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Underwriting Capacity and Income of Insurance Companies: (A Case of Nigeria)

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Abstract:- The Study attempted to address the how underwriting capacity has affected the income of insurance industry in Nigeria. Using expo-facto research design and inferential analysis; the study tested whether significant relationship exist between dependent variable (income of insurance) and set of independent variables (shareholder's fund, underwriting profit, investment income, earning asset ratio). Analysis was based on descriptive statistics, using secondary data that was extracted from the financial report of the selected insurance companies, the data covering a period from 2006 to 2015. Regression model analysis was used to find out the extent to which set of independent variables impacted the dependent Variable. The findings of the study show that underwriting profit and earning asset have impact on income of insurance companies in Nigeria positively. For shareholder's fund and total investment the study shows that they impacted the income of Nigeria insurance companies negatively as at the period this study is carried out. The study concludes that insurance companies in Nigeria should improve their underwriting techniques, and train their staff more in this area. Therefore, the study recommends that insurance companies should put in more effort in investment of their premium. The study further recommends that insurance companies should efficiently manage their asset properly to increase their earning capacity basically to boost their profitability.

***Keywords**:- Investment, Underwriting capacity, Shareholder's fund, Insurance companies, underwriting profit.*

I. INTRODUCTION

Insurance is a financial tool that responsible for the management of individual and corporate risks conventionally within the economy. These risks are deserved to be well managed by the insurance companies if profitability and sustainability are to be achieved, because of the inability about the future by the insured and the insurance companies. Beightler & Street (1967) assert that general insurance businesses are involved in trading uncertain risks of an indefinite amount for a certain definite cost. The conventional management of risks by insurance gives individual and corporate body certain peace of mind and assurance to operate within imbalanced and unfavorable environment. Priest (2003) opined that, the insurance business manager responsible for a product and service operates in a constantly changing environment. According to the author, he or she needs to know which factors are having which effect on profitability. Therefore, for any insurance company to assume the risk of individual or corporate organization, it is essential on its part to examine the nature of the risk basically to establish whether the risk is bad or better risk to its portfolio.

It is evident and utmost averred that the major survival backbone of insurance companies' operations are underwriting operation and investment, this is because a good and effective underwriting operation of insurance company allows them to arrive at a profitable and safe business operation. Also, the investment of long-term business' premium into the economy brings about economic multiplier effect into the economy, and yield investment income to the insurance companies, and invariably increases their profitability and market share within the financial institution. Kahane, (1977) opined that the profit from risk underwriting and investment activities are random variables and the rates of underwriting profit of various insurance businesses may be correlated. Kamau (2013) established in his study that there is considerable uncertainty in decision making as insurance companies must earn a profit on their businesses, and their investments returns should be favorable. But at the same time, it is paramount for the insurance companies to put into consideration their financial strength and strategize their underwriting tentacles when assuming any risk from insuring public.

A stable economy is a promotional platform for necessary savings to finance investments which is the utmost prerequisite for achieving a strong and workable insurance industry which can help to sustain a lasting economic growth and development in the country. Therefore, Underwriting capacity in any insurance company has long way to go for the survival of that company. Implementing regulations on underwriting process and investment of insurance is highly imperative in any unstable environment where differs risks are to be managed. This is so, because Insurance companies are sensitive to essential economics to the development of a country, and sometimes consider a lot of economic variables so as to make the right investment decisions, these variables include foreign exchange reserves, government debt, government deficits, inflation, interest rates and exchange rates which have all suffered in recent years as a result of Nigeria's financial indiscipline and misappropriation (Osinuga, 2016). Unfortunately, many issues related to the management of the underwriting business management and investment of premium pooled together from the public insured as a business process in Nigerian insurance industry; still remain aside the core interest of the insurance practioners, stakeholders and government. On this premise, this study stands to investigate how underwriting capacity has really affected the income of insurance industry in Nigeria.

II. LITERATURE REVIEW

A. Conceptual framework

Underwriting involves the process of examining the risk brought before the insurer, whether to accept, moderate before acceptance or reject the risk. If to accept, at what rate of premium to be accepted, or if to be accepted with moderate, the necessary risk control measures will be applicable. The process is incomplete until necessary underwriting documents are applicable for proper risk documentation, such as medical reports that show the health condition of the proposer, bills that show the value of property to be insured. The underwriter can also make use of past relevant risk data that can provide relevant information to the statistical possibility of certain type of risk. Underwriting is the assessment of hazards attributed to the subject matter of insurance, and to determine whether the risk in question associated with the subject matter is to be accepted or rejected. underwriting is defined as a process whereby the underwriter analyze, accept or reject risks for insurance (reinsurance) businesses; this process also involves assessing, classifying and selecting the insurable and non-insurable risks, setting the insurance periods, terms and conditions as well as liability limits and calculating the premium rates" (Arhipov, 2007).

Underwriters are trained insurance professionals who mitigate the effects of adverse selection of risks by carefully accepting the applications whose loss exposures are very minimal, that are good risk for insurance coverage with the intention of charging premium that is accurately reflect the loss exposures in the pool of fund, take proper care of the applications, and monitoring the risk account book carefully. An insurance underwriter is a professional that has the ability to understand the risks to which the underwritten object is exposed to before accepting it (Macedo, 2009). This ability can achieved through both theoretical studies applied to the risk, and the result of years of experience dealing with similar risks and paying claims on those exposures (Macedo, 2009).

B. Theoretical framework

➢ *Underwriting Capacity*

Nigeria as a black nation has the potential biggest insurance market in Africa, but weaknesses in the industry meant that most of the large insurance business was managed by foreign companies (Obaremi, 2007). Now the domestic industry is poised not only to penetrate deeper in the local market but to expand to other regions of Africa (Obaremi, 2007). Onaolapo (2005) sees underwriting capacity as the combination of the retention strength of insurance companies and the treaty or facultative cover provided by reinsurance companies to support their businesses. The International Association of Insurance Supervisors (IAIS) as cited in Onaolapo, (2005) issues some ethical principles, standards and guidance documents on insurance businesses globally. In its No. 5 principle issued in the month of January, year 2002 on Capital Adequacy management and Solvency margin of insurance companies, the body seriously intensified for the principle of adequate technical provisions as the bedrock of a sound and healthy capital adequacy and solvency regime in insurance business operations globally. According to Onaolapo, (2005) this approach indicates how the position of advocates of risk-based capital determining the adequacy in insurance companies, or otherwise of the existing levels of capital in the industry.

Underwriting capacity of any insurance company is the financial ability of that company that determine the limit its risk shouldering. Financial capital is of essence in any viable business but the peculiar nature of insurance business requires more capital in the context of underwriting capacity (Onaolapo, 2005). Talking about the fact that the last completed recapitalization process exercise in Nigeria insurance industry was year, 2007, the former minister for finance Mrs. Kemi Adeosun as cited in Vanguard News paper (2016) on the 12th of July, 2016 said that insurance sector in Nigeria was due for another new face of recapitalization following the need to reposition the industry in the economy. The Minister stated this at the opening ceremony of the National Insurance Conference organized by the sector's Insurance Industry Consultative Council (IICC) with the theme 'Expanding National Resources and Infrastructure in Challenging Times' held in Abuja. Although, the 2005 recapitalization of insurance industry in Nigeria was carried out to increase the shareholders' value, ensure greater efficiency and provide the insurance companies with the requisite capacity to underwrite lager-risk (Epetimehin, 2013).

As expressed out by Fola (2013), insurance companies in Nigeria have witnessed positive transformation in recent years arising from the new reforms embarked upon by NAICOM. This is enough to say that these reforms were intended primarily to reinforce the Federal Government's Vision 2020 of deepening insurance penetration in the economy to become the insurance industry of choice among the emerging markets in Africa, in terms of capacity, safety, transparency and efficiency in addition. According him Nigeria would achieve rapid and sustained sound economic growth if it efficiently embraces its insurance penetration whereby more members of the population buy one or more of the available insurance policies. However, Chukwulozie (2008) in his research showed that inadequate capital base, dearth of appropriate human capital, poor investment returns; poor structures of corporate governance; and the absence of risk management framework are includes other major problems that have been preventing the Nigerian insurance sector to impact positively on the economy. This is so because a organization's risk-taking attitude has aroused numerous researcher's interests because it concerns the financial interests of various corporate stakeholders (Zou, Min-Ming, Yang, &Wang, 2010). This is significantly important in the financial institutions where the protection of the customers is always of the utmost concern. This means that the insurance companies are bed rock to the survival of economy, therefore, when accepting the risks from insuring public, efficient underwriting measure needs to be applied so as to ascertain proper rate of premium and minimize volatility in their own business. This is so because, one of the significant roles of an insurance company is the underwriting process, including selecting, classifying, and pricing of risk for insurance coverage (Fan, 2014).

➢ *Investment*

The Nigeria environment is very unstable and unfriendly for investment do to political imbalance and current recession, but insurance companies have to invest in the economy because they are the bedrock of the economy. Ahmed (2012) describes insurance companies as creator of national wealth and mobilizer of funds for economic growth. This means that it has become necessity for insurance companies to invest, but Nigeria investment environment is challenging for fixed income securities for insurance companies, with low yields factored by high rate of inflation, and exposure to mark-to-market losses when interest rates rise currently. The term 'investing" could be attributed to different business activities, but the common target goal in these activities is to "employ" the money (funds) during the period of time, seeking to enhance the investor's wealth generation (Epetimehin, 2014). Obviously, both insurance and reinsurance business operators engage their assets in investment to support, and meet up their business liabilities, therefore, return on investment is all-time determinant factor of their business' profit generation. Both insurers and reinsurers companies need to efficiently manage their investment risks, and balancing the need to maintain a prudent diversification of their investments, whose risk is appropriate to the risk profile of their business liabilities, with the need for adequate and robust investment incomes.

The insurance companies mobilize large amounts of financial resources from the premium paid by the insuring public and use part of the funds to invest after official expenses (Akpan and Joseph, 2017). Heyman and Rowland (2006) in their study assert that investment officers of publicly manage insurance companies battling with the question of how best to contribute to shareholders value in their companies. The authors scholarly submitted that it is wise enough to manage the investments of the insurance companies' operations independently, as if they were a closed-end investment company that happens to be funded by insurance underwriting activities. For insurance companies to survival and unraveled the threat of competitive environment, it is imperative enough for them to invest their long-term business premium into the economy wisely. Kamau (2013) submitted that there is an operational problem of determining an efficient way of evaluating organizations' investment returns, and the compounded rate of cash inflows should be more than that of cash outflows for insurance companies to avoid generating capital at a costly amount. The author stresses further that the amount of investible funds generated by insurance companies at times depends on external factors for instance the efficiency of the judicial system in processing settlement of claims.

In Nigeria, the Insurance Act of 2003 established in Section 25(1) of the act that "an insurance company shall at all time in respect of the insurance business transacted by the company in Nigeria, invest and hold investments in Nigeria assets equivalent to not less than the amount of policyholders' funds in such accounts of the insurance company. Therefore, it is better to invest the insuring public's funds primarily to defease the firm's liabilities and thus support the investment operations of a company whose principal value derives from its insurance activities (Heyman and Rowland, 2006). Akpan and Joseph (2017) opined that the investment objectives of insurance companies among others are mainly future safety, liquidity and growth of their business. It is utmost true that these objectives which form the basis of investment portfolio structure of insurance companies are based on their liabilities, their operational focus and guidelines of the industry's stakeholders which differ from one economy to another. Heyman and Rowland (2006) stated in their study that the insurance companies' investment policy should has two basic aims which are: to treat insurance reserves with a sound fixed-income portfolio; and earning "abnormal returns" on their surplus in "a responsible and disciplined" manner. They submitted that net investment income ("NII") is the best standard for companies' performance, and that active efficient management and portfolio approaches that aim to produce a growing, but relatively stable NII would maximize market value. Insurance companies as institutional investors actively invest in government securities, loans and housing or real estate development, among others in the economy (Ojo, 2010). But, insurance companies generate investing funds especially from their life assurance business, because these funds are for long-term contract, they invest these large accrued premiums into the economy.

➢ *Underwriting Profit*

Typically, insurance companies arrive at underwriting profit by adding together the sum of underwriting premium and investment gains, deducts income taxes, loading expenses, administrative expenses, and genuine claim incurred. In summary put, underwriting profit is the total net premium earned less claims and expenses incurred by insurance companies. Before 1960s, a minimum 5% underwriting profit provision was allowed as appropriate for most lines of insurance companies, notwithstanding inadequate theoretical justification (D'Arcy & Garven, 1990). Insurance companies should see underwriting profit as the utmost concern within the limitation of regulations, in both real and threatened situation. It is possible for insurance companies to survive with zero underwriting profit performance, and still do better in their business operation than operating essentially as an investment trust companies (Hofflander & Drandell, 1969). Any insurance company operating in an unfavorable business environment with constraints on its business operating policies, the constraints are arrived at through experiences and intuitions.

➢ *Relationship between investment and underwriting profit*

The total profit for an insurance company is roughly the sum of underwriting incomes plus investment gains less taxable income (Robbin, 2004). According to Kerman (2012) the shareholders fund and the premiums earned, another factor that adds to the profitability of the company is investment income. The investment incomes of an insurance company include the sum of interest, dividends realized, and real estate income plus capital gains realized (Robbin, 2004). Kerman (2012) scholarly opined that the money earned from investment can be used for reinvestment, and adding more to the company's profit margin. Company can make an overall profit with healthy investment, even if underwriting business is at negative (Robbin, 2004). Although, a certain percentage of it which depends on how much the investors contributed is distributed among the shareholders (Kerman, 2012), and also, negative underwriting performance can also lower income taxes by offsetting otherwise taxable investment gain (Robbin, 2004).

Therefore, it is worth to know for the insurance companies that if the premiums realized to surplus ratio increases, then the investment gain on assets will likely to reduce because, the percentage of un-invested assets emanating from the insurance business operations, such as cash flows and agents' balances, will tend to increase, and with a higher premiums to surplus ratio the element of risk to the company's equity becomes more and this would have to be compensated for by a more conservative investment policies. However, the negative effect of investment income on premiums of insurance companies is expected, which is attributed to the fact that the insurance may adjust the underwriting margin as the basis of premiums according to the gain/loss of their investment to reach a target rate of return on equity (Wen and Born, 2005). An insurance company can peacefully and safely write larger risks that would invariably increase premium volume if the company underwriting results are more attractive, and favorable. According to Ismail (2013) a rise in profit/interest rates produces greater returns on company's investment assets, and this will increase the total returns of the company, provided the returns are not counteract by lower underwriting incomes.

According Kamau (2013) general insurance companies generate investing funds for two principle reasons; premiums paid in advance and time lag on payment of claims. The funds generating factors are separated from among lines of insurance business due to variation in claims payment lag time (Cummins & Nye, 1981). Under property insurance business, claims are settled relatively faster, thus loss reserves are comparatively slower, inherently settlement of claim delays under Liability lines of business, this permits the insurance company to hold and invest premium balances into the economy for longer period, for these lines of business, funds generating factors are higher compared to property lines of business (Kamau, 2013).

C. Research Objectives/ Research questions/ Research Hypotheses

➢ *Research Objectives*

- To determine the impact of Shareholder's fund on the income of insurance companies in Nigeria
- To determine the impact of total investment income on the income of insurance companies in Nigeria.
- To determine the impact of earning asset ratio on the income of insurance companies in Nigeria.
- To determine the impact of underwriting profit on the income of insurance companies in Nigeria.

➢ *Research questions*

- To what extent has Shareholder's fund affected the income of insurance companies in Nigeria?
- To what extent has total investment income affected the income of insurance companies in Nigeria?
- To what extent has earning asset ratio affected the income of insurance companies in Nigeria?
- To what extent has underwriting profit affected the income of insurance companies in Nigeria?

➢ *Research Hypotheses*

$\boldsymbol{H_1}$ Shareholder's fund has no significant impact on the income of insurance companies in Nigeria.

$\boldsymbol{H_2}$ Total investment income has no significant impact on the income of insurance companies in Nigeria.

$\boldsymbol{H_3}$ Earning asset ratio has no significant impact on the income of insurance companies in Nigeria.

$\boldsymbol{H_4}$ Underwriting profit has no significant impact on the income of insurance companies in Nigeria.

III. METHODOLOGY

Research design assists the researcher to develop a mental image of the structure for his study, and gathering of data and the analysis of the data (Asika, 2006). The study employed an *ex-post facto* research design in collating quantitative data for this study to establish the relationship between underwriting capacity and the income of insurance industry. The justification for adopting this type of research design is because, this

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research is undertaken after the events have happened, and the data are already in existence for further usage. The population for this study is the entire insurance companies in the Nigerian insurance industry; the reason for chosen registered insurance companies is to focus on a sample area of study that would stand to represent all quoted insurance companies in Nigeria. The choice of these companies is based on the fact that they fully satisfied the listing requirement of Nigerian Stock Exchange (NSE) and must have available data required to carry out the analysis of this study. Five insurance companies out these registered companies are randomly selected for this study. Therefore, financial statements of the companies randomly selected served the purpose for data gathering for the analysis of this study, with a scope of 6 years (2011 to 2015). This study adopted an econometric empirical analysis, using ordinary least squares (OLS) estimation technique.

Notation	Dependent Variable	Description	Independent Variables	Description
Y	Gross premium	Natural Log of Gross premium		
X1			Investment income	Natural log of total investment income
X2			Earning asset ratio	Premium earned/Total asset
X3			Underwriting profit	Natural log of underwriting profit
X4			Shareholder's fund	Natural log of Shareholder's fund

Table 1:- Descriptions of Dependent and Independent Variables

IV. ANALYSIS AND INTERPRETATION

A. Regression analysis

This study adopts expo-facto research design. Uses multiple regression analysis to examine the predictive ability independent variable (underwriting capacity proxy by: total investment income, shareholder's fund, underwriting profit, and earning asset ratio) on the dependent variable. Basically, the interest of researcher for applying regression analysis in this study is to predict the significant impact of each independent variable on the dependent variable. That is, the extent to which shareholder's fund, total investment income, earning asset ratio, and underwriting profit of insurance companies in Nigeria might contribute to the prediction of the companies' perceived gross premium.

The regression model is:

$Y = a_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + U$

Where:

Y= Gross premium (GP)

$\boldsymbol{a_o}$= Autonomous

$\boldsymbol{x_1}$= Shareholder's fund (SF)

$\boldsymbol{x_2}$= Underwriting profit (UP)

$\boldsymbol{x_3}$= Total Investment income (TI)

$\boldsymbol{x_4}$ = Earning asset ratio (ER)

	Shareholder's Fund	Underwriting Profit	Investment Income	Gross premium	Earning asset Ratio
2006	10.21	8.46	9.31	10.21	2.54
2007	10.41	9.26	9.22	10.11	2.12
2008	10.40	10.04	9.35	10.43	2.08
2009	10.39	9.94	9.70	10.32	2.98
2010	10.50	9.84	9.59	10.12	3.10
2011	10.50	9.87	9.10	10.28	2.76
2012	10.48	9.82	9.20	10.21	2.07
2013	10.21	8.46	9.31	10.21	2.54
2014	10.41	9.26	9.22	10.11	2.12
2015	10.40	10.04	9.35	10.43	2.08

Table 2:- Data used for the study analysis (Source: *Financial reports of the randomly selected insurance companies)*

➢ *Discussion of Result*

Model	Variables Entered	Variables Removed	Method
1	Earning asset ratio, Underwriting profit, Total Investment income, Shareholder's fund[b]	.	Enter

Table 3:- Variables Entered/Removed[a]

b. All requested variables entered.

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Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.997[a]	.994	.990	.01204

Table 4:- Model Summary

R = 0.997 or 99.7%
R^2=0.994 or 99.4%
Adjusted R^2= 0.990 or 99.0%

The coefficient determination ($\boldsymbol{R^2}$) of the four independent variables that was studied from table 1.6 above indicates how good is the fit of the regression line to the sample observation of the dependent and independent variables, from the study's output, $\boldsymbol{R^2}$ =0.994, or 99.4%. This implies that about 99.4% of the total variation in the dependent variable i.e. income of insurance companies in Nigeria has been explained by the set of independent variables i.e. total investment income, shareholder's fund, underwriting profit, and earning asset ratio. While other factors not studied in this research contributes 0.6 % of income of insurance companies in Nigeria. Therefore, further research should be carried out to investigate the other (0.6 %) factors influencing income of Nigeria insurance business.

Adjusted $\boldsymbol{R^2}$ of 0.990 is an indication that haven considered the likely error (Error term), that may influence the study's result; the independent variables (total investment income, shareholder's fund, underwriting profit, and earning asset ratio) still explained 99.4% of variation in dependent variables.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	32.422	1.000		32.438	.000
SF	-2.197	.088	-1.901	-24.971	.000
UP	.435	.016	2.219	27.983	.000
TI	-.394	.036	-.596	-10.851	.000
ER	.081	.015	.269	5.577	.003

Table 5:- Coefficients

In table 1.7 above, GP= 32.422-2.197SF+0.435UP-0.394TI+0.081ER

Where GP is Gross premium, SF is Shareholder's fund, UP is underwriting profit, TI is investment income, and ER is earning asset ratio. The equation above indicates that: One percent increases in SF will leads to 2.19 % decreases in gross premium of insurance companies if other factors that will contribute to the growth of their premium are not well kept and controlled. One percent increases in UP will leads to 0.43% increase in gross premium of insurance companies provided that other factors that will contribute to the growth of their gross premium are well controlled and monitored. One percent increases in TI will leads to 0.394% in gross premium of insurance companies if other factors that will contribute to the growth of their premium are not well kept and monitored effectively. One percent increases in ER will leads to 0.08% increase in gross premium of insurance companies provided that other factors that can contribute to the growth of their gross premium are well controlled and monitored effectively.

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.130	4	.033	224.513	.000[b]
	Residual	.001	5	.000		
	Total	.131	9			

Table 6:- ANOVA[a]

b. Predictors: (Constant), Earning asset ratio, Underwriting profit, Total Investment income, Shareholder's fund

In table 1.8 above, the F value is 224.513. It is significant because the significance level is = .000 which is less than P ≤ 0.05. This implies that the regression model is statistically significant, valid and fit. The valid regression model implies that independent variable is showing that it has a positive and significant relationship with dependent variable.

B. Testing of Research Hypotheses and Interpretation of Result

The hypotheses to be tested for the analysis of this study are as follow:

Hypothesis 1

Shareholder's fund has no significant impact on the income of insurance companies in Nigeria.

Table 1.7 shows a significant relationship between Shareholder's fund and gross premium of insurance companies under consideration, where (β= -2.197, p= < 0.05). Therefore, the study reject ***hypothesis 1,*** and established that Shareholder's fund has significant impact on the income of insurance companies in Nigeria.

Hypothesis 2

Total investment income has no significant impact on the income of insurance companies in Nigeria**.**

Table 1.7 above indicates that significant relationship exists between total investment income and gross premium of insurance companies under consideration, where (β= -.394, p= < 0.05). Therefore, the study ***rejects hypothesis 2,*** and established that total investment income has significant impact on the income of insurance companies in Nigeria.

Hypothesis 3

Earning asset ratio has no significant impact on the income of insurance companies in Nigeria.

Table 1.7 above shows that significant relationship exists between earning asset ratio and gross premium of insurance companies under consideration, where (β= 0.081, p= < 0.05). Therefore, the study ***rejects hypothesis 3,*** and established that earning asset ratio has significant impact on the income of insurance companies in Nigeria.

Hypothesis 4

Underwriting profit has no significant impact on the income of insurance companies in Nigeria.

Table 1.7 above indicates that significant relationship exists between underwriting profit and gross premium of insurance companies under consideration, where (β= 0.435, p= < 0.05). Therefore, the study ***rejects hypothesis 2,*** and established that underwriting profit has no significant impact on the income of insurance companies in Nigeria.

C. Decision Rule

Under Table.1.8 above, F-value of 224.513 as against F-critical (F-tabulated) at 0.5% level of significant, the degree of freedom = n-1, i.e. 5-1=9, F-critical (F-tabulated) =5.117.

Since decision rule posits that significant relationship exist between dependent and independent variable when F-calculated is greater than F-tabulated.

Given F-tabulated of 5.117 as against F-calculated of 224.513 there exists a significant relationship between the dependent variable (gross premium) and set of independent variables (underwriting profit, total investment income, earning asset ratio, and shareholder's fund).

V. CONCLUSION

The study determines the effect of underwriting capacity on the income of insurance companies in Nigeria. The study has empirically verified how underwriting capacity has affected the income of insurance business in Nigeria. The study revealed that: underwriting profit; and earning asset ratio have meaningful impacts the income of insurance companies in Nigeria, which implies that much efficient underwriting with good loading and adequate rating of insurance companies and effective management of their assets will guarantee more profitability for their industry. This is justified by the work of Kamau (2013) that insurance companies are making underwriting profit, as well as operating activities break-even, but long-term survival was anchored by their operational ability to generate investment returns, and that adequate pricing of risks underwritten changes to high underwriting profit providing impetus for innovations to sustain a trend of high underwriting profit. Therefore, the insurance companies in Nigeria. Again, insurance companies should intensify the management of their earning assets so as to take part in the growth of the economy, to ensure solvency, to charge low premium, to get a perfect look and examination on risk premia of various assets, in effect their expected future values, is paramount for asset allocation. Ren *et al.* (2008) show that underwriting costs and insolvency risks faced by insurance companies are expected to be higher in hard markets than soft markets, therefore the companies may take on more asset risks in soft markets and forgone them in hard markets.

Also, the study reveals that shareholders' fund and total investment income has negative impact on the income of income of insurance companies in Nigeria. This indicates that insurance companies should study the trend of the financial market before investing their premium. Also, insurance companies in Nigeria should call for recapitalization of the industry, so that they can compete globally with their counterpart abroad. The study therefore concluded that insurance companies in Nigeria should improve their underwriting techniques, and train their staff more in this area. And also, the industry should invest more into the economy, and on their asset management.

VI. RECOMMENDATIONS

Based on the findings of the study and the conclusions made, the study recommends that insurance companies should put in more effort in investment of their premium. Also, the study suggests that insurance companies should efficiently manage their asset properly to increase their earning capacity basically to boost their profitability. The insurance business regulator should collaborate with the stakeholders in insurance to ensure rapid response to investment of insurance companies in the economy, so that it will encourage the insuring public to have trust in insurance business in Nigeria. The Nigeria insurance companies should ensure collective effort in the area of corporate governance to ensure transparency within the industry, and increase adequate efficiency the area of their underwriting activities.

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