a set of processes for creating, communicating and delivery value to customers and for managing customer relationships in ways that benefit the organization and it stakeholders.” In this definition, it

shows that organizations such as banks produce something of value; inform their customers through effective persuasion process such as promotional efforts and then try to deliver these values in such away to benefits their organizations and stakeholders.

Rosenberg (1977) as cited in Akpan (2003) sees marketing as “a matching process, based on goals and capabilities in which a producer provides a marketing mix (product, price, promotion and place) that meets consumer needs within the limit of the society”. Here in this definition, the strength of the organization and its goals must be taken into consideration as well as the societal limitation i.e. the marketing environmental factors such as geographical, demographic, political, ecological, economic, legal, society and the likes. Kotler (2003) sees marketers as involving the marketing of Ten (10) entities. These entities are: goods, services, events, experiences, persons, places, properties, organizations, information and ideas. Each of these is capable of satisfying individual needs and wants whether physically or psychologically at a profit.

2.3 Developing Marketing Strategies and Plan

Garba (2007) sees strategy as the pattern or plan that integrates an organizations major goals, policies and action sequences into a comprehensive whole. A well formulated strategy helps to marshal and allocate an organizations resources into a unique and viable positive based on its relative internal competencies and short comings, anticipated changes in the environment and contingent moves by “intelligent opponents” (Garba, 2007).

In developing marketing strategies and plans that guide marketing activities, Kotler and Keller (2013) stated that developing marketing strategy over time requires blends of discipline and flexibility. Business firms must stick to a strategy but also constantly improve it. They must also develop strategies for a range of products and services within the organizations.

On the other hand, Akpan (2003) stated that marketing strategies are applied to at least three levels of marketing issues, each at a different level of aggregation: Firstly, at macro – level, marketing strategies focus on manipulations of marketing mix – variables (products, price promotion and physical distribution).

Secondly, at micro-level marketing element strategies are narrowed concept that applies to individual element of marketing mix.

Thirdly, is the product market entry strategies which includes strategies building, harvesting, and divesting and defending market share.

2.4 The Marketing Mix Strategy

Marketing mix is a set of marketing weapons or elements that a marketer uses in order to achieve his marketing objectives. The se elements of the marketing mix are product, price, promotion and place. They are referred to as the 4ps of marketing. A marketer uses them in combination to achieve his organizational objectives. Kotler (2003) considers marketing mix as “the set of marketing tools a firm uses to pursue its marketing objectives in the target market” these marketing tools are classified into four broad groups that are called the four ps of marketing: product, price, place and promotion.

Table 2.1 The Four Ps Components of the Marketing Mix



Source: Kotler (2003) *Marketing Management (Eleventh edition)*. India, Pearson Education Incorporation.

In the above (table 1). Kotler describes the particular marketing variable under each P, and the marketing mix decision that must be made for influencing the trade channels as well as the final consumers. The table shows a company preparing and offering mix of different products, services at prices and utilizing promotion mix of sales promotion, advertising, sales force, public relations, direct mail, telemarketing and internet to reach the trade channels and the target customers.

In the short run, a firm can change its prices, sales force size, and advertising expenditures. In the long run, it can also develop new products and modify its distribution channels. Thus, the firm typically makes fewer period to period

marketing mix changes in the short run than the number of marketing-mix decision variable might suggest.

However, the four Ps here represent the “sellers” view of the marketing tools available for influencing buyers. From the buyer’s point of view, each marketing tool as designed by the seller’s four Ps should correspond to the customers’ four Cs.

Four Ps	Four Cs
Product	Customer solution
Price	Customer cost
Place	Convenience
Promotion	Communication

The using companies, according to Kotler are those that can be able to meet customer needs economically and conveniently and with effective communication.

2.5 **Organizational Arrangement for New Product Development**

Boozy Allen and Hamilton (1982) in Aibieromolen and Aibieromilen (2004) identified six categories of new products in terms of their newness to the Bank and to the market place. These are:

- a) New-to-the-world products: New products that create an entirely new market.
- b) New product lines: New products that allow a bank to enter an established market for the first time.

- c) Additions to existing product lines: New products that supplement a bank's established lines.
- d) Improvements and revisions of existing products: New products that provide improved performance or greater perceived value and replace existing products.
- e) Repositioning: Existing products that are targeted to new market or market segment.
- f) Cost-reduction

According to Reidenbach and Grubbs (1987). a good framework for developing new products should have the following characteristics;

- i. Simplicity – it should be easy to follow and apply.
- ii. Comprehensive – while simple, it should address the full range of new product development decisions.
- iii. Adaptability – it should be adaptable to the unique requirements of any bank.

To develop a new product, Kotler (2003) states that the arrangement to be made in handling new product development differs from one company to other, many companies assign responsibility for new product ideas to product managers, but product managers are often so busy managing existing product lines that they give little attention to new products other than line extension. They also lack the specific skills and knowledge needed to develop and acquire new products. Some have new-product managers who report to category

managers. Whereas some companies have a high-level management committee charged with the responsibility of reviewing and approving proposals for new product. In some large companies, new-product department are headed by a manager who has substantial authority and access to top management. The department major responsibilities include: generating and screening new ideas, working with Research and development (R&D) department and carrying out field testing and commercialization activities.

According to Kotler (2003) some companies often assign new-product development work or responsibility to venture teams. A venture team is across functional group charged with developing specific product or business. They are “entrepreneurs” relied frame, and a “skunkworks” sitting. Skunk works are informal workplaces sometimes garages, where entrepreneurial teams attempt to develop new-products.

He also stated that same companies use the stage-gate system to manage the innovation process and the process is divided into several stages. At the end of each stage there is a gate or check point. The project leader, working with a cross-function team must bring a set of known deliverable to each gate before the project can pass to the next stage. To move from the business plan stage into product development requires a convincing market research study of the consumer needs and interest, a competitive analysis and a technical appraisal.

At each stage senior managements review the idea at that stage to ensure or judge whether it deserves to move to the next stage or not. Gatekeepers

normally make one of four major decisions as; whether to GO, KILL, HOLD or RECYCLE. The stage gate systems put strong discipline into the innovation process, making its steps visible to all involved and clarifying the project leaders and team's responsibilities at each stage (Kotler 2003).

The eight stages involved in new product development decision process are: idea generation, idea screening, concept development and testing, marketing strategy development, business analysis, product development, market testing and commercialization.

Kotler (2003) stated that new product development requires senior managers to define business domains, product categories and specific criteria. He comes up with the following acceptance criteria as:

- i. The product can be introduced within five years.
- ii. The product has market potential of at least \$50 million and a 15 percent growth rate.
- iii. The product would provide at least 30 percent return on sales and 40 percent on investment.
- iv. The product would achieve technical or market leadership.

Kotler (2003) explains some of the several factors that hinder successful new product development as:

- a. Shortage of important ideas in certain areas.
- b. Fragmented markets.
- c. Social and governmental constraints.

- d. Cost of development.
- e. Capital shortage.
- f. Faster required development time.
- g. Shorter product life cycles.

Kotler also stated that in a service industry, additional three elements require attention. These three elements are referred to as additional three (3) Ps include: people, physical evidence and process.

2.5.1 **Growth Strategy Approach**

Kotler and Keller (2009) suggest that assessing the growth opportunities includes: Planning new business, down-sizing and terminating older business. If there is a gap between future desired sales and projected sales, corporate management will need to develop or acquire new business. This gap can be filled by adopting any of the three options.

The first is to identify opportunities to achieve further growth within current businesses (intensive opportunities). Secondly, build or acquire business that are related to current businesses (integrative opportunities) and attract businesses unrelated to current business (diversification opportunities).

The table below indicates the strategic planning gap and the three available options that can be used in order to achieve growth.

To achieve intensive growth, the first course of action is to review the opportunities of improving the present or existing businesses. The best option

for detecting the new intensive growth opportunities is through the use of “Ansoff’s product-market expansion grid”.

Under the three intensive growth strategy of Ansoff, the marketer first considers whether he could gain more market share with his current products in their current markets, using a market-penetration strategy. Secondly, he considers whether he can find or develop new market for his current products, in a market development strategy. Then he considers whether he can develop new products for new markets in a diversification strategy. (Kotler and Keller 2009).

2.5.2 The BCG Growth Share Matrix

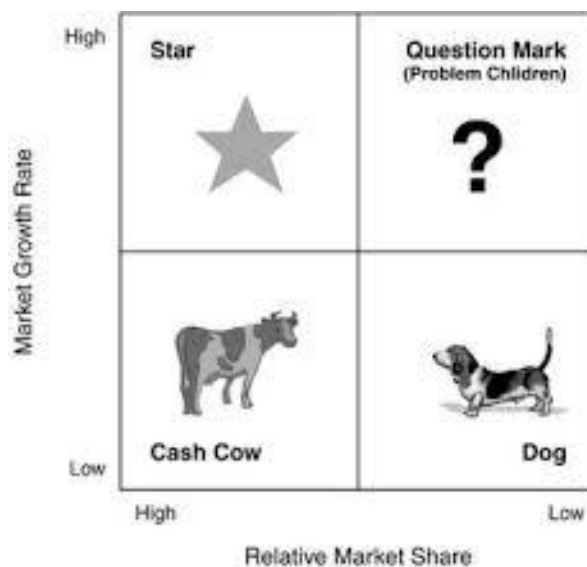
The BCG growth share matrix works on two assumptions i.e. the market growth rate and the relative market share of the products. The vertical axis of the matrix measures the market growth rate and the horizontal axis measures relative market share of the products. Using the model, a firm can identify its product/market position and then choose a strategy that is in consistent with its position, which may likely help the organization to have competitive advantage over others. The matrix categorized company product under four categories, namely star, cash-cow, Dog; and problem child or question mark.

1. **The Star:** The star is a product with high market growth rate as well as high relative market share. It is the most advantageous because of its higher contributions to the organization and also the most difficult to manage because of its high market growth rate. The strategy that best suite this is

high capital deployment in order to produce variety of products. These products can be tailored towards different market segments.

2. **The Cash-Cow:** Cash-cow product is characterized as having low market growth rate but high relative market share. It is positioned within low market growth rate. This but with high relative market share. This product, because of its high relative market share, contributes greatly to the profit potentials. The strategy here is to improve the quality of the products as well as its performance in the market.
3. **The Dog:** The Dog product is considered as product with low market growth rate and relative market share. This product in most cases is in declining stage of its life cycle. The company can only maintain this product if and only if it is not cash trap i.e. it is not trapping cash, even through same companies names are attached to some of these products that are considered as “Dogs” they can now either divest or to develop them or alternatively to hold them for security propose particularly those companies that secured loans in the name of this product.
4. **The Problem child/Question Mark:** Is the product at high market growth rate with low relative market share. This product is very aggressive in terms of selling in the market but has little contribution to company’s profit potentials. These products are in most cases newly introduced in the market. The strategy is to saturate the market with the product and find ways of reducing over head cost as well as encouraging its aggressive competitive advantage.

Table 2.2: The BCG Growth



Source: <https://tutorz.net/businessstrategy/begboxhtm29/02/2008>

Once a company has classified its Strategic Business Units (SBU), it must decide what to do with them in the diagram as discussed above. Here the company has one large cash cow, a large Dog and smaller stars, and question marks.

Conventional strategic thinking suggests there are four possible strategies for each Strategic Business Unit (SBU).

1. **Building Share:** here the company can invest to increase the market share of a given product, for instance turning a question mark into star product.
2. **Holding Share:** here the company invests just enough to keep or maintain the strategic business unit in its present position particularly its relative market share and competitive or market sales growth.

3. **Harvesting Share:** here the company reduces the amount of investment in order to maximize the short-term cash flow and profit from the Strategic Business Unit (SBU). This may have the effect of turning stars into cash-cows or vice versa.
4. **Divesting Strategy:** the company can divest the Strategic Business Unit (SBU) by either phasing it out or selling in order to use the resources (money) elsewhere for example in investing more in promising question marks who will eventually become cash-cows of the future (<https://tutorzUNET/businessstrategy/begboxhtm>) 29/02/2008.

2.6 Distinctive Characteristics of Services

Kotler and Keller (2009) define service as “any act or performance one party can offer to another that is essentially intangible and does result in the ownership of anything, its production may or not be tied to a physical product”. They continue to state that service component can be minor or a major part of the total offering. Kotler and Keller (2009) come up with five categories of offerings as:

- Pure tangible good.
- Tangible good with accompanying services.
- Hybrid.
- Major services with accompanying minor goods and services and
- Pure services.

According to Kotler and Keller (2009), service has four characteristic features that greatly affect the design of their marketing programmes. These features are; intangibility, inseparability, variability and perishability.

According to them, any bank that wants to position itself as the “FAST” bank, it could make this positioning strategy tangible through any of the marketing tools available. These marketing tools includes, place, people, equipment, communication, material, symbols and price.

Gronroos (2000) defines service as “a processes consisting of a services of more or less intangible activities that normally, but not necessarily always take place in interaction between the customers and service employees and or physical resources or goods and system of the service provides which are provided as solutions to customer problems”.

Gronroos (2000) continues to state that for most services, three basic characteristics can be identified as:

- Services are processes consisting of activities or a series of activities rather than things.
- Services are at least to some extent produced and consumed simultaneously.
- The customer participates in the service production process at least to some extent.

Service marketers such as banks must be able to transform intangible services into concrete benefits and well defined experience.

Berry and Parasuraman (1991) suggest that service quality is the foundation for service marketing because the core product being marketed is a performance.

The performance is the product, it is what customer buys. A strong service concept gives companies the opportunity to compete for customer.

They state that superior execution is vital to sustaining the success initiated by an innovative service concept. An innovators service quality is usually more difficult to initiate service concept because quality service comes from inspired leadership throughout the organization, a customer-minded corporate culture, excellent service-system design, the effective use of information and technology and other factors that develop slowly in the company, if at all.

For improving service quality, Berry, Parasuraman and Zelthami (in Kotler and Keller 2009) offer 10 comprehensive set of guidelines that are essential for improving the service quality across service industries. These elements are: listening, reliability, basic service, service design, recovery, surprising customers, fair play, teamwork, employee Research and servant leadership.

According to them, if all the guidelines are adhered to by the service providing firm such as “Bank”, its service quality will be improved and hence will lead to sales growth within the industry.

2.7 Innovation and New Product Development in the Banking Industry

New product development involves the development of something that is entirely new, improve or modify the existing product or to change market for the existing ones.

In the Nigerian Banking Industry, the Central Bank of Nigeria (2011) stated that reforms in the financial sector created certain salutary effect on the financial sector some of such effect includes improved services delivery through new innovation and product development. The use of modern technology enhanced service delivery and eliminated queues in the banking halls which used to be the common nature of banks in Nigeria.

Also Automated Teller Machines (ATMs) were installed at designated points across the country to further reduce customer traffic to banks for cash withdrawals. The use of debit and credit cards is also being popularized in some banks to reduce the risk of carrying money for transaction.

2.8 **Achieving New Product Success within the Financial Service Industry**

EMC² (2011) stated that in the financial service industry new product launches are too often not successful. Rapid market changes combined with the challenge of changing internal system to support new offering make launching new product risky. Because of the high number of failures, firms must screen product and services concept to project share penetration and guide against cannibalizing existing offerings.

For increasing new product success, EMC² (2011) suggests that the launch challenge can be approached from one of the three perspectives:

- The firm may be concerned with launching of a single product,
- The firm acknowledges the need for underlying processes to enable successful product launches,

- The firm wants to develop systems to support customizable launches.

The approach should be based on the bank's current ability to support new products and its commitment to building out new product capabilities going forward. The financial service firms can attract new product success from three approaches: transactional, conditional and or transformational.

Customer Satisfaction in the Banking Industry in Kano Model (2011).

The Kano Model is a theory of product development and customer satisfaction. It was developed in the 80s by Professor Noriaki Kano which classified customer preferences into five categories:

- Attractive Quality
- One-Dimensional Quality
- Must-Be Quality
- Indifferent Quality
- Reverse Quality

The model offers some insight into the product attributes which are perceived to be important to customers. In the model, customers needs have been grouped as whether well fulfilled needs, or not fulfilled i.e. satisfied and dissatisfied. The model also focuses on differentiating product features as opposed to focusing initially on customer needs.

2.9 Strategies for Marketing of Banking Products

Iyengar (2007) states that attitudes and buying patterns of future customers can be affected by current customers' degree of satisfaction; competitive quality creates satisfied customers who will continue to use the product or service and recommend it to others. Such satisfied customers bring additional revenue to the bank. Poor product or service quality causes bad publicity from dis-satisfied customers which quality spreads in the market place. The dissatisfied customers stop buying the product or service and new customers are lost. This hurts the enterprise's growth, profitability and market share.

Iyengar (2007) also gives some guidelines to customer satisfaction in banks as:

- Listen to the customer and develop an appreciation for the future magnitude and potential impact of their complaints.
- Agree that the customer has a valid complaint and apologize on behalf of the organization for any inconvenience. Avoid arguing with the customer or adopting a defensive attitude.
- Investigate the complaint thoroughly by asking the right questions. Avoid passing the buck to other people when the problem can be solved.
- Get the fact, listen carefully to all those who might help provide solution.
- If possible after an immediate resolution of the problem or inform the customer of the steps necessary to resolve the complaint.
- If immediate resolution is not possible, get back to the customer promptly and inform him when the problem has been resolved. Make the customer feel important. Sympathize for inconveniences and offer solutions that

totally resolve the customer complaint. If the customer's demands are unreasonable, convey this to the customer though fully, professionally and courteously.

Growth in the Nigerian Banking Industry

The Central Bank of Nigeria (2010) stated that, "the Nigerian Banking Sector witnessed dramatic growth in the post consolidation (2005) and the development posed a lot of challenges for the industry and regulation".

Abdullahi (2010) also states that "even though there is distress in the Nigerian banking industry, but a good number of banks remain healthy to which many customers "flown for safety". "On the whole, 80.9% of the banks are believed to be healthy 11.1% believed to be mildly distressed, and 8.00% confirmed to be severely distressed".

It is widely acclaimed that the banking system in particular and the financial system in general, play crucial role in economic development. By mobilizing savings and channeling them for investments especially in the real sectors, the banking system increases the quantum of goods and services produced in the economy, thus, national output increases and the level of employment improves. At a broad level of generalization, empirical studies have shown and established strong evidence of positive correlation between real growth of output and Bank assets.

<https://www.freewebs.com/bizadminpublication4httpm.03/18/2011.3.35am>).

2.10 **Technological Innovations and Competition in Banking Industry**

Technological plays a key role in the performance of commercial banks. It is the major source of competition in the banking industry. Customers generally always want to transact business with banks without undue delays.

Frei, Harker and Hunter (1998) state that “pushed by growing consumer demand and the fear of losing market share, banks are investing heavily in PC banking technology”. Collaborating with hardware, software, telecommunications and other companies, banks are introducing new ways for customers to access their account balances, transfer funds, pay bills and buy products and services without using cash, mailing a cheque or leaving home.

Also Frei, Harker and Hunter (1998) state that; instead of veiling the bank as an assembly line provider of standardized services, the bank can be viewed as a job shop with flexible production capabilities. At the heart of the bank would be a comprehensive customer database and a product profit database. The bank would be able to identify all the services used by any customer, the profit or loss on the services and the potentially profitable services which may be proposed to that customer. The movement away from mass marketing, mass production and mass distribution is widespread throughout the financial services industry.

Ede (2002) said, “in an age when electronic commerce drives the world’s economies, Nigerian banks remain in hospitable” behemoths whose customers spend hours or days to get the simplest transactions completed”. As a result,

many Nigerians sequined away Naira notes at home. Preferring to risk armed break-in rather than face exorbitant transaction fees.

Uche and Ehikwe (2001) state that “advances in information technology have greatly influenced the idea and practice of banking”. Banks have witnessed four phases of disintermediation as:

- The growth of mutual funds, specialized pension funds and life assurance policies at the expense of bank savings.
- The rise of markets which encroaches on the banks traditional role as providers of credit.
- Advances in information technology which helped streamline the bank office operations of most banks.
- Advance in information technology which has continued to influence the disintermediation and distribution of banking products.

In the Nigerian banking industry, information technology has suddenly become the major comparative weapon. It can even transform the way banks operate globally. Any bank that excels in information technology gagged globally will definitely have both comparative and absolute advantages in effective service delivery and customers’ satisfaction than their competitors.

2.11 **Theoretical Frame–Work of the Study**

Theoretical frameworks help develop hypotheses and guide direction for discussion.

The theory guiding the planning, implementation and control of this research work is the **growth-share theory**. The Boston consultant group (BCG) growth share matrix is chosen as a guiding model. The choice of this is informed because of its simplicity and how it categorises each product based on its contributions to the profit potentials to the organization as well as its market growth rate.

The model grouped all companies' products as Star, Cash-Cow, Dog and Problem Child (question mark). These classifications or groupings are done based on the relative contribution of each product to the growth of the company.

The model emphasizes that a company should produce as many products as possible, particularly Stars, Cash Cows and problem children due to their position in the market growth rate and relative market share. However, care must be taken to avoid producing DOGs because Dogs products have been characterized as being positioned as having low market growth rate and low relative market share. Dogs can only be held in the organization as a security device.

The BCG was established in 1963 following the appointment of Bruce Henderson to head the Boston safe deposit and trust company. Henderson was charged with the responsibility to start a consulting arm of the Bank. Henderson (1970) stated that to be successful, a company should have a portfolio of products with different growth rates and different market shares.

The portfolio composition is a function of the balance between cash flows and he came out with four rules that determine a cash flow of a product as:

- Margins and cash generated are function of market share. High margins and high market share go together. This is a matter of common observation, explained by the experience curve effect.
- Growth requires cash input to finance added assets. The added asset cash required to hold share is a function of growth rates.
- High market share must be earned or brought. Buying market share requires an additional increment of investment.
- No product market can grow indefinitely. The payroll from growth must come when the growth slows, or it never will. The payroll off is cash that cannot be reinvested in that product.

2.12 Evaluation of Banking Business

Banking is essentially concerned with collecting deposits and lending to individuals and institutions experiencing deficit for a fee and according to established rules, instructions and procedures. Banks basically collect deposits and lend such out to prospective investors for a profit. Prior to the monetary exchange barter was initially used as the means of transiting businesses. It involves exchange of product for product or service for service, otherwise known as mercantile.

Merchants or people used to exchange commodities for example to give you rice and collect maize i.e. Bani Gishiri in baka Manda (to give crude oil to

collect weapons). When the barter system trade gave way to monetary exchange around 3950 BC., the imperative of banking was by then born, although, it took a few more centuries before it become more evident. Also as humans and trade multiplied, becoming more complex and sophisticated, there were always giving to be long distance trade involving deficit or surfeit in money. For example Trans-Sahara trade. This result led in the need for impartial arbiter. A payment system: A payment system is the financial procedures and instructions which engender the satisfaction of obligations as are involved in the mercantile exchange of goods and services.

Banking started out as a non-specialist service. It began as adjunct to other activities offered by individuals and institutions. It originated organically in different parts of the world like in Asia, Middle-East, Europe and Africa: As social institution including temples of worship and same enterprising in individuals: merchants, gold smiths, money exchangers and wealthy gentry responded to their societies payments and safe keeping needs for a fees known as interest.

Umoren (2006) states that the earliest banking was traced to ancient between 3000 and 2000 BC at Mesopotamia: now the present Syria, Turkey and Iraq. Mesopotamia means “Land between rivers which is one of the earliest civilizations. It developed some 500 years ago in the Middle-East between the rivers Tigris and Euphrates. The Mesopotamia was very prosperous and strong. As one of the Mesopotamian’s several first, the people of its Lydia province

(now part of western Turkey) were the first about 2,700 years ago to make coins. They made their coins from a naturally occurring alloy of silver and gold called electrum. Besides pioneering coins as money, mesopotamia with their fertile land, highly refined farming methods and sophisticated culture was also among the pioneers of writing, the wheel and cities building one of such is Babylon. Then later other countries like Egypt, China and some European countries such as British, German, French, Spanish, Portugal and Dutch across the world who are termed latecomers brought about modern banking in British (1750). USA (1784) and the like.

2.13 Some Empirical Studies on New Product Development, Sales-Growth, Profitability and Competitiveness

Auta (2010) “E-banking in Developing Economy: Empirical Evidence from Nigeria” stated that Nigerian banks have embraced innovative banking technologies and e-banking services in recent years. Almost all banks have invested in expanding and improving the information technology system and a number of new e-banking services have been developed. All the 25 commercial banks operating in Nigeria have declared e-banking as one of the core strategies for the future development. At the same time, e-banking acceptance depends probably on bank service quality, customer performances and satisfaction.

In another empirical study on “Customer satisfaction: A study of bank customer retention in New-Zealand by Cohen¹, Gan², Yong³, and Chaong⁴

(2006). The results suggest that in order to retain young customers, New-Zealand bankers should introduce new products or services that young customers' value most. Financial institutions have long attempted to lure young customers with the use of latest technology (Penny, 1993).

Nwaka, Ugoji and Ofoegbu (2009) "Product development and organizational performance" concludes that:

- The quality of the product by the breweries greatly affects their profitability depending on customer's acceptance or rejection of their products.
- A positive and significant correlation exists between the quality of products manufactured by the breweries and their sales volume.
- The degree of quality of products offered for sale by the breweries significantly influences the level of customer loyalty in the brewing industry in Nigeria.
- There is no significant relationship between product size and profitability in the Nigerian brewing industry.
- The relationship between product size and sales volume is not significant in the Nigerian brewing industry.
- The correlation between product size and customer loyalty in the Nigerian brewing industry is not significant because customers' patronage is not solely a function of size of the products.
- There is a significant and positive correlation between product line/mix and profitability since a brewery with more product lines and product mix can make more profit by offering assorted brands of products.

- Product line/product mix and sales volume are positively correlated as the breweries with many product lines/product mixes (assortment) will record higher sales level than those with one product line/little mix.
- A positive and significant relationship exist between product lines/product mix and customer loyalty in the Nigerian brewing sector as a result of the satisfaction derived by customers in the various market segments of the organizations.
- The correlation between product design and profitability is not significant in the Nigerian brewing sector because product shape and colour alone cannot induce customer patronage if the quality of the poor is not favourably perceived by customer.
- There is no significant relationship between product design and sales volume since customers do not patronize the products because of its shape, size or colour.
- The relationship between product design and customer loyalty is not significant in the Nigerian brewing industry because what keeps the customer loyal to the brand is not necessary the shape, size or colour of the product but the satisfaction he derives from consuming it.

Sohail, Sabir and Zaheer (2011) “Link between Product Innovation and Non-Technological: Organisation Performance” stated that organizational innovation is the only factor which contributes to higher total factor productivity. Product Innovation will only provide maximum benefit, if it is performed with the combination of organizational innovation. The linkage of

both will give maximum results. (Michael et al., 2010). Organizations sometimes innovate their selves and focus on product oriented organization structures, which land toward the improved in products. Implementing Just-in-time and supply chain management are the part of organizational innovation which actually smooth's and facilitates the Product Innovation process. (Armbruster et al., 2008). Organization structure and its environment both transform New Rational Innovation which leads toward increase in innovation in the organization. Innovation has also positive effect on organization performance. (Leslie et al., 2005). These studies support alternative hypothesis of this study, hence we will accept H₂.

Collection and use of new market information assists to trigger up marketing innovation in the firm, which has also an ultimate effect on the performance of the firm in them market. (Sabri et al., 2004). Product Innovation can act as mediating role between organization support on organization performance. Managers must select and pursue Product Innovation as primary strategic goal to achieve high performance of the organization. (Bostjan and Otmar, 2004). Organisation designs have high impact on the firms' ability to explore and exploit new product and resources. New resources and products have positive effect of firm's financial performance and on overall performance as well. (Michael et al., 2006). Employee training, motivation and process control have a positive effect on technological innovation. Product Innovation is the dimension of technological innovation. So the technological innovation has a positive effect on performance of the organization (Yuan et al., 2006). Policies

and practices in the workplace are dimensions of NTI. This has a positive effect on the performance of the organization. (Frank, 2011). Organization innovation significantly affects the performance of the firms. More specifically organization innovation is the key factor to accelerate financial performance and market innovation. On the other hand market innovation also boost up the performance of the organization. So NTI has multiple effects on organization performance. (Li-an, 2011). As different studies provided references that NTI has a positive effect on organization performance hence we will accept H₃ of the study.

Wu Jiayi (2009) “The impact of inter-organizational relationship on new product development performance with intermediate role of information sharing” stated that the results show that trust, commitment and interdependence have been the key factors in doing research for inter-organizational information sharing, and also indicate that commitment and information sharing have direct impact on NPD performance. The findings of this study discover that trust can influence commitment and commitment partly plays an intermediate role on the relationship between trust and information sharing. The empirical results also show that information sharing will intermediate the relationship between trust and NPD performance. Thus, this study might be able to increase the completeness for the research of information sharing and new product development.

Zhao and Aram (1995) examined the effect of external networks on growth performance of new technology based firms. The authors concluded that the new ventures which have higher growth rates also have more external relationships and relationship frequency than firms which have lower growth rates. In the study, it was highlighted that networking affects the firm growth positively especially early stages of firm development. Similarly, Bruderl and Preisendorfer (1998) investigated the effect of entrepreneurs' personal networks on survival, employment growth and sales growth.

Daft (1998) has identified two major approaches to measurement of organizational effectiveness – the traditional and contemporary approaches. The traditional approaches include the goal approach, the system resource approach and the internal process approach. The goal approach to organizational effectiveness which this study considers is concerned with the outputs, whether the organization achieves its goals in terms of its desired level of outputs (Strasser et al., 1981, Zheng et al., 2010). This means that this approach identifies the organization's output goals and assesses how well they have been attained. The approach tends to measure progress towards attainment of goals. It is based on the fact that organisations have goals they are expected to achieve. Hall and Clark, (1980) argue that the important goals to consider are the operative goals and not the official goals. The official goals tend to be abstract and difficult to measure while the operative goals reflect the activities the organization is actually performing. The goal approach is used in business organizations because output goals can be readily measured (Daft, 1998). Top

managers can report on actual goals of the organization since such goals reflect their values (Pennings and Goodman, 1979). Once goals are identified, subjective perceptions of goal achievement can be obtained if quantitative indicators are not available. Effectiveness can be measured by profitability, productivity and market share.

Profit has been defined as the money a business earns above and beyond what it spends for salaries expenses, and other costs (Nickels et al, 1997). Profit is one of the major reasons for venturing into business. Without profit the business will not survive in the long run. Conversely a business that is highly profitable has the ability to reward its owners with a large return on their investment. According to Thompson and Strickland (2005:9, 42).

“Achieving acceptable financial result is crucial... Achieving acceptable financial performance is a must, otherwise the organization’s financial standing can alarm creditors and shareholders, impair its ability to fund needed initiatives and perhaps even put its very survival at risk”.

This makes measuring current and past profitability and projecting future profitability a very important issue. Profitability has been identified as criteria for organizational effectiveness by many authors (Friedlander and Pickle, 1968; Child, 1974 and 1975; Negandhi and Reimann, 1973; and Maheshwari, 1980, Amah, 2009). Amah and Baridam (2012) Profitability is obviously related not only to costs of production but also to revenue. Profitability can be defined in

several ways, such as the difference between revenue and costs (gross margin). or the ratio between cost and revenue.

As Harrison and Kennedy (1997) argue, firms with positive profits indicate that they are able to create barriers preventing the entry of new firms (whose entrance would result in profits decreasing to zero for all firms in the industry). that is to say they are able to maintain their market shares and thus possess some type of competitive advantage. Market shares are sometimes mentioned as a way of assessing a firm's competitiveness, but the assess the competitiveness of Canada's agri-food industry in 1986, van Duren et al (1991) use three profit measures. Profits are calculated by the ratio of value added to sales; value added to workers; or value added to plants. These three indicators are then aggregated to compare the competitiveness of Canada, the EU and the United States, according to their ranking with each indicator. Results indicate that overall the US food industry was more competitive than the Canadian, which in turn was more competitive than the EU. Canada was the most competitive regarding the meat sector, while the EU and the United States were similarly highly competitive for the beverage sector.

Viaene and Gellynck (1998) evaluate the competitiveness of the pigment processing sector in Belgium during 1987 – 93 by looking at several profitability measures: the net sales margin (i.e. the net profit relative to the level of sales); the business assets turnover (i.e. sales divided by business assets); the ratio of net profits on own funds; and the financial leverage. Results

indicate poor profitability as net sales margins are less than 1, and the ratio of net profits to own funds and the leverage are both negative.

To evaluate the competitiveness of the Czech dairy industry, Bavorova (2003) computes for the sector a yearly profitability measure as a percentage of total profit in total costs. She concludes that profitability fluctuated over 1990 – 2000, but increased greatly in the last year studied. Davidova et al, (2003) calculate the profitability of Czech farms in 1998 – 99 with the ratio of costs (paid, or paid plus unpaid) to total revenue (including or excluding subsidies). They find that most of the farms were not profitable (ratio greater than 1) even when unpaid costs (i.e. for family inputs) were not considered.

Competitions in the banking industry become intense and aggressive where each bank tries to secure large share of the market. Therefore, new product development becomes a necessary strategy. Advertisement, sales promotion and personal selling become more prominent in the industry. Banks nowadays consider new product development as the pivot through which all their operations revolve. They must attract, persuade, induce and motivate the general public in order to patronize their products so that they can be able to survive and grow in the industry.

2.14 Competitive Advantage and New Product Development

Competitiveness and New Product Development competitiveness has been defined as the advantage obtained over rival firms by providing consumers higher value by either selling products at reduced prices or providing more benefits and superior service that justify even charging higher prices. Cole Ehmke (2008). Cole Ehmke also sees

competitiveness as an edge a supplier has over and above his rivals. The concept of competitiveness also states that a firm has customers because of fact it has a reason. The reason is because of competitive advantage and this helps a firm develops core customers that are loyal to the firm (Cole Ehmke, 2008).

It has been argued that in a setting where products are homogenous, the only factor that gives competitive edge is price (Cole Ehmke, 2008). Nowadays, the productive environment has been altered drastically because products are differentiated and as a result clients are searching for products with special characteristics or service. The goods may be high quality goods or services which are differentiated from other related products (Barone and Decardo, 2003).

Cole Ehmke (2008) listed differentiation strategies to include product benefits or characteristics, locations, staff, operating procedures, price, incentives given to customers, warranties etc. King (2005) and Cole Ehmke (2008) advised that firms starting businesses need to evaluate their competitive edge right at the initial stage of starting businesses. This entails an overall evaluation of firm's goals and how such goals can be achieved in the business environment. This is done by evaluating available resources, the clarification of goals, the definition of consumers and potential consumers, and examination of competitors and potential competitors.

Anatana, Enkawa and Suzuki (2009) examined new product development (NPD) efficiency and firm's performance and how technology development affect both. The study identified NPD as one of the most important determinants of competitiveness and sustainable development of a firm (Paritt, 1984); Govener and Soderquist, 1984). Swink, Talluri and Padejpong (2006) argued that technology is the major determinant of NPD efficiency. They argued that different technologies affect NPD efficiency in different ways depending on the type of industry. They argued that for construction, scale effect is more important, for processed food, it is supplier determinant, beverage

and liquor, it is supplier determined including cloth, wood and furniture, paper steel and printing. For automobile, motorcycle, ship and other transportation, it is scale sensitivity that is important. In pharmaceutical, chemical, machinery, electrical and information science based technology is more improvement. For software, electrical parts, machine parts, etc, specialized suppliers are important.

2.15 Profitability and New Product

Goddard, McMilan and Wilson (2006) had stated that the dynamics of firm growth and profit earnings are very important issues to industrial practitioners and academicians. For practitioners and academicians who are interested in understanding firm profit and firm growth and their interactions it is important to study their interactions.

Goddard, McMilan and Wilson (2006) have argued that if the rate of firms' growth, firms' size and past firms' growth rate is not correlated, the firms' growth rate is a random variable. This means that firms can grow to become extra-ordinary large. This theory is known as the law of proportional effect (LPE). The LPE has been also known as stochastic growth process in the sense that the growth of firm has become a random factor, something that happened by chance or game of luck. The stochastic process implies that in the long-run firms will grow to become infinitely large. If on the contrary, if firms' growth is hampered by size then in the long-run, firms will converge.

Muller (1977) supported the convergence theory arguing that competition among firms is the major factor that will restrain firms from growing indefinitely. The consequence is what he termed persistence of profit (POP). The POP theory states that competition among firms will ensure that in the long-run firms will earn normal

profits. The process involves is that if industrial condition warrants existing firms to make supper profits, this will attract marginal firms to enter the industry with super profit. As new firms enter the industry, the rate of profit will decline until normal profits are earned. On the contrary, if industrial conditions are such that firms are making losses or making profit below the normal profits, marginal firms will quit the industry to invest their resources in their next best opportunity investment. As they quit the industry, profit level will rise or losses will be reduced until normal profits are realized. Therefore, the POP theory enunciates that in the long-run profits in all industries and firms will tend to converge to their normal levels.

The POP theory appears to be a straight theory but attempts by researchers to verify the theory has brought certain complications. One reason why it is difficult to verify the relationship between profit and growth of the firm has been attributed to bi-causality between profit and growth of firms. It is argued that profit stimulates firms to grow and growth also makes it possible for firms to make more profit. Thus there is endogeneity profit, making impossible to disentangle their influences (Goddard, Molyneux and Wilson (2004). One method which profit influence growth is that when firms make profits they used part of the profit to develop new products which increase their revenue generation which enable them increase profit and size. What this means is that profit can influence firms growth and firms growth can encourage more profit making.

2.17 History, Structure, New and Existing Products of UBA Nigeria Plc

Today's United Bank for Africa Plc (UBA) is the product of the merger of Nigeria's third (3rd) and fifth (5th) largest banks, namely tshe old UBA and the erstwhile Standard Trust Bank Plc (STB) respectively, and a subsequent

acquisition of the erstwhile Continental Trust Banks Limited (CTB). The union merged as the first corporate combination in the history of Nigerian banking.

UBA history dates back to the founding of the old UBA in 1961, and the erstwhile STB and CTB both in 1990. Although today's UBA emerged at a time of industry consolidation induced by regulation, the consolidated UBA was borne out of a desire to lead the domestic sector to a new era of global relevance by championing the creation of the Nigerian consumer finance market, leading a private/public sector partnership at supporting the acceleration of Nigeria's economic development, and growing the institution from a banking to a one-stop financial services institution, while spreading its footprints across Africa to earn the reputation as the face of banking in the continent.

The bank has an inspired vision as:

“To be the undisputed, leading and dominant financial services institution in Africa”.

New and Existing Products in the Nigerian Banking Industry

According to Aigbiremolen and Aigbiremolen (2004) products/services offered by modern banks in Nigeria are classified into six groups as follows:

1. Retail Banking Product:

- Regular Current Accounts (Demand Deposits)
- Electronic Funds Transfer (Inland money transfer, SWIFT etc).

- Investment certificate (yields here are above the normal deposit account).
- Cash Pick-Up Services/Remittance Accounts.
- Zero COT Account for Individual and Corporate Customers.
- Regular Savings Accounts.
- Saturday Banking Services.
- Telephone Banking.
- Special Savings Accounts (with special features and benefits).
- Revenue Collection (e.g. Customs Duty, Nitel, VAT, etc).
- Value-Card.
- Off side cash processing for major cash customers.
- Special Current Accounts (with special features and benefits).
- Safe custody.

2. Corporate Banking Products:

- Working Capital Finance
- Overdraft
- Syndication
- Bonds and Guarantees (Performance Bonds and Advance Payment Guarantee)
- Equipment Leasing
- Commercial Papers
- Export Finance and Export Advisory Services

- Bid (Import) Finance facility
- Warehouse finance
- Bridging loans
- Agricultural loan
- Project finance
- Mortgage loan
- Trade Finance
- LPO Financing

3. Treasury Services Products:

Here most banks offer sale the following products:

- Banker's Acceptance
- Non-negotiable Certificates of Deposits
- Negotiable Certificates of Deposits
- Strict call
- 7 day's call
- 30 day's Fixed Deposit
- 60 day's Fixed Deposit
- 90 day's Fixed Deposit
- 180 day's Fixed Deposit
- 360 day's Fixed Deposit
- Investment Advisory Services
- Trust Fund Pension Management

- Fund Management
- Treasury Bills
- Open Buy Back (OBB)
- Repurchase Agreement (REPOS)

4. **Foreign Operations:**

The products here include:

- Advance Payments
- Open Account
- Documentary Bills for Collection
- Letter of Credit (Confirmed, Unconfirmed, Revocable, Irrevocable)
- General Current Transactions
- Domiciliary Accounts
- Form “M” and Form “A” processing
- Offshore Financing
- Sports and forwards
- Derivatives (Options and Swaps)

5. **Corporate Finance:**

The fee-based products include the followings:

- Bills Discounting Facilities
- Debt/Equity Issues
- Investment/Portfolio Management
- Business Restructuring

- Mergers and Acquisitions
- Debt conversion
- Underwriting Services
- Debt Factoring/Receivable Financing
- Government Bonds
- Leverage Buy Out/Leverage Leasing
- Management Buy Out/Management Buy In
- Offer for Subscription/Offer for Sale/Rights Issue/Private Placement
- Privatization
- Capital Restructuring

6. Electronic Banking:

- Home Banking
- SWIFT
- Mobile Banking
- Internet Banking
- Automated Teller Machines (ATM)
- Telephone Banking
- Debit and Credit Cards.

Some newly introduced Products:

Some of the newly introduced products in UBA (Nigeria) Plc include the following: U-Mobile, ATMs, Cashfast, Executive Loan, Voom Voom Loan, Special Overdrafts, Asset Financial, U-Care, Share Plus, Halal Savings Account and No Wahala Loan.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This study uses the ordinary least squares (OLS) regression analysis using time-series data, which employed secondary data. The study explains the population of the study, the nature of data used and the sources of data employed in obtaining the relevant data to estimate the parameters of the dependent and independent variables. The chapter also explains the method of estimation used as well as the methods of diagnostic tests to be used to ensure that the estimated relationship does not result to spurious regression. The chapter also states the models employed in estimating the relationship among the variables used and the a priori signs.

3.2 Population and Sample Size of the Study

The population employed in this study consists mainly the annual data of United Bank for Africa (UBA) financial statement for the period of 2001 to 2014. The data before this period are not covered and the period after are not also included. The period used constitute the population of this study.

3.3 Nature of the Data to be used in the OLS Study

The data that is to be used in this study is time-series data relating to profit, sales or turnover and capital of the United Bank for Africa (UBA) Plc. This data is by nature using secondary data that is compiled by the bank through its annual accounts. The quality of this data as the data obtained from management and social sciences suffer from certain inherent defects such as:

- a) Non-experimental nature of the data. This data suffers from observational errors either of commission or omission.
- b) The data is available in aggregative form and it is not possible to know the level of variations among the branches. The losses from some branches are covered by others.

Based on the above observations, it is important to keep in mind that the results expected from the study is necessarily a reflection of the quality of result of data published by the bank.

The data used in this study are ratio scale and nominal scale data. The ratio scale data measures quantities such as x and y such that x taking the values of x_1 and x_2 or Y_1 and Y_2 . The values of $x_1 - x_2$ and x_1 / x_2 are meaningful qualities. The same applies to Y values which can be manipulated in the same manner. It is also possible to state that $x_1 > x_2$ or $x_1 < x_2$. Examples of these are profit, sales and capital that are used as variables in this study.

All these measurements; were identified in the work of Gujarati, Porter and Gunasekar (2012) who classified data into ratio scale, interval scale, ordinal scale and nominal scale. The first relates to data that can be measured with accuracy, the second can be measured based on the interval 1950 – 1955, 1956 - 1960, etc, the third can be ordered such as indifference curves, and the fourth refers to qualitative variables such as male and female, new product and old products.

3.4 Sources of data

The data that is used in this analysis is obtained from annual accounts and financial statements of United Bank for Africa (UBA) for the period of 2001 to 2014. The data relate to the profit earning, annual turnover, new product development and competitiveness of the company.

3.5 Measurements of variables

The variables of the study are measured as explained below:

- a. Profit: profit is measured as after tax profit as stated in the annual statement of profit and loss of the bank each year.
- b. Sales or turnover: is the turnover of the company annually as shown in the annual financial statement of the company.
- c. New product development: the new product development is taken to be synonymous with the introduction of ATM by the bank which is assumed to become operational in 2005. Dichotomous variables are used to measure this. The period before introduction of automotive teller machines (ATM) are represented by the value of 0 while the periods after the introduction of ATM are represented by the value of 1.
- d. Competitiveness: this represented by the rating of the bank. The rating of the bank among banks is used as the yardstick for measuring competitiveness. Such rating are done by private corporate bodies like the Guardian, Daily Trust, etc.

3.6 Classical Normal Linear Regression Model (CBLRM)

The CNLRM or the classical theory of statistical inference consists of two parts: estimation and hypothesis testing (Gujarati, Porter and Gunasekar, 2012). Using the ordinary least square (OLS) regression, we can estimate the parameters $\alpha_1, \alpha_2, \alpha_3, \dots$ and their error terms. This covers the elements of estimation. The OLS estimators of the parameters possess several desirable features called BLUE: namely best, linear, unbiased estimator of the population regression function (PRF) using the sample regression function (SRF).

$$\text{The PRF is: } y_1 = \alpha_1 + \alpha_2 X_1 + \dots + V_i \quad 2.1$$

While the SRF may be stated as:

$$y_i = \beta_1 + \beta_2 X_i + \dots + V_i. \quad 2.2$$

The parameters are estimated -using the formula

$$\bar{\beta}_1 = \bar{Y} - \bar{\beta}_2 \bar{X}. \quad 2.3$$

$$\bar{\beta}_2 = \frac{\sum x_1 y_1}{\sum X^2 - n\bar{X}^2}. \quad 2.4$$

These estimators are expressed in terms of observable quantities and therefore they can be easily estimated. These estimators are point estimates. Once such estimates are made the sample regression line is obtained.

The above estimates are based on the CNLRM which are:

- a) The regression model is linear in parameters but it may not be linear in the variables. Thus for one variable function it can be stated as:

$$Y_1 = \alpha_1 + \alpha_2 X_i + \mu_i \quad (2.5)$$

- b) Fixed X values independent of the error term. It is assumed that the values of X are fixed while the values of Y are allowed to vary. This explains why James

(2000) states that stochastic regressors mimic the fixed regressor model. Gujarati and Porter (2009) give reasons for assuming X to be fixed why Y values vary as: (a) to simplify the analysis and (b) to experiment. Goldberger (1991) characterized this analysis as neoclassical regression model (NCLRM) as opposed to CLRM.

- c) Zero mean value of the disturbance term (μ_i)- Given the values of X_i the mean or expected value of μ_i is assumed to be zero. This is stated as:

$$E(\mu_i/X_i) = 0 \quad (2.6)$$

Gujarati and Porter and Gunasekar (2012) interpret this feature to mean that the model is correctly specified. If the model is not correctly specified, the mean $E(\mu_i)$ cannot be zero.

- d) Homoscedasticity or constant variance μ_i ($\text{Var } \mu_i$). This feature states that the variance of the error term $\text{var}(\mu_i)$ is constant irrespective of X_i values. This is stated as:

$$\text{Var}(\mu_i/X_i) = \sigma^2. \quad (2.7)$$

Greene (2012) explain that the above equation mean that X_i and Y_i are not corrected. So that $\text{Var}(Y_i/X_i) = \sigma^2$. If this condition is not met, the error terms are said to be heteroscedastic.

- e) No autocorrelation between the disturbance terms. This assumption states that given X_i and X_j , the correlation between μ_i and μ_j is zero. This is stated as:

$$\text{COV}(\mu_i, \mu_j) = 0 \quad (2.8)$$

The above equation postulates that there is no correlation between the error terms.

Using technical terms, we state that there is no autocorrelation or serial correlation of the error terms.

- f) The number of observations must be greater than the number of parameters to be estimated. This assumption is not innocuous as it seems. If this assumption does not hold it will be impossible to carry out the estimation.
- g) The natures of variables are important. The variables x should be positive and there should be sufficient variations in x variable. The explanatory variable must vary and should not be the same allow estimation to take place and to avoid spurious correlation. This is known as absence of multicollinearity of regressors.

One may state that the above assumptions are unrealistic and there for useless. But Friedman (1953) points out that what matter is the reasonableness of the assumptions of a theory. If the assumptions are reasonable, their being unrealistic is an advantage. Gujarati, Porter and Gunasekar (2012) say that the important aspect of a theory is that it idealizes and simplifies. These assumptions simplify and idealize and they are important. The result of the estimated equation will be subjected to diagnostic test based on the following hypotheses:

1. The estimated parameters do not have serial correlation;
2. There is no heteroscedasticity in the estimated results;
3. There is multicollinearity among the regressors.

The hypotheses formulated will be tested suing the estimates of the regression results using t statistic after having verified that the results are robustic by not violating the second-order test.. The t value will be tested based on the exact

probability value p value which is the lowest value of rejecting the null hypothesis.

3.7 The Models to be Used

The models to be used in this study can be stated as follows:

$$\text{Profit}_t = \beta_1 + \beta_2 \text{Sales}_t + \beta_3 \text{Competitiveness}_t + \beta_4 \text{Newproductdev}_t + u_t. \quad 2.9$$

$$\text{Sales}_t = \alpha_1 + \alpha_2 \text{Profit}_t + \alpha_3 \text{Compts}_t + \alpha_4 \text{Newproduct}_t + u_t. \quad 2.10$$

$$\text{Compets}_t = \gamma_1 + \gamma_2 \text{Profit}_t + \gamma_3 \text{Sales}_3 + \gamma_4 \text{Newproduct}_t + u_t. \quad 2.11$$

The a priori assumptions of the models are:

- a. $\beta_1, \beta_2, \beta_3, \beta_4, > 0$.
- b. $\alpha_1, \alpha_2, \alpha_3, \alpha_4, > 0$.
- c. $\gamma_1, \gamma_2, \gamma_3, \gamma_4, > 0$. and
- d. $E(u_t) = 0$

The ordinary least squares (OLS) regression model is applied in estimating equations 2.9, 2.10 and 2.11 in order to establish the impact of new product development on profit being made by UBA (Nig.) Plc.

CHAPTER FOUR

PRESENTATION OF RESULTS, INTERPRETATION AND TEST OF HYPOTHESES

4.1 Introduction

This chapter presents the results of data analysed using Eviews 4.0 and it also interprets the results. The results are presented in two broad groups: the result of ordinary least squares (OLS) regression model; and diagnostic tests to subject the statistical results to scrutiny and ensures that the estimated parameters are not spurious but their true relationship. This second-order tests are the tests for autocorrelation (the correlation between the regressors and the random errors, u_t). heteroscedasticity (the non existence of equal variance across the time periods and zero mean value of random errors). multicollinearity (non-variations of regressors) and the normality of the residuals of the regression data. The chapter also tested the hypotheses formulated to guide the study.

4.2 Presentation of Results

This section presents the results of analysed data. The result is presented in three tables. Table 4.1 result is presented in this section. Column one shows the independent variables of the regression. Columns two, three and four of the table show the estimated parameters, the standard errors of the coefficients, the t-statistics and the probability values of the t-statistic, respectively.

Table 4.1: OLS regression results (SALES_t is the dependent variable)

Variable	Coefficient	Standard Error	t-statistic	Probability
Constant	2649.193	62404.66	0.042452	0.9672
SALES _t	0.629492	0.218875	2.876032	0.0206
COMPITITIVENESS _t	273.3095	3211.407	0.085106	0.9343
NEW PRODUCT _t	0.425861	0.732413	0.581449	0.5769
PROFIT _t	49751.58	55951.04	0.889199	0.3998

Adjusted R² = 638

S. E. Of regression = 45214

F. Statistic = 6.29

F- Probability = 0.014

Durbin-Watson Stat. = 2.15

Source: Computed from Secondary Data using Eviews: 4.0

The results show that only the past values of sales has a significant impact in explaining the current sales value in the model. All the other independent variables cannot explain sales. This means that the level of competition, new product development, and profit have no substantial impact on ales. This is demonstrated by low t-statistics as shown in column four and further reinforced by the high values of the probabilities of the t-ratios.

The important related question is how reliable is the estimated regression result on which this study based its judgment. This is the concern of this section. One of the men of judging the result of estimated equation or model is to conduct confidence interval test and vilify if the estimated interval contains the value zero. If it contains, then the estimated parameter has the value of zero. The confidence interval of table 4.1

is shown in table 4.2a below. The columns 1, 2, 3, and 4 depict the variable estimated, the coefficient, the lower class interval limit and the higher class interval limit, respectively.

Table 4.2a: Coefficient confidence interval test

Variable		95 percent confidence interval	
		Low value	High value
Constant	2649.193	-141256.	146554.
SALES _{t-1}	0.629492	0.125	1.134
COMPETITION _t	273.3095	-7132.	7679
PROFIT _t	0.425861	-1.263	2.115
NEW PRODUCT _t	49751.58	-79272	178775

Source: Estimated using Eviews 4.0

The result of the confidence interval test has demonstrated that the constant values takes the range of -141256 to 146554; Sales takes the range of 0.125 to 1.134; Competition takes the values of -7132 to 7679; profit takes its values ranging from -1.263 to 2.115; and new product takes the values of -79272 to 178775. Thus it is only sales that its range of values excludes zero. This confirms the result of the analysis above.

The second-order test is the Q-statistic diagnostic test. This the test of autocorrelations which measures the existence or otherwise of serial correlations. The effect of serial correlation is to render the result of regression invalid. If serial correlation existed substantially, the t-statistic no longer has the features of t-distribution and likewise the F-statistic. Inference using these two means of hypothesis testing are not valid and likewise the conclusion drawing from them. The Q-statistic test is presented in table 8.2b with first,

second, third, fourth, fifth, sixth and seventh columns representing autocorrelations, partial correlation, and number of lags, autocorrelation statistic, probability of autocorrelation statistic, Q-statistic and the probability of Q-statistic, respectively.

Table 4.2b: Q-static

Auto-Correlation	Partial Correlation	S. No.	AC	PAC	Q.Stat	Prob.
. * .	. * .	1	-0.077	-0.077	0.0960	0.757
. ** .	. ** .	2	-0.323	-0.331	1.9473	0.378
. .	. * .	3	-0.065	-0.139	2.0286	0.566
. ** .	**** .	4	-0.284	-0.479	3.7720	0.438
. * .	. .	5	0.171	-0.041	4.4843	0.482
. * .	. ** .	6	0.120	-0.244	4.8860	0.559
. .	. * .	7	-0.027	-0.097	4.9104	0.671
. .	. ** .	8	-0.005	-0.259	4.9113	0.767
. .	. .	9	-0.010	-0.033	4.9164	0.842
. .	. * .	10	-0.000	-0.174	4.9164	0.897
. .	. .	11	-0.000	-0.062	4.9164	0.935
. .	. * .	12	-0.000	-0.156	4.9164	0.961

Source: Computed Using Eviews 4.0

The serial correlation test has the null hypothesis that the results of estimated regression have no problem of serial correlation. If this null hypothesis is subjected to the above hypothesis using auto –correlation (AC). probability of AC (PAC). Q-statistic and the probability of Q-statistic (Prob.). the null hypothesis has to be accepted as the probabilities of all AC (PAC) all above

0.05. The same remark applies to the probabilities of Q-statistic. Thus the results of table 4.2b have not suffered from serial correlation.

The next diagnostic test is to subject the residuals of the regression to normality test. The null hypothesis of this test is that the residuals are normally distributed. If the computed probability and the Jacque Bera statistic are significant, the null hypothesis stands to be rejected. The alternative hypothesis that the residuals are not normally distributed must be accepted. This invalidates the reliability of estimated regression. This test is tested using diagram 4.1.

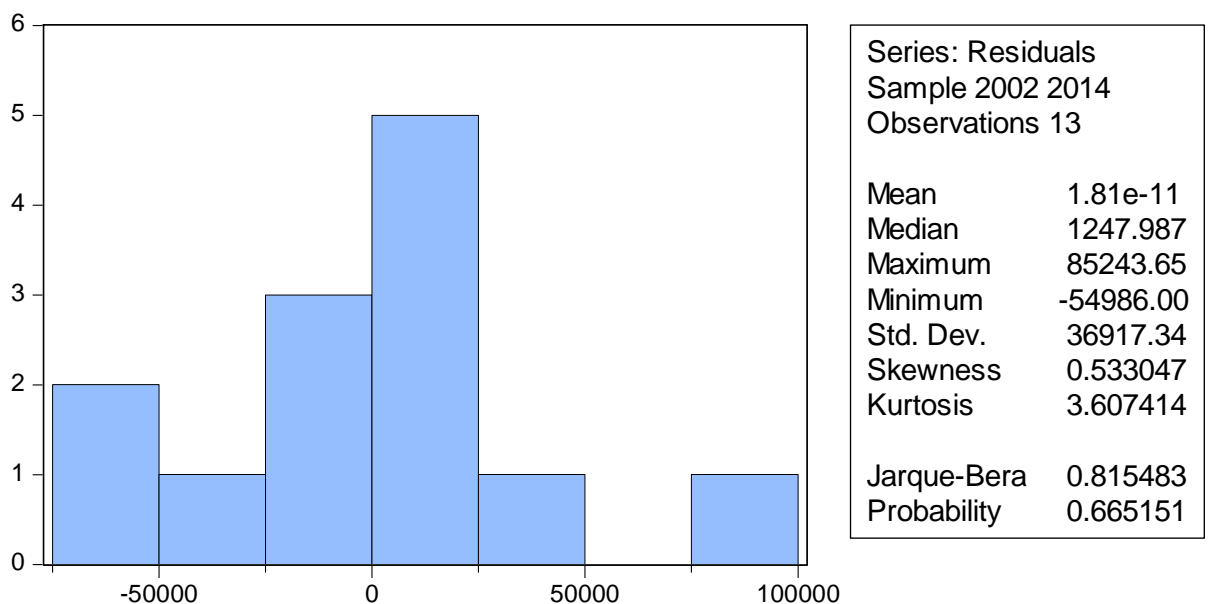


Table 4.1: Residual test

Source: Drwan using Eview 4.0

The table and Jacque Bera statistic show that the residuals are normally distributed. The Jacque Bera probability of 0.67 indicates that the null hypothesis must be accepted.

From the above diagnostic tests, this study has no evidence that the result of the regression analysis presented above is spurious. Therefore the regression result has been used for hypothesis testing.

Table 4.3 data analysed result is presented in this section. Column one depicts the independent variables of the regression. Columns two, three and four of the table show the estimated parameters, the standard errors of the coefficients, the t-statistics and the probability values of the t-statistic, respectively.

Table 4.3: OLS regression results (PROFIT_t is the dependent variable)

Variable	Coefficient	Standard Error	t-statistic	Probability
Constant	2860.255	23994.82	0.119203	0.9081
PROFIT _{t-1}	0.771135	0.366708	2.102860	0.0686
COMPITITIVENESS _t	40.84365	1242.105	0.032883	0.9746
SALES _t	-0.061753	0.105466	-0.585524	0.5743
NEWPRODUCT _t	15540.49	22395.58	0.693909	0.5074

Adjusted R2 =0.235
 S. E. Of regression =17465
 F. Statistic =1.92
 F- Probability =0.20
 Durbin-Watson Stat. =1.89

SOURCE: Computed from secondary data using Eview 4.0

The results show that all the other independent variables cannot explain profit of the bank. This means that the level of competition, new product development, and sales including the past sales values have no substantial impact on profits. This is

demonstrated by low t-statistics as shown in column four and further reinforced by the high values of the probabilities of the t-ratios.

The result also shows that the model explains only 23 percent of variations in profit. The F-statistic value shows that the overall model is not significant in explaining the profit made by the bank. This clearly demonstrated by the low probability value of F-probability. The low F-statistic and the fact that non of the independent variables is capable of accounting for variations in profit show that the regression result is not spurious. This is confirmed by Durbin Watson statistic that is closed to 2.0.

Another important question is how reliable is the estimated regression result on which this study based its judgement? This is the concern of this section. One of the method of judging the result of estimated equation or model conduct confidence interval test and vilifies if the estimated interval contains the value zero. If it contains, then the estimated parameter has the true value of zero. The confidence interval of table 4.3 is shown in table 4.4a below. The columns 1, 2, 3, and 4 depict the variable estimated, the coefficient, the lower class interval limit and the higher class interval limit, respectively.

Table 4.4a: Coefficient confidence interval test

Variable Coefficient		95 percent confidence interval	
		Low value	High value
Constant	2860	-52472	58192
PROFT _{t-1}	0.771135	-0.0745	1.62
COMPETITIVENESS _t	40.84365	-2823	2905
SALES _t	-0.061753	-0.305	0.181
NEW PRODUCT _t	15540.49	-36104	67185

Source: Estimated using Eviews 4.0

The result of the confidence interval test has demonstrated that the constant values takes the range of -52472 to 58192; profit takes the range of -0.0745 to 1.62; Competition takes the values of -2823to 2905; sales takes its values ranging from -0.305 to 0.181; and new product takes the values of -36104 to 36104. Thus, all variables contain the value zero in their range. This confirms the result of the analysis above in table 4.3.

The second-order test is the Q-statistic diagnostic test. This is the test of autocorrelations which measures the existence or otherwise of serial correlations. The effect of serial correlation is to render the result of regression invalid. If serial correlation existed substantially, the t-statistic no longer has the features of t-distribution and likewise the F-statistic. Inference using these two means of hypothesis testing are not valid and likewise the conclusion drawing from them. The Q-statistic test is presented in table 8.2b with first, second, third, fourth, fifth, sixth and seventh columns representing autocorrelations, partial correlation, and number of lags, autocorrelation statistic, probability of autocorrelation statistic, Q-statistic and the probability of Q-statistic, respectively.

Table 4.4b: Q-static

Auto- Correlation	Partial Correlation	S. No.	AC	PAC	Q.Stat	Prob.
. .	. .	1	0.006	0.006	0.0005	0.982
. * .	. * .	2	0.141	0.141	0.3532	0.838
. * .	. * .	3	-0.133	-0.137	0.6964	0.874
. .	. .	4	-0.046	-0.064	0.7420	0.946
. * .	. .	5	-0.091	-0.054	0.9460	0.967
.*** .	.*** .	6	-0.354	-0.370	4.4342	0.618
. * .	. * .	7	0.080	0.107	4.6446	0.703
. * .	. * .	8	-0.127	-0.070	5.2722	0.728
. .	. * .	9	0.043	-0.109	5.3612	0.802
. .	. .	10	-0.017	0.019	5.3803	0.864
. .	. * .	11	0.006	-0.093	5.3841	0.911
. .	. * .	12	-0.008	-0.165	5.3971	0.943

Source: Computed Using Eviews 4.0

The serial correlation test has the null hypothesis that the results of estimated regression have no problem of serial correlation. If this null hypothesis is subjected to the above hypothesis using auto –correlation (AC). probability of AC (PAC). Q-statistic and the probability of Q-statistic (Prob.). the null hypothesis has to be accepted as the probabilities of all AC (PAC) all above 0.05. The same remark applies to the probabilities of Q-statistic. Thus the results of table 4.4b have not suffered from serial correlation.

The next diagnostic test is to subject the residuals of the regression to normality test. The null hypothesis of this test is that the residuals are normally distributed. If the computed probability and the Jacque Bera statistic are significant, the null hypothesis stands to be rejected. The alternative hypothesis

that the residuals are not normally distributed must be accepted. This invalidates the reliability of estimated regression. This test is tested using diagram 4.1.

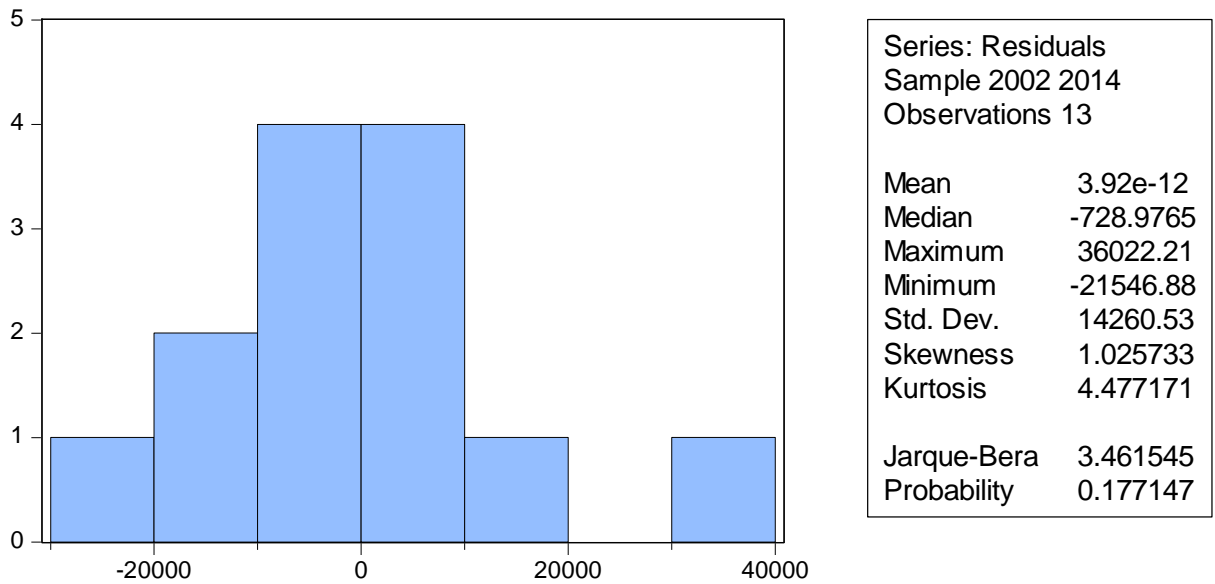


Table 4.2: Residual test

Source: Drwan using Eview 4.0

The table and Jacque Bera statistic show that the residuals are normally distributed. The Jacque Bera probability of 0.18 indicates that the null hypothesis must be accepted.

From the above diagnostic tests, this study has no evidence that the result of the regression analysis presented above is spurious. Therefore the regression result has been used for hypothesis testing.

Table 4.5 results depicted result or regression showing competitiveness as a dependent variable. Column one depicts the independent variables of the regression. Columns two, three and four of the table show the estimated parameters, the standard errors of the coefficients, the t-statistics and the probability values of the t-statistic, respectively.

Table 4.5: OLS regression results (COMPETITIONESS_t is the dependent variable)

Variable	Coefficient	Standard Error	t-statistic	Probability
Constant	-60.48907	34.68547	-1.743931	0.1193
COMPETIIVENESS _{t-1}	3.316076	1.471798	2.253078	0.0543
NEWPRODUCT _t	46.58467	26.35703	1.767447	0.1151
SALES _t	1.46E-05	2.29E-05	0.635844	0.5426
PROFIT _t	2.49E-05	6.57E-05	0.379124	0.7145

Adjusted R² = 0.458

S. E. Of regression = 9.509

F. Statistic = 3.53

F- Probability = 0.061

Durbin-Watson Stat. = 2.86

Source: Computed from Secondary Data using Eviews: 4.0

The results show that all the other independent variables cannot explain competitiveness of the bank. This means that the level of profit, new product development, and sales including the past competitiveness of the bank have no substantial impact on competitiveness. This is demonstrated by low t-statistics as shown in column four and further reinforced by the high values of the probabilities of the t-ratios.

The result also shows that the model explains only 46 percent of variations in profit. The F-statistic value shows that the overall model is not significant in explaining the profit made by the bank. This clearly demonstrated by the low probability value of F-probability. The low F-statistic and the fact that non of the independent variables is capable of accounting for variations in competitiveness of the bank show that the

regression result is not spurious. This is confirmed by Durbin Watson statistic that is closed to 2.86.

Another vital question is how reliable is the estimated regression result on which this study based its judgment? This is the concern of this section. One of the criteria of judging the result of estimated equation or model conduct confidence interval test and vilifies if the estimated interval contains the value zero. If it contains, then the estimated parameter has the true value of zero. The confidence interval of table 4.3 is shown in table 4.6a below. The columns 1, 2, 3, and 4 depict the variable estimated, the coefficient, the lower class interval limit and the higher class interval limit, respectively.

Table 4.6a: Coefficient confidence interval test

Variable Coefficient		95 percent confidence interval	
		Low value	High value
Constant	-60.48907	-140	19
Competitiveness _{t-1}	3.316076	-0.078	6.71
Newproduct _t	46.58467	-14.19	107.4
SALES _t	1.46E-05	-0.000038	0.000067
Profit _t	2.49E-05	-0.00013	0.00018

Source: Estimated using Eviews 4.0

The result of the confidence interval test has demonstrated that the constant values takes the range of -140 to 19; competitiveness takes the range of -0.078 to 6.71; new product takes the values of -14.19 to 107.4; sales takes its values ranging from -0.000038 to 0.000067; and new profit takes the values of -0.00013 to 0.00018. Thus, all variables contain the value zero in their range. This confirms the result of the analysis above in table 4.5.

The second-order test is the Q-statistic diagnostic test. This is the test of autocorrelations which measures the existence or otherwise of serial correlations. The effect of serial correlation is to render the result of regression invalid. If serial correlation existed substantially, the t-statistic no longer has the features of t-distribution and likewise the F-statistic. Inference using these two means of hypothesis testing are not valid and likewise the conclusion drawing from them. The Q-statistic test is presented in table 8.6b with first, second, third, fourth, fifth, sixth and seventh columns representing autocorrelations, partial correlation, and number of lags, autocorrelation statistic, probability of autocorrelation statistic, Q-statistic and the probability of Q-statistic, respectively.

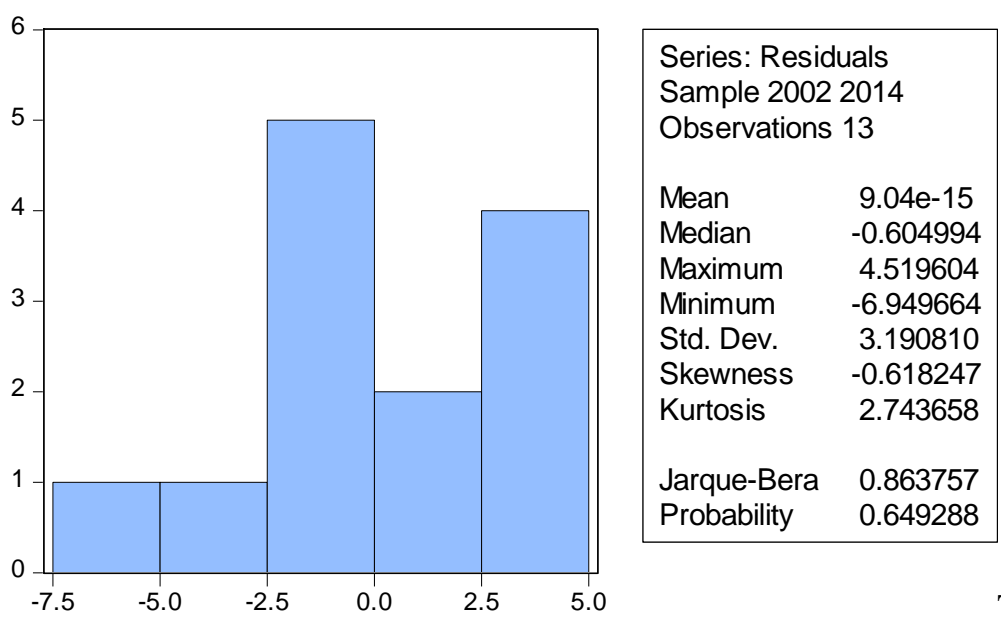
Table 4.6b: Q-static

Auto-Correlation	Partial Correlation	S. No.	AC	PAC	Q.Stat	Prob.
. .	. .	1	-0.003	-0.003	0.0001	0.990
. ** .	. ** .	2	-0.327	-0.327	1.8996	0.387
. ** .	. ** .	3	-0.213	-0.241	2.7805	0.427
. .	. ** .	4	-0.065	-0.227	2.8719	0.579
. * .	. .	5	0.146	-0.043	3.3905	0.640
. .	. * .	6	-0.020	-0.202	3.4019	0.757
. * .	. ** .	7	-0.179	-0.299	4.4446	0.727
. .	. ** .	8	-0.059	-0.286	4.5815	0.801
. ** .	. .	9	0.282	0.017	8.4713	0.487
. .	. * .	10	0.062	-0.200	8.7198	0.559
. * .	. * .	11	-0.101	-0.191	9.7213	0.556
. .	. * .	12	-0.022	-0.081	9.8189	0.632

Source: Computed Using Eviews 4.0

The serial correlation test has the null hypothesis that the results of estimated regression have no problem of serial correlation. If this null hypothesis is subjected to the above hypothesis using auto –correlation (AC), probability of AC (PAC), Q-statistic and the probability of Q-statistic (Prob.), the null hypothesis has to be accepted as the probabilities of most AC (PAC) are above 0.05. The same remark applies to the probabilities of Q-statistic. Thus the results of table 4.6b have not suffered from serial correlation.

The next diagnostic test is to subject the residuals of the regression to normality test. The null hypothesis of this test is that the residuals are normally distributed. If the computed probability and the Jacque Bera statistic are significant, the null hypothesis stands to be rejected. The alternative hypothesis that the residuals are not normally distributed must be accepted. This invalidates the reliability of estimated regression. This test is tested using diagram 4.3.



Table

4.3: Residual test

Source: Drawn using Eview 4.0

The table and Jacque Bera statistic show that the residuals are normally distributed. The Jacque Bera probability of 0.645 indicates that the null hypothesis must be accepted.

From the above diagnostic tests, this study has no evidence that the result of the regression analysis presented above is spurious. Therefore the regression result has been used for hypothesis testing.

4.3 Test of hypotheses

The hypotheses formulated for testing in chapter are:

- iv. **H₀** New product development has not made any significant impact on sales growth in UBA Nigeria Plc.
- v. **H₀** New product development has not made any significant impact on profitability of UBA Nigeria Plc.
- vi. **H₀** New product development has not made any significant impact on competitive effectiveness of UBA Nigeria Plc.

These hypotheses are tested by selecting the test statistic, which is the t-statistic, the degrees of freedom and the level of significance. On the basis of degrees of freedom (DF) and significance level, the critical t-statistic will be selected. If the computed statistic is lower than the critical t-statistic, the null hypothesis is accepted. But if the estimated t-statistic is higher than the critical t-statistic, the null hypothesis will be rejected.

4.3.1 Test of hypothesis one

As seen above the first hypothesis states that new product development has not made any significant impact on the sales or turn-over of UBA. The test statistic used in testing this hypothesis t-statistic or t-ratio. Just like most test of hypothesis in management and social sciences, this study uses 0.05 or 5% level of significance. The degrees of freedom used in this study is the number of observations less the number of parameters estimated ($N - 5 = D.F$) = 13 - 5 = 8. The critical t-statistic is 2.20. the computed t-statistic is 0. 889. The corresponding probability of t-statistic relating the impact of new product to sales is 0.40. The low t-statistic value along with high probability value provides substantial evidence against the alternative hypothesis. This study on the bases of these two evidences accepts the null hypothesis and concludes that new product development has not significantly contributed to sales made by UBA in Nigeria.

4.3.2 Test of hypothesis two

The second hypothesis states that the new product development has not made any impact on profitability of UBA. This hypothesis like that of sales is tested using the t-statistic based on the degrees of freedom of 8 and significance level of 0.05. The critical t-statistic corresponding to these degrees of freedom and significance values is 2.20. From table 4.3, the computed t-ratio is 0.69. The computed probability is 0.51. Just like in the case of the previous hypothesis, the low t-statistic and high probability value provide overwhelming evidence in support of the null hypothesis. This study therefore accepts the null hypothesis

and concludes that new product development has not contributed to profit generation of UBA.

4.3.3 Test of hypothesis three

The second hypothesis states that the new product development has not made any impact on the competitiveness of UBA. This hypothesis like that of sales and profit generation of UBA is tested using the t-statistic based on the degrees of freedom of 8 and significance level of 0.05. The critical t-statistic corresponding to these degrees of freedom and significance values is 2.20. From table 4.5, the computed t-ratio is 1.77. The computed probability is 0.12. Just like in the case of the previous two hypotheses, the low t-statistic and high probability value provide overwhelming evidence in support of the null hypothesis. This study therefore accepts the null hypothesis and concludes that new product development has not contributed to making UBA more competitive.

4.4 Discussion of the Findings

This study established that new product development has not significantly contributed to sales growth in the UBA. It also established that new product development has not contributed significantly to profit of UBA. New product development has not made UBA more competitive. These findings are discussed in this section.

4.4.1 New Product has not Contributed to Sales

This study has shown that new product development has not made any significant contribution to UBA sale growth. This finding is at variance with the findings Boston and Otman (2004) and Wu Jiayi (2009) who established in their studies that new product development improves the performances of sales of firms they investigated. This finding, can, however, be defended on the ground that the new product could be the dog or a problem child whose sales potentials are low and as such cannot substantially influence the level of sales.

4.4.2 New Product has not Contributed to Profit

This study has established that the sale of new product has not contributed significantly to the profit made by UBA. This finding is conflicting with the findings of Cohen, Gan, Young and Chaong (2006). So Hail, Sabir and Zaheel (2011) who found that new product development enhanced the level of profit of enterprises. This finding could also be justified if the product, like in the case of sales, is a dog of problem child. These kinds of products do not exert substantial impact on the level of profit or sales.

4.4.3 New Product do not Enhance Competitiveness

This study has also established that new product do not substantially enhance the competitiveness of UBA. This finding also conflict the findings made by Wu Jiayi (2009) who through their studies showed that new product improved the competitive nature of firm's performance. The main reason new product may not improve firm's performance is that the new product was introduced by

all the banks in Nigeria and not UBA alone and so it did not give any bank an advantage. Rather the introduction of the new product had the possibility of penalizing firms that failed to do so.

CHAPTER FIVE
SUMMARY OF FINDINGS, CONCLUSIONS AND
RECOMMENDATIONS

5.1 Summary of the Study

The banking industry in Nigeria has grown over the years. Governments have introduced policies that will improve the efficiency of the banking sector and to make them strong enough to finance development projects. This was accomplished by the reform that reduced the number of banks from 89 to 25 national banks. These 25 banks that emerged at the end due to the consolidation were known as mega banks.

The consolidation of banks in Nigeria has increased competition in the banking sector. To service this competition, banks have to be innovative by improving on the quality of services and at the same time introduce more products in order to diversify their operations.

It is against this background that this study is designed to investigate the relevance of new product development in the performance of the banking sector using UBA as the case study.

To achieve this, the study sets as its objectives to: investigate the contribution of new product on the sales of UBA; assess the contribution of new product to profit earnings of UBA; assess the effectiveness of new product development to the competitiveness of UBA; and suggest possible ways of improving the performance of the new product and the banks.

To carry-out the study, related literatures are reviewed, both theoretical and empirical literatures. Under theoretical literatures, literatures on the concept of markets, the marketing mix strategy and organizational arrangement for new product development were reviewed, among other concepts. The study also reviewed literature on service sector products, particularly those that are related to the banking sector. The study reviewed literature on the features of services products. The study explained innovation and new product development in the banking sector. It also reviewed product use cycle in financial sector of the economy – starting from idea generating, product definition to product prototype to final validation. The study reviewed the theoretical framework of the study adopted as the growth share theory that was developed by the Boston Consultant Group (BCG) growth matrix. The model groups a company's product into: star, cash-cow, dog and problem child. What determines the name of the product is its contribution to the total profit of the firm. The star and the cash cow tend to have much sales and contribute so much to profit. The dog has low sales and low contribution to profit, likewise the problem child.

The thesis also reviewed empirical works on new product contribution to sales and profit performances. Auta (2010) showed that new product improves banking performances. Cohen, Gan, Young and Chaong (2006) also established that innovative technology improves bank performances, bank sales, and bank competitiveness. SoHail, Sabir and Zaheer (2011) showed that new products improve input productivity, particularly labour and capital.

Boston and Otmar (2004) showed that new product improve performances. Wu Jiayi (2009) showed that new product improved organizational performances, among others. Literature on competitive advantage and new product development were also reviewed.

The study explained the research method applied. The population of the study consisted of time series data covering the period of 2001 to 2014. The data used were collected from the annual financial statement of UBA. The variables applied are profit, sales or turnover, new product development and the measures of competitiveness. The method of regression analysis applied is the ordinary least squares regression. The study carried out second order test or diagnostic test to establish that the results of the analysis are not spurious but consistently estimated the true parameters of the regression.

This study establishes the following findings:

- i. The introduction of a successful new product has not significantly increased the level of sales of a company.
- ii. The introduction of a successful new product has not improved substantially the level of a company's profit performance; and
- iii. The development of a new product has no significantly enhanced the level of the company's competitive advantage.

5.2 Conclusion

The conclusions of this study are stated in the succeeding paragraphs in this section. These conclusions are:

i. The study establishes that the introduction of a new product has not improves the company level of sales. This finding is not unreasonable. The new product has to do with introduction of ATM and all the competitor did the same. As such no company was expected to make any gain over the other. The disaster would have been on a bank that failed to innovate. This finding is therefore in proper order.

ii. This study has established that introduction of new product does not result to more profit being earned by the company. This means that the introduction of new product may not always lead to more profit being earned. A company may introduce a new product to stand for a product that is having declining sales. Or a new product can be introduced to withstand completion by improving product or service delivery. These may ensure survival and prevent the imminent collapse of the firm.

iii. The third finding reveals that the introduction of new product has not increases the banks' level of competitiveness. This finding too is also in proper perspective with the situation on ground. Recalled that the new product was automatic teller machines which dispenses money and reduce the labour requires for doing the work. It actually saves labour costs but additional cost in terms of machine and the cost of internet are involved. The level of efficiency was also increase but the technology was applied throughout the industry. This

cannot give the bank a competitive edge. It can only penalize the bank if the action was not taken. That the new product does not increase competitive edge is natural in this sense.

5.3 Recommendations

Based on the findings, the following recommendations are put forward:

i. The bank introduces the new product but if the new product did not lead to increase in sales. This did not mean that it was a wasted effort. The new product was a new development in terms of increased technology in the industry. The bank has no choice. The option is to introduce the facility or to lose out totally. If the bank wants to increase its sales through new product it has to do something quite unique that other banks have not done. A good example is to introduce new teller machines that deposits as done in more advanced countries.

ii. The second finding is that the new product could not help raise the level of bank profits. This finding has not proven that the new product was a waste. To know whether the new product was a waste or gain, it is important to ask the question, if the new product was not introduced what would the consequence on the bank level of profit? It is obvious that the new product was introduced to enable the bank keep up with new development in the industry. Failure to innovate would have made the bank to collapse. Thus the introduction of the new product enables the bank to survive. The aim was achieved. For profit-making, the new product would have achieved this if ad

only if the costs of operating with the ATM are lower than the cost of operating without the ATM.

iii. Banks in Nigeria should have research and development (R & D) unit that should be concerned with searching for customer needs, wants, and aspirations of the target customers so as to serve them at a profit.

iv. For banks to be more competitively sound, they should invest heavily in information communication technology so as to be able meet up with the present trend of globalisation and liberalization in the world.

5.4 Suggestions for Further Research

This study recommends that the examination of the impact of new product development on the performances of commercial banks in Nigeria using UBA as a case study be expanded in the following areas to enable intra-industry and inter industry comparisons:

1. New product development as a strategy for sales growth, profit making and competitiveness in the Nigerian banking industry;
2. New product development as a strategy for sales growth, profit making and competitiveness in the Nigerian financial sector;
3. New product development as a strategy for sales growth, profit making and competitiveness in the Nigerian manufacturing industry;
4. New product development as a strategy for sales growth, profit making and competitiveness in the Nigerian food and beverages industry.

REFERENCES

- Abdullahi A. S. (2010). Distress in the Nigerian banking industry: A critical assessment of its nature, causes and extent. Retrieved from <http://www.freeuba.com/binding> publication 4:htn on 2/28/2010:k37pm.
- Agarwal, D. R. (2003). *Business statistics*. Delhi: Vrinda Publication.
- Aigbiremolen, M. O. & Aigbiremolen, C. C. (2004). *Marketing banking services in Nigeria*, Lagos: The UBN Press Limited
- Akpan, A.B (2003). *Marketing strategy: Concepts and application (2nd ed)*. Lagos: Isola Ola and Sons.
- Amah, E. (2009). Corporate culture and organizational effectiveness. A study of the Nigerian banking industry. An unpublished PhD thesis of the Faculty of Management Sciences, University of Port-Harcourt, Nigeria.
- Amah, E. and Baridam, D. (2012). Adaptability and organizational effectiveness: A study of the Nigerian banking industry, *International Journal of Business and Management Tomorrow*2(3). 1-9.
- Anantana, T., Enkawa, H and Suzuki, S. (2009). New product development efficiency and financial performance: Perspective of technology trajectories in Japanese manufacturing, retrieved from <http://newproductdevelopmentanantanasuzukipdf> on 8th August, 2015.
- Asika, N. (1991). *Research Methodology in the Behavioral Sciences*, Ibadan: Longman Plc.
- Auta, E. M. (2010). E-banking in developing economy: Empirical evidence from Nigeria, *Journal of Applied Quantitative Methods*, 5(2). 212-222.
- Babbie, E. (2004). *The Practice of Social Research*. Belmont CA: Wards Worth/Thomson
- Barone, M. J. and Decarlo, T. E.(2003). Emerging forms of competitive advantage: Implications for agriculture producers, Midwest Agricbusiness Trade Research and Information Research Center Paper 03, MRPS.

- Berry, L. and Parasuraman, A. (1991). *Marketing Services: Competing through quality*. New York: Free Press Line.
- Blueman, A. (2004). *Elementary Statistics Step by Step Approach (5th ed)*. New York, MC Graw – Hill.
- Bruderl, J. and Peter, P. (1998). Network support and success of newly founded businesses, *Small Business and Economics*, 10(3). 213-225).
- Central Bank of Nigeria (2010). <http://www.cenbankorg.org/monetarypolicy/reformsasp> 18/3/2011 2:35am.
- Child, J. (1974). Management and organizational factors associated with company performance- part 1. *Journal of Management Studies*, 2: 12-16.
- Cohen, D., Gan, C., Yong, H. H. A. and Choong, E. (2006). Customer satisfaction: A study of bank customer retention in New Zealand. Lincoln University, Canterbury, discussion paper No. 109.
- Cole Ehmke, M. S. (2005). Strategies for competitive advantage, WEMC, Working paper No. 08.
- Davison, J. (2000). *Econometric theory*. London: Blackwell Publishers
- Draft, R. I. (1998). *Organisation theory and design (5th edition)*. Ohio: South-Western Publishing.
- Express Marketing Corporation, EMC (2012). Achieving new product success within the financial services industry. Retrieved from: www.emc.com on 25/02/2012.
- Frank, P. (2011). Work place innovations for better jobs and performance, *International Journal of Productivity, Performance and Management*, 60: 404-415.
- Fredlander, F. and Pickle, H. (1968). Components of effectiveness in small organizations, *Administrative Science Quarterly*, 13: 289-304.
- Frei, F. X., Harker, P. T. and Hunter, L. T. (1998). *Innovation in Retail banking*. Pennsylvania: the Wharton School University, Pennsylvania.
- Friedman, M. (1953). *Essay in positive economics*. Chicago: university of Chicago Press.
- Garba, A. M. (2007). *Essentials of corporate strategy*. Kano: benchmark Publishers.

- Goddard, J., McMilan, D. and Wilson, J. (2006). Do firm size and profitability converge? Evidence on Gibrat's law and persistence of profits in the long-run, *Applied Economics*, 38, 267-278.
- Goddard, J., Molyneux, P. and Wilson, J. (2004). Dynamics growth and profitability in banking, *Journal of Money, Credit and Banking*, 36, 106-1091.
- Godener, A. and Soderquist, K. (2004). Use of impact of performance measurement results in R&D and NPD. An exploratory study, *R&D Management*, 32(2). 191-219.
- Goldberger, A. S. (1991). *A course in econometrics*. Cambridge: Cambridge University Press.
- Greene, W.H. 2012. *Econometric analysis*, 6th edition. Boston: Pearson.
- Gromoos, C. (2000). *Service management and marketing: A customer relationship management approach*. London: John Wiley.
- Gujarati, D. N. and Porter, D. C. (2009). *Basic Econometrics*. Boston: John Wiley.
- Gujarati, D. N., & Porter, D. C. & Gunasekar, S. (2012). *Basic econometrics*. Boston: McGraw-Hill.
- Hall, R. H., and Clark, J. P. (1980). An effective effectiveness study and some suggestions for future research, *Sociological Quarterly*, 21: 119-134.
- Henderson, B. D. (1998). *Perspective on Strategy from the Boston Consulting group*. New York; John Wiley.
- Hill, R. C., Griffiths, W. E. and Lim, G. C. (2008). *Principles of Econometrics*. London: John Wiley.
- Iyenger, G. V. (2007). *Introduction to Banking*. New Delhi: excel Books
- Jiaxi, W. (2009). The impact of inter-organisational relationship on new product development, performance with the intermediate role of information sharing. Beijing: China Institute of Science and Technology.
- Jiaxi, W. (2009). The impact of inter-organizational relationship on new product development performance with the intermediate role of information sharing, 4th International Conference on cooperation and promotion of information resources

in Science and technology, Beijing, Institute of Scientific and Technical Information of China.

Kano N. (2011). Model – Wikipedia, the free encyclopedia 13/4/2011 – 5.59am.

King, J. B. (2005). The top 10 reasons businesses succeed, Ezine Articles. Retrieved from: <http://ezinearticles.com> on the 23th August, 2015.

Kotler, P. (2003). *Marketing Management (13th Edition)*. New –Delhi: Pearson.

Kotler, P. and Kelvin K. (2009). *Marketing management*, (13th Edition). New York: prentice Hall

Kotler, P. and Kelvin K. (2013). *Marketing management*, (14th Edition). New York: Prentice Hall

Laure, L. (2010). Competitiveness, Productivity and Efficiency in Agricultural and Agric – Food Sector/OECD food, Agriculture and Fisheries Working Papers. No. 30.

Laure, L. (2010). Competitiveness, productivity and efficiency in agriculture and agric- food- sector/OECD Food, agriculture and fisherie. Working Paper 30.

Lee, J. S. Y. (1999). Organisational learning in China, *Business Horizons*, 4(1). 234-251.

Leslie, H. V., Bardwaj, S. G. and Challagalla, G.N. (2005). Antecedents, consequences and mediating role of organizational innovation: Empirical generalisations.

Li-An, H. (2011). mediating, learning, organizational innovation and performance, *Industrial Management and Data Systems*, 111(1). 113-131.

Michael, P., George, V. I., Pierre, M, and Raymond, W. (2010). Product, processes and organizational innovation: Drivers, complementarity and productive effects, CIRANO working papers No.28.

Micheal, T.M., Smith, K., Wood, W., Westerman R. C. Wendy, G. O.,O'Reilly, C. (2006). Organizational design and innovation systems. Harvard Business School, Morgan Hall 313, Boston, MA. Retrieved from: mtushman@hbs.edu;617-495-5442.

- Moon-Gi, S. (2004). Organisational effectiveness in the IT industry: The case of South Korea, *Development and Society*, 33(2). 207-227.
- Muller, D. (1977). The persistence of profits above the norm, *Economica*, 44, 369-380.
- Neuman, L. W. (2004). *Basics of Social Research: Quantitative and qualitative approaches*. Boston: Pearson.
- Nickel, G. McHugh, J. M. and McHugh, S. M. (1997). Understanding business, 4th edition, New York: Irwin/McGraw-Hill.
- Nigeria Deposit Insurance Cooperation (2009). 20th Anniversary, 20 Years Deposit Insurance in Nigeria p. 114
- Nwokah, N. G., Ugoji, E. L. and Ofoegbu, J. N. (2009). Product development and organizational performance. A paper presented at river State University of University of Science and Technology, Por-Harcourt, Nigeria.
- Pavitt, K. (1984). Sectoral patterns of technical change: Towards taxanomy and a theory, *Research Policy*, 13(6). 343-373.
- Pennings, J. M., and Goodman P. S. (1979). Towards workable frame work in Paul S. Goodman, Johannes M. Pennings, et alnew perspective on organizational effectiveness productivity management. *A practical handbook*, Geneva: ILO.
- Sabri, E., Oya, E. and Halit, K. (2004). The relationship between market orientation, firm innovativeness and innovative performance, *Journal of Global Business and Technology*, 1(1). 1-11.
- Sanusi, L. S. (2010). The Nigerian banking industry: What went wrong and the way forward. A lecture delivered to mark 2010 Bayero University graduation ceremony.
- Sohail, A., Sabir, M. S. and Zaheel, A. (2011). Link between product innovation and non-technological organizational performance. A paper presented at Islamabad campus of Igra University, Pakistan.

- Spanos, A. (1999). Probability theory and statistical inference: Econometrics Modeling with observational data: New York: Cambridge University Press.
- Strasser, S., Eveland, J. D., Cummins, G., Deniston, O. L. and Romani, J. H. (1981). Conceptualizing the goals and systems model of organizational effectiveness-implications for comparative evaluative research, *Journal of Management Studies*, 18:321-340.
- Swink, M., Tallari, S. and Pandey, T. (2006). Faster, better, cheaper: A study of NDP project efficiency and performance trade-offs, *Journal of Operational Management*, 24(5). 542-562.
- Thompson, S. and Stickland, A. J. (2005). *Strategic management: Concepts and cases*. Boston: McGraw-Hill/Irwin.
- Uche, C. U. and A. U. Ehikwe, A. E. (2001). Globalisation and marketing of banking services in Nigeria. A paper presented at World Service Congress, Hong Kong.
- Umoh, R. (2006). *The Nigerian banking services: users hand book*, Lagos: Global Money Publication.
- Yuan, L., Zhao, Y. and Liu, Y. (2006). The relationship between HRM, technology innovation and performance in China, *International Journal of Manpower*, 27(7). 679-697.
- Zhao, L. and Aram, J. D. (1995). Networking and growth of young technology-intensive ventures in China. *Journal of Business Venturing*, 10(5). 349-370.
- Zheng, W., Yang, B. and McLean, G. N. (2010). Linking organizational culture, structure, strategy and effectiveness: mediating role of knowledge management, *Journal of Business Research*, 63(7). 763-771.

APPENDIX A: EVIEWS RESULTS

Dependent Variable: SALES

Method: Least Squares

Date: 08/15/15 Time: 23:42

Sample (adjusted). 2002 2014

Included observations: 13 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2649.193	62404.66	0.042452	0.9672
SALES(-1)	0.629492	0.218875	2.876032	0.0206
COMPET	273.3095	3211.407	0.085106	0.9343
PROFT	0.425861	0.732413	0.581449	0.5769
NEWPRD	49751.58	55951.04	0.889199	0.3998

R-squared 0.758427 Mean dependent var 116327.9

Adjusted R-squared 0.637640 S.D. dependent var 75111.40

Akaike info

S.E. of regression 45214.32 criterion 24.55994

Sum squared resid 1.64E+10 Schwarz criterion 24.77723

Hannan-Quinn

Log likelihood -154.6396 criter. 24.51528

F-statistic 6.279058 Durbin-Watson stat 2.153109

Prob(F-statistic) 0.013737

Coefficient Confidence Intervals

Date: 08/15/15 Time: 23:44

Sample: 2001 2014

Included observations: 13

95% CI

Variable	Coefficien		
	t	Low	High
C	2649.193	-141256.2	146554.6
SALES(-1)	0.629492	0.124765	1.134218
COMPET	273.3095	-7132.209	7678.828
PROFT	0.425861	-1.263086	2.114807
NEWPRD	49751.58	-79271.74	178774.9

Date: 08/15/15 Time: 23:45

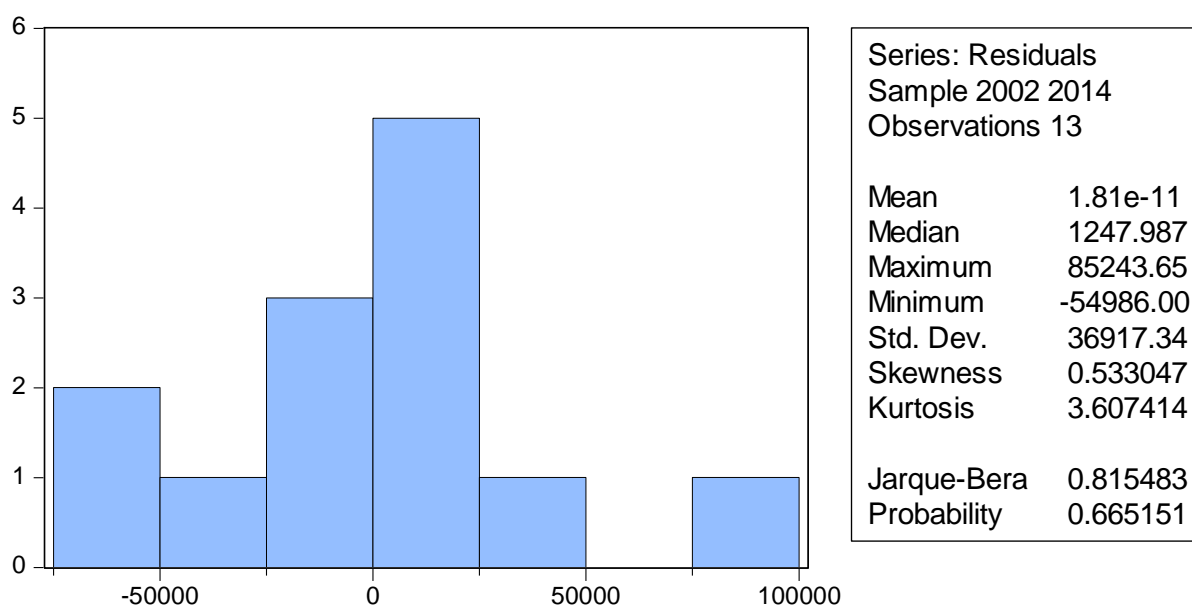
Sample: 2001 2014

Included observations: 13

Q-statistic probabilities adjusted for 1 dynamic regressor

Autocorrelation	Partial		AC	PAC	Q-Stat	Prob *
	Correlation					
. * .	. * .		1-0.077-0.077	0.0960	0.757	
. ** .	. ** .		2-0.323-0.331	1.9473	0.378	
. .	. * .		3-0.065-0.139	2.0286	0.566	
. ** .	**** .		4-0.284-0.479	3.7720	0.438	
. * .	. .		5 0.171-0.041	4.4843	0.482	
. * .	. ** .		6 0.120-0.244	4.8860	0.559	
. .	. * .		7-0.027-0.097	4.9104	0.671	
. .	. ** .		8-0.005-0.259	4.9113	0.767	
. .	. .		9-0.010-0.033	4.9164	0.842	
. .	. * .		10-0.000-0.174	4.9164	0.897	
. .	. .		11-0.000-0.062	4.9164	0.935	
. .	. * .		12-0.000-0.156	4.9164	0.961	

*Probabilities may not be valid for this equation specification.



Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.302027	Prob. F(2,6)	0.3391
Obs*R-squared	3.934506	Prob. Chi-Square(2)	0.1398

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 08/15/15 Time: 23:47

Sample: 2002 2014

Included observations: 13

Presample missing value lagged residuals set to zero.

Variable	Coefficie			
	nt	Std. Error	t-Statistic	Prob.
C	-2837.222	60469.28	-0.046920	0.9641
SALES(-1)	0.351205	0.327890	1.071106	0.3253
COMPET	-17.87011	3102.098	-0.005761	0.9956
PROFT	-1.050741	0.963571	-1.090465	0.3174

NEWPRD	-16439.85	55664.00	-0.295341	0.7777
RESID(-1)	-0.608613	0.536758	-1.133869	0.3001
RESID(-2)	-0.791802	0.499010	-1.586746	0.1637
<hr/>				
R-squared	0.302654	Mean dependent var	1.81E-11	
Adjusted R-squared	-0.394691	S.D. dependent var	36917.34	
Akaike info				
S.E. of regression	43598.29	crit	24.50716	
Sum squared resid	1.14E+10	Schwarz criterion	24.81136	
Hannan-Quinn				
Log likelihood	-152.2965	crit.	24.44463	
F-statistic	0.434009	Durbin-Watson stat	1.874994	
Prob(F-statistic)	0.833391			

Dependent Variable: PROFT

Method: Least Squares

Date: 08/15/15 Time: 23:53

Sample (adjusted). 2002 2014

Included observations: 13 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2860.255	23994.82	0.119203	0.9081
PROFT(-1)	0.771135	0.366708	2.102860	0.0686
COMPET	40.84365	1242.105	0.032883	0.9746
SALES	-0.061753	0.105466	-0.585524	0.5743
NEWPRD	15540.49	22395.58	0.693909	0.5074
<hr/>				
R-squared	0.490125	Mean dependent var	20087.54	

Adjusted R-squared 0.235188 S.D. dependent var 19971.19

Akaike info

S.E. of regression 17465.51 criterion 22.65757

Sum squared resid 2.44E+09 Schwarz criterion 22.87486

Hannan-Quinn

Log likelihood -142.2742criter. 22.61290

F-statistic 1.922530 Durbin-Watson stat 1.891788

Prob(F-statistic) 0.200087

Coefficient Confidence Intervals

Date: 08/15/15 Time: 23:54

Sample: 2001 2014

Included observations: 13

		95% CI	
Variable	Coefficien t	Low	High
C	2860.255	-52471.91	58192.42
PROFT(-1)	0.771135	-0.074495	1.616764
COMPET	40.84365	-2823.455	2905.142
SALES	-0.061753	-0.304958	0.181452
NEWPRD	15540.49	-36103.81	67184.79

Date: 08/15/15 Time: 23:55

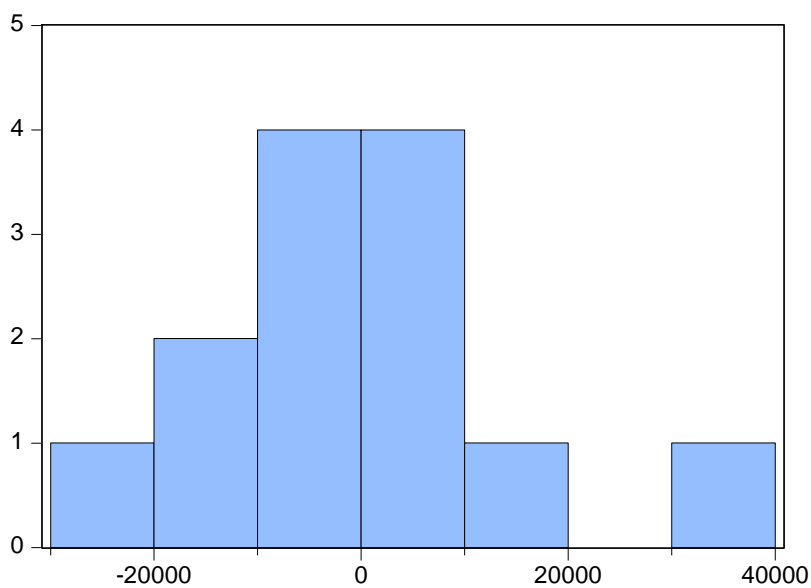
Sample: 2001 2014

Included observations: 13

Q-statistic probabilities adjusted for 1 dynamic regressor

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob *	
. .	. .	1	0.006	0.006	0.0005	0.982
. * .	. * .	2	0.141	0.141	0.3532	0.838
. * .	. * .	3	-0.133	-0.137	0.6964	0.874
. .	. .	4	-0.046	-0.064	0.7420	0.946
. * .	. .	5	-0.091	-0.054	0.9460	0.967
.*** .	.*** .	6	-0.354	-0.370	4.4342	0.618
. * .	. * .	7	0.080	0.107	4.6446	0.703
. * .	. * .	8	-0.127	-0.070	5.2722	0.728
. .	. * .	9	0.043	-0.109	5.3612	0.802
. .	. .	10	-0.017	0.019	5.3803	0.864
. .	. * .	11	0.006	-0.093	5.3841	0.911
. .	. * .	12	-0.008	-0.165	5.3971	0.943

*Probabilities may not be valid for this equation specification.



Series: Residuals	
Sample	2002 2014
Observations	13
Mean	3.92e-12
Median	-728.9765
Maximum	36022.21
Minimum	-21546.88
Std. Dev.	14260.53
Skewness	1.025733
Kurtosis	4.477171
Jarque-Bera	3.461545
Probability	0.177147

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.245219	Prob. F(2,6)	0.7900
Obs*R-squared	0.982321	Prob. Chi-Square(2)	0.6119

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 08/15/15 Time: 23:57

Sample: 2002 2014

Included observations: 13

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3501.949	27312.66	0.128217	0.9022
PROFT(-1)	-0.648930	1.108438	-0.585446	0.5796
COMPET	-126.7436	1399.210	-0.090582	0.9308
SALES	0.043189	0.136330	0.316796	0.7621
NEWPRD	4991.278	25969.76	0.192196	0.8539
RESID(-1)	0.527706	0.979803	0.538583	0.6096
RESID(-2)	0.514828	0.735560	0.699914	0.5102

R-squared 0.075563 Mean dependent var 3.92E-12

Adjusted R-

squared -0.848874 S.D. dependent var 14260.53

Akaike info

S.E. of regression 19390.51 criterion 22.88669

Sum squared resid 2.26E+09 Schwarz criterion 23.19089

Hannan-Quinn

Log likelihood -141.7635 criter. 22.82416

F-statistic 0.081740 Durbin-Watson stat 1.904273

Prob(F-statistic) 0.996160

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.324991	Prob. F(4,8)	0.8537
Obs*R-squared	1.817163	Prob. Chi-Square(4)	0.7693
Scaled explained			
SS	1.196419	Prob. Chi-Square(4)	0.8787

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 08/15/15 Time: 23:58

Sample: 2002 2014

Included observations: 13

Variable	Coefficient	Std. Error	t-Statistic	Prob.
	-			
C	40774563	5.69E+08	-0.071713	0.9446
PROFT(-1)	-4693.081	8689.441	-0.540090	0.6038
COMPET	1112944.	29432703	0.037813	0.9708
SALES	1607.628	2499.106	0.643281	0.5380
NEWPRD	1.39E+08	5.31E+08	0.262699	0.7994

R-squared	0.139782	Mean dependent var	1.88E+0	8
Adjusted R-squared	-0.290327	S.D. dependent var	3.64E+0	8
S.E. of regression	4.14E+08	Akaike info criterion		42.80368

Sum squared resid	1.37E+18	Schwarz criterion	43.02096
		Hannan-Quinn	
Log likelihood	-273.2239	criter.	42.75901
F-statistic	0.324991	Durbin-Watson stat	2.518191
Prob(F-statistic)	0.853721		

Dependent Variable: COMPET

Method: Least Squares

Date: 08/16/15 Time: 00:01

Sample (adjusted). 2002 2014

Included observations: 13 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-60.48907	34.68547	-1.743931	0.1193
COMPET(-1)	3.316076	1.471798	2.253078	0.0543
NEWPRD	46.58467	26.35703	1.767447	0.1151
SALES	1.46E-05	2.29E-05	0.635844	0.5426
PROFT	2.49E-05	6.57E-05	0.379124	0.7145

R-squared 0.791892 Mean dependent var 7.384615

Adjusted R-

squared 0.687839 S.D. dependent var 6.994503

Akaike info

S.E. of regression 3.907928 criterion 5.847614

Sum squared resid 122.1752 Schwarz criterion 6.064903

Hannan-Quinn

Log likelihood -33.00949 criter. 5.802952

F-statistic 7.610412 Durbin-Watson stat 1.835817

Prob(F-statistic) 0.007817

Coefficient Confidence Intervals

Date: 08/16/15 Time: 00:03

Sample: 2001 2014

Included observations: 13

Variable	Coefficien t	95% CI	
		Low	High
C	-60.48907	-140.4739	19.49577
COMPET(-1)	3.316076	-0.077896	6.710048
NEWPRD	46.58467	-14.19476	107.3641
SALES	1.46E-05	-3.83E-05	6.74E-05
PROFT	2.49E-05	-0.000127	0.000176

Date: 08/16/15 Time: 00:03

Sample: 2001 2014

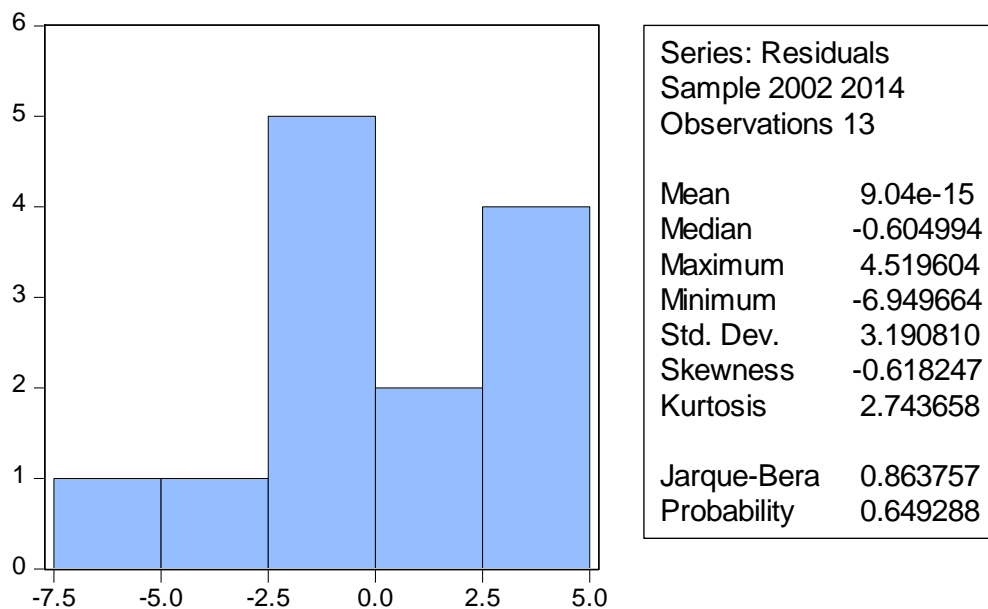
Included observations: 13

Q-statistic probabilities adjusted for 1 dynamic regressor

Autocorrelation	Partial		AC	PAC	Q-Stat	Prob *
	Correlation					
. .	. .		1-0.003-0.003	0.0001	0.990	
. ** .	. ** .		2-0.327-0.327	1.8996	0.387	
. ** .	. ** .		3-0.213-0.241	2.7805	0.427	
. .	. ** .		4-0.065-0.227	2.8719	0.579	
. * .	. .		5 0.146-0.043	3.3905	0.640	
. .	. * .		6-0.020-0.202	3.4019	0.757	

. * .	. ** .	7-0.179-0.299	4.4446	0.727
. .	. ** .	8-0.059-0.286	4.5815	0.801
. ** .	. .	9 0.282 0.017	8.4713	0.487
. .	. * .	10 0.062-0.200	8.7198	0.559
. * .	. * .	11-0.101-0.191	9.7213	0.556
. .	. * .	12-0.022-0.081	9.8189	0.632

*Probabilities may not be valid for this equation specification.



Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.658272	Prob. F(2,6)	0.5515
Obs*R-squared	2.339230	Prob. Chi-Square(2)	0.3105

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 08/16/15 Time: 00:05

Sample: 2002 2014

Included observations: 13

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.080130	36.57604	0.138892	0.8941
COMPET(-1)	-0.168069	1.546367	-0.108686	0.9170
NEWPRD	-8.195968	28.93440	-0.283260	0.7865
SALES	2.27E-05	3.88E-05	0.585772	0.5794
PROFT	1.19E-05	6.95E-05	0.171860	0.8692
RESID(-1)	-0.393407	0.679365	-0.579080	0.5836
RESID(-2)	-0.546101	0.475974	-1.147334	0.2949
R-squared	0.179941	Mean dependent var	9.04E-15	
Adjusted R-squared	-0.640118	S.D. dependent var	3.190810	
		Akaike info		
S.E. of regression	4.086378	crit	5.956928	
Sum squared resid	100.1909	Schwarz criterion	6.261132	
		Hannan-Quinn		
Log likelihood	-31.72003	crit.	5.894401	
F-statistic	0.219424	Durbin-Watson stat	2.236852	
Prob(F-statistic)	0.956331			

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	3.534323	Prob. F(4,8)	0.0606
Obs*R-squared	8.302045	Prob. Chi-Square(4)	0.0811
Scaled explained			
SS	2.741004	Prob. Chi-Square(4)	0.6021

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 08/16/15 Time: 00:05

Sample: 2002 2014

Included observations: 13

Variable	Coefficie			
	nt	Std. Error	t-Statistic	Prob.
C	186.6025	84.40746	2.210734	0.0580
COMPET(-1)	-6.856787	3.581635	-1.914429	0.0919
NEWPRD	-139.1096	64.14012	-2.168839	0.0619
SALES	-5.50E-05	5.58E-05	-0.985623	0.3532
PROFT	-0.000104	0.000160	-0.652267	0.5325

R-squared	0.638619	Mean dependent var	9.398091
Adjusted R-squared	0.457928	S.D. dependent var	12.91669
Akaike info			
S.E. of regression	9.509983	crit	7.626284
Sum squared resid	723.5182	Schwarz criterion	7.843572
Hannan-Quinn			
Log likelihood	-44.57085	crit.	7.581622
F-statistic	3.534323	Durbin-Watson stat	2.862009
Prob(F-statistic)	0.060623		
