



# Motor Vehicle (Third Party) Insurance Regulation and Road Traffic Liability Risk Management in Nigeria

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## ABSTRACT

*Road accident fatalities were observed to be one of the major threats to socio-economic development of developing countries of the World including Nigeria. Motor Vehicle (Third Party) Insurance Law was promulgated for effective management of road traffic accident liability of the motorists. The study examined the impact of Motor Vehicle (Third Party) Insurance regulation compliance on road traffic liability risk management. The study adopted enforcement theory and compliance theory of regulation. The study population comprised the motorists of both private motors and commercial vehicles in south western states excluding Lagos State due to high level of compliance based on the concentration of Law enforcement agents. Relevant data on registered vehicles and insured vehicles in Nigeria were obtained from FRSC and NIA respectively. Structured questionnaire was administered on 464 motorists in Five (5) States of the South Western Nigeria where the state capitals were selected from each state under study. Descriptive statistics was used to analyse the socio-demographic section of the questionnaire while correlation and regression were used to analyse the research questions and research hypotheses respectively. The findings of the study revealed that Motor Vehicle (Third Party) Insurance regulation compliance determine the motorists liability risk protection and increase in Insurance Companies Gross Premium Income which determine the Insurance contribution to Economic Growth (GDP). The study also revealed that Enforcement of Motor Insurance regulation and Road accident compensation determine Motor Vehicle (Third Party) Insurance regulation compliance. The study however recommends that the Federal Government through appropriate Agencies should conceptualize a scheme that will guarantee motorists compliance with Motor Vehicle (Third Party) Insurance regulation.*

**Keywords:** Motor Insurance, Regulation Compliance, Third-party risk, Motorist liability

## Introduction

Road traffic liability risks are those risks attributed to activities of the motorists arising out of his/her negligence through the usage of his/her vehicles on the road causing injury to other road users including pedestrians or property damage to other vehicle(s) or other valuable properties along the road. Motor vehicle owners and/or drivers are exposed to these road risks by virtue of their driving on the road and of which if it occurs the magnitude could be outside the financial strength of the motorist. Industrial

revolution and technology brings about automobiles and there has been tremendous increase in the number of automobiles on the roads worldwide. Rapid urbanization in developed countries presents tremendous challenges to the transport system of expanding cities if they are to meet the access and mobility needs of their communities and provide them with a sustainable, safe and healthy environment.

There is thus a need for new techniques and technologies as well as legal and institutional mechanisms for safety design and control, accident prevention, contingency planning, damage mitigation, and provision of relief (Our Common Future, 1986). Mannis (2002), buttressed the report tagged chapter 40 agenda 21 of UNCSO which emphasized on socio-economic development as one of the variables of sustainable development and also that proportion of deaths per thousand in the previous year from transport relation causes i.e. indicator A32 and proportion of road fatalities who are pedestrians i.e. indicator A40 are both indicators of socio-economic challenges confronting sustainable development under module 3 (Transport) as specified in the report.

Subsequent growth in the number of motor vehicles and in road infrastructure has brought societal benefits but it has also led to societal cost which road traffic injury contributes significantly (Peden, 2004). As the growth of registered vehicles always outnumbers population growth and new roads are constructed, travel risks and traffic exposure grow at much faster rate with rising motorization and expanding road network (Sensarina, Balani & Rawat, 2011),

According to UN decade of action for road safety (2011-2020), road crashes are the number one killer of young people worldwide and meeting road safety goal could save up to five (5) million lives and prevent up to fifty (50) million serious injuries. According to the economic commission for Africa (ECA, 2011), more than 1.2 million people die every year worldwide by road crashes, 65% of deaths involved pedestrians of which children death account for 35 percent. Each year around fifty (50) million are injured and a lot disabled. In most countries, the economic cost imposed is huge and it takes between 1 to 3% of the GDP shares. This has confirmed that deaths and injuries have multiplier effects on socio-economic development of any countries in the world. Federal Road Safety Commission (FRSC) Annual Report (2013) revealed that 6450 Nigerians lost their lives on our roads in 2013 which includes 4552 men, 1398 women, 299 boys and 201 girls. The report also showed that 28480 men, 9198 women, 1520 boys and 859 girls, a total of 40057 people were injured in road accidents in 2013.

One of the major tools to ensure sustainable risk management is insurance which is a mechanism to transfer risk and provide compensation to any victim of accident leading to death or injury or perhaps damage to property insured. Insurance however satisfies part of the conditions for sustainable development which implies rational management of human, natural and economic resources that aims to satisfy the essential needs of humanity in the very long run since the rationale for conceptualizing insurance is to put the victim of an accident or incident back to the position he was prior the incident. Motor insurance has the potential to be a powerful tool in the promotion of personal responsibility. If communicated effectively, the link between the consequences of causing an accident and the economics of paying for those consequences will of itself gradually lead to improved driving (Gonulal, 2009). Part of the five guiding principles of sustainable development which are ensuring a strong, healthy and just society and achieving a sustainable economy according to 'UK Sustainable Development Strategy (Securing the future) falls within the roles and contributions of insurance to sustainable development.

It was however specified in chapter 3 of the China Agenda 21, the white paper on China's population, environment and development in the 21<sup>st</sup> century that 'Establishing laws relating to sustainable development is a claim for formalizing and codifying strategies and policies for sustainable development. It however stressed further that enforcement of that legislation will be critical for putting sustainable development strategies into action and amongst the various strategies designed to achieve sustainable development are the establishment of legislation and the enforcement of associated laws and regulations in order to play important roles. Legislations is one of the sources of English law that was put in place to govern, regulate and controls the behavior of people in the country or state in which we live.

Third party motor insurance was made compulsory by the enabling ordinance for the purpose of protection of lives and properties for sustainability due to the fact that it was evidenced that many

motorists if involved in an accident caused death or injury to another person or damage another person's property, they found it difficult to take care of the cost of treatment in the hospital because of their economic constraint. The victims of accident that died in the process have their family left unattended to and thereby exposed them to economic hardship at the demise of the breadwinner. The basic reason for the enactment of the Act is for the preservation of lives and property so that any accident victim will not be exposed to unnecessary suffering due to lack of care as a result of absence of fund for medical treatment in the hospital. The accident victim that loses his/her life as a result will also be catered for by making compensation available to the family. In addition any third party that suffered property damage will not be exposed to hardship so that he/she will be compensated to quickly get the property either repaired or replaced. The economic reason for making the insurance compulsory is that the financial hardship being faced by many motorist due to economic constraint will be passed on to the insurance provider having paid a fee (premium) for the motor insurance purchased because it was possible that in most cases that the negligent party lack financial capacity at the time of the accident. The insurance company that was the custodian of various motorists' fund will then make the fund available in that situation.

The problem arise when it occur that an accident happen and the victim need to be hospitalized and it was found out that the negligent motorist and the accident victim do not have the money to take care of the situations and that many of them do not have the maximum insurance as prescribed by Third Party (Motor Insurance) Act (1945) which states that "No motorist should be allowed to drive or permit to drive on the public road without the minimum third party insurance and public road in this regard is the road in which public have access". In the same vain, several individual personality or public properties damaged or destroyed in one accident or the other and when later found out that the negligent motorist involved in the accident did not have the insurance as prescribed by the enabling law and he lack financial capacity to pay for the loss suffered by the owner of the property, this therefore creates hardship and burden to the property owner and at the same time becomes a waste to the economy. It was however observed that in the course of working on some claims involving road accident, some motorists that claimed that they have the prescribed insurance, it was normally discovered that many of these insurances does not emanate from genuine and registered insurance office and the road accident victims at this level are exposed to ridicule.

Meanwhile, research conducted by the Planning and Advisory Unit of the Federal Road Safety Commission (FRSC) in 2003 gave the compliance rate of the notable countries of the World on the compulsory third party motor insurance and the compliance rate for Nigeria was not ascertained and still not established till date which is the major reason for this research work. This research work therefore critically examined Motor Vehicle (Third Party Insurance) Act (1945) as amended by Insurance Act (2003) and road traffic liability risk management in Nigeria. The research work span through the level of compliance, enforcement, policy benefits (provision) and economic benefits.

## **Literature Review**

### **Third Party Motor Insurance in Nigeria: *Motor Vehicle (Third Party Insurance) Act***

According to AIDA (2010), Compulsory Motor Third Party Liability insurance was first implemented in 1908, at dawn of motorizations, in Austrian-Hungarian Empire (Law 9 August 1908 n.162) and, after the first world war, in Denmark in 1918, in Finland in 1925, in Norway in 1926, in Massachusetts in 1927, in Austrian Republic and in Sweden in 1929, in the United Kingdom in 1930. In the Thirties it was implemented in Switzerland, Liechtenstein, Luxemburg, former Czechoslovakia, the Principality of Monaco, Latvia, Germany, in France for public transport as in Belgium in 1947.

In the other continents, the first Countries to implement compulsory regimes were for bodily injuries and some Commonwealth Countries: Burma and New Zealand in 1934, the Australian States of Queensland and New South Wales in 1937, South Africa in 1942, India in 1946, Sierra Leone in 1949, Hong Kong, Sri Lanka and Uganda in 1951, Victoria and Western Australia in 1954, Tasmania, Kenya, Nigeria in 1955, year that has seen the enforcement of a compulsory insurance also in Japan (AIDA, 2010). Since 1949 the United Nations Committee for transport by land issued a recommendation (the n.5 of 25 January) to bring up an international insurance certificate for journey by car abroad. In every

country a “bureau” with the participation of insurance companies was constituted and the certificate (the green card in Western Europe, blue card in Eastern Europe, of other colours in other continents) became to put into circulation in 1953.

The first statute affecting insurance practice in Nigeria according to Akintayo (2006) could be said to be the Motor Vehicles (Third Party Insurance) Ordinance of 1945. The legislation regulating insurance of motor vehicle was passed in 1945 but actually became effective in 1950. It was the first piece of legislation in Nigeria compelling individuals and corporate bodies to effect any type of insurance as this was modeled after the Road Traffic Act of 1930 in Britain and was only amended by Insurance Act 2003. The Act made it compulsory for every motor vehicle owner to have in place either an insurance policy or security deposit for injury or death to third parties caused by his negligence or that of any other person driving under his authority. The Act (Insurance Act, 2003), is an Act to make provision against third party risk arising out of the use of motor vehicles and the important sections are:

The Act also specified that motorist should not allow any user of his/her vehicle to permit to use the vehicle unless there is in force by such user the minimum insurance cover or security in respect of third party risk. It was however stipulated in the Act (Insurance Act, 2003), that any motorist that contravenes the law shall be liable to a fine or imprisonment or both or face disqualification for holding or obtaining a driving license.

### **Road Traffic Liability Risk Management**

Industrial revolution and technology brings about automobiles and there has been tremendous increase in the number of automobiles on the roads worldwide. Rapid urbanization in development countries presents tremendous challenges to the transport system of expanding cities if they are to meet the access and mobility needs of their communities and provide them with a sustainable, safe and healthy environment. As the growth of registered vehicles always outnumbers population growth and new roads are constructed, travel risks and traffic exposure grow at much faster rate with rising motorization and expanding road network (Sensarina, Balani & Rawat, 2011),

According to UN decade of action for road safety (2011-2020), road crashes are the number one killer of young people worldwide and meeting road safety goal could save up to five (5) million lives and prevent up to fifty (50) million serious injuries. According to the economic commission for Africa (ECA, 2011), more than 1.2 million people die every year worldwide by road crashes, 65% of deaths involve pedestrians of which children death account for 35 percent. Each year around fifty (50) million are injured and a lot disabled. In most countries, the economic cost imposed is huge and it takes between 1 to 3% of the GDP shares. This has confirmed that deaths and injuries have multiplier effects on socio-economic development of any countries in the world. Federal Road Safety Commission (FRSC) Annual Report (2013) revealed that 6450 Nigerians lost their lives on our roads in 2013 which includes 4552 men, 1398 women, 299 boys and 201 girls. The report also showed that 28480 men, 9198 women, 1520 boys and 859 girls, a total of 40057 people were injured in road accidents in 2013.

One of the major characteristics of law and legal system is its effectiveness which is the constraint of majority of our law/ regulations in Nigeria. The general test of the effectiveness of a law (a particular provision of a legal system) is therefore to see how far it realizes its objectives i.e. fulfills its purpose (Allot, 1981). This study therefore evaluate the effectiveness of Third Party (motor vehicle) Insurance Act (1945) to ascertain to what extent has it fulfill its purpose in terms of compensating the road accident victims as a result of accident caused by negligent motorists on the public road by taking care of their liability having purchased the prescribed insurance. Evaluating regulation effectiveness entails an enquiry after regulation has been put in place, into how it has changed behavior as well as ultimately its impacts on conditions in the world. To ask how well it is working is really to ask about regulations impacts, positive or negative. What difference does regulation make in terms of the problems it purportedly seeks to solve?

**Motorists Risk Protection:** The basic principle of insurance is to provide protection for a person or organization that procured insurance coverage. The insurance policy procured supposed to offer

protection against the risk or uncertainty insured against. Mossin (1968); Schlesinger and Doherty (1985); Mayers and Clifford (1983); Manning and Marquis (1996) posited that the demand for insurance is by risk averse consumers who use insurance to avoid, eliminate, hedge against, kill, manage, shed, protect against or bear the risk of loss. The essence of insurance among other things is to protect against the risk of loss, destruction/damage or liability incurred by the person that procured insurance coverage. Third party motor insurance in this situation if procured offer protection to the insured against liability incurred due to accident resulting in death or disability/injury or property damage to third party in the course of using his/her vehicle.

**Providing Compensation (Indemnification):** The objective of enacting Third Party (Motor Vehicle) Insurance Act (1945) is to proffer solution to the road accident victims that may be the liability of motorist who may not be able to meet up with the expenses incurred through the accident. The law TP (MV) Act (1945) imposes third party insurance on the entire motorist and the objective of the insurance is to pay compensation for liability of the motorist for death or injury to road accident victims after payment of the required premium or damage to third party property.

**Insurance Companies' Growth and Premium Income:** Buttressed further that what difference the regulation makes in terms of other conditions that matters to the decision maker such as cost, technological innovation or economic growth. The premium paid by motorists on third party insurance is a plus to insurance growth and at the same time to economic growth at large. If per adventure all the vehicles in Nigeria procured the third party insurance as prescribed by law, the premium fund would have contributed immensely to insurance companies' growth and increase the total contribution of insurance to GDP meaningfully.

**Level of Enforcement:** Enforcement has to do with how well the officials have been able to administer the regulation or the regulatory policy. Even when a person is aware of a law, he cannot be compelled to observe it. This is so even if the form of the law is mandatory and even it sanctions for non-compliance are built into the law, a law cannot compel action Allott (1981). Sometimes the term "evaluation" is used to describe a study focused on the activity or the delivery of a treatment. How well have officials implemented a regulation or regulatory policy for example, studies might investigate how thoroughly a regulation has been enforced, counting the number of 2012 inspections and enforcement actions or the size of penalties imposed.

## **Theoretical Review**

### **Theory of Enforcement Behaviour**

From an economic perspective, regulators aim to "maximise welfare" (*i.e.* they try to minimise the costs to society) when enforcing a regulation and therefore aim to balance administrative and compliance costs with the environmental benefits from reduced pollution. In practice, however, enforcers are often subject to political pressures, or they may just follow different strategies, such as trying to maximise compliance with environmental legislation. Looking at the enforcement issue from the regulator's aspect one can identify and agreed that there is enforcement policy or framework in place since section 68 of the Insurance Act (2003) specified and also makes it a criminal offence not to have a motor vehicle third party insurance policy and the penalty for non-compliance is imprisonment for one year or a fine of ₦250,000 or both. Much of the normative economics literature on monitoring and enforcement assumes that the regulator can be described as a "benevolent welfare maximiser" in the sense that his objective is to minimise the overall costs for society. However, the established political economy and public choice literature considers that this assumption may need to be adjusted to understand empirically found enforcement behaviour and actual political outcomes. This assumption considers political and administrative actors as individuals making rational, self-interested decisions, and that the influence of interest groups is allowed.

*Compliance Theory of Regulation:* Etzioni (1975,1977) developed an innovative approach to the structure of organisations that he calls compliance theory. He classified organisations by the type of power they use to direct the behaviour of their members and the types of involvement of the participants. Compliance theory is an approach to organization structure that integrates several ideas from the classical and participatory management models. According to compliance theory, organisations can be classified according to the type of power they use to direct the behavior of their members and type of involvement of the participants. In most organisations, type of power and involvement are related in three predictable combinations; coercive- alienative, utilitarian- calculative and normative- moral. Of course, a few organisations combine two or three types for instance some teachers' unions use both utilitarian and normative power to gain compliance from their members. Nevertheless, school officials who attempt to use types of power that are not appropriate for the environment can reduce organizational effectiveness. This implies that the system of enforcing compliance of regulation depends heavily on the nature of our society (Nigeria) and this determines the method of enforcing a particular regulation. In the context of third party Motor Vehicle) insurance regulation, the law has been promulgated since 1945 and records have shown that there was no compliance because virtually less than 10% of the motorists drives with the prescribed motor insurance. However it was also specified in section 68 of insurance Act (2003) that it is a criminal offence not to have a motor vehicle third party insurance policy and the penalty for non – compliance is imprisonment for one year or a fine of N250,000 or both. Since the period of this enactment, there was no serious sign of compliance which has not make the law to be effective.

This means therefore that the regulatory agent (NICOM) need to make sure that they put appropriate measure in place to ascertain that the motorists complies with the regulation so that the law will achieve the purpose for which it was promulgated. However, the present study is anchored on the theories of enforcement of regulation and compliance of regulation. Theory of enforcement behavior explains that the essence of enforcement is to balance the regulation administration through sanction or penalty. Compliance theory of regulation also explains that organization or society is classified according to the type of power they use to direct the behavior of their members. It implies that the system of enforcing compliance of regulation depends heavily on the nature of our society.

### **Empirical Review**

It is well known that road traffic accidents have already become one of the increasing public health problems more importantly in the developing countries of which Nigeria is no exception. (Gonulal 2009) in his study revealed that the first major report on road injury prevention jointly issued by the World Health Organisation (WHO) and World Bank reported that road traffic injuries are a huge public health and development problem killing almost 1.2 million people a year and injuring or disabling between 20 million and 50 million or more.

In Nigeria according to Road Accident Statistics (FRSC Report, 2013) with total road length of 194 thousand kilometers and total vehicles population of N10 million (as cited by FRSC vehicle inspection and certification head) and this is 2016, the study conducted by FRSC revealed that 6450 Nigerians lost their lives on our road in 2013 which includes 4552 men, 1398 women, 299 boys and 201 girls. More data from the report content shows that between 2009 and 2013, 30425 people were killed in road accidents in Nigeria (This about the size of a European city e.g. Hungary). Also 28480 men, 9198 women, 1520 boys and 859 girls, a total of 40057 people were injured in road accidents in 2013. Looking through the years, the report shows that 183531 people were injured in road accidents between 2009 and 2013and the extent of their injury was unknown. This has shown that road traffic accidents to greater extent is affecting socio-economic development of Nigeria which invariably is hindering sustainable development in our country. This indicates that the third party motor insurance law as contained in Motor Insurance Act, 1945 and Insurance Act, 2003 (Section 68) are the right things in the right direction.

A study conducted by Zimolo (2010), the chairman Motor Insurance Working Group, Italian Section of AIDA in “Normative and Management Characteristics of motor third party liability insurance in the World revealed that a close scrutiny to all data collected shows that there continues to be a high

percentage of uninsured vehicles even in those countries where insurance is compulsory. The highest percentage of uninsured vehicles was recorded in Indonesia where as many as 78% vehicles appeared to be uninsured, Brazil 70%. Though developing nations report the highest percentage but there are some significant exception even though in Europe itself, namely in Cyprus with uninsured vehicles at 10%, in Malta (22%), in Latvia (between 45-55%). In the USA 14% of drivers is considered uninsured with peaks of 32% in some states like for instance in Colorado. There is need to evaluate the effectiveness of third party (motor vehicle insurance Act to establish or ascertain the level of compliance in Nigeria and the level of performance in terms of solving the problem of road traffic accident by providing financial compensation.

Chidoka (2011) in his study evaluated the effectiveness of third party insurance regulation by establishing the compliance level of some notable countries of the World, with British Columbia having 98-99% compliance level, Sweden 98%, Costa Rica 84%, United Kingdom 90-95%, Ghana 70%, Zambia 15%, Pakistan 3-5%. Nigeria compliance level was not known as at the time of Chidoka's study and no research study was found to have established the effectiveness of the third party insurance act in terms of compliance level, performance and administration. The study worked on this to know the compliance level, performance of the policy, level of enforcement and the economic impact of the regulatory policy. Jacobzone, (2007); OECD, (2009) measures the extent to which a jurisdiction has adopted various elements of regulatory policy or other management best practices. The studies investigated how thoroughly a regulation has been enforced, counting the number of inspections and enforcement actions or the size of penalties imposed. This studies only evaluated how well regulation or regulatory policies are administered, judged against ideal administrative goal and not whether they actually work in terms of changing behavior or outcome performance which is the main objectives of this research. In a nutshell, there are relatively few or no studies that have sought to empirically establish the effectiveness of Third Party Motor Insurance Act (1945) on road traffic liability risk management in Nigeria. Although the work of Zimolo (2010) relates to this study but only studied the compliance level of some countries of the world but Nigeria was not included and his study did not evaluate the effectiveness of the regulatory policy i.e. how far does the third party insurance has proffered solution to road traffic accident fatalities as well as the effectiveness of enforcement of third party insurance law including the contribution of third party insurance to economic growth in Nigeria which are the major task of this research work.

Additionally the work of Coglianesse (2012) in OECD paper relates to this study but it was basically an empirical literature on the bases through which regulation or regulatory policy can be evaluated and the research design that can be adopted for measuring regulation or regulatory policy effectiveness. This study improves on the previous studies by working on secondary data collected from the Nigeria Insurers Association (NIA) on the total number of the vehicles insured over five (5) years period and relate it with the data collected from Federal Road Safety Commission (FRSC) on registered vehicles per year between 2011 and 2015 for the purpose of compliance assessment and the stationary of data to be used by the study.

## **Methodology**

The study adopted a descriptive research design and based it on ex-ante and ex-post research approach (Nwaiwu, 2017). The population of the study was the motorists with registered vehicles in the Federal Republic of Nigeria while the sample of the study comprised the selected Five Hundred (500) motorists selected from five states in the South-western region excluding Lagos State. The sample selected was proportionate to the number of registered motorists/license holders in each of the states under study which was carried out across the categories of vehicles in circulation through multi-stage sampling technique. The reason for the exclusion of Lagos State from the study was due to differing regulations on transportation peculiar to the state alone leading to high level of compliance couple with prevalence of substantial law enforcement agencies in Lagos State.

The secondary data was collected from both the Federal Road Safety Commission (FRSC) and Nigeria Insurance Association (NIA), the data was on the number of vehicles in circulation and number of vehicles duly insured with minimum insurance cover in line with the regulation between years 2011-

2019. The secondary data collected was analysed through simple percentage to ascertain the level of compliance. Questionnaire were distributed among the 500 respondents for the study for primary data while 464 were return and administered. The study utilized correlation analysis to determine the relationship between the independent variable and set of dependent variables while the regression analysis was used to evaluate the extent to which independent variable affect the set of dependent variables.

**Model Specification**

$$Y = a_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + e$$

Where; Y =Road Traffic Liability Risk Management

X<sub>1</sub> = Compliance, X<sub>2</sub> = Motorist Risk Protection, X<sub>3</sub> = Road Accident Compensation,

X<sub>4</sub> = Insurance Gross Premium Income, X<sub>5</sub> = Enforcement, e = Level of Significant

The relationship between the dependent and independent variable in this study was investigated using the Pearson product-moment correlation coefficient at \0.01 levels of significance. This was carried out with the use of Statistical package for Social Scientist (SPSS, version 20)

**Table 1 showing the correlation analysis of the study Variables**

		LEVEL OF COMPLIANCE	ROAD ACCIDENTM AGT	PROMPT CLAIM SETTLEMENT	INSURANCE GROSSPREM	ENFORC EMENT
LEVEL OF COMPLIANCE	Pearson Correlation	1	.441**	.352**	.510**	.385**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	241	241	241	241	241
MOTORISTPROTECTION	Pearson Correlation	.441**	1	.400**	.470**	.258**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	241	241	241	241	241
ROAD ACCIDENTCOMPENSATION	Pearson Correlation	.352**	.400**	1	.495**	.425**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	241	241	241	241	241
INSURANCEGROSSPREM	Pearson Correlation	.510**	.470**	.495**	1	.575**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	241	241	241	241	241
ENFORCEMENT	Pearson Correlation	.385**	.258**	.425**	.575**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	241	241	241	241	241

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**(Source: field survey, 2021)**

Table 1 above shows a strong positive relationship between level of compliance and motorist risk protection (r = 0. 441\*\*, n = 241, p=0.00), road accident compensation(r = 0. 352\*\*, n = 241, p = 0.00), insurance gross premium income (r = 0. 510\*\*, n = 241, p = 0.000), and level of enforcement (r = 0. 385\*\*, n = 241, p=0.00). What these implies is that significant relationship exist since their p-values is lesser than 0.01 (level of significance).



**Regression Analysis**

By applying multiple-regression analysis, the relative contribution of each independent variable in explaining variance in the criterion variable can be well determined. Therefore, each analysis performed in this study will be regarded as a model, with a view to establish the model that best predicts the criterion variable (dependent).

The **model 1** for the regression analysis is to investigate the relationship between the level of compliance and motorist risk protection is shown below:

$Y = a_0 + \beta_1 X_1 + U$  Where: Y=MOTORIST RISK PROTECTION,  $a_0$ = Autonomous,  $X_1$ = LEVELOF COMPLIANCE

**Table 2.1 showing the analysis Model Summary of the study**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.441 <sup>a</sup>	.194	.191	2.82597	.194	57.561	1	239	.000	1.761

- a. Predictors: (Constant), LEVELOF COMPLIANCE
- b. Dependent Variable: MOTORISTPROTECTION

**(Source: field survey, 2021)**

The coefficient determination ( $R^2$ ) shows how good is the fit of the regression line to the sample observation of the dependent and independent variables, from the regression analysis result,  $R^2 = 0.194$ , or 19.4%. This implies that about 19.4% of the total variation in the dependent variable i.e. MOTORISTPROTECTION is being explained by the independent variable i.e. LEVELOF COMPLIANCE. While the remaining 80.6% is due to error term or factors not capture within the model.

Adjusted  $R^2$  of 0.191 is an indication that haven considered the likely error (Error term), that may influence the study’s result; the independent variable (LEVELOF COMPLIANCE) still explained 19.4% of variation in dependent variable.

**Table 2.2 showing the analysis Coefficient of the Study**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	8.386	1.244		6.742	.000	1.000	1.000
	LEVEL OF COMPLIANCE	.594	.078	.441	7.587	.000		

- a. Dependent Variable: MOTORISTPROTECTION
- (Source: field survey, 2021)**

From the regression result, the estimated model is  $MOTORISTPROTECTION = 8.386 + 0.594x_1 + U$ . which implies that one percent increase in efficient use of LEVELOF COMPLIANCE increases 59.4 percent in MOTORISTPROTECTION level if other variables are kept controlled within the operation.

**Table 2.3 showing the analysis ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	459.690	1	459.690	57.561	.000 <sup>b</sup>
	Residual	1908.684	239	7.986		
	Total	2368.373	240			

a. Dependent Variable: MOTORISTPROTECTION

b. Predictors: (Constant), LEVELOFCOMPLIANCE

**(Source: field survey, 2021)**

The F value is 57.561. It is significant because the significance level is = .000 which is less than  $P \leq 0.01$ . This implies that the regression model is statistically significant, valid and fit. The valid regression model implies that independent variable is explaining that there is a positive and significant relationship with dependent variable.

The **model 2** for the regression analysis is to investigate the relationship that exists in the second and third objectives; this is shown below:

$Y = a_0 + \beta_1 X_1 + U$  Where: Y= LEVELOFCOMPLIANCE,  $a_0$ = Autonomous

$X_1$ = ROADACCIDENTCOMPENSA,  $X_2$ = ENFORCEMENT,

**Table 2.4 showing the analysis Model Summary of the study**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df 1	df2	Sig. F Change	
1	.438 <sup>a</sup>	.192	.185	2.10269	.192	28.205	2	238	.000	1.604

a. Predictors: (Constant), ENFORCEMENT, ROADACCIDENTCOMPENSA

b. Dependent Variable: LEVELOFCOMPLIANCE

**(Source: field survey, 2021)**

The coefficient determination ( $R^2$ ) shows how good is the fit of the regression line to the sample observation of the dependent and independent variables, from the regression analysis result,  $R^2 = 0.192$ , or 19.2%. This implies that about 19.2% of the total variation in the dependent variable i.e. LEVELOFCOMPLIANCE is being explained by set of independent variables i.e. ENFORCEMENT, and ROADACCIDENTCOMPENSA. While the remaining 80.8% is due to error term or factors not capture within the model.

Adjusted  $R^2$  of 0.191 is an indication that haven considered the likely error (Error term), that may influence the study's result; the independent variable (ENFORCEMENT, and ROAD ACCIDENT COMPENSA) still explained 19.2% of variation in dependent variable.

**Table 2.5 showing the analysis Coefficients of the study**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	9.305	.870	.230	10.699	.000	.820	1.220
ROAD ACCIDENT COMPENSA	.146	.041	.287	3.576	.000	.820	1.220
ENFORCEMENT	.218	.049		4.461			

a. Dependent Variable: LEVELOFCOMPLIANCE

**(Source: field survey, 2021)**

From the regression result, the estimated model is  $LEVELOFCOMPLIANCE = 9.305 + 0.146x_1 + 0.218x_2 + U$ . which implies that:

One percent increases in ROAD ACCIDENT COMPENSA increases 14.6 percent in LEVEL OF COMPLIANCE if other variables are kept controlled within the economy such as rate of premium, policy purchase process, income of the citizens, corruption rate, and effectiveness of the government law enforcing agencies.

One percent increases in ENFORCEMENT increases 21.8 percent in LEVEL OF COMPLIANCE if other variables are kept controlled within the economy such corruption of law enforcing agencies, partiality on the side of the law enforcing agencies.

**Table 2.6 showing the analysis ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	249.401	2	124.701	28.205	.000 <sup>b</sup>
	Residual	1052.267	238	4.421		
	Total	1301.668	240			

a. Dependent Variable: LEVELOFCOMPLIANCE

b. Predictors: (Constant), ENFORCEMENT, ROADACCIDENTCOMPENSA

**(Source: field survey, 2021)**

The F value is 28.205. It is significant because the significance level is = 0.000 which is less than  $P \leq 0.01$ . This implies that the regression model is statistically significant, valid and fit. The valid regression model implies that independent variable is explaining that there is a positive and significant relationship with dependent variable.

The **model 3** for the regression analysis is to investigate the significant impact of level of compliance to third party policy insurance on the annual gross premium income of insurance industry; this is shown below:

$Y = a_0 + \beta_1 X_1 + U$ , Where: Y = LEVEL OF COMPLIANCE,  $a_0$  = Autonomous,  $X_1$  = INSURANCE GROSSPREM

**Table 2.7 showing the analysis Model Summary of the study**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.510 <sup>a</sup>	.260	.257	2.32574	.260	83.972	1	239	.000	1.673

a. Predictors: (Constant), LEVEL OF COMPLIANCE

b. Dependent Variable: INSURANCE GROSS PREM

**(Source: field survey, 2021)**

The coefficient determination ( $R^2$ ) shows how good is the fit of the regression line to the sample observation of the dependent and independent variables, from the regression analysis result,  $R^2 = 0.260$ , or 26.0%. This implies that about 26.0% of the total variation in the dependent variable i.e. INSURANCE GROSSPREM is being explained by independent variable i.e. LEVEL OF COMPLIANCE. While the remaining 74.0% is due to error term or factors not capture within the model. Adjusted  $R^2$  of 0.257 is an indication that haven considered the likely error (Error term), that may influence the study's result; the independent variable (LEVEL OF COMPLIANCE) still explained 26.0% of variation in dependent variable.

**Table 2.8 showing the analysis Coefficients of the study**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	9.147	1.024		8.936	.000		
	LEVEL OF COMPLIANCE	.591	.064	.510	9.164	.000	1.000	1.000

a. Dependent Variable: INSURANCEGROSSPREM

**(Source: field survey, 2021)**

From the regression result, the estimated model is  $\text{LEVEL OF COMPLIANCE} = 9.147 + 0.591x_1 + U$ . which implies that:

One percent increases in LEVEL OF COMPLIANCE increases 59.1 percent in if other variables are kept controlled within the economy such as rate of premium, policy holders, income of the citizens, corruption rate, and effectiveness of the government law enforcing agencies.

**Table 2.9 showing the analysis ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	454.212	1	454.212	83.972	.000 <sup>b</sup>
	Residual	1292.767	239	5.409		
	Total	1746.979	240			

a. Dependent Variable: INSURANCE GROSSPREM

b. Predictors: (Constant), LEVEL OF COMPLIANCE

**(Source: field survey, 2021)**

The F value is 83.792. It is significant because the significance level is = .000 which is less than  $P \leq 0.01$ . This implies that the regression model is statistically significant, valid and fit. The valid regression model implies that independent variable is explaining that there is a positive and significant relationship with dependent variable.

### **Summary and Conclusion of the Study**

Motor Vehicle (Third Party) Insurance has become inevitable in view of the incessant road accidents leading to deaths, disability and property damages of innocent victims by the road users. From the findings, the study reveals that positive relationship exist between Compliance to Third party insurance and motorist risk protection which indicates that in order to ensure motorist protection on Nigeria roads, compliance to effective third party motor insurance must be ascertained. Also Findings of the study shows that positive relationship exist between compliance to third party motor insurance and road accident compensation which implies that to ensure compensation for road accident victims, there must be compliance to effective procurement of third party insurance.

Another implication of the findings of the study is that there is positive relationship between third party motor insurance compliance and enforcement of the law on the motorists. This indicates that government should ensure enforcement of the law on third party motor insurance to guarantee compliance by the motorists. Finally, the findings of the study shows a positive relationship between compliance to third party motor insurance and insurers gross premium income which implies that third party insurance compliance generates substantial income for the insurance industry which will eventually reflects on the country's GDP. The study therefore recommends that the Federal Government through appropriate Agencies should conceptualize a scheme that will guarantee motorists compliance with Motor Vehicle (Third Party) Insurance regulation. It was also recommended that the Nigeria Insurance Industry should develop a scheme or bureau for the administration and management of road traffic accidents for quick settlement and compensation of victims. Time frame for payment of road accident victims should be specified.

### **References**

- Akintayo, L.A (2006). General Insurance Underwriting. Lagos, CSS Bookshop HG8102, N6A44x
- Brundtland, G.H. (1987). World Commission on Environment and Development (WCED). General Assembly 42/87, United Nations.
- Chidoka, O. (2011). Transportation and Insurance Policy in Nigeria; Seminar held at University of Lagos, Akoka, Lagos State.
- China's Agenda 21: White Paper on China's Population, Environment and Development in the 21<sup>st</sup> Century, China.
- Coglianesi, C (2012). Measuring regulatory Performance: Evaluating the Impact of Regulation and Regulatory Policy.
- ECA (2011). Economic Course for Africa. Africa Plans to Cut Road Crashes in a Decade. Addis Ababa, Ethiopia. New Business Ethiopia.com
- Gonulal, S. (2009) Motor Third Party Liability Insurance. Prime Series on Insurance Issue. World Bank. [www.worldbank.org/nbfi](http://www.worldbank.org/nbfi)
- Jacobzone, S Choi, C and Miguet, C (2007). "Indicators of regulatory Management Systems" OECD Working Papers on Public Governance, No.4, OECD Publishing.
- Manning, W. G and Marquis, M. S (1996) health Insurance: The Tradeoff Between Risk Pooling and Moral hazard. Journal of Health Economics, Vol.15, pp 609 – 640
- Mannis, A. (2002). Indicators of Sustainable Development. University of Ulster. Copyright 1995-2002 by ESS Environmental Software and Services. GmbH AUSTRIA
- Mayers, D. and Clifford W.S. (1983). The Interdependence of Individual Decision and the Demand for Insurance. Journal of Political Economy, Vol. 91, pp 304 – 311.
- Gursten, S.M (2014). The Auto Insurance Consumers' Guide to Michigan 'No Fault Reform
- OECD, (2009) "Indicators of Regulatory Measurement Systems" (Regulatory Policy Committee) at <http://www.oecd.org/dataoecd/44/37/44294427.pdf>.
- Peden, M (2004) World Report on Road Traffic during Prevention. Geneva, World Health Organization.
- Zimolo, A (2010). Motor Insurance Working Group: Normative and Management Characteristics of Motor Third Party Liability Insurance in the World. XIII World Congress (May) 17 -20. <http://www.iiste.org/journal>

