THE CONTRIBUTIONS OF INSURANCE INDUSTRY TO GROSS DOMESTIC PRODUCT (GDP) IN NIGERIA (1985 – 2010)

BY

ELENDU NANCY CHIKAODINAKA

REG NO: EC/2009/719

DEPARTMENT OF ECONOMICS, FACULTY OF MANAGEMENT AND SOCIAL SCIENCES

CARITAS UNIVERSITTY, AMORIJI-NIK, EMENE ENUGU STATE.

AUGUST, 2013

TITLE PAGE

THE CONTRIBUTIONS OF INSURANCE INDUSTRY TO GROSS DOMESTIC PRODUCT (GDP) IN NIGERIA. (1985 – 2010)

BY

ELENDU NANCY CHIKAODINAKA

EC/2009/719

A PROJECT SUMMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE DEGREE (B.Sc) IN ECONOMICS.

DEPARTMENT OF ECONOMICS FACULTY OF MANAGEMENT AND SOCIAL SCIENCE

CARITAS UNIVERSITY, AMORIJI-NIKE, EMENE,

ENUGU STATE

AUGUST, 2013

APPROVAL PAGE

I certify that this project work was done by Elendu Nancy Chikaodinaka an undergraduate of Economics department with registration number EC/2009/719 was satisfactory completed the requirement for the award at B.Sc degree in Economics of Caritas University Amorji-Nike Emene, Enugu State.

…… ……

Mr Ojike R.O Date

(Supervisor)

…… ……

Onwudinjo P.C (Esq) Date

(H.O.D, Economics Dept.)

…… ……

Dr. C.C Umeh Date

(Dean of the faculty of Management and Social Science)

…… ……

External Supervisor Date

DEDICATION

This work is dedicated to God Almighty for the strength, wisdom and inspiration He gave me. Without Him I can do nothing.

ACKNOWLEDGEMENT

The completion of this study was enabled through the numerous contributions of different persons. I express my gratitude to God Almighty whose tender mercies have led me through this career. It is however, pertinent to mention but few, wish to appreciate the untiring effort of my supervisor, Mr Ojike R.O who in spite of his very tight schedule found time to thoroughly supervise this work and also gave me very resourceful information that contributed immensely to the success. My greeting goes to my HOD, Barr. P.C Onwudinjo and other lecturers in the department including Mr Ezekiel O. Uche, Mr J.C. Odionye, Mr Augustine C Odo, Mr P.E.C. Osodiuru, Dr C.C Umeadi, Chief Odike, Prof. Udabah, Prof. Onah etc for imparting good knowledge to me. I want to appreciate my parents Engr. and Mrs Edwin Elendu and my siblings Nelly, Peace, Ebuka, Miracle and Mr and Mrs Jonathan Duruogu for their prayers, financial support and encouragement.

Finally, my appreciations goes to my roommates Joy, Stella, Kate, Jessica, Fyne and my friends and course-mates Miracle, Vivian, Blessing, Opral, Udochukwu, Dozie, Chika etc for their warm association and sincerity, I am very grateful for all the support and encouragement.

ABSTRACT

This work examined the contributions of the insurance industry to the gross domestic product (GDP) in Nigeria. Data for the study were basically through the secondary process, extracted from journals, newspapers, internet, magazines, textbooks, CBN statistical Bulletin and Statement of Account etc. The Ordinary Least Square technique was used to test the validity of the hypotheses stated in the study. The research revealed that insurance industry through her routine activities has contributed significantly to economic growth of Nigeria. Through the signs from a priori expectation, it revealed a positive linear relationship between insurance contributions with gross domestic product (GDP) in Nigeria. However, the study revealed a negative relationship between total investments of insurance industry to gross domestic product. This is due the negligence of investment in the industry. Furthermore, the study exposed that neglect of laws governing insurance practise in Nigeria, poor accounting practice, poor claims settlement, failed public image, negligence of investment, low awareness of insurance etc as the major problems of the industry. The researcher recommended an increased supervisory role of NAICOM (National insurance commission), prompt payment of premiums, effective utilisation of insurance funds, research, improved public awareness through adverts and campaigns as possible solutions to the challenges facing the industry.

TABLE OF CONTENT

CHAPTER FIVE

5.0 Summary of the findings, Recommendations and conclusion

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Insurance is a course of productive that enhances the quality of life and ensures the development and survival of all other businesses in general. The main purpose of insurance apart from its basic function is to enhance National development through effective wealth creation, protection and conservation.

In the view of this, Oshinloye et al (2009), shows that the important of insurance to any Nations economy cannot be undermined. He said that no country can experience a meaningful development without the presence of formidable insurance industry, thereby making insurance business in any nation indispensable irrespective of its quota to the gross domestic product (GDP) or its level of awareness among the populace. According to Ezirim and Muoghahu (2002), in a typical market economy of the globe the insurance industry is perceived as an indispensable tool of economic progress, growth and development. It is seen as vital to the well-being of and smooth functioning of a modern economy. Like most financial institutions, is seems as a conduct for mobilizing monetary from the surplus economy agents and channelizing them to more efficient uses.

Oba (2003) wrote that, the performance of the insurance sub- sector is a function of a social economic and political environment in which it operates. In fact, the state of the insurance industry of a country is a reflection of its economy. Insurance remains one of the

major indices for the level of development of a nation's wealth and plays very significant roles in the mobilization of investable resources of an economy.

In developing economics of the world, were financial systems are not highly sophistically insurance provides the necessary bridge between commerce and industry thereby making it possible for continued economic activities. Unfortunately, the Nigeria situation is different. It is no longer news at all to observe that the economy appears to have defiled economy prescriptions which are intended to a positive impact on the well-being of the people.

According to Szablick (2009), Nigerian insurance is now the most developed among Africa. The industry has underperformed its role in the financial sub- sector of the economy, when compared with other parts of the world. The total insurance shared of the world market is only 0.01% compared to South Africa with 0.86% several factor account for the under performance of the insurance industry, such as low capitalization, high receivable and poor public perception of the importance of the insurance for business.

Insurance companies are established to provide financial security to their policy holders, through the pooling and investment of premiums, out of which those who suffer unexpected losses are indemnified.

In Nigeria, the returns on investment insurance funds lay behind the rate of inflation in the economy, there is market instability due to inadequate information in the market, which

made it difficult for insurance companies to make a long term planning and make optimal use of fund for investment.

Based on the fore-going this research investigates the contribution made by the insurance industry on the economic growth and development of Nigeria. Possible factors affecting the impact of insurance on the economy will be reviewed.

1.2 STATEMENT OT THE PROBLEM

This section of the research emphasizes on some of the challenges faced by insurance companies in the discharge of their duties that contribute to gross domestic product (GDP).

According to Obasi (2010), Nigerian has a negative attitude towards insurance companies. This accounted largely for the low patronage and performance stemmed from the poor attitude of insurers in the non claims payment. This tradition of defaulting in claims translated to some form of bad publicity for the industry and consequently, confidence in the industry eroded significantly. Because of the confidence crisis of the industry, Nigerians developed strong apathy for insurance which made the industry pariah industry. The industry has refused to change with the times, as policy documents still carry clauses that breeds distrust with customers. (Obasi, 2010)

The abysmal level of insurance culture developing economies has attracted relative interests among researches and practitioners alike (Yusuf, Gbadamosi, and Hamadu,

2009). Omar (2005) assessed customer's attitude towards life insurance patronage in Nigeria and found out that there is lack of trust and confidence in the insurance companies. Other major reason, he adduced is lake of knowledge about life insurance products. An instructive opinion suggested by the researchers is the call for a renewed marketing communication strategy that should be based on creating awareness and informing the customers of the benefit inherent in life insurance so as to reinforce the purchasing decision.

Furthermore, Yusuf (2006) noted that religion historically has provided a strong source of cultural opposition to life- insurance as many religious people believe that a reliance on life insurance results from distrust of God's protecting care. Until the nineteenth century, European nations condemned and banned life insurance on religious grounds. (Yusuf, Gbadamosi and Hamadu, 2009). Some scholars are of the opinion that religious antagonism to life insurance still remains in several Islamic countries.

Researchers have also proven that another major challenge of insurance industry is unfavourable macroeconomic environment. A stable macroeconomic environment promotes the savings necessary to finance investments, a pre-condition for achieving viable insurance industry and sustainable economic growth. Insurance companies are sensitive to economic fundamentals; this means that insurance companies factor macroeconomic variables into the amount they collect as premium and their investment decisions in order to meet up with claims. These macroeconomic variables include the size of the current account deficit in relation to foreign exchange reserve, government debt,

government deficits, inflation, interest rate and exchange rates etc. Nigeria's macroeconomic policies over the last periodic financial indiscipline, leading to volatile and generally high inflation, large exchange rate swings and negative real interest rates for extended periods. Government is not sincere in promoting a favourable macroeconomic environment that will allow the financial service industries thrive. This will adversely affect the operational efficiency o the insurance industry.

In spite of the following challenges facing insurance industry, the following research questions will be asked;

- What is the relationship between insurance contribution and gross domestic product (GDP) in Nigeria?
- What major challenges face the activities of insurance business in Nigeria?
- What is the significant relationship between total investment of insurance business and gross domestic product (GDP) in Nigeria?

1.3 OBJECTIVES OF THE STUDY

The major objective of the study is to appraise the contribution of the insurance industry to the growth of Nigeria economy. Other specific objectives include;

- To verify the existence of any relationship between the insurance contribution and the gross domestic product (GDP) in Nigeria.

- To expose the challenges to an effective contribution of insurance funds to the economy.
- To examine the significant relationship between total investment of insurance business and gross domestic product in Nigeria.

1.4 RESEARCH HYPOTHESES

Hypotheses for the research are stated in the null an alternative forms as follows;

Hypothesis 1

H_o – There is no significant relationship between the total investment of insurance business and the gross domestic product in Nigeria.

H_1 – There is a significant relationship between total investment of insurance business and gross domestic product in Nigeria.

Hypothesis 2

H_o – insurance contribution do not significantly relate with gross domestic product (GDP) in Nigeria.

H_1 – insurance contribution do significantly relate with gross domestic product (GDP) in Nigeria.

1.5 SIGNIFICANCE OF THE STUDY

This study will be of immense benefit to authorities in the insurance industry, relevant government agencies (policy makers) and students in the universities. To the authorities in the industries, the findings will expose the various means of tackling the challenges of insurance investment in the economy it. It will also reveal some of the loopholes in their endeavour to enhance on the activities of insurance in the economy. In this regards, an effective solution will be preferred to assist their efforts.

The relevant government authorities, a suggestion that will enable them appreciate the need for a reduction in policing the affairs of the industry will be made. This will ensure that insurers are given a free hand to operate within the armpit legitimacy.

The findings of this research will also benefit under graduates in the universities. It will add to the volume of literature that is available in the library on the topic and also serve as a source of reference for further research.

1.6 SCOPE AND LIMITATIONS OF THE STUDY

The scope of the study is limited to the examination of the contribution of the insurance business to the gross domestic product (GDP) of Nigeria. A range of time is taken from (1985 – 2010).

The study however suffered an initial and usual constraint of time and finance, there was also poor information supplied by some of the respondents who feared exposing official secrets. This caused an initial setback in the investigation. They were however over taken with time and this resulted to the success in the regard.

CHAPTER TWO

2.0 LITERATURE REVIEW: INTRODUCTION

Insurance arises from a contract between an insurer and an insured, whereby the former undertakes to provide against a risk on behalf of the latter. The main function of insurance companies is to provide long term capital to government and corporate bodies. Those functions are very crucial to the economic growth in Nigeria. Arising from the above, this chapter takes a literature review of the contributions of insurance to the gross domestic product of Nigeria, between the years 1985 **– 2010.**

2.1 THEORETICAL LITERATURE

2.1.2 THE EVOLUTION OF MODERN INSURANCE BUSINESS IN NIGERIA

Before the introduction of modern insurance business in Nigeria, some form of social insurance had existed in the society. These social schemes, according to Osoka (1992) evolved through the existence of extended family system and social associations such as age grades and other unions. This supported in Irukun (2006) thus, it must be noted, however, that long before the British arrival on the scene, there was a lot of organised trading activity in the territory now know as Nigeria although there was no organised insurance business as we know it today. There existed, at that time what might be

described as crude or unsophisticated forms of mutual and social insurance schemes. Apart from the extended family system, the age grade associations and some clan or traditional unions. These unions were described in Irukwo (2001) to act as mutual insurance societies to the members, much the same lines as the English ancient guilds.

They provided each donation, material or sometimes organised collective labour to assist members of social or communal association who suffer a mishap. The more modern schemes operate through funds accumulated from levied or regular contribution imposed by an association on its members. The funds are used to assist members who may suffer misfortune such as death, illness, unemployment or sometimes members may be given financial assistance for marriages and other celebration. The establishment of British trading companies in Nigeria such as the Royal Niger company in 1879 and the Ldder Demster, which dominated trade on the west coast of Africa, brought about increased activities in shipping and banking. In line with the development of commerce, it became necessary for the trading companies to handle some aspects of their insurance business locally.

Trading companies were granted insurance agency licenses by United Kingdom – based insurance companies to issue covers and assist in claims supervision, especially in Marine insurance. For example, in 1919, the Africa and East Trade Companies introduce the Raja Exchange Assurance Agency, the first insurance agency company in Nigeria, which was upgraded to a branch office the following year. Other agencies established included

Patterson Zonchonis (PZ's), Liverpool, London and globe, BEWAC's legal and Rock, the first agency of a British company to be given to a Nigerian, Sir Mobolaji Bank Anthony.

It was not until 1921 that the Royal Exchange assurance was established as a full insurance company. More than a quarter of a century later, three other companies, the Norwhich Union Fine insurance society, tobacco insurance company Ltd, and the legal and General Assurance society were established in 1949. All of these companies were wholly owned by the British, and established for the principal purpose of providing insurance for their trading activities. The first indigenous company, African Insurance Company limited, was established in 1958. A total of 49 recapitalised insurance companies are in operation in Nigeria today.

2.1.3 CONCEPT OF INSURANCE BUSINESS

The definition of insurance has been analysed by various scholars, for some as a social device, some as a contract, some as an institution etc. Marcus (2002) defined insurance as a risk transfer mechanism, where by policy holder called the insured contributes into common pool, out of which the unfortunate is made fortunate or the insured pay a consideration called premium in view of the insured, so that if loss occurs, the insurer will put the insured in the same position he/she was prior to the loss. Irukwu (1999) defined insurance as an agreement between two parties, the insured and the insurer where by the insured pays a small consideration called premium in view of risk insured, so that if a loss occur the insurer will put the insured in the same financial position he/she was prior to the lss. Furthermore, Anelle (2004) and Nwite (2007) defined insurance as a profession where

people are trained to insure the risk of individual, corporate bodies, government and the general public and also teach them on ways of risk management in the environment.

According to Oluoma (1999) “insurance is a device for the reduction of uncertainty of one party, called the insured through the transfer of particular risk to another party, called the insurer who offers a restoration, at less in part, of the economic losses suffered by the insured.”

Nduka (2005), insurance is defined as a systematic plan for protection against economic losses, in which large number of people agree to make regular payments to an insurance organization in exchange for an assurance that they will be reimbursed for losses they may suffer from such hazards as fire, accident and death. More so, Irono and Akoji (2003) described insurance as one of the best of all risk management measures which shifts the risk and the financial blow that exists when the risk or loss occurs to an insurance company. However, Scott (1994) established that every individual faces an assortment of financial risks that range from the possibility of receiving a parking ticket to a potential reduction of income caused by a long-term illness. Insurance he continued is one of several options for dealing with certain types of risks. Nader and Smith (2000) wrote that insurance is basically about spreading risk.

2.1.4 CLASSIFICATION OF INSURANCE BUSINESS

Abiodun (2002), insurance business is classified by various authorities according to different criteria. Nevertheless, insurance could be classified on the three main bases namely;

- By the function it performs
- By the main classes of business
- By statutory classification

Classification by the Function it Performs

Under this criterion, four main classes of insurance business can be distinguished;

- Insurance of the person
- Insurance of property
- Insurance of liability
- Insurance of right and financial interest

Classification by Main Classes of Business

In practice and historically, insurance business was divided into four major departments viz; marine, fire and accident departments.

Statutory Classification

The insurance Decree 1976, 1991 and insurance Act I, 2003 broadly divided insurance business into life and non-life insurance business.

2.1.5 THE MECHANISM OF INSURANCE

Definitely, to the layman, the concept of insurance sounds very illusory. For instance, it looks absurd for an institution to parade itself as an insurer, having received only a small amount of money as premium and undertakes to indemnify a person if he suffers over thousands or millions of naira worth of at the happening of the event insured against. An insurer combines similar exposure units. He studies past records of losses suffered in a particular class of insurance. The law of large numbers tells him that the larger the statistical basis of the study the more reliable the numerical basis of the study the more reliable the numerical information of relevance now is the average loss in the group. It is the knowledge of this average loss that enables the insurer to fix the premium he charges the prospective policy holders.

This is an area of insurance business in which tools of statistics and financial mathematics are used to determine among things, the premium considered adequate to cover certain risks. From this basic premium, adjustments could be made to accommodate variations in losses and other exigencies of legitimate business undertaking.

2.1.6 THE INSURANCE INDUSTRY AND NIGERIAN ECONOMY

The Nigeria macro-economy overview is a compelling story of progression and advancement, attributable mostly to a stable political environment and the successful implementation of socio-economic and financial reforms. Though Nigeria has previously been extremely dependent on oil and gas revenues, recent statistics shows a change in this trend. Militant unrests affecting oil producing regions have resulted in significant reductions in oil contribution to GDP. On the flip side, increasing focus on developing the non-oil sector, combined with growth in key sectors such as telecoms and building construction have boosted non-oils sector earnings and growth.

Akanro (2008) wrote that the significances sector is a key part of the financial services sector. In other emerging economics, it has been identified as being critical to the ability of those markets to grow and develop, simultaneously providing an opportunity to hedge against possible risks of private, social and economic investments. Insurance companies also serve a base for collecting relatively small premiums from millions of policy holders, into a pool to support term financing for economic growth.

The Nigerian insurance industry has evolved over the past five years following the announcement of new capitalisation requirements for companies operating in the sector with the conclusion of the consolidation exercise, the number of players dropped from 103 to 49. Activities in the sector have, however, noticeably increased, with enhanced public awareness of the sector and their operations, rapid expansion and strategic business acquisitions, improved visibility and strict supervisory regulation. (Abayomi; 2011)

Announcements of the recapitalisation guidelines in 2005, implicated that (a) the insurance industry was large, fast growing and at the start of a predictable growth curve, (b) it was ripe for consolidation, as there were too many fragmented players, and (c) it was high performing with huge potentials, but had still largely undervalued companies. It is however, believed that emerging/developing markets will provide a close enough road map for the Nigerian insurance sector, in the near to medium term. Some of the trends identified include the following (i) similar capitalisation evolution patterns; (ii) use of terminology as a major means of increasing public access to insurance products (iii) the eventual entry of foreign players into the market, barring any entry restrictions and (iv) life-insurance having the higher proportion of total premiums.

As at August 2005, prior to the announcement of the recapitalisation directives, there were 22 insurance companies with a market capitalisation of #28.94 billon listed on the Nigeria Stock Exchange. Now there are more than 30 active companies with a market capitalisation of #683.1 billon, a 2.260% growth over 5 years, with quite a few still expected to be listed.

2.1.7 THE INVESTMENT CASE FOR THE INSURANCE SECTOR

The insurance sector is a very key part of financial sector. In developed markets, the insurance sector accounts for a significant position of the total economy. In collecting relatively small premiums from many individuals in the economy, insurers are able to pull together, like no other institution, a large pool of funds that could be invested for short or long term periods. Insurance businesses are split into life representing short term and non-

life representing long term funds. The sector is therefore important for sustained economic growth.

This will in turn deepen and broaden the domestic financial services universe, as well as generate higher savings rates and therefore greater economic development. It is believed that the insurance sector is critical to the ability of emerging and transitional economics like Nigeria to grow and develop, as well as provide a reliable cover for risk to the citizens. According to Abdullahi (2008), insurance provide stability by allowing large and small businesses to operate with a lesser risk of volatility or failure. Insurance is also seen as a compliment to government's security programmes and its privatisation process.

2.1.7.1 KEY FACTORS FOR PROSPECTS IN THE INDUSTRY

Abdullahi longed on the following factors as key for prospects in the industry;

- Recent macro-economic growth especially growth in the real sector and how this affected the industry.
- Governments legislations in the insurance sector, and how they have impacted on growth in the sector so far, as well as the prospects for the sector as a result of these legislators, and
- The recapitalisation exercise as a separate regulation induced activity, and how it opened up the sector growth, as well as what the prospects of new capital raisings and mergers are.

- **2.1.7.2 REAL SECTOR GROWTH**

The Nigeria economy has recorded significant growth over the last few years. This growth has been attributed mostly to the successful implementation of some key reforms including; fiscal policy reforms, Budgetary reforms, Monetary reforms, debt management reforms and financial sector reforms over this few years. GDP growth has averaged 7.86% over the past five years. Non-oil sector contribution to GDP growth has grown significantly over the years from an all time low of 45% in 1992 to 69%in 2007, and 73% in 2009. Considering the setbacks from production in the oil sector (0.3% growth in2005 and 5% in 2006), the non-oil sector has mostly been responsible for propelling overall growth in the economy. Growth in the non-oil sector has meant a wider distribution of wealth in the economy, as the focus is no longer solely on oil. This has also supported the growth of an emerging middle class.

2.1.7.3 IMPLICATIONS OF GOVERNMENT LEGISLATION

Government legislation has also supported the prospects of growth for the industry. Regulations that have been propagated by the government in the recent times in support of growth in the industry include the following;

1. Compulsory insurance of all public buildings as well as those under construction;
2. Compulsory of all private sector organisations operating in Nigeria to enrol their employees in the National health insurance scheme to boost the resource base of the scheme;

3. The national insurance commission ensuring that any inhibitions to local insurers participating in the oil percentage gas business are removed. It has also worked to ensure that “consortium bidding” is strongly considered by oil and gas companies in selecting insurer for participating in the oil and gas companies in selecting insurer for participating in the oil and gas business. This is also as to achieve wider spread in participation by local insurance companies;
4. Introduction of the local content policy for the oil and gas industry, and an increase in the applicable rate from 10% to 45% in2007 and 70% in 2011.
5. The regulatory authorities also plan to address a tax law, which places a separate tax on gross premium. Discussions are on with the federal Inland Revenue service to work out ways and means of ameliorating the effect of this policy on the insurance companies.
6. The central bank is also currently considering an upward review of interest rates that are currently earned on the statutory deposits of insurance companies which are placed with the CBN.
7. There is also a planned reactivation of the VISER sticker, an initiative which is meant to increase the coverage of motor vehicle insurance, and increase the premiums earned by insurance companies based on number of policies.

Further to the implementation of these legislations, we have witnessed growth in the activities of insurance companies left in the market. One example of this is the formation

of some insurance consortia; with several insurers pooling funds together to enable them underwrite significantly large risks, especially in the oil and gas sector.

2.1.8 EVOLUTON OF CAPITAL REQUIREMENTS IN THE INSURANCE SECTOR

The sector has undergone two rounds of recapitalisation over the past ten years and this could be inferred to as an additional proof that the insurance industry is closely linked to general economic growth over this same time period, the sector has had to increase capacity to draw level with economic department and expectations. Even with this, there are clear indications that the new capitalisation levels were inadequate at each point.

Industry statistics reveal that insurance companies lose the opportunity of earning #70 billion in premiums annually from the oil and gas sector as a result of premium flight. Many companies, especially multi-national ones, have resorted to insuring their assets overseas; as the capital base of the local insurance companies are inadequate to carry the risks of insuring there assets. The first of the two rounds of capitalisation occurred in 2003, where in line with passing of the 2003 insurance Acts, insurance companies were required to increase their capital bases from #20 million for life businesses, #70 million to #300 million for non-life business#150 million to #350 million for reinsurance companies before the recapitalisation in December 2002, 14 of them did not make it and were liquidated. In September 2005, a new capitalisation requirement was announced, increasing the capital base to #2 billion for life insurance, business, #3 billion for non- life insurance business and #10 billion for reinsurance businesses. Following the completion of

the 2005/2006 recapitalisation exercise, which also involved quite a number of consolidations, the number of insurance companies dropped from 103 to 49.

2.1.8.1 PRE-RECAPITALISATION/CONSOLIDATION

The insurance industry before the regulatory induced recapitalisation/consolidation was one confronted with many challenges. These challenges were mostly responsible for the sector's inability to attract sufficient businesses both locally and internationally. It also affected its ability to retain a significant proportion of risk emanating from assets domiciled in Nigeria. Insurance premium flight was a key challenge for the sector, as the underwriting capacity of the existing companies was low. The industry at that time had 113 insurance companies, 4 reinsurers, 527 brokers and 28 loss adjusting companies. The industry at this point in time was characterized by the following;

1. Under capitalisation of existing industry players.
2. Dearth of appropriate human capital and professional skills
3. Poor returns on capital
4. Existence of two many fringe players
5. Poor asset quality
6. Prominence of unethical practices
7. Significant corporate governance issues
8. Insurance premium flight
9. Poor business infrastructural facilities especially in the area of ICT
10. Lack of innovation in product development

11. Lack of awareness on part of consumers on the uses/suitability of insurance products.
12. Low GDP per capital figures, and
13. Poor corporate governance structures.

These factors proved significant in restricting the companies from achieving any potential development. In 2006, Nigeria total premiums as a percent of world premium was put at 0.82% (source 11A), as world premiums totalled $3.72 trillion (#446.4 trillion) for that year, a pale comparison to other emerging markets such as South Africa, India and Brazil, which contributed 1.09%, 1.16% and 0.82% respectively. The United States had the largest contribution with 31.43%.

Total premiums for Nigeria in2001 were #33.1 billion (#283.7 million), and have grown to an estimated #82.3 billion ($705.4 million) as at 2006, #97.7 billion ($767.5 million) in 2009, representing a 25% AAGR over the past ten years.

2.1.9 CONTRIBUTION OF INSURANCE TO THE GROSS DOMESTIC PRODUCT (GDP) OF NIGERIA

The primary role of insurance is to provide indemnity or benefit to insured victims that have suffered financial loss due to consequences of uncertain and unexpected mishaps. The invaluable role or contribution made by insurance in any economy is not called to question here, as there is no controversy over the fact that insurance exists for the primary purpose of ensuring the survival of other businesses. This crucial function is achieved by

relieving entrepreneurs of insurable risks, leaving them in a better frame of mind to concentrate on the challenges posed by their various core lines of businesses.

In view of this, Ezirim and Muoghalu (1992) wrote that in the typical market economy of the globe, the insurance industry is perceived as an indispensable tool of economic progress, growth and development. It serves as a conduct for mobilising monetary resources from the surplus economic agents and channelling them to more efficient uses. More so, Oshinloye et al (2009) observed that the importance of the insurance-growth nexus is growing due to the increasing share of the insurance sector in the aggregate financial sector in almost every developing and developed country. The investments activities of insurance companies, they argued, leave various effects onto the capital markets and further onto the economy at large.

According to Babalola (2008), this sector represents the backbone of Nigeria's risk management, ensures financial security, serves as an important component in the financial intermediation chain, and offers a ready source of long term capital for infrastructural projects. It mitigates the impacts of risks and positively correlates to growth as entrepreneurs cover their exposures; otherwise risk taking abilities are hampered. Thus, a strong and competitive insurance industry is a compelling imperative for Nigeria's economic development and growth, he submitted.

However, to effectively contribute the economic growth of Nigeria, insurance according to Oyinlola (2006) functions in the following ways;

1. **INVESTMENT**

Insurance has always played a positive role in stimulating activities in all areas of investment ranging from capital, real estate and money markets. Just as no modern economy can survive without insurance protect so also, no national economy can grow without investments (local and foreign). Of all sectors of the economy, insurance industry plays the most important role in the promotion of all forms of investment, first as facilitators and secondly as institutional investors.

The principal sources of insurance companies funds are the premium collected from the sale of insurance policies. Life assurance companies generally put their funds in long term investments (primary mortgage loans, corporate bonds and stocks). As a major catalyst in the development of large industrial undertakings, the insurance industry plays important role in the development of the capital market through underwriting support, provision of required capital and active participation in the secondary market.

2. GROSS PREMIUM INCOME GENERATION

The insurance industry has the capacity of generating funds (inform of accumulated premiums) that can be utilized to drive economic development.

3. OUTFLOW OF RESOURCES

As a contribution to the economy, the insurance industry contributes to the reduction of outflow of resources from one country through the retention of insurance and reinsurance

premiums within the country thereby having positive effect on the balance of payments. Also, the country's invisible earnings are made possible through retrocession from the international market.

4. EMPLOYMENT GENERATION

The insurance industry today, with 49 insurance companies in its fold about 250 insurance brokers, 20 loss adjusters and not less than 3500 agents. Through this, the industry has created employment for quite a sizeable number of people thereby contributing to employment generation and poverty alleviation in the country. It is estimated that the industry has over 89000 employees on its payroll.

5. STATEMENT OF CLAIMS TO THE INSURED

With the level of insecurity in the country it can only be imagined what the situation would have been if there was no insurance. The boom blasts which occurred at the military cantonment, Ikeja on 27th January, 2002, May 27th 2011 at the Eagles square, Abuja etc, which resulted in the loss of thousands of lives and substantial damage to properties as well as disruption of business activities. Many of the victims (corporate and individuals), were insured against fire and allied perils. Insured claims arising from the boom blasts, various aeroplane crashes in the country and filled by the insured, amounted to more than #5.1 billion. Insurers have reacted promptly to this unfortunate incident by paying to the insured after necessary adjustment.

The insurance industry ensures that processing and setting claims are expected to eschew untold hardship posed for the insured with the losses.

6. INVISIBLE EARNINGS

The insurance market is global in nature especially where jumbo risks are involved. The risk insured in any country is usually not fully retained in that country. Thus, large risks with potential losses are reinsured elsewhere and ceded across the country's frontiers. The large United States of America and United Kingdom market notwithstanding, risks are still shared to developing countries in those countries.

Also, certain risks that are uninsured from abroad had saved the country some foreign exchange earnings. Similarly, the creation of Aviation pool and other special risk pools ensure the retention of more funds in the country to boost economic development.

7. INSURANCE AND SUPERANNUATION SCHEMES

Loss of a love one is one of the problems any family could be confronted with. The death of a breadwinner often brings untold hardship to the immediate family, particularly if they worked in organisations that have not put aside sufficient funds for the care of orphans or widows whose spouses died prematurely. No other social welfare schemes exist to take responsibility of these social and economic problems apart from the now re-christened Nigeria social insurance Trust Fund (NSITF), which its operating provisions are grossly inadequate.

A number of corporate establishments have insured pension schemes for their employees. Such schemes apart from providing adequate funds, which old and serving workers could retire also, assist establishments in reducing the spate of industrial unrest. Nigeria is a nation which lacks social security from which the jobless, retired and aged can draw succour. While NSITF exist, its activities are not created much salutary impact on the fortunes of pensioners.

Life assurance funds are usually available for medium and long term lending to the money and such properties are also required by mortgage institutions for the protection of fund loaned to customers. Individuals and corporate bodies could take advantage of the product offerings by insurance companies to improve on their lives and that of their dependents.

2.1.10 THE INSURANCE INDUSTRY IN NIGERIA AND THE FINANCIAL SYSTEMS STRATEGY (FSS) 2020

The Federal Government of Nigeria is desirous of making the national economy become one of the 20 largest economies in the world by the year 2020. It is envisaged that by the year, Lagos, Nigeria will become the financial hub of the continent under Financial System Strategy (FSS) 2020. The insurance industry is a critical part of FSS 2020. The vision of the industry, according to the FSS 2020 document is, to become the insurance market of the first choice in Africa noted for high level of capacity, transparency, efficiency and safety and attain the 15th position in world insurance premium generation by the year 2020; from the vision, the industry's objectives can be inferred as follows; (i) The

sector must be financially sound. (ii) The insurance market structure must remain efficient and profitable to attract further investment. (iii) The confidence of the policy holders must be rebuilt and sustained.

2.1.10.1 INTENDED POSITION OF THE INDUSTRY

Since the completion of the first phase of the regulation induced consolidation exercise many commentators have continued to wonder when the next phase of reconstructing on the industry will commence and if the industry has reached its promised with recent fixing of the minimum capital base of insurers.

As the economy develops, the need for instance services will necessarily increase thus, there is need for an industry with a highly driven information technology (IT) that is solvent enough to respond to the needs of policy holders in terms of prompt payment of claims and able to contribute meaningfully to the economic development process. Such an industry must be well capitalised to play in the global market. To accomplish this, the solvency of the insurer must be measured and monitored by the government to ensure the protection of the insured. The insurance industry need to have adequate capacity, and expertise to manage complex business transactions as they emerge in this increasingly globalised world. Out differently, the product portfolio must allow the insurers to serve as many target customers as possible while responding quickly to the changing needs of the market. It is in respect to this, that the industry should desire market with the right skills such that the market will be a safe, strong and responsive insurance industry able to meet the challenges of modern day business. Furthermore, insurance industry desires a situation

where the purchase of insurance is driven by conviction of its value rather than in compliance with regulatory requirements. If certain insurance policies were not mandatory, many would not have procured them. Unfortunately, only the occurrence of disasters drives home the need for insurance as mechanism for reducing losses or mitigating the effects of disasters. Indeed, prior to now, only the motor insurance was statutorily compulsory. With the recent pensions reform act, the British act, the National insurance act, etc the list has lengthened.

The insurance industry must be managed by professional in the public interest. A competitive value driven insurance industry able to play its role in global commerce is derived. More so, an industry that generates adequate returns on investment such that it remains an investors delight. The industry need to build on the solid foundations of stoic compliance with international best practised and strong corporate governance rules.

2.1.10.2 THE WAY FORWARD

Insurance is about the creation of a pool of funds from which the impact of disaster can be mitigated. In other words, it is all about risk sharing and loss minimisation. The purpose of insurance is to compensate victims (to insured) for their financial losses. Compared to the insurance business in the United Kingdom where the gross premiums is known to be higher than bank deposits, the Nigerian insurance market is just growing and indeed, it is a reflection both of the state of development of the nation and the public perception of its importance. As the economy continues to grow, the insurance needs of the players will continue to grow.

2.1.10.3 THE CODE OF ETHICS

For the insurance industry to remain the lubricant of the wheel of business the profession must develop and enforce a code of ethics in line with universally accepted norms. The code should define in very clear terms, the acceptable practises and mannerisms of insurance practitioners. All non conformists or deviant behaviours must be sanctioned without fear or favour if there are no sacred cows, the industry will be better for it, as the confidence of stakeholders would be sustained. There must be a collective effort towards redefining the rules and raise the ethical bar for the industry to continue to flourish. The time for the regulatory agencies and professional insurance institute to act is now.

In conclusion, the dream of 2020 is realisable. The industry must work at it as a nation by building the right capacity in terms of human capital development, provision of appropriate infrastructures including information technology and energy, aggressively marketing insurance such that its business value will be appreciated. Players in the sector must demonstrate that the trusts reposed in them by policy holders are not misplaced. This they can do through prompt payment or verified claims. Insurance, from time immemorial, is the assisted to ensure that it continues to enjoy that pride of place.

2.2 EMPIRICAL LITERATURE

Beenstock et al (1988) applied pooled time series and cross – sectional analysis on 1970 to 1981 data, covering mainly 12 countries. They employed multiple regression model to analyse the effect of premiums for property liability insurance (PLI) on gross national product (GNP), income and interest rate development, and found that premiums are correlated to interest rate and GNP; marginal propensity to insure (short and long run) rises with income per capita and is always higher in the long run. Outreville (1990) conducted a cross – section on PLI premium for the year 1963and 1984for 55 developing countries onto GDP, insurance price and macroeconomic figures. The results are similar to Beenstock et al (1988) and support the significance of income and financial development (MR/GDP).

Brown and Kim (1993) analysed life insurance consumption per capita for 45 countries for the years 1980 to1987 with the multiple regression model on cross – sectional data on various countries figures, such as income or inflation rate; income dependency and social security expenses are positively correlated, while inflation is negatively correlated and significant in both years. The religious origin that is, being a Muslim country is always negatively connected to insurance consumption and so, the findings support the works of Hofstede (1995, 2004) and Fukuyama (1995) in their reasoning that social backing influences insurance demand.

Zhuo (1998) focused on China and conducted a cross – regional study for 1996 and a time – series analysis for the period 1986 to 1995. In accordance with other findings, both

the cross – regional and the time series analysis show that GDP per capita and consumer price index (CPI) are significantly correlated with insurance consumption.

Holsboer (1999) concentrated on the changes in the external environment for income companies in Europe in the period under review. He argued that the change of importance of insurance services in the economy is dependent on the growing amount of assets and the increasing competition in the financial sector. He built the following model which is based on Aaron (1966); interest rate (R), growing of the working population (N), the economy growth rate (G), superior benefits as to pay – as – you – go pension system if R<N+G, superior benefits of the funded pension system if R>N+G and both pension system providing equal benefits if R=N+G. as population aging and the move from pay – as – you – go (PAYG) to privately funded schemes favours the growth of the insurance industry and facilitated capital market development with increasing system of long term savings; Holsbber (1999) the interaction between the insurance and economic growth as bi – directional.

Brown et al (2000) applied a pooled cross – sectional panel model to motor vehicle and general liability insurance in the OECD from the 1986 to 1993 periods. They analysed liability insurance consumption on a variety of factors, including income, wealth and legal system. Income and the legal system are positively correlated with insurance consumption while loss probability and wealth are negatively correlated with insurance consumption. They argued income affects insurance consumption.

Zurbruegg (2000) examines the short and long run dynamic relationships between economic growth and growth in the insurance industry for nine OCED countries. This was achieved by conducting a co – integration analysis on a unique set off annual data for real GDP and total real premiums issued in each country from 1961 to 1996. Causality test were also conducted, which account for long run trends within the data. The results from the tests suggest that in some countries, the insurance industry Granger cause economic growth and in other countries, the reverse is the case. Moreover, the result indicates that the relationships are country specific and discussion of whether the insurance industry does not promote economic growth will be dependent on a number of national circumstances.

Ward and Zurbruegg (2000) analysed Granger causality between total real insurance premiums and real GDP for nine OECD countries over the period of 1961to 1996 and found that the insurance market is leading the GDP for Italy; they also found a bi – directional relationship. The result of ECM added Australia and France to the group of countries giving evidence for some kind of connection.

Beck and Webb (2002) applied a cross- country and time series analysis for the relation between life insurance penetration, density, and percentage in private savings and GDP as the dependent variables, real interest rate, inflation volatility and others as the explanatory variables. Strong evidence was found for GDP, oil dependency ratio, inflation and banking sector development, Inflation, real interest rate, secondary enrolment and private savings were found to be significant. The cross country analysis shows a negative coefficient for a

country being of Islamic origin and adds institutional development to the indicators connected positively to insurance demand.

Webb et al (2002) used a Solow-Swan model and incorporates both the insurance and the banking sector, with the insurance divided into property/liability and life products. Their findings indicate that financial intermediation is significant. When split into the three categories, banking and life sector remain significant for GDP growth, while property/liability insurance lose their importance. Furthermore, results show that a combination of one insurance type and banking has the strongest impact on growth.

Lim and Haberman (2003) concentrated on the Malaysian life insurance market. While the interest rate for savings deposits and price enter significantly in the equation, the positive sign for the interest rate puzzles the authors. This could be in line with findings of Webb et al. (2002) who found the best results when insurance and banking sector are combined in the estimates.

Webb et al. (2005) analysed the effect of banking and insurance on the growth of capital and output based on cross- country data of 55 countries for the period from 1980 to 1996. The insurance variable is measured by average insurance penetration (insurance premium relative to GDP) of life and non-life insurance respectively. At the first stage of ordinary least square (OLS) estimation, assuming exogenous financial variables indicate positive effect of banking development on economic growth, while insurance variables do not enter significantly. The results of simultaneous equations, assuming endogenous

relationship between financial activity and economic growth, show that higher levels of banking and life insurance penetration predict higher rates of economic growth.

Kugler and Ofoghi (2005) examined the log-run relationship between insurance market size and economic growth in United Kingdom for the period from 1966 to 2003 for long-term insurance, and for the period from 1971 to 2003 for general insurance (from 1991 to 1997 for marine-aviation, transport insurance and reinsurance). The study used disaggregated data for the measure of market size. That is, net written premium for each market in insurance industry in the UK is used as a measure of market size for that market. Causality tests show that there is a long-run causality from growth in insurance market size to economic growth for eight (8) out of the nine (9) insurance markets. Using Johansen's co-integration test, the result shows a long-run relationship between development in insurance market size and economic growth for a components of insurance market.

Adams et al. (2005) examined the dynamics and historical relation between banking, insurance and economic growth in Sweden in the period from 1830 to 1998. Insurance development is measured by annual aggregate (non-life and life) insurance premiums. They used time series data and econometric tests of co-integration and ganger causality. The results show that the development of banking, but not insurance, preceded economic growth during the nineteenth century, while it was reversed in the twentieth century. Insurance development appears to be given more by the pace of growth in the economy rather than leading economic development over the entire period of analysis.

Peter and Kjell (2006) worked on the relationship of insurance and economic growth, a theoretical and empirical analysis which was presented as a paper at the 2006 ECOMOD conference in Hong Kong. They applied a cross country panel data analysis using annual insurance premium data from 29 European countries over the 1992 to 2004 period. They found a weak evidence for a growth-supporting role of life insurance and explain this with similarities to recent bank and stock sector findings

Arena (2008) worked on the empirical study and causal relationship between insurance market activity and economic growth which include 56 countries (both developed and developing ones) in the period from 1976 to 2004. Insurance premiums are used as proxies of total life and non-life insurance activities separately. As an estimation method, the author used the generalized method of moment for dynamic models of panel data. The result shows a positive and significant effect of total, life and non-life insurance market activity on economic growth. The author also examined the possibility of non-linear effect of life and non-life insurance variables on economic growth, but the results did not show the non-linearity in the relationship.

Haiss and Sumegi (2008) applied a cross country panel data analysis from 29 European countries in the period from 1992 to 2005. The insurance variable is measured by premium income and total net investment of insurance companies. Premium income is split into life and non-life premium income. As estimation method, the authors use ordinary least squares (OLS) or unbalanced panel with country and time-fixed effects. According to the findings, there is a positive impact of life insurance on GDP growth in the EU-15

countries; Switzerland, Norway and Iceland, while non-life insurance has a larger impact in Central and Eastern Europe.

Wadlamannati (2008) examined the effects of insurance growth and reforms along with other relevant control variables on economic development in India in the period from 1980 to 2006. Growth of insurance penetration (life, non-life and total) is used as proxies of insurance sector growth. The author applied ordinary least square (OLS), co-integration analysis and error correction models (ECM). The study confirms positive contribution on insurance sector to economic development and a long-run equilibrium relationship between the variables. While the reforms in the insurance sector do not affect economic activity, their growth has positive impact on economic development.

Marijuana et al. (2009) empirically examined the relationship between insurance sector development and GDP growth in 10 transition European Union member countries in the period from 1992 to 2007. Three different insurance variables were used; life non-life and total insurance and other control variables like education, openness, inflation, investment, bank credit, stock capitalization. According to their findings, insurance sector development positively and significantly affects GDP growth. The results are confirmed in terms of life and non-life insurance, as well as total insurance.

2.3 LIMITATIONS OF THE PREVIOUS RESEARCH FINDINGS:

These empirical findings show that there exists a strong concern for insurance development in the reviewed literatures. However, the results of the empirical researches

carried out up to date are mixed and also it is carried out in other countries excluding Nigeria. It is in the light of this that the study intends to analyse the impact of the insurance sector development on the Nigerian economic development and growth.

CHAPTER THREE

3.0 RESEARCH METHODLOGY

Methodology is a set of rules and procedures upon which research is based and against which claims for knowledge and assumptions are evaluated for decision making. It can also be said to be the specification for collecting and analysing the data necessary to help solve the problem the country obtaining various levels of accuracy is minimized.

The ordinary least square (OLS) techniques shall be employed in obtaining the numerical estimates of the co-efficient in different equation. The OLS method is chosen because it possesses some optimal properties, its computation procedures is fairly simple and it is also an essential component of most order estimation techniques. The estimation period covers the period 1985 to 2010. In demonstrating the application of ordinary least square method the multiplier linear regression analysis will be used with gross domestic product (GDP) as the dependent variables while insurance contribution, interest rate, total insurance investment, inflation rate as the explanatory variables.

3.1 MODEL SPECIFICATION

An economic model is a re presentation of the basic features of an economic phenomenon, it is an abstraction of the real world (Fonta, Ichoku and Anumudu, 2003). The specification of a model is based on the available information relevant to the study in question. This is to say, the formulation of an economic model is dependent on available information on the as embedded in standard economic theory and other major empirical

works or else, the model will be theoretical. The functional form of the model can be specified as follows;

GDP = f (INS, TI, IR, INF)

The econometric form of the model can be expressed as;

$GDP = B_o + B_1INS + B_2TI + B_3IR + B_4INF + ECM\text{-}_1 + U_1$

Where; Bo is the constant intercept which shows the level of GDP. The explanatory variables are INS, TI, IR, and INF. GDP is dependent variable in the study and dependent on INS, TI, IR, and INF. This means that INS, TI, IR and INF are the independent variables and therefore determines the behaviour of the GDP.

GDP = Gross Domestic Product (GDP)

INS = Insurance contribution

TI = Total investment

IR = Interest rate

INF = Inflation rate

B_O, B_1, B_2, B_3, and B_4 are the parameters

$ECM\text{-}_1$ = Error correction model

U_1 = the stochastic error term or disturbance variable.

3.2 METHOD OF EVALUATION

An evaluation of the model enables the researcher to determine where the estimated coefficients are theoretically meaningful and statistically satisfactory. The variables in this work will be tested with the economic test, first order statistical test and second order econometric test.

3.2.1 ECONOMIC A PRIORI TEST

The a priori expectations are determined by the principles of economics theory and refer to the parameter of economic relationship. The a priori expected signs of the macroeconomics variables used in the model are summarized in the table below;

Variables	Expected signs
INS	+
TI	+
IR	+
INF	-

3.2.2 EVALUATION BASED ON STATISTICAL CRITERIA

3.2.2.1 COEFFICIENT OF MULTIPLE DETERMINATION (R^2)

(First order test):

This measures in explains the total variations in the dependent variable cause by variation in the explanatory variables computed in the models.

The t-test

The test of significance approach is a procedural test used to test whether the variables are significant or not in the determining the variations in the dependent variable.

The f-test

The f-test is used to test the overall significance of the regression model.

3.2.3 EVALUATION BASED ON ECONOMETRIC CRITERIA

AUTOCORRELATION

The Durbin Watson d-statistics will be employed to test the randomness of the residuals or more specifically for testing the preserve of autocorrelation in the error term. The null hypothesis is summarised as follows;

Null hypothesis	Decision	If
No positive autocorrelation	Reject	o<d<di
No positive autocorrelation	No decision	di<d<du
No positive autocorrelation	Reject	4-di<d<4
No negative autocorrelation	No decision	4-du<d<4-di
No negative autocorrelation, positive or negative	Do not reject	du<d<4-du

Multicollinearity test

This is conducted to test if the explanatory variables are highly correlated. The test for multicollinearity is done with the aid of the high pair-wise correlation among regressions. The role of thumb suggested that if the pair-wise or zero order correlation coefficient between two regressors is high, say, in excess of 0.8, then multicollinearity is a serious problem.

Normality test

This test is carried out to check whether the error term follows a nominal distribution. The normality test adopted in this research work is the Jarque Bera (JB) statistic which follows the chi-square distribution with 2 degrees of freedom. If the computed p-value of the JB statistic is low, one can reject the hypothesis that the residuals are normally high,

which will happen if the value of the statistic is close to zero, we do not reject the normality assumption.

3.3 CO-INTEGRATION AND ERROR CORRELATION REPRESENTATION

A test for co-integration can be thought of as a protest to avoid spurious regression situation, if the linear combination of x only y i.e (u = y-b, $-b_2$ xt) is stationary, the variables y and x are co-integrated. It involves normal regression that given spurious result for instance, regression yt = b_1 + $b_2$xt +1/t obtained the residual and subject the residual estimated in the df unit root test (gujarati, 1995) the ganger representation indicates that if x and y are co-integrated, they will have an error correlation mechanism (ECM) representation. Hence the ECM model for X_1 and Y_t is stated thus

- $Y_t = B_o + B_1X + B_2u_t\text{-}_1 + et$

$U_t\text{-}_1$ is the one period logged valued of the residual, is an empirical estimation of the equilibrium error term.

Et = error term

B_2U_1 = is the ECM, if b_2 is statistically significant, it tells us what proportion of the disequilibrium yt in one period is corrected in next period. Therefore, this work proceeds to specify inter temporal dynamic error correction representation of gross domestic product as a function of total insurance investment, insurance contribution, interest rate and inflation rate. So that change in the error term could be written as a function of its own logged values.

Particularly, the estimate error term coefficient must have statistically significant negative sign. The coefficient indicates the percentage of the disequilibrium in the dependent variable that would be adjusted from one period to another.

3.4 JUSTIFICATION OF THE MODEL

Preference for co-integration and error correlation approach is motivated by its appealing statistical and economic properties. A co-integrating relationship makes it possible to derive super consistent estimates, which minimizes biases usually associated with macroeconomic modelling such as endogenously measurement errors and multicollinearity. Co-integration ensures that the relationship established is not spurious. The co-integration analysis permits the test and estimate short and long run relationship between variables.

Furthermore, the ECM approach helps to solve the spurious correlation problem among economic variables. Therefore, a co-integration model captures the three relationship economists is interested in the short run effect of the explanatory variables on the dependent variables, their equilibrium effect and the error correlation mechanism of the current level of the dependent variables towards its equilibrium level (Nkuruziza, 2002).

3.5 DATA REGUIRED AND SOURCES

Data for the survey were sourced from the secondary methods. The secondary sources of data or information are with respect to existing literature, research reports, and government documents etc. These secondary sources of data for this study were sought

through the following sources, including Central Bank of Nigeria(CBN) statistical Bulletin, Annual reports and settlement of Accounts, Time series and Economic and financial Review. Also journals, seminar papers presented by the academia were variously consulted.

CHAPTER FOUR.

4.0 PRESENTATION AND INTERPRETATION OF DATA.

4.1. Unit Root Test :

An attempt was made to investigate the time series characteristics of the variables INS {Insurance Contribution}, TIV {Total investment}, INT {Interest Rate} and INF {Inflation Rate} of the model in this study. A variable is stationary when it has no unit root which is denoted in literature as I (0). A non-stationary variable can have one or more unit roots and denoted as I (d), d is the number of unit roots that the variable must be differenced in order to make it stationary. Similarly, if a time series has to be differenced twice (i.e. take the first difference of the first difference) to make it stationary, we call such a time series integrated of order 2.

At normal level, none of the variables is stationary, so we test at the first differential.

Fig 1.

Variable	Order of integration.
GDP	I (1)
INS	I (2)
TIV	I (1)
INT	I (1)
INF	I (1)

From FIG 1. The variables are not stationary at the first difference for each of the forms of estimation. This implies that, TIV {Total Investment}, INT {Interest Rate}, INF {Inflation Rate}, GDP {Gross Domestic Product} are integrated of first order one i.e. I (1) and insurance contribution is not integrated at the first order So we suspect co-integration between the dependent and independent variables.

4.1.1 Co-integration Test: Long-run analysis unit root test for residual from the estimated regression at level form.

We have assumed that not all the variables are of the same order of integration, in order to carry out further tests, we then run an ordinary least square regression of the variables on levels and test for co-integration by testing the residual.

Unit root tests 1985 to 2010

Critical values: 5% = -1.958 1% = -2.682

Fig 2.

	t-adf	Ä	Lag	t-lag	t-prob.
Residual	-0.19614	6.5936	2	-1.1670	0.2569
Residual	-0.53085	6.6502	1	-0.81648	0.4234
Residual	-1.3118	6.5996	0		

From Fig 2, we can conclude that the variables are not co-integrated because the residual was not stationary.

4.2 PRESENTATION OF REGRESSION RESULT:

Fig 3.

Dependent variable: Gross Domestic Product.
Method: Ordinary Least Square.
Period of study: 1985 – 2010
Included Observations: 26

Variable	Coefficient	Standard error	t-statistics	t-prob.	PartyRỳ
Constant	36640	4.5794e+006	0.008	0.9937	0.0000
INS	1558.7	246.10	6.334	0.0000	0.6564
TIV	-0.10845	0.30491	-0.356	0.7256	0.0060
INT	1.2626e+005	2.4474e+005	0.516	0.6113	0.0125
INF	-19523	1.0118e+005	-0.193	0.8488	0.0018

R^2 = 0.697711 F{4, 21} = 12.118 {0.0000} à = 5.04459
DW = 1.61

From Fig 3, the interpretation of the result as regard the coefficient of various regressors is stated as follows:

The value of the intercept is 36640, this shows that the Nigerian economy will experience a 36640 increase when all other variables are held constant.

The estimate coefficients which are 1558.7 {INS} shows that a unit change in INSURANCE CONTRIBUTION will cause a 51558.7% increase in GDP, -0.10845 {TIV} shows that a unit change in TOTAL INVESTMENT will cause a -0.10845%

decrease in GDP, 1.2626{INT} shows that a unit change in INTEREST RATE will cause a 1.2626% increase in GDP. -19523 {INF} shows that a unit change in INFLATION RATE will cause a -19523% decrease in GDP.

4.3 Economic a priori Criteria:

The test is aimed at determining whether the signs and sizes of the results are in line with what economic theory postulates. Thus, economic theory tells us that the coefficients are positively related to the dependent variable, if an increase in any of the explanatory variables leads to a decrease in the dependent variable.

Therefore, the variable under consideration and their parameter exhibition of a priori signs have been summarized in Fig 4.below.

Fig 4.

Variables	Expected signs	Estimate	Remark
INS	+	$\beta > 0$	Conform
TIV	+	$\beta < 0$	Does not Conform
INT	+	$\beta > 0$	Conform
INF	-	$\beta < 0$	Conform

From Fig 4, It is observed that all except TIV conforms to the a priori expectation.

INS and INT, have a positive relationship with GDP, while TIV and INF have a negative relationship with the GDP.

4.3. 1 Statistical Criteria {First order test}

4.3.1.1 Coefficient of Multiple Determinants {R^2}:

The R^2 {R-Squared} which measures the overall goodness of fit of the entire regression is 0.697711 = 69.7711% approximately 70%. This indicates that the independent variables accounts for about 70% of the variation in the dependent variable. This means that the variables included in the model are the major determinant of GDP as it account for the variation in GDP.

4.3.1.2 The Student's t-test:

The test is carried out, to check for the individual significance of the variables. Statistically, the t-statistics of the variables under consideration is interpreted based on the following statement of hypothesis.

H_0: The individual parameters are not significant.

H_1: The individual parameters are significant.

Decision Rule:

If t-calculated > t-tabulated, we reject the null hypothesis {H_0} and accept the alternative hypothesis {H_1}, and if otherwise, we accept the null hypothesis {H_0} and reject the alternative hypothesis {H_1}.

Level of significance = α at 5% = 0.025

Degree of freedom: n-k

Where n: sample size.

K: Number of parameter.

The t-test is summarised in the table below:

Variables	t-value	t-tab	Remark
INS	6.334	$\pm$ 2.080	Significant
TIV	-0.356	$\pm$ 2.080	Insignificant
INT	0.516	$\pm$ 2.080	Insignificant
INF	-0.193	$\pm$ 2.080	Insignificant

The t-statistics is used to test for individual significance of the estimated parameters {β_1, β_2, β_3 and β_4}.

From Fig 5 above, we can deduce that INS {6.334} is greater than 2.080 which represent the t-tabulated implying that only INS is statistically significant.

On the other hand, the intercept {0.008}, TIV {-0.356}, INT {0.516} and

INF {-0.193} are less than the t-tabulated {±2.080} signifying that the intercept, TIV, INT and INF are statistically insignificant.

4.3.1.3 F-Statistics:

The F-statistics is used to test for simultaneous significance of all the estimated parameters.

Level of significance: α at 5%

Degree of freedom: $V_1 = k-1$ $V_2 = N-K$ d/f

Decision Rule:

If the f-calculated is greater than the f-tabulated {f-cal > f-tab} reject the null hypothesis $\{H_0\}$ that the overall estimate is not significant and conclude that the overall estimate is statistically significant.

From the result, f-calculated {12.118} is greater than f-tabulated {2.76}, that is, f-cal > f-tab. Hence, we reject the null hypothesis $\{H_0\}$ that the overall estimate implies that independent variables are simultaneously significant.

4.3.2 Econometric Criteria.

4.3.2.1. Test for Autocorrelation:

One of the underlying assumptions of the ordinary least regression is that the succession values of the random variables are temporarily independent. In the context of

the series analysis, this means that an error {Ut} is not correlated with one or more of previous errors $\{U_{t-1}\}$. The problem is usually dictated with Durbin-Watson {DW} statistics.

The durbin-watson's test compares the empirical d* value calculated with d_L and d_U tables to their transforms $\{4-d_L\}$ and $\{4-d_U\}$.

Decision Rule:

- If $d^* < d_L$, then we reject the null hypothesis of no correlation and accept that there is positive autocorrelation of first order.
- If $d^* > \{4-d_L\}$, we reject the null hypothesis and accept that there is negative autocorrelation of the first order.
- If $d_U < d^* < \{4-d_U\}$, we accept the null hypothesis of no autocorrelation.
- If $d_L < d^* < d_U$ or if $\{4-d_U\} < d^* < \{4-d_L\}$, the test is inconclusive.

Where: d_L = Lower limit

D_U = Upper limit

D* = Durbin Watson.

From our regression result, we have;

D* = 1.61

D_L = 1.062

$D_U = 1.759$

$4\text{-}d_L = 2.938$

$4\text{-}d_U = 2.241$

Conclusion:

Since d_L {1.062} < d* {1.61} < d_U {1.759} or if {$4\text{-}d_U$} {2.241} < {$4\text{-}d_L$} {2.938}, that test is inconclusive.

4.3.2.2. Normality Test for Residual:

The Jarque-Bera test for normality is an asymptotic, or large-sample, test. It is also based on the ordinary least square residuals. This test first computes the skewness and kurtosis measures of the ordinary least square residuals and uses the chi-square distribution {Gujarati, 2004}.

The hypothesis is:

H_0 : $X_1 = 0$ normally distributed.

H_1 : $X_1 \neq 0$ not normally distributed.

At 5% significance level with 2 degree of freedom.

JB = 24.826

While critical JB > {$X^2_{\{2\}}$df} = 5.99147

Conclusion:

Since 24.826 > 5.99147 at 5% level of significance, we reject the null hypothesis and conclude that the error term do not follow a normal distribution.

4.3.2.3. Test for Heteroscedasticity:

Heteroscedasticity has never been a reason to throw out an otherwise good model, but it should not be ignored either {Mankiw , 1990}.

This test is carried out using White's general heteroscedasticity test {with cross terms}. The test asymptotically follows a chi-square distribution with degree of freedom equal to the number of regressors {excluding the constant term}. The auxiliary model can be stated thus:

$Ut = \beta_0 + \beta_1 INS + \beta_2 TIV + \beta_3 INT + \beta_4 INF + Vi.$

Where Vi = pure white noise error.

This model is run and an auxiliary R^2 from it is obtained.

The hypothesis to the test is stated thus;

$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$ {Homoscedasticity}

$H_1: \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 = 0$ {Heteroscedasticity}.

Note: the sample size {n} multiplies by the R^2 obtained from the auxiliary regression asymptotically follows the chi-square distribution with degree of freedom equal to the number of regressors {excluding constant term} in the auxiliary regression.

Decision Rule:

Reject the null hypothesis if $X^2_{cal} > X^2$ at 5% level of significance. If otherwise, accept the null hypothesis. From the obtained results, $X^2_{cal} = 10.096 < X^2\ 0.05\ \{8\} = 15.5$ we therefore reject the alternative hypothesis of heteroscedasticity showing that the error terms have a constant variance and accept the null hypothesis showing that the error terms does not have a constant variance.

4.3.2.4 Test for Multicollinearity:

The term Multicollinearity is due to Ragnar Frisch. Originally it meant the existence of a "perfect" or exact, linear relationship among some or all explanatory variables of a regression model. The tests were carried out using correlation matrix. According to Barry and Feldman {1985} criteria; "Multicollinearity is not a problem if no correlation exceeds 0.80".

Fig 6.

	GDP	INS	TIV	INT	INF	REMARK
GDP	1.000					-
INS	0.8276	1.000				M
TIV	-0.3434	-0.3062	1.000			Nm,Nm
INT	-**0.08024**	-0.1400	0.2450	1.000		Nm, Nm, Nm
INF	-0.3103	-0.2826	0.8316	0.3709	1.000	Nm,Nm,M,Nm

Where M = Presence of multicollinearity

Nm = No multicollinearity.

From Fig 6 above, we can conclude that there is existence of multicollinearity among INS and GDP, INF and TIV, which means that there is perfect or exact relationship among INS and GDP, INF and TIV.

4.4 POLICY IMPLICATION

The insurance contributions significantly relate to gross domestic product in Nigeria. It shows that in the economy insurance contributions has a great impact to play in promoting economic growth. Furthermore, the negative relationship of total

investment of insurance industry shows that there is negligence of investment in insurance industry. The insurance industries have not been able to invest these premiums or income, building houses to cater for the welfare of the citizens, to boost the economy.

CHAPTER FIVE

5.0 SUMMARY OF FINDINGS, RECOMMENDATION AND CONCLUSIONS

5.1 SUMMARY OF THE FINDINGS

To this end, the researcher has conducted a versatile analysis and investigation on the contribution of insurance industry to gross domestic product (GDP) of Nigeria between the periods 1985 to 2010. The major objective of the research was to investigate the extent to which the activities of insurance industry in Nigeria have contributed to the economic growth of Nigeria. The following findings were made; there is a positive linear relationship between insurance contribution and gross domestic product in Nigeria. There is a negative relationship between total investment of insurance companies and gross domestic product in Nigeria.

The study identified some challenges that are facing insurance companies not to carry on their work effectively. They are: (1.) the enforcement of the laws governing insurance practice in Nigeria is neglected and thereby failing to collect the premiums from the insurance cover for building fire and public liabilities in the country.

2. There is neglect in the industry in respect of rendering of accounts, prompt settlement of claims and efficient services to the clientele.

3. There is poor diversification of investible funds of the insurance industry. Crucial areas like housing which can improve on the welfare of the citizens while improving on the investment income of the insurers have been neglected.

4. Government policies have not been made in favour of insurance growth in Nigeria.

5. There is poor awareness of the working of insurance, which may partly be attributed to the poor attitude of the public towards insurance. This is in addition to poor public image of the insurance business.

5.3 RECOMMENDATIONS

In view of the summary of the findings which resulted from the investigations, the following are recommended and if followed judiciously by way of implementation, we shall be projecting the insurance industry and the economy forward;

1. The national insurance commission (NAICOM) which is the regulatory body for insurance business in Nigeria, in conjunction with the government should work to see that some of the premiums collected and other income generated by the industry are being invested to ensure diversification of investible fund of insurance industry to boost the economy.

2. NAICOM in conjunction with the government should enforce existing laws on insurance practice in Nigeria. This is necessary, considering huge amount of capital which can be generate by enforcing the insurance cover for buildings, fine and public liability in Nigeria. The revenue injection will help galvanize the insurance sector and ensure that more buildings are insured against collapse and fine accidents in Nigeria. It should be
3. +3.6incumbent on insurance companies to insure public buildings against any mishap.
4. NAICOM should work closely with Pension Commission (PENCOM) in the setting up and implementation of a group life cover for existing pension fund assets. This, apart from providing security for these funds, generates investible funds for the economy through premium generation. (Oshinloye et al, 2009)
5. Furthermore, the researcher recommends the NAICOM and the insurance private sector body should immediately commence a campaign that insurance becomes a key provision in our budgeting process at Federal, State and Local levels. The product market for insurance companies needs to start witnessing some interesting changes. There is need to utilize customized high end. Financially aware customers with risk appetite. On the other hand, over the counter (OTC) insurance products are needed. This product should harness the combination of pension, money back guarantees, among others.
6. The insurance industry is expected to render prompt account and insurance returns as well as quick settlement of claims so to grow the industry and upscale the insurance patronage in the country. It is an opportunity cost which will benefit the industry in the long run.

7. There is an urgent need for the industry players as well as the regulators strive to enhance the sophistication of risk management and measurement capacities to improve on the understanding of aggregate portfolio risks and upgrade risk control, reporting and monitoring.
8. There is need for the effective utilization of insurance funds as the industry could assist the government in creating some social security schemes for old age or citizens that suffer mishap.
9. One of the major problems facing residents at urban areas is housing insurance funds could be utilized to fund housing schemes for sale thereby assisting in the provision of low cost houses.
10. Another area that should be of great interest especially now is research. Insurance companies or the industry as a whole could funds research in medicine or other related areas like agriculture which will be aimed at tackling certain tropical diseases and improving on food production and availability in Nigeria.
11. It is also recommended that government policies should focus on improving insurance industry so as to have a corresponding impact on the economic growth in Nigeria.
12. The regulatory environment for insurance should encourage risk based pricing. Risk management should stimulated to make sure public and private institution are conscious of the risk environment they are facing and take measures to reduce the impact on their activities.

5.4 CONCLUSION

Based on the findings and recommendations, the researcher concludes as follows; there is no doubt that the world economic system has become more interdependent these days. Economic relations between countries are growing stronger and stronger. Consequently, there is need to develops the insurance industry in Nigeria up to the world class standard so as to benefit from the globalisation of trade business and industry that are now taking place worldwide.

Economic development should be seen as a major challenge of the nation and the Nigeria economy should be managed in consonance with global trends so that near accurate decisions have to be made otherwise the insurance industry in Nigeria may be left behind and become irrelevant in the scheme of things. It is hoped that with the present effort of the government working very hard to bequeath an enduring democracy in Nigeria, there is therefore a good prospect for political stability which will create the environment for economic growth and stability.

In view of the present realization of the importance of insurance as a means for achieving economic independence and development, there is need for concerted efforts aimed at ensuring that insurance in Nigeria align with current developments in the global economy. Therefore the industry operators need to constantly work hand in hand to ensure a healthy mutual beneficial self-regulation.

We can learn goal lessons from the experience of developed economics where insurance helps to mobilise savings that can be profitably invested in the economy thus helping the development of the nation. A major requirement for all of these to be achieved is to develop

the capital formation of the nation. Despite the weak macro-economic fundamentals of the country in the past few years, the insurance industry has show resilience and been playing a crucial role in respect of economic growth.

However, the insurance industry could play a greater role in the resuscitation of the economy if the economic environment is more conducive with greater reduction in poverty level and phenomenal increase in per capita income of the people.

5.5 AREAS OF FURTHER RESEARCH

The areas suggested for further studies include an investigation into causes of the poor image of the insurance business. Also reasons for the low premium income of insurance companies in Nigeria compared to their contemporaries in the South Africa, and Europe. Further the causes of poor investment returns of the industry in Nigeria.

This is essentially relevant as they play a vital role in contributing to the success of the industry and its contribution to the GDP of the nation.

BIBLIOGRAGHY

Abayomi, B. (2011). *Insurance Industry in Retrospect*. http:www//abayomibusanjo/educticleshtml/2130 free articles.

Abdullahi, S. (2008). *Investment Insurance Funds.* http:/www.google.com.

Abiodun, S.A. (2002). *Introduction to Insurance.* Lagos, Decent publishers' Ltd.

Adams, M.J., Anderson, L.F., Lindmark, M. (2005). *The historical Relation Between Banking, Insurance and Economic Growth in Sweden:* 1830 to 1996, Department of Economic Discussion. Paper SAM .

Arena, M. (2008). *Does Insurance Market Promote Economic Growth? A cross- country study for industrialized and developing countries.* J Risk insur, 75(4): 921-946.

Babalola, O.S (1999). *Insurance Vs the Nigerian Economy*. The Nigeria insurer; Lagos Nigeria insurers association.

Babington, A.F. (2008). *Refocusing the Insurance Industry towards FSS 2020.* Property of Risk Analyst Isurance Brokers Ltd. Avaiable online @http:llwww.google.com.

Beenstock, M., Dickinson, G., Khajuria, S. (1988). *The Determination of Life Premium*: An international cross-section Analysis 1970 – 1981. Insur. Math. Econom., pp. 261 – 270.

Brown, M.J, Chung, J.W, Frees, E.W, (2000). *International Property Liability Insurance Consumption.* J. Risk insur., 67(1): 73 – 90.

Central Bank of Nigeria, (2010). Statistical Bulletin and Statement of Accounts, Abuja; Federal Government of Nigeria.

Fatula, O. (2007). *The Imperative of Recapitalisation and Consolidation in the Nigeria Insurance Industry.* 1(1&11), Ikeja Bar.Review, p. 128.

Hofstede, G. (1995). *Insurance as a Product of National Values*. Geneva paper. Risk Insur, 20(4);423 – 429.

Holsboer, J. H. (1999). *Repositioning of the Insurance Industry in the Financial Sector and its Economic Role.* Geneva paper. Risk insur, 24(3): 243 – 290.

Insurance Act 2003, Federal Government of Nigeria

Irukun, J. O. (2001*). Insurance Management in Africa*. Ibadan Carton press Ltd.

Kugler, M., Ofoghi, R. (2005). *Does insurance promote economic growth*? Evidence from the UK, working paper, division of Economics, University of Southampton.

Lim, C., Haberman, S. (2003). *Macroeconomic Variables and The Demand for Life Insurance in Malaysia.* Faculty of Actuarial Science and Statistics, FASS, Business School, City University, London.

Marijuana, C, Sandra, L, Lime, P, (2009). *Insurance Sector Development and Economic Growth in Transition Countries.* Int. Res.J. Franc. Econom, issue 34.

Merton, R.C(2004*). Financial innovation and Economic growth*. Harvard China review. P.5

Muoghalu, M. I of Congress Cataloguing in publication data.

Oba, O (2003). *Insurance a Vehicle for Revitalising the Economy. The insurers perspective.* The Nigeria insurer; Lagos, Nigeria insurance Association. November, 2003.

Oshinloye , M. O. (2009). *The Impact of Insurance Activities on Economic.*

Osoka, O (1992). *Insurance and The Nigerian Economy*. Lagos, pananche publishing Ltd.

Outrevillia, J. F. (2008). *The Economic Significance of Insurance Market in Developing Countries*. J. Risk insur., 57(3): 487 – 498.

Wadlamannati, K.C (2008). *Do insurance sector Growth and Reforms affect Economic Development?* Empirical evidence from India. J, Appl. Econom. Res, 2(1): 43 = 86.

Ward, D, Zurbruegg, R . (2000*). Does Insurance Promote Economic Growth*? Evidence from OECD Countries. J. Risk. Insur, 67(4): 487 – 506.

Webb, L, Grace, M. F, Skipper, H. (2005). *The Effect of Banking and Insurance on the Growth of Capital and Output.* J. Financial issues, 2(2):1 – 32

Zhuo, Z. (1998). *Insurance Sector Development and Economic Growth*: An Empirical Analysis from China Portfolio Management University of Manhnheine

JOURNALS

Abidemi , A. K. (2009). *The Impact of Insurance Activities on Economic Growth in Nigeria, Proceedings of International Conference on Research and Development*. Vol. 2 no 21, Nov.24-27, 2009, University Nationale Du Benin Cotonou, Republic of Benin.

Anderson, S.E (2006*). Roles of insurance in National Development*. International journal of Economic development vol. 10.No73,November,2006.

Ezirim, C.B, (2002). *Contending with the Challenges and Imperatives of Marketing Insurance Services in a Sub-Sahara African Country: The case of Nigeria*". Journal of Economics and Business Sciences, Vol. No. 1.December, 2002.