

Effect of General Insurance Cost of Claims on the Gross Claims of Insurance Business, Nigeria Perspective

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Abstract

This study examined the Effect of general insurance cost of claims on gross claims of insurances industry in Nigeria. The motive of the work is anchored on the gap in the empirical where average cost per claims has not been used to evaluate the effect of cost of claims of general insurance policies on the gross claims of insurance industry in Nigeria. The main objective is to appraise the effect of general insurance cost of claims on gross claims of general insurance business in Nigeria. The specific objectives are to determine the average cost of: motor, general accident, and oil/gas insurances claims (independent variables) on the gross claims paid (dependent variable) by insurance firms in Nigeria. *Ex-post facto* research design was adopted while secondary data were sourced from CBN and NAICOM respectively. Auto regressive distributed lag (ARDL) model was employed in analysis. The investigation revealed that the impact of motor insurance claims and oil/gas insurance claims were positive and significant at (P-value of $0.00003 < 5\%$ and a coefficient value of 4.16) and (P-value of $0.0085 > 5\%$ and a coefficient value of 0.13) respectively. Similarly, general accident insurance claims were negative and significant at (P-value of $0.0010 < 5\%$ and a coefficient value of -3.87). The implication of the finding is that the cost of settling motor and oil/gas claims is positive and significant while general accident insurance claims is negative and significant. The study concluded that motor and oil/gas insurance policy claims have positive and significant impact while general accident had a negative and significant impact on the dependent variable. The study recommends among others that insurers should develop a mechanism to mitigate fraud within the claims department. Consequently, insurers should be stringent and closely monitor losses and recovery with respect to general accident insurance given the time and its nature and equally insurers should form pools to underwrite oil/gas insurance in collaboration with loss adjusters to tap from expanded expertise skill.

Keywords: General Insurance, Cost of Claims, Gross Claims, Motor Insurance and General Accident Insurance.

Introduction

The disobedience of early man changed the rule of creation and man's relationship with God drifted. Then man began to struggle with the environment, the struggle for survival exposed man to various types and degrees of perils: hunger; theft; snake bit; fall; child bearing; shelter; relationship; fire; among others. The future of man became uncertain. Man in search for protection orchestrated by anxiety, fear and apprehension of uncertainty, (the actual negative outcome termed risk) brought about the concept 'Insurance'. Risk is the actual negative outcome such as: loss of income; diseases; death, damage to property and bodily injury that may be caused by any of the perils as mentioned earlier. Risk is inherent in all life endeavours (Ugwuanyi, 2013). More so, it is a natural ingredient that

garnishes every human activity given its unpredictable environment. Howbeit, the failure of risk (actual negative outcome) come opportunity.

The contemporary insurance practice is a footprint of Babylonian merchants (present Iraq) in 300 BC. The traders organized themselves in syndicate, contributed fund into a common purse for compensation of any loss of cargo to sea thieves in the pursuance of the trade. The condition of indemnity was only if a member consignment was lost to sea thieves during the journey. Hence insurance law was conceived. Various insurance contracts continued to evolve including; Bottomry practiced by the Phoenician traders (present Lebanon) in 12000 BC where the bottom of their ship were pledged as security of the loan on the criteria that the loan is cancelled if the voyage was aborted due to ship sank. (Microsoft Encarta, 2009). The present practice of insurance in Nigeria is regulated by Insurance Act 2003. Section 2 of this Act classified insurance business into two classes namely: life insurance business and non life insurance business. Sub-section 3 of section 2 of this Act further categorised non life insurance into eight namely: fire; motor; general accident; marine; oil & gas; engineering, bonds credit, guarantee & suretyship, and miscellaneous insurance businesses. Non life insurance dominates the insurance business landscape in Nigeria.

Thus, insurance avails itself to exchange the above trend with a measurable degree of respite and certainty. Far from it that insurance takes away risks, rather it expunges emotionalism with reassurance of peace of mind as well as encourage adventures. This accounts for why in 2009 Nielson, stated that insurance provide alternatives for the members of the public to deal with some of their risk exposures. Hence, insurance is best described as a medium of exchange of uncertainty with a defined certainty in a bi-contractual relationship and is enforceable in any competent court. Notably, it involves two parties the insured with the fear of actual negative outcome who then exchange this fear with a defined certainty 'premium' paid to the insurer. Similarly, the insurer promises a financial compensation (indemnification) thereby, reassuring the insured that his anticipated loss will be paid as agreed.

The fundamental interest of all stakeholders in business is the company's financial performance because it defines the healthiness of the organisation. Performance refers to the association between strategic effectiveness and operational efficiency of a specific firm (Batool & Sahi, 2019). Insurance financial performance is customarily perceived by the size of the: premium income; claims paid; profit earned; investment income; return on equity and others. Notably, the main source of insurance income is premium in addition to others, while claims constitute the main expenditures outflow among others. Insurance profit fundamentally hinges on the company's claims experiences over a given period. Other factors that influence insurance profit are investment income and management efficiency

Claim (financially compensated following an insured loss) is the prime reason people buy insurance and it is an insurer's obligation. Thus, the business of insurance is to pay a legitimate claim which is a contractual and legal duty. It is inconsequential the quantum of premium charged whether sufficient or otherwise, insurers must pay when the need arises. Thus, insurer would prefer a situation of no claims. Unfortunately, this presumption appears fallacy as all things are not even, given the imperfect operating environment of businesses. Given the intensity of market competition, it becomes an imperative for insurers to generate impressive profit through a robust market base. Lee (2014) admonishes insurers to recognise the effect of the claims on profitability in their quest for business profit. Though it is one of the most important performance measurements in determining the health and success of a business (Businesses Corporations Financial Dictionary, 2009). Understanding

claims and its component costs are essential to insurer given that claims cost may vary with the nature of claim and class of insurance.

Cost had been described as money required to perform a task or cause some form of loss of something (Microsoft Encarta, 2009). For instances, the cost of opportunity (opportunity cost) is alternative forgone economist's view, while risk management classified the cost of risk into; monetary, time and administrative. Costs of claim refer to those costs or expenses incurred while processing a claim such as; costs associated with preparing, handling and adjusting claims. It is not part of the actual amount paid to the claimant (Pendry, 2021). The nature, time and size of claims often introduce alternatives for the insurer to opt for either to handle a claim internally, or engage the services of a loss adjuster and other professionals such as consultants, accountants, lawyers, investigators, among others. A large or substantial claim is best handled by loss adjuster depending on the specialty. Similarly, small claims that may not require a specialised form of skill is handled internally by the claims department. There are costs accrued to the insurer either way, the difference being the amount involved in hiring these professionals.

Consequently, financial performance (efficiency) of insurance is better appreciated by the application of some standardised financial key performance indicators for insurance (KPI) (guidingmetrics n.d.). Performance measurements have critical role besides appraising the current performance of a firm which rather support attainment of high-level performance and growth in the future (Alina, 2008). Among the KPI for insurance include: average cost per claim, expense ratio average policy size, loss ratio, average revenue per client, profit margin among others (guidingmetrics n.d.). Average cost per claim measure the amount spent by the firm on a particular class of claim filed within a specific time lag (Opsdog n. d.). In light of the above, average cost per claim, one of the performance indicators will be applied to some selected classes of non life insurance to determine the effect on the gross claims on the financial performance of insurance firms in Nigeria. Faculty and Institute of Actuaries, (1997), described some of the average claim methods available to include: Paid Average Claims Projection; Number Settled & Number Reported; Incurred Average Claims Projection; Risk Exposure & Claim Frequency and Correspondence of Claim Numbers & Claim Amounts

Clear definition of term is crucial to the understanding and meaningfulness of the method adopted in this study. Thus, Paid Average Claims method which represents gross claims is chosen for this study. It is the product obtained when gross claims paid or incurred are divided by the number of claims involved (Faculty and Institute of Actuaries, 1997). Categorizing cost by type of claim is vital because each type may differ in cost. This KPI will enable insurer to properly assess the risks associated with each type of policy and adjust policy pricing accordingly (Klipfolio, n.d.).

It is important to understand the average cost of claims of individual policies to the total claims because it is the main channel of insurer's financial expenditure.

Commonsensical, it is obvious and acceptable claims would affect insurance performance negatively. However, it will be wrong to conclude affirmatively to this theory.

The pretext is insurers deploy expertise skills to mitigate adverse selection, determine appropriate premium rate; reserves and a margin of profit. The adoption of average cost per claim enables the insurer to re-evaluate its assessment strategy, selection criteria and pricing of risks presented for insurance. The outcome provides the organisation with insight and feedback on efficiency and effectiveness of its underwriting skills and claims management. Undoubtedly, it assist insurer to

appraise reinsurance alternatives (Opsdog, n.d.). To a large extent the insurance management would like a situation of a low loss or losses lower than projected value of claims.

Statement of the Problem

The physical product of insurance is claim (financial compensation). One of the duties of insurer is the payment of legitimate claims to genuine claimants. A genuine claimant is a named beneficiary or a person who is entitled to receive the proceed of the policy for which the insurer is liable, having satisfied that the loss suffered is covered and such is caused by the insured peril among other factors. Hence, claims payment is a contractual duty as well as a legal obligation. Payment of insurance claims is a process, starting from the receipt and review of claims notice through thorough investigation, negotiation and the actual settlement of the claims. The issue is; do insurers incur cost during this navigation? Yes! Costs associated with hiring services of: loss adjusters; lawyers; medical professionals; engineers; accountants, arbitrators, in some instances and many more, in preparing, investigating loss, negotiation quantum and the actual settlement. Conversely, these costs are not component of the claims amount paid, likewise the costs may vary with the type of policy, nature, time and scale of loss. Since, it is affirmed that payment of claims is not without a cost, what is the effect of these costs on the gross claims paid? This question solicits for an answer. In response, empirical evidence reveals that a lot have been discussed on effect of claims on the financial performance of non life insurance business. Howbeit, none of the empirical used average cost per claims to evaluate the effect of cost of claims on the gross claims of general insurance of insurance firms, especially in Nigeria. Correspondingly, average costs of: motor, accident, oil and gas, insurances claims on the gross claims of non life insurance as one of key performance indicators is inconspicuous in the empirical. Hence, this creates a gap in literature. Accordingly, this work intends to bridge the gap. Explicitly average cost of claims of: motor, accident, oil and gas, insurances are the independent variables that will predict the gross claims being the dependent variable in this study. This expense metrics will highlight the amount insurers expend in processing each types of claims filed and settled.

Objectives of the Study

The broad objective of this study is to appraise the effect of general insurance (non life insurance) cost of claims on the gross claims of general insurance business in Nigeria. The specific objectives are to:

- i. Determine the effect of average cost of motor insurance claims on the gross claims of insurance firms.
- ii. Examine the effect of average cost of general accident insurance claims on the gross claims of insurance firm
- iii. Access the effect of average cost of oil and gas insurance claims on the gross claims of insurance firms

Statement of Hypotheses

To achieve the stated specific objectives of the study, the following hypotheses formulated were stated in alternate form:

H₁. Average cost of motor claims has positive and significant effect on gross claims of insurance firms.

H₂. Average cost of general accident claims has positive and significant effect on gross claims of insurance firms.

H₃. Average cost of oil and gas claims has positive and significant effect on gross claims of insurance firms.

Review of Related Literature

Conceptual Review

General Insurance (Non Life Insurance)

General insurance is one arm of insurance business conducted in Nigerian insurance business landscape (Insurance Act 2003). It offers financial protection against risk exposures not covered by life insurance business. Wikipedia (n.d.) described it as any insurance product not sold by life insurance. It is called property and causality in USA and Canada and non life insurance in Europe (Wikipedia (n.d.)). The various forms of general insurance transacted in Nigeria are eight namely: fire; motor; general accident; marine; oil & gas; engineering, bonds credit, guarantee & suretyship, and miscellaneous insurance, see Insurance Act 2003, S 2(3). Twenty seven insurance companies transact general insurance in Nigeria (NIA, 2018).

Motor Insurance: Motor vehicle is a mechanically propelled vehicle intended and adopted for use on the road (Okonkwo, 2007). Motor insurance is a legal contract of financial protection associated with the use of the insured vehicle on a public road in accordance with the terms of the contract. Motor vehicle was first discovered and appeared on the road in about 1880's while the first motor vehicle insurance policy was issued in 1890's, (Nwite, 2013). Historically, the UK government funded the medical expenses of the victims of road accident under their social security scheme but in 1930 introduce a compulsory motor insurance regulation to ease the pressure on government fund (Nwite, 2013). Types of motor insurance policies are: Road Traffic Act only policy (RTA); Third party policy; Third party fire and theft policy and Comprehensive policy. Act Only Policy provides cover for bodily injury or death of a third party (Nwite, 2013). It is not operational in Nigeria.

Third Party Policy is the acceptable minimum motor insurance cover in Nigeria and it is compulsory (Insurance Act 2003, Road Traffic Act 1972 & Motor Insurance Ordinance 1945). Section 68(1) of the Act, states that "No person shall use or cause or permit any other person to use a motor vehicle on a road unless a liability which he may thereby incur in respect of damage to the property of third parties is issued with an insurer registered under this Act". The limit of liability of not less than one million for property damage in a single event and liability for bodily injuries or death has no ceiling. The policy provides indemnity for third party bodily injury (including costs of: hospital care, lost wages, pain and suffering due to the accident.) and property. Kagan (2021) opined that some states separate bodily injury liability coverage from property coverage, but insists that each state sets its minimum requirement for each type of coverage.

Third Party Fire and Theft Policy in addition to third party only makes provision to accommodate fire and theft damages. Fire is defined as the actual ignition of what ought not to be on fire (Hall 1985). Thus, in this policy insurer is liable if the vehicle is: damaged by fire, lightning or explosion, lost to thieves (stolen) and not recovered, and damaged during attempted theft or while it is stolen.

Comprehensive Motor Vehicle Insurance Policy is all inclusive coverage and provides protection to the insured's own damage adding to the other three types earlier mentioned. Okonkwo (2003) states that the policy grants indemnity for the following: i. Cover as provided in third party only, third party fire and theft policy. ii. Accidental damages to the insured vehicle include own damage and malicious

damage. iii. A limited cover for medical expenses by the driver and other passenger. Comprehensive insurance therefore provides a wider cover and guarantees a wholesome financial protection

General Accident: General Accident Policy provides compensation generally for unforeseen, accidental losses or damages to property and injury/death to persons (Guinea insurance, 2020). Basically, this policy is categorised into four classes namely: Property insurance, Insurance of the person, Pecuniary insurance and Liability insurance (Guinea insurance, 2020). Similarly, compensation is provided for under four policies: Group Personal Accident, Fidelity Guarantee, Goods in transit policy and Money policy (Linkage Assurance, 2020).

Group Personal Accident provides benefit when the consequence of the injury is death or permanent disability of employee(s), group members like schools, associations among others. The immediate cause of such must be accidental. The scope of coverage is not restricted to time, place and or in the practice of occupation. The benefit in Death and Permanent Total Disability is 100% of the selected benefit plan. However, there is a proviso 'the bodily injury is the immediate reason of the death or permanent total disability of the insured within twelve calendar months of the date of the incident. In the case of Temporary Total Disability, the benefit payable is weekly salary of the insured. A caveat states that mutually agreed medical expenses will be granted if the bodily injury snowball into permanent disability within twelve calendar months in line with the definition of proximate cause in *Pawsey v Scottish Union and National Insurance company* (1908).

Fidelity Guarantee is designed to financially protect organization from losses suffered due to any act of fraud, embezzlement, misappropriation etc, of the insured's employee(s) and such is uncovered during the period of the insurance contract or dismissal of such employee(s). The sum insured is contingent on the amount of money or the value of stock in the possession of such employee(s). Therefore, the sum insured is subjective.

Goods in transit promises compensation for losses or damages related to the movement of goods either by fire, theft and/or collision of conveying vehicle.

Money in transit policy provides protection for loss of money and cheques to theft and other causes not specifically excluded. The scope of cover includes cash: in transit; in a safe; on its premises; in personal custody; in ATM: and damage to a safe. By extension cover is granted to protect losses and damages resulting from: riot, strike, civil disturbance, and robbery and hijack (Linkage Assurance, 2020).

Oil and Gas Insurance: The term oil-and-gas is synonymous with petroleum and hydrocarbon. The industry began operation in Nigeria in 1956 after the product was discovered at Oloibiri in Bayelsa by Shell & British Petroleum (BP). There are two classes of gas namely: associated and non-associated gas. Gas cannot be stored in its nature because it is like air or steam but processed into liquid form like liquefied petroleum gas (LPG) or liquefied natural gas (LNG), (Efiom-Ekaha, 2009). Oil and gas insurance is an insurance policy that protects financial loss against accident to life, property, liability, environments and other firm's activities (Petropedia, n.d.). It is a difficult task, beginning from production (crude oil extraction) through delivery of final product (supply chain value) and marketing. The policy is designed to cover onshore risk including: refineries, petrochemical plants, depots, power stations; product pipelines; storage units (tank farms and underground storage caverns; jetties (loading and breakwaters) and terminals and stations, comprising multinational and independent lease operators who work along with oil service companies involved in Engineering & Construction services, seismic operations, drilling rig activities and all manner of well delivery services (Guinea Insurance, n.d., NCRIB, 2014).

Properties covered by the policy include: Oil Rigs and Platforms; Pipelines; Flow Stations; Gas Terminals; Farm Tanks; Operators Extra Expenses; Cost of Controlling Well Fire; Cost of Re-drilling; Oil Seepage and Pollution (Clean Up Costs and Third Part Liabilities) and Cryogenic Vessels Hull (Guinea Insurance, n.d.)

Claim

Claim is a formal request of entitlement by one that has the right to do so (Microsoft Encarta 2009). It is the right to ask for settlement after a loss on the subject matter insured (Nwite, 2013). Nwite added that the aim of insurance is to pay claim when a claim on the subject matter is reported after a thorough investigation. Mark (2012) emphasizes that claims loss payouts and their related expenses are the most significant costs to insurance organizations and subsequently have the largest impact on underwriting profits. Practically, claim is the tangible result of insuring, in spite of the accrued benefits of insuring, the ultimate value of insurance policy will be judged by the way claim is managed (CIIN, 2004). It further referred to claims department as the shop window of the insurance company without bias. The implication is that the claimant judges insurers on the basis of claims administration without recourse to the adequacy of its premium and underwriting skills (CIIN, 2004). Claims process is triggered when notice of a loss is given to the insurer by the insured or the insured authorised third party (Nielson, 2009). Section 70 of Insurance Act 2003, states that where an insurer is notified in writing of a loss by the insured or any other third party specified in the contract: a. the insurer settles the claim with 90 days where he admit liability; b. the claimant may demand the Commission to make the payment from the statutory deposit of the insurer; or c. the insurer where he does not accept liability communicate in writing to the claimant stating reasons for the decline within 90 days of the notification.

The process of claims commences when a loss occurs and is reported through to the actual settlement and the insurer is discharge of further claim on the particular claim. The process imposes a duty on both the claimant and the insurer see section 70 of Insurance Act 2003. The observance of the duty on the part of the claimant determines to a high extent the successful execution of the claim (CIIN, 2003). The duties of the claimant include: notification, reasonable prevention of further damages, providing supporting evidence of loss (proof/particulars of the loss to be given in writing with a time lag). While the duties of the insurer are: review, investigation, negotiation, payment, Discharge and recovery (where applicable). Nwite, (2013) opined that notification is a basic condition in insurance policy and the insured will notify the company even if the company is going to be liable or not. Nielson, (2009) maintains that an insured who want to be compensated following the loss suffered must notify and complete claims form. Notification of loss can be made in writing or oral. The issue of time has been a subject of debate prompting the ABI Statement of General Insurance Practice which encourages insurers to require action 'as soon as possible' after the event, rather than within specified timescale (CIIN, 2004). Date of knowledge of the loss or the existence of the policy should be considered vital in determining time.

The moment a notice of claim is received, supported by proof of evidence the company's claims unit will open a file and allocate claim number then proceeds to issue a claims form to the claimant for completion. At this stage the unit review the claim to verify if: the claimant has right to request for payment; has insurance policy with the firm; if the policy is active or have expired before loss, the currency of premium payment, whether loss was caused by the insured peril or it complied with the terms of the policy (Nielson, 2009). The objective at this stage is to ascertain if the insurer is liable

and to what extent. Lastly, take decision based on the review findings. Where the insurer is liable to pay advances to next stage of investigation, but if the insurer decline liability he must notify the claimant as earlier mentioned (see section 70(c). Notably, dispute may be envisaged by the aggrieved claimant who may proceed to the court to address his criticism of the insurer's declinature of his claim.

A claim form contains the following basic information: (a) Description of the property damaged (b) Date, cause, circumstances and amount of loss or damage (c) Situation of the property (d) Capacity in which the insured is claiming (e) Whether any other person has interest in the loss or damaged property (f) Whether there is any other insurance in force

The purpose of claim form includes:

To establish whether the insured is entitled to indemnity under the policy.

Whether the information ascertained comply with the information given in the proposal form.

To provide sufficient information to enable the insurer to begin processing the claim.

To determine the potential severity of the claim.

To determine whether any potential recovery right exist.

To determine whether there may be any potential third-party claim.

When the insurer establishes and accepts liability. The question therefore is what is the extent of liability? The answer lies with investigation/negotiation result poised to authenticate the quantum of insurer's liability. Similarly, another challenge is how and who conducts the investigation. Small claims are usually handled by the insurer's in-house claim staff but may require the expertise skill of professional loss adjusters in case of a large loss. A loss adjuster in Nigeria is a person registered in that behalf under Insurance Act 2003 S.45 (2) (3a, b, c) and for a foreign loss adjuster; see section 48 of Insurance Act 2003. The choice of Loss Adjuster lies with the type of claim sort such as: (1) Solicitors – to give legal opinion or institute a legal process, (2) Surveyors – to establish the possible cause and to estimate cost of claim, (3) Doctors – to verify or assess the severity of injury, etc. In a nut shell, dispute usually may emanate at this stage.

The parties have the following option to address their grievances in case of dispute; (a) Appoint an Arbitrator by the two parties, or (b) Go to Court of law see section 69(1a) of Insurance Act 2003. The finality of a claim is the actual payment. The insurer having been satisfied and convinced then indemnify the claimant. Indemnity is a financial compensation paid to the insured as promised by the insurer in the policy. There are four options of providing indemnity in insurance however, the choice of option is domiciled with the insurer. The options are: Cash payment, Repair- most in motor, Replacement - common with glass insurance, and Reinstatement – most used in building insurance (Enche, Enwereuzor, Ibeabuchi, Nwite & Ogwo, 2005). When a claim is authorised and paid to a third party, it is required that the recipient completes a discharge form to exonerate the insurer from future claim on the particular claim (CIIN, 2003). Insurer acquires the right of recovery, any right that will diminish the loss once he admits. The rights may come by: (1) salvage value, (2) contract, (3) statute (4) tort (negligent third party or the negligent insured).

Cost of Claim

Costs of claim refer to those cost or expenses incurred while processing a claim such as; costs associated with preparing, handling and adjusting claims. It is not part of the actual amount paid to the claimant (Pendry, 2021). The nature and size of claims often determines if it will be handled internally, or to engage the services of a loss adjuster. Loss adjusters include various professionals,

such as consultants, accountants, lawyers, investigators, among others that investigate and negotiate claims. There are costs accrued to the insurer either way, the difference being the amount involved. The amount spent in investigating a claim is termed cost of a claim. When the total claim of a particular policy paid or incurred in a given period is divided by the number of claims filed, the outcome is termed average cost of claim.

Average cost per claim measure the amount spent by the firm on a particular class of claim filed within a specific time lag (Opsdog n. d.). Faculty and Institute of Actuaries, (1997) described some of the average claim methods available to include: Paid Average Claims Projection; Number Settled & Number Reported; Incurred Average Claims Projection; Risk Exposure & Claim Frequency and Correspondence of Claim Numbers & Claim Amounts

For clarity, paid average claims method was chosen for this study. It is the product obtained when gross claims paid or incurred are divided by the number of claims involved (Faculty and Institute of Actuaries, 1997). Categorizing cost by type of claim is vital because each may differ in cost. Apparently, the good name of insurers is viewed from its ability to timely pay genuine claims.

Concept of Insurance

Insurance is a social apparatus of providing financial compensation for the effects of misfortune, the payment being drawn from the accumulated contributions of all parties' participants in the scheme (Ugwuanyi, 2013). Meanwhile Adebisi, (2006) opines that insurance is both economic and social means of handling risks to life and property though complicated. Insurance is a promise of compensation for specific potential future losses in exchange for a periodic payment (Eze & Okoye, 2013). Ejide and Tsowa, (2010) opine that it is a social device that combine uncertain risk of individuals in a group thereby making it more certain, via small periodic contributions by the members in the group from where to reimburse one who may suffer loss. In the opinion of Nwite (2004) insurance is an institution that insures the risks of people managed by expert, settles claim if loss occurs on any risk insured. Consequently, insurance is a legal contract that protects people from the financial costs that result from loss of life, loss of health, lawsuits, or property damage (Nielson, 2009). From the above scholarly definitions there is a common ground. Thus, insurance is a business, providing risk financing option and management services at a cost in a bi-contractual relationship. Put differently, it is business that guarantees a defined level of certainty amidst uncertainty to whom that cares.

Insurance business in many countries of the world assumes a certain degree of regulation. The reason for the regulation is to minimise unfair and unethical practices that may undermine the insured's interest and enthrone orderliness in the market. The federal government of Nigeria through Insurance Act 2003 regulates insurance business under the supervision of National Insurance commission (NAICON) and Nigeria Reinsurance Corporation. Among other organs that oversight the business of insurance in Nigeria is Central Bank of Nigeria (CBN). There are 69 insurance companies and two reinsurance companies operational in Nigeria.

Theoretical Review

The theory of average cost as postulated by Dooley was adopted. Manoj (2015) citing Dooley saw average cost as the total cost per unit of output (total cost divided by the total number of units produced). Average cost (AC) is useful in determination of price and price plays significant role in appraising profit and loss of a business. In other words, AC is a good parameter to measure efficiency. The formula of calculating AC is:

$$AC = \frac{TC}{Q}$$

where AC = Average Cost
 TC = Total Cost
 Q = Output

The suitability and relevance of the adopted theory specifically with its principle of price determination and measure of efficiency speaks volume of the objectives of this work. Hence, the aggregate claims paid within the period under review will be divided by the sub-total amount of each predictor filed in each of the predictors. Hence, the theory provides requisite information on various insurance products pricing mechanism and claims management.

Empirical Review

Agbo and Agbaji (2019) studied effect of motor insurance claims settlement on insurance penetration in Nigeria with the aim to explore the effect of motor insurance claims settlement on insurance penetration. Ordinary Least Square (OLS) was employed and the investigation revealed that, motor insurance claims settlement affect insurance penetration positively and concludes same that payment of motor insurance claims deepens insurance penetration. They recommended that insurers should improve their motor claims settlement strategy through the adoption of modernized technology. Ajemunigbohun and Oreshile (2014) looked at risk attitude and demand for motor insurance in Lagos, Nigeria. Multiple regression was adopted specifically Kolmogorov-Smirnov test. The result showed a significant interrelationship between the variables. It was concluded that risk attitude and demand for motor insurance cannot be separated.

Awunyo-Vitor (2012) evaluated the determinants of comprehensive motor insurance demand in Ghana. Logit model was employed to assess factors responsible for demand of comprehensive motor insurance. The following: income, value and age of the vehicle, premium and claim procedure were revealed to be significant for the demand of comprehensive motor insurance. Thus, concluded that income, value and age of the vehicle, premium and claim affect the demand for comprehensive motor insurance in Ghana.

LawTeacher (2003) examined third party motor claims in India insurance industry. The objective was to explore the evolution of third-party motor claims in Nigeria and its relation with third party insurance cover in India. It was found and concluded that there was delay in settlement of awards and no centralized database. Thus, recommended creation of a consolidated Industry-level database of all the insurers issuing motor policies to enable identification of duplicate claims and possible fraudulent claims; and to enable identification of involvement of vehicles in accidents for proper loading of premium.

Alma and Rajeev (2004) investigated the incentive effects of automobile insurance, compulsory insurance laws, and no-fault liability laws on driver behaviour and traffic fatalities. An instrumental variables approach was used to analyze a panel data of 50 U.S. states and the District of Columbia from 1970-1998. Evidence from the test result showed that automobile insurance had moral hazard costs, leading to an increase in traffic fatalities. Equally, reductions in accident liability created by no-fault liability laws triggered an increase in traffic fatalities. They concluded that the increases in the incidence of automobile insurance and moves to no-fault liability systems have significant negative effects on traffic fatalities.

James (2020) studied the impact of COVID-19 on motor insurance. The aim was to underscore the effect of COVID-19 on motor industry, from the manufacturer to the driver. The design used in the study is historical/ empirical. Findings revealed a significant drop in the number of motor insurance

claim and negative trend on the motor policy holders who did not utilize the insurance purchase and motor manufacturers suffered financial losses. The study recommended provision of openness and updates insurer's strategy to satisfy customers concern and need amid changes following covid-19.

Eduproject (n.d.) accessed the impact of motor insurance policy on the growth and development of the economy. The goal was to understand why Nigeria motorist embrace motor insurance policies. The method of data analysis used is chi-square statistical model. The findings revealed that motorist in Nigeria are not purchasing motor insurance policies and it was recommended that the public should be educated on the numerous benefits accrued to motor insurance policies

Mwangi and Murigu (2015) investigated determinants of financial performance in general insurance companies in Kenya (2009-2012). The goal was to establish the factors that affect the profitability of general insurers in Kenya. Multiple linear regression data analysis was employed. The findings indicate that profitability positively relates to leverage, while equity capital management competence index negatively relates to size and ownership structure. It was recommended that insurers transacting general insurance business should increase leverage, equity capital and quality of staff to enhance performance.

Methodology

Research Design: This study adopted *ex post facto* research design which involves the utilisation of data collected and archived, thus inhibiting the researcher's ability to manipulate data rather analyzes the data and interpret result (Udeze, 2005).

Data was obtained from the annual financial and statistical publications of Central Bank of Nigeria Statistical Survey (1999), National Insurance Commission Financial Annual Report (2011) and Nigeria Insurance Digest (2019) from (2002 – 2020). The data generated includes: gross claims; sub-total claims of: motor, general accident and oil/gas insurance policies.

Model Specifications: The value of model application is to provide results of possible alternative to solve a given problem (Lucey, 2002). She further states, that a model which incorporates several predictors is known as multiple regression model and the aim of adding to the two variable models was to improve the fit of the data and it is represented as: $Y = a + b_1X_1 + b_2X_2$.

Thus, the model for this present study, is $GNLINSCP = a + b_1(MCP) + b_2(GACP) + b_3(OGCP) + e$
Where:

$GNLINSCP$ = Gross claims paid, a = constant $b_1 - b_3$ = regression coefficient

MCP = Motor Claim Paid, $OGCP$ = Oil and Gas Claim Paid

$GACP$ = General Accident Claim Paid, e = standard error term

Description of Variables in the Model: Dependent variable is the gross claims, coded $GNLINSCP$ in the equation. It is the aggregate of all the claims without adjustment paid out on non life policies within the period under investigation. The independent variables are: MCP , the amount of motor insurance claims paid; $OGCP$ is the amount of oil and gas insurance claims paid; $GACP$ is the sum paid on general accident insurance claims. The " a " symbol is constant in the equation and $b_1 - b_3$ is the coefficient associated with each of the independent variables. Similarly, the e symbol is the error term associated with the analysis.

Method of Data Analysis: The meaningfulness of the study is reliant on the data analysis and interpretation hence, the analytical technique used is Auto regressive distributed lag (ARDL). In testing the hypotheses, the multiple linear regression, was used based on ARDL which permits simultaneous investigation of the effect of more than one independent variable on the dependent variable. The choice of ARDL is because the bound test is more appropriate for a small sample usually less than 40 observations (Pesaran and Shin, 1998).

Decision criteria: The decision to the acceptability of the hypotheses (null H_0 or alternate H_1) will be guided as highlighted: Reject H_0 when the P- value of the outcome is less than 5% error margin ($p < 5\%$) and the coefficient of the parameter estimate is negative, otherwise accept. Similarly accept H_0 when the P- value is greater than the 5% error margin ($p > 5\%$) and the coefficient of the parameter estimates is positive, otherwise reject.

Data Presentation and Analyses

Data Presentation

Table 1, showing, the expenditure of three classes of non life and gross claims of all general insurance businesses - All Companies (N' Thousand) in Nigeria, since 2002 to 2020

The variables are all growth rate transformed to bring down the data size and ensure linearity.

YEAR	GNLINSCP	MCP	FCP	GACP	MACP	OGCP
2002	6,856.15	2818.65	1,857.87	109.285	900.88	0
2003	502894	3,040.17	1,681.74	2,266.79	1,240.57	0
2004	395085	3,476.24	2,724.43	2,852.92	1,361.42	0
2005	280753	3,733.39	2,766.71	3,138.16	1,266.22	0
2006	778140	20,734.98	6,662.98	15,239.75	10,493.41	0
2007	1065177	6,196.12	1,793.39	3,829.06	1,904.23	0
2008	26,377,511	9,935.50	6,076.60	4,467.50	3,185.00	235
2009	19,604,310	13,040.29	15,124.74	6,567.45	4,556.60	7,372.95
2010	30,527,364	13,219.03	7,794.06	6,444.45	2,965.17	3,713.64
2011	34,722,397	13,291,078	6,430,331	6,360,527	2,474,338	4,028,714
2012	46,128,350	12,992,188	10,081,792	9,652,564	4,466,215	5,520,296
2013	58,644,860	14,498,546	10,715,126	9,427,949	6,089,461	14,019,172
2014	51,061,483	14,611,040	9,927,699	9,333,284	4,862,544	9,006,810
2015	54,649,328	16,248,051	13,246,931	9,797,955	7,255,627	4,224,306
2016	57,757,978	17,431,999	16,128,948	8,563,869	6,506,830	4,642,957
2017	70,522,613	17,653,890	23,877,109	8,655,291	5,981,826	10,929,363
2018	98,704,627	17,575,282	19,020,694	10,091,838	9,925,040	38,258,052
2019	70,522,613	17,653,890	23,877,109	8,655,291	5,981,826	10,929,363
2020	98,704,627	17,575,282	19,020,694	10,091,838	9,925,040	38,258,052

Sources: Central Bank of Nigeria Annual Survey and National Insurance Commission (NAICOM) Annual Reports 2002 – 2010. Nigeria Insurance Digest (NIA) 2011 – 2020

Table 1 shows that gross claims from 2002 was 6856.15 million naira which increased to 502894 million in 2003 but decreased to 395085 million in 2004 to further 280753 million in 2005. In 2006, it rose to 77814 million and following the recapitalization in 2006. The gross claim was 1065177 million which represent 35% increase in growth rate. In 2008 when insurance companies consolidated across the globe, it was 26377511 before it fell to 19604310 in 2009. This trend may be attributed to political economic atmosphere of the Nigerian democratic government within the year. In 2010, it grew rapidly to 30527364trillion, in 2017 it amounted to 98704027million, but in 2019, it fell back to 70522613 million due to adverse economic situation in Nigeria. 2020 saw it grew further to 98704627. Motor insurance claims recorded 2818.65 million in 2002 and increased to 3040.17 in 2003 and was at its peak in 2006 during the insurance industry recapitalisation. In 2007, it decreased to 9935.50 million and peaked again in 2011 to 13291078 million and kept a zig zag movement until in 2016, immediately after 2015 Nigeria general elections, and maintained such growth till 2019 when it amounted to 17658,890 million, but in 2020 it dropped to 17575282 million.

General accident claims stood at 109285 million naira and continued to rise till 2006 when it peaked as a result of recapitalization. In 2007, it saw decline through to 2010 and in 2011, it rose to 7794.06 million to 6360527 million and continued to 9797955million in 2015 but decreased to 8563869million. In 2018, it went up to 10091834 but declined in 2019 to 8655291 million and finally rose to 10091838 million in 2020.

Oil and Gas Insurance claims recorded nil account in 2002 to 2007. It was in 2008 that it recorded 235 million naira and continued to rise to 7372.95 million naira. In 2013, it went up to 14019172 million and started to decline till 2019 and went up again to 382558052 million naira in 2020.

Table 2, showing, the log transformed variables of expenditure of three classes of general insurance and the gross claims - All Companies (N' Thousand) in Nigeria, since 2002 to 2020

YEAR	LNGCLAMS	LNLMORT	LNFIRES	LNGACC	LNLMARN	LNOIGA
2002	8.8329	7.9440	7.5271	4.6939	6.8033	
2003	13.1281	8.0196	7.4275	7.7261	7.1233	
2004	12.8868	8.1537	7.9100	7.9560	7.2162	
2005	12.5454	8.2250	7.9254	8.0513	7.1437	
2006	13.5646	9.9395	8.8043	9.6316	9.2585	
2007	13.8786	8.7316	7.4918	8.2503	7.5518	
2008	17.0880	9.2038	8.7122	8.4045	8.0662	5.4595
2009	16.7912	9.4754	9.6240	8.7898	8.4243	8.9055
2010	17.2341	9.4894	8.9611	8.7709	7.9942	8.2197
2011	17.3628	16.4024	15.6768	15.6653	14.7214	15.2089
2012	17.6469	16.3798	16.1262	16.0827	15.3120	15.5239
2013	17.8870	16.4895	16.1871	16.0591	15.6220	16.4559
2014	17.7485	16.4972	16.1108	16.0490	15.3970	16.0134
2015	17.8164	16.6035	16.3992	16.0976	15.7972	15.2563
2016	17.8717	16.6738	16.5961	15.9630	15.6883	15.3508
2017	18.0714	16.6863	16.9884	15.9736	15.6042	16.2069
2018	18.4076	16.6820	16.7610	16.1272	16.1105	17.4598
2019	18.0714	16.6864	16.9884	15.9736	15.6042	16.2069
2020	18.4076	16.6820	16.7610	16.1272	16.1105	17.4598

Sources: Own compilation from E-View 10.0

Where,

LNGCLMS= Log of Gross claims of non life insurance business,

LNMOTrC= Log of Motor claims of non life insurance business,

LNGACC = Log of General accident claims of non life insurance business,

LNOIGAC= Log of Oil and gas claims of non life insurance business

These variables were transformed to growth rate to ascertain the growth form of the variables and also bring the variable to linear form. It is also being noted that the variables of insurance indices are measured in millions of naira as part of its quantification, using the log of gross claims of non life insurance, in 2002, the growth rate from the trend started with 8.5, in 2004, it increased to 13.0 but decreased to 12.8 in 2006. In 2008, it surged to 18.0. In 2010, the numbers of claims paid reduced to 17.0 and maintained such growth till 2018 when it moved up to 18.0. Evidence from the trend the dependent variable (gross claims) had a steady growth from 2002 – 2004 and 2008 – 2010 and remains consistent in growth to 2020.

Log 2; motor insurance claims started in 2002 with 8.0 and increased to 10.0 in 2006, then dropped in 2009. However, in 2010 it maintained a steady growth from 2012 through to 2020. It implies that motor insurance claims only grow when the industry was participating in insurance recapitalization. Log of general insurance claims was 4.0 at the start and maintained the growth momentum till 2010 and moved geometrical to 16.0 and maintained the speed to 2020. Log of oil and gas insurance claims recorded zero claims until 2008 and witnessed an increased growth till 2020.

Data Analysis

Unit root Test of Stationary

Tests of Unit root using Philip and Peron

In an attempt to confirm the order of integration of the series under study thereby confirming their suitability for a linear combination in the form of a model, the unit root test following the form specified as Philip and Peron Test was used. Below is a summary of the unit root result that was stationary.

Table 3: SUMMARY OF UNIT ROOTS TEST RESULTS

Variable	ADF Statistic	Critical Values @ 5%	Prob Val	STATIONARY
LNNLGCP	-3.4788	-3.0403	0.0214	I(0), Intersect Only
LNMCp	-4.3612	-3.7104	0.0158	I(1) Trend & Intersect
LNFCp	-4.5790	-3.3710	0.0107	I(1) Trend & Intersect
LNGACP	-4.3202	-3.7104	0.0170	1(1) Trend & intersect
LNMACP	4.4886	-3.7104	0.0126	1(1) Trend & intersect
LNOGCP	4.7131	-3.9336	0.0173	1(0) Trend & intersect

Source: Author's e-view 10 output with data in Appendix One to six.

The result of Augmented Dickey Fuller unit root test statistics contained in table 3, log of non life gross premium paid and log of oil and gas claims paid are all integrated at order (0) while others are integrated at order, 1(1). Given these different orders of integration, the Ordinary Least Square Regression Method was given up in preference for the Autoregressive Distributed Lag Model which tolerates such stationary property combination. In addition, the sample size is also not good enough

for the OLS, ARDL was given the nod so that its estimates remain robust and consistent in the face of large sample size and finally good for data characterized with structural breaks. The alternate hypotheses of a unit root which stated that the variables of interest must be statistically significant, the test statistics must be more negative than the critical value at 5%. All followed these hypothetical apriori called a framework.

Basic Descriptive Statistics/ Standard tests for Normality

The statistical properties of the data sets are seen as vital determinants of their behaviours when used in econometric analyses. On the basis of this, the basic descriptive statistics called Normality test of the variables under study is presented.

Table 4: Basic Descriptive Statistics/ Standard tests for Normality:

	LNNLGCP	LNNLMCP	LNNLFCP	LNNLGACP	LNNLMCP	LNNLOGCP
Mean	17.72348	14.91943	14.76096	14.31421	13.88101	14.13293
Median	17.81645	16.49729	16.18717	15.97368	15.60424	15.52394
Maximum	18.40764	16.68647	16.98843	16.12724	16.11057	17.45986
Minimum	16.79126	9.203869	8.712201	8.404584	7.994690	5.459586
Std. Dev.	0.490280	3.154963	3.255091	3.229544	3.280493	3.905434
Skewness	-0.366529	-1.275451	-1.243837	-1.276057	-1.241732	-1.287524
Kurtosis	2.983257	2.635726	2.635868	2.639791	2.604154	3.089338
Jarque-Bera	3.569343	3.596556	3.423936	3.598309	3.425655	3.596047
Probability	0.752261	0.165584	0.180510	0.165439	0.180355	0.165626
Sum	230.4052	193.9526	191.8925	186.0847	180.4532	183.7281
Sum Sq. Dev.	2.884498	119.4455	127.1474	125.1594	129.1396	183.0290
Observations	13	13	13	13	13	13

Source: Author's e-view 10 output with data in table 4.3.

Table 4, show all the variables LNNLGC, LNNLMCP, while that of LNNLGACP, and LNNLOGCP are negatively skewed to the left, evidencing the degree of their departure to the line of symmetry. Skewness is the relationship arising from the mean and median of the data series. It can be symmetrical or asymmetrical. It is symmetrical when the variables concede and are closely interrelated but asymmetrical when they are not coincided. When it is positively skewed, it means it moves to the right meaning the variables are not normally distributed, but moving to the left must have a negative sign meaning that the variables are skewed to the left thereby making it negatively skewed. When variables are abnormally distributed, it influences the econometric result and makes the result spurious and inconsistent in explaining the outcome of the result and hence faulty for interpretation. The Kurtosis of the distribution shows that LNNLGC, LNNLMCP, while that of LNNLGACP, and LNNLOGCP are all tending towards 3 meaning that it is Leptokurtic and are highly peaked, there is no sign of Mesokurtic showing that there is no variable that is above 3. Finally, none of the variable is platykurtic meaning its pickiness is lower than 2.5 among all the variables. So when the skewness of between (0-3) and kurtosis of tending towards 3 or above 3 occurs, the variables are said to be normally distributed. Jarque-Bera statistics is of particular interest which is a real test for normality. The Jarque-Bera statistics is important because it shows that all the variables, LNNLGC, LNNLMCP, LNNLGACP, and LNNLOGCP are equally tending to 3 which are sign of Mesokurtic and

negatively skewed meaning they are all normally distributed. It is also important to note that the values of the variables are all significant in relation to the a priori expectations showing they are well distributed.

Table 5: Presentation of the results arrived at using the estimation technique

Dependent Variable: LNGCLAMS

Method: ARDL

Date: 08/16/21 Time: 15:58

Sample (adjusted): 2004 2020

Included observations: 17 after adjustments

Maximum dependent lags: 1 (Automatic selection)

Model selection method: Akaike info criterion (AIC)

Fixed regressors: C

Number of models evaluated: 81

Selected Model: ARDL(1, 2, 0, 0, 1)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNGCLAMS(-1)	0.406961	0.136619	2.978800	0.0176
LNLMORT	4.167145	0.750751	5.550638	0.0005
LNLMORT(-1)	3.111714	0.639870	4.863043	0.0013
LNLMORT(-2)	0.210802	0.098541	2.139231	0.0649
LNLMORT(-3)	-0.389355	0.321681	-1.210377	0.2607
LNGACC	-3.875127	0.764461	-5.069096	0.0010
LNLMARN	-0.109862	0.558567	-0.196685	0.8490
LNLMARN(-1)	-2.907796	0.621711	-4.677087	0.0016
C	2.220225	1.516540	1.464006	0.1813
R-squared	0.982861	Mean dependent var		16.66356
Adjusted R-squared	0.965722	S.D. dependent var		2.032117
S.E. of regression	0.376234	Akaike info criterion		1.187842
Sum squared resid	1.132417	Schwarz criterion		1.628955
Log likelihood	-1.096656	Hannan-Quinn criter.		1.231689
F-statistic	57.34598	Durbin-Watson stat		2.129930
Prob(F-statistic)	0.000003			

*Note: p-values and any subsequent tests do not account for model selection.

Source: Author's e-views 10 output, 2021.

From the Autoregressive distributed lag regression result shown above, we have the R-square value of 0.98 which shows that the independent variables jointly explain the dependent variable by 98% meaning that the unexplained variation of 2% which is attributable to other variables not included in the model is not enough to affect the result. The adjusted R² which is 0.96 indicates that with the inclusion of more variables, the R² can reduce maximally to a very low rate of not more than 2%. The Durbin-Watson statistic value of 2.12 with acceptable hypotheses of 1.5-2.4 indicates that there is no

suspicion of autocorrelation in the model. The F-statistics which is 57 and a P-value of 0.00003 < 0.05, also shows that the overall regression is significant and can be used for meaningful econometric results and analyses.

Hypothesis one: Table 5 showed that P-value is 0.00003 < 5% error margin and the coefficient is positive at 4.16. Thus, the null hypothesis is not supported by the outcome of the analysis, and it is rejected and the alternate hypothesis is accepted. This implies that motor insurance cost of claims affects gross claims of insurance positively and significantly.

Hypothesis two: From table 5 the probability value of general accident insurance claims paid out is 0.0010 < 5% error margin and the coefficient has a negative sign of -0.38, hence this study accepts the null hypotheses and reject the alternate hypothesis which is not supported by the analytical result. The inference is that general accident insurance claims paid out contribution to gross claims of non life insurance business in Nigeria insurance industry is negative but significant.

Hypothesis three: Table 5 revealed that probability value of oil and gas insurance claims paid out is 0.0085 < 5% and the coefficient has a positive sign of 0.13. The decision of this study is to accept the alternate hypothesis that affirmed the position of the alternate hypothesis and reject the null hypothesis because it is not supported with the outcome of the analysis. The implication of this study is that the cost of claims of oil and gas insurance contributes positively and significantly to non life gross claims paid in Nigeria insurance industry.

Discussion of Findings

Motor insurance claims with a P-value is 0.00003 and a coefficient value of 4.16 indicates that motor insurance claims positively contributed to non life gross claims paid in Nigeria between the periods 2002 to 2020. The result further revealed that 1 percent increase in motor insurance claims in Nigeria will lead to about 416 percent increase in non life gross claims paid in Nigeria caused by the level of motor insurance claims.

General accident insurance claims with a P – value of 0.0010 and a coefficient value of -3.87 indicates that general accident insurance claims negatively contributed to non life insurance gross claims paid in Nigeria between the periods 2002 to 2020. The result further revealed that 1 percent decrease in General accident insurance claims in Nigeria will lead to about 387 percent decrease in non life insurance gross claims paid in Nigeria caused by the level of General accident insurance claims.

Oil and gas insurance claims with a P- value of 0.0085 and a coefficient value of 0.13 which is positively signed, indicates that oil and gas insurance claims positively contributes to non life insurance gross claims paid in Nigeria between the periods 2002 to 2020. The result further revealed that 1 percent increase in oil and gas insurance claims in Nigeria will lead to about 13 percent increase in non life insurance gross claims paid in Nigeria caused by the level of Oil and gas insurance claims.

Summary, Conclusion and Recommendations

Summary

Based on the hypothetical test result of this study as earlier mentioned, the findings deduced are summarized as follow:

Cost of claims of motor insurance claims with a P-value of 0.00003 < 5% and a coefficient value of 4.16 had a positive and significant contribution on non life insurance gross claims in Nigeria.

Cost of claims of general accident insurance claims with a P – value of $0.0010 < 5\%$ and a coefficient value of -3.87 had a negative and significant contribution on non life insurance gross claims in Nigeria. Cost of claims of oil and gas insurance claims with a P- value of $0.0085 > 5\%$ and a coefficient value of 0.13 had a positive and significant contribution on non life insurance gross claims in Nigeria.

Conclusion

The insurance industry is subject to the various claims expenses arising from the number of losses in the Nigerian insurance industry. Claims settlement duty is statutory, contractual and a moral obligation of insurers to honour. It is a process and during this process triggered by the notification of an insured loss through to the payment of the claims, insurers accrue some expenses which do not form part of the actual amount of claims paid to the claimants. These expenses usually are: investigative cost of claims of losses, cost of settlement of disputes and variable cost. The question is, does these expenses (claims cost) affect the overall claims of an insurer who seek healthy business performance? Sometimes claims payment in a particular class of insurance changes due the level of the product packages, degree of quantum involved and the location. Such variations have the potential to either adversely influence the claims cost experiences of the insurance industry and as well the economic sectors both on the macro and micro economic level. In the light of the above result obtained, the study concludes by answering the question does these expenses (claims cost) affect the overall claims of an insurer by stating that: the cost of motor insurance claims paid out contributes positively and significantly on the gross claims of non life insurance companies. Thus, the amount of money expended in the settlement of motor claims is not healthy for progressive insurance business concern. In a single claim experience the cost is reasonable but on the average within a defined time lag it becomes a going concern. A lot of factors could be held responsible such as fraud from both sides (the insurer's claims department or the claimant), lack of diligent underwriting and corrupt insurance practices among others. Fire and marine/aviation insurance revealed a negative and non significant contribution thus it is concluded that insurance is growing but must be vigilant given the negative sign of the result. Similarly, the study concluded that general accident and oil/gas insurance have a negative and significant impact on the gross claims meaning that it cost insurers more in settlement claims in these classes of insurance. Just as opined earlier the nature of these products as the quantum is responsible for the outcome we see.

Recommendations

In line with the specific objectives and hypotheses tested, the study recommend as follows:

Insurance should develop a mechanism to check fraud within the claims department of the company. The cost of investigating and processing motor claims at a single motor claim seems not substantial as such and can induce fraud and when aggregated, exact ridiculous financial stress. Other factors as pointed earlier should also be prioritized, like diligent underwriting, given the test result where the cost impact is positive and significant.

General accident insurance claims cost revealed a negative and significant contribution on non life insurance gross claims in Nigeria. General accident policy provides compensation for losses associated with accidental loss of life or injuries as well as other pecuniary losses in the normal course of daily life and business operations. This nature makes the claims processing even more complex because of the long term effect. Thus, insurers require a mechanism to stringently and closely monitor losses and progress of recovery.

Oil and gas insurance claims have a positive and significant contribution on non life gross claims in Nigeria. The same as above. However, the insurers should insert that the insured must proof the existence of cordial relationship with the host communities as a condition precedent to liability with regards to oil spillage which affect environmental degradation. Undoubtedly the act will minimize sabotage from the host communities and they will even alert the insured early enough where spill is witnessed for prompt action. Similarly, the insured negligent act will likewise tend to be inhibited.

Contributions to Knowledge

This research adds to existing works in this area of insurance. In very specific terms, this works contributes to knowledge in the following ways:

By title and variable: Imperatively, none of the works reviewed considered the contribution of cost of claim per policy to the gross claims. Most of the works centred on insurance and GDP especially in Nigeria except few from US, Europe and Asia research background but differs in title and variables.

By way of geography: To the best of my knowledge it is right to infer that this work is first to be conducted within Nigerian research space, US, Europe and Asia from the works reviewed.

Theory: None of the studies reviewed, applied theory of average cost

By way of currency: This work is more current because it covers the period from 2002 to 2020 in Nigeria and seems to the first of its kind given the works reviewed.

Suggestions for Further Studies

This study recommends the following for further studies:

Measuring the long run relationship existing between various general insurance policies claims and gross claims of general (non life) insurance business paid out in Nigeria.

Replicating this study using other variable not used at the moment.

Estimation of the relationship existing between various general insurance policies claims and gross claims of non life insurance business paid out in Nigeria.

Repetition of this work in all ramifications in a different geography.

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