16 | INSURANCE: THE KEY PLAYER OF MANUFACTURING COMPANIES PERFORMANCE

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ABSTRACT

The overall objective of this study is to investigate insurance as the key player of manufacturing companies' performance. To achieve this objective, data was gathered about risk factors within the manufacturing premises; customers risk exposure, risk transfer from manufacturing companies, risk transfer to insurance companies, growth of the manufacturing company, and adequate insurance cover. A total of 200 respondents were selected for the purpose of the study using stratified sampling method. The Pearson Product Moment Correlation and Regression Analysis were used to test the hypothesis. Both qualitative and quantitative analysis approaches were used in data analysis, thus reflecting the mixed model research design approach followed in the analysis. It is recommended that to be successful in the long-term, manufacturing companies need to think beyond what is affecting them today to what is going to happen tomorrow. This is not just about addressing changes, but also taking into account alterations in social, environmental and governance issues which can be handled by insurance.

Keywords: insurance, manufacturing companies, risk transfer, insurance cover

1.0   INTRODUCTION
1.1 Background

The manufacturing sector comprises of activities which includes the mechanical, physical, or chemical transformation of materials, substances, or components into new products. Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. The success of the manufacturing industry depends on its ability to consistently produce a high volume of goods on tight margins, no matter what happens in the outside world. Unfortunately, a lot of what affects its production activities is uncertain and beyond man's control. Every business wants to believe that the worst will never happen, but there are inherent risks associated with manufacturing that needs to be examined. The possibility that products will be unsafe for end users is real. There may be a malfunction in the production process that is not realized until someone is harmed. While companies are proactive about preventing this from happen, it is still a risk. Equipment used in manufacturing can pose a danger to employees when a malfunction occurs, failure to follow safety procedures could also cause injury or death, and companies may be held liable if there is a belief that safety training efforts prior to an incident were not adequate.

Insurance allows anyone harmed by these products to be compensated for medical expenses and other losses without hurting the business. Insurance is defined as the act of pooling funds from many insured entities in order to pay for relatively uncommon but severely devastating losses which can occur to these entities (Omoke, 2012). According to Oke (2012) insurance is design to protect the financial well-being of an individual, companies or other entity in the case of unexpected loss. Insurance is a risk transfer mechanism where an individual or commercial enterprise shifts some of its uncertainty embedded in everyday life, to the shoulders of another, in return for a certain amount of money called premium. It is essentially an arrangement by which a party, called the 'insurer', promises to pay another party called the "Insured", a sum of money in the event of a loss occurring of The global positive impact of insurance therefore cannot be overemphasized as it is essential for sustainable economic development and supportive of the poverty alleviation aspirations of many developing nations (business day newspaper 12 Sept 2015). Akinlo (2013) posit that insurance is the corner stone of modern day financial services.

In the manufacturing sector all activities are carried out stage by stage and from the production of the products to the distribution of these products so it is almost impossible to prevent losses from occurring. Every manufacturer depends on

the wealth of assets such as equipment, inventories and supplies to keep its business running also, the premises the manufacturers use for their productions as well as a warehouses for the storage of finished products, manufacturer could be liable for the damages caused to their customer as a result of the consumption or usage of their product, they can also be liable for bodily injury or death to one of their employees as a result of production activities provided that the accident occurred at the place of work and also during working hours. The combination of risk is unique to the manufacturing companies therefore each loss exposure needs different policies in other to get appropriate protection. Most manufactures depends on people and equipment's to produce their goods ignoring the fact that they prone to unforeseen circumstances. Companies must work to prevent risk at every stage of their operation. From design and pre-fabrication to shipment of the final product, attention to detail and safety are of the utmost importance. Companies must acknowledge the high demands they face, and implement risk control processes.

Fatula (2007)and cited by Oke (2012) explained that the practice of insurance company in Nigeria has played a significant role in the development of the economy and managing the risk of household and firm by issuance of insurance policy, mobilizing and transferring fund to the deficit unit for financing.

1.2 Problem Statement

The primary goal of a manufacturing company is to satisfy its customers and also to maximize profit, most manufacturing companies go on with their day to day business ignoring the fact that they are exposed to all kinds of risks. The manufacturing companies in a developing country like Nigeria is subject to a number of risks that lead to large fluctuations in the output and prices of its products. These fluctuations result in uncertain incomes for producers, and varying availability of work for laborers. Most manufacturing companies go through tough times when accidents occur either to one of its worker, or customer is harmed as a result of the consumption of products. This problem cannot be totally avoidable but provisions can be made for in case an unforeseen circumstance occurs. The major functionality of insurance on the client side is risk transfer. Usually the insured pays a premium and is secured against a specific uncertainty. By reducing uncertainty and volatility, insurance companies smoothen the economic cycle and reduce the impact of crisis situations on the micro and aggregate macro level. However, the demand for protection against loss of life and property caused by natural disaster, crime, violence, accidents, are not so demanded in Nigeria thus the purchase, possession and sale of goods, assets and services which are often facilitated by the indemnification of the insurance thereby not enhancing growth. Therefore, the assured safety of life and property which enhances trade, transportation and capital lending and many sectors are not heavily reliant on insurance services.

Manufacturing companies face the problems of

1. Loss of customer loyalty
2. Uncertain incomes for producers
3. Inability to manage risks when they occur sometimes leads to the collapse of manufacturing companies

1.3 Research Objectives

1. Identify the risk factors in the manufacturing environment and also to its customers
2. Analyze how risk is being transferred from the manufacturing companies to the Insurance Company
3. Know whether there is an adequate insurance cover on the growth of the manufacturing companies

1.4   Research Hypotheses

H_{01}: there is no relationship between the risk factors identified in manufacturing environment and its customers.

H_{02}: Risk transfer does not reduce the burden of the manufacturing companies

H_{03}: It is not important for a manufacturing company to have adequate insurance cover

1.5   Scope of the Study

In view of the study, the research took into consideration' Insurance' as the key player of the manufacturing company's performance in Nigeria. The research study selected 10 manufacturing companies in Lagos state. 20 respondents were selected in each of the 10 manufacturing companies to give a total of 200. Two hundred questionnaires were administered to the employees of selected manufacturing companies in Lagos state that were to participate in the study.

2.0   REVIEW OF LITERATURE

According to Hayes, Perry and Thompson (1986) cited in Walke & Topkar (2012). "uncertainty is part of all manufacturing work regardless of the size of the product line. Other risk factors that carry risk include: complexity, speed of manufacturing, location of the product line, and familiarity with the work. When serious risks occur on product lines the effects can be very damaging. In extreme cases, time and cost overruns turn a potentially profitable product line into a loss-making venture". "Manufacturing companies are often labeled as unsafe, dangerous or hazardous places to work" (Sherratt, Farrell & Noble, 2013). The fact that, "manufacturing activities are diverse with changing project teams and difficult-to-handle materials and equipment, could lead to human errors that are uncontrollable" (Al-Humaidi& Tan 2010). Consequently, "risk can be described in terms of its effect (positive or negative) on objective" (Hillson & Murray-Webster, 2004; Damodaran, 2008; Kannan &Thangavel, 2008).   Coşkun (2012) observed that "the recent global events (from the global financial crisis to the ensuing market volatility, decline in consumer confidence, and extreme fluctuations in energy prices) have demonstrated that uncertainty permeates firms' operations. Likewise, financial failures observed during global financial crisis also highlight the importance of Enterprise Risk Management. Notwithstanding the presence of risk and uncertainty in firms' operations; uncertainty and risk have not been effectively managed by many firms' in Nigeria. Performance and risk are

inextricably linked. By establishing a consistent and disciplined process for managing risks, firms' can improve the predictability of their results. Enterprise Risk Management can earn firms' better ratings and allows them to take advantage of lower costs of capital". Levy, Lamarre & Twining (2010).explained that "in the dynamic and highly competitive business environment, manufacturing industries are under tremendous pressure due to the free market economy, rapid technological development, and continuous changes in customer demands". Gupta, (2011) and Fadun, (2013) added that "to cope with the current business trends, the demands on modern manufacturing systems have required increased flexibility, higher quality standards, and higher innovative capacities". "These demands emphasize the need for high levels of overall system reliability that include the reliability of all human elements, machines, equipment, material handling systems and other value added processes and management functions throughout the manufacturing system" Levy, Lamarre & Twining (2010). Gupta, (2011)however stated that "whatever the resources they possess, the manufacturing organizations encounter undesirable events and unwanted setbacks such as machine breakdowns, material shortages, accidents, and absenteeism that make the system unreliable and inconsistent". Hallowell and Gambatese (2009) in their article noted that "the temporary and transitory nature of manufacturing companies are claimed to contribute to accidents". While "environmental factors such as climate, temperature, and geographical conditions could be considered as typical

characteristics for workplace" (Liao &Perng 2008), "organisational factors may include characteristics referring to manufacturing companies and project-based procurement of works" (Rozenfeld, Sacks, Rosenfeld and Baum, 2010). The size of workplace was analyzed by Lingard and Holmes (2001). And they justified "the significance of small businesses as they are the majority in Australia and on average employ less than 20 workers. Being small firms, their characteristics were often associated with poorer management skills and inadequate implementation of safety measures". Organizational and environmental factors were focused on by Ling, Liu, and Woo. (2009) who emphasized "factors relating to time, month, location, size of organisation, and type of workplace". López et al. (2008) showed that "time of day and day of the week are associated with accident severity". Their study led to "a further investigation into other factors associated with the environment such as climatic, geographic and behavioral factors and their impact on accident severities" (López, Fontaneda, Alcantara and Ritzel, 2011). Generally, the manufacturing industry faces substantial financial, operational, strategic and hazard risks. Financial risks create uncertainty about future cash flows due to changes in general economic conditions and specific changes in revenues operating expenditure and financing costs. According to Dorfman (2007) cited by Siayor (2010), "operational risk is not really one risk but many. It's a sweep up of a term covering everything that does not fall under either market risk or credit risk. Operational risk management requires identification of its

sources, measuring it and plans to address them". Operational risk can be "qualitative leading to reputational losses and quantitative leading to financial losses" (Simiyu, 2008), (Mbiti, Lugogo & Koech2018). Irrespective of the type of risk, insurance helps to remove the uncertainties in business.

2.1   CONCEPTUAL REVIEW
Based on the literature, the researcher postulated a conceptual model, as shown in Figure 2.1, in which risk factors, risk transfer and adequate insurance cover affects the growth of the manufacturing industry.

Figure 2.1: Insurance: The Key Player of Manufacturing Companies
Source: Author's Compilation, 2018

Risk transfer means "the original party exposed to a loss can obtain a substitute party to bear the risk" (Aduloju, 2008). Risk transfer is "a feature of all insurance transactions because the uncertainty of who will pay for the loss is transferred from the individual to the insurance pool. Some methods of risk transfer, however, do not involve insurance. They are known as non-insurance risk transfer. Non-insurance transfers are methods other than insurance by which a pure risk and its potential financial consequences are transferred to another party".

Examples of non- insurance transfers include contracts, leases, and hold-harmless agreements. For example, the hotel's contract with a transport company for the transportation of their employees can specify that the transport company is responsible for any accident to their staff

while in their vehicle. If they lease some cars, the lease can specify that maintenance, repairs, and any physical damage loss to the vehicle are the responsibility of the transport company. The risk of a defective television or stereo set can be transferred to the retailer by purchasing a service contract, which makes the retailer responsible for all repairs after the warranty expires. The risk of a price increase in construction costs can be transferred to the builder by having a guaranteed price in the contract. The risk of a rent increase can be transferred to the landlord by a long-term lease. Leasing allows the transfer of the risk of obsolescence to another party (the owner of the property). A firm may insert a hold-harmless clause in a contract, by which one party assumes legal liability on behalf of another party. Thus, a tread mill manufacturer may, by inserting a hold-

harmless clause, be held harmless by the hotel management if the thread mill malfunctions, causing injury or even death to a user.

The Act of 16 June 1999 (ILO, 1999) "provides for occupational hygiene and safety standards, and the obligations of employers and employees to create a safe work environment, organization of hygiene and safety at the level of the enterprise, institution and State, procedures for settlement of disputes in this matter, and responsibility for breaches of established standards. In the specific case of manufacturing company employees, during their workday, they are exposed to various occupational risks generated by chemical, physical, biological and physiological risk factors".

Physical risk factors as explained by Organização (2001) is "to which workers are exposed in manufacturing companies include noise from vehicles, extreme air temperatures (hot and cold) during the seasons with extreme temperatures characteristic of the studied region. Chemical risk factors include contact with the fuel, more specifically, with the chemical benzene. Biological risk factors include bacteria, viruses, fungi, *etc.*, which the manufacturing company workers come into contact due the diversity of clients of the local population and immigrants from other regions, characteristics of the port region of the study, the lack of hand hygiene of workers and non-use of individual protective devices. Physiological risk factors are repetitive movements of the same type, such as those performed by employees to supply the

vehicles. These factors can create or worsen occupational diseases and accidents, which depend on the nature of risk, the degree of exposure, a lack of protective measures, work conditions and rhythms and the worker's function". An occupational accident is defined "as a fire, explosion or another occurrence at work which may endanger the life or health of employees or that of other persons" (ILO, 2001).

Manufacturing companies provides suitable atmosphere for occupational accidents. "In this place it is possible to identify health problems related to noise, favoring irritability of the worker; physical stress and decreased hearing acuity among others" (Ferreira, & Freire, 2001). "Biological agents can result in respiratory infections" (Souza, Medeiros, &Diagnóstico, 2007), among others. As explained in the research by Wu, Zhang, Wan, Gu, Liu, &Jin (2008), "the inadequate postures, the long working hours standing and repetitive movements may cause injury and pain in the cervical spine, upper and lower limbs. Injuries resulting from chemical agents are indicated as a major concern in occupational workplace. Benzene, a constituent of gasoline, is associated with skin lesions and intoxication at the airway and digestive tract levels myeloblastic and lymphoblastic leukemia and non-Hodgkin lymphoma"

"Chemical hazards are recognized in the literature and in different studies as the risk of greater magnitude and associated with greater potential loss over time, however, it is important to identify the workers'

perceptions of occupational exposure in order to able to understand all risk factors in relation to the their workday". (Kaufman, Anderson, &Issaragrisil, 2009; Richardson, 2008; Infante-Rivard, Vermunt, Weinberg, 2007; Smith, Jones, & Smith, 2007).

2.2   Theoretical Review
i.   The Basic Theory of Insurance
Insurance assumes that there exist a multitude of risk-averse individuals who are insured and face independent, identical loss risks that can be covered through insurance that makes the pooling of risks possible. There are three ways to take care of the risks: retain the risk; avoid the risk; or transfer the risk. Retaining is self-insurance, i.e., bearing the cost of the loss in its entirety. Avoiding is the decision not to face risk. "Transferring risk takes place when one purchases a policy of insurance that makes the insuring party (insurer) responsible for payments in case of the occurrence of the event.

ii.   Modern Portfolio Theory
Modern Portfolio Theory is a theory of investment which tries to maximize return and minimize risk by carefully choosing different assets (Chang, Yang, & Chang, 2009&Mangram, 2013). Modern Portfolio Theory is "a mathematical formulation of the concept of diversification in investing, with the aim of selecting a collection of investment assets that has collectively lower risk than any individual asset. This is possible, in theory, because different types of assets often change in value in opposite ways. For example, when the prices in the stock market fall, the prices in the bond market often increase, and vice versa". "A

collection of both types of assets can therefore have lower overall risk than either individually" (Mandelbrot, and Hudson, 2004). "The Primary principle upon which Modern Portfolio Theory is based is the random walk hypothesis which states that the movement of asset prices follows an unpredictable path: the path as a trend that is based on the long-run nominal growth of corporate earnings per share, but fluctuations around the trend are random" (Chandra, Siddharth &Shadel, 2007).

iii.   Stakeholders Theory
The stakeholder's theory was originally detailed by Edward Freeman in the book Strategic Management: "A Stakeholder Approach. He identified stakeholders of a corporation to include: Organization, management, shareholders, suppliers, employees, local community and clients. Each of this stakeholder makes positive contribution to the organization therefore, this theory presents techniques for management's giving due regard to groups of interest. Simply put, it tries to explain the 'principle of who or what really counts'". According to Freeman (2012), "each of these stakeholders affect or benefit from the other, for example shareholders seek to maximize their wealth in the organization and employees are concerned with the ability of the organization to secure their employment and pay their salary on a timely basis. On the other hand the organization depends on suppliers for inputs to produce quality goods as suppliers depend on them for payment because organizations are their customers".

Reynolds, Schultz and Hekman (2006)

assert that "stakeholder theory helps managers in making decisions on how they can balance interests of all stakeholders surrounding organizations to ensure that they maintain the support they receive from the stakeholders". According to Reynolds et al. (2006), "balancing interests of stakeholders is done where managers distribute scarce resources to those who claim against the organization".

2.3   EmpiricalReview

In a study of Nigerian context, Torbira and Ngerebo (2012) investigated "the relationship between risk management practices and firm performance using Gross Fixed Capital Formation (GFCF) as a surrogate. Their findings revealed that sound risk management practices affect the growth of the firm at least in the short run. However, using the growth of fixed capital formation as a proxy for performance will make sense only if the study controls for the non-settlement of claims issue that is prevalent in the industry". "Insurance companies sometimes use technicalities to evade claims payments". In a related study in the same industry, Obalola, Akpan and Olufemi (2014) revealed "a positive relationship between the Enterprise Risk Management implementation and organizational performance in Nigeria".

Gordon, Loeb and Tseng (2009) claimed "in their study that the relationship between Enterprise Risk Management implementation and firm performance is dependent on the proper match between Enterprise Risk Management and five contingent factors (environmental uncertainty, industry competition, firm size, firm complexity, and board of directors' monitoring). In contrast, the study selected the contingent variables without explicit theoretical justification. It makes sense to deduce that implementing Enterprise Risk Management alone may not lead to higher performance". Also, McShane, Nair, and Rustambekov (2011) used "the S&P Enterprise Risk Management rating scale as a proxy for Enterprise Risk Management quality and linked it to firm value. The study revealed a positive relationship between Enterprise Risk Management capability and firms' value. However, it felt to report the relationship between higher Enterprise Risk Management rating and firm performance". In a US context study, Ballantyne (2013) "found that Enterprise Risk Management implementation is not connected to the financial performance of organisations and that the implementation of Enterprise Risk Management alone is not sufficient to accomplish the theoretical assertions of Enterprise Risk Management as highlighted in the literature. These contradictions justify the need to examine further the Enterprise Risk Management effect through a survey approach to enable the business firms appreciate the benefits of Enterprise Risk Management implementation in the context of Nigeria".

According to White (2005) cited by Owolabi, Oloyede, Iriyemi, & Akinola, (2017) conducted "an investigative study on the management of property risks in Nigeria using a case study of the insurance sector. Questionnaires were distributed to a sample of 18 insurance companies out of a total of 36. An interview was conducted with the Commissioner of Insurance and the Honorary Secretary to the Institute of

Loss Adjusters and Risk Surveyors. Due to the exploratory nature of the study, a qualitative analysis of the available data was adopted. Data from questionnaires and interviews was coded and frequency tables in simple percentages used to analyze responses to each question. A descriptive approach was then adopted in communicating the results. In summary, the study found that although risk management is consciously present in Nigeria insurance business, there still lacks a clear understanding of the discipline in the industry. Where they were available, the involvement of risk surveyors/managers by insurers was found not comprehensive enough. They were not involved in risk control and evaluation even after they had recommended appropriate risk control measures. It was found that although insurers have adequate information for any risk management activity, there lacks an efficient means of storage and retrieval of the same. The study recommended computerization and general improvement of their information systems".

Eze& Okoye (2013) examined "the impact of insurance practice on the growth of Nigerian economy. The study observed that the insurance premium capital has significantly impacted on economic growth in Nigeria; that the level of total insurance investment has significantly effected on economic growth in Nigeria; and that there is causal relationship between insurance sector development and economic growth in Nigeria. Their findings implied that insurance industry would contribute meaningful to the growth of Nigeria economy in the long run. They recommended that, having seen that there is long-run relationship between insurance industry practice and economic growth in Nigeria. They further advised that more efforts should be made to increase transparency and efficiency in insurance industry through adequate legislation and policy formulation targeted at providing institutional improvement, especially in risk management and product innovations in Nigeria insurance industry".

Mojekwu, Agwuegbo and Olowokudejo (2011) examined "the impact of insurance contributions on economic growth in Nigeria. The study covered the period between 1981 and 2008.This study used dynamic factor model which described a number of methods designed to analyze a functional relationship between the volume of insurance contribution and economic growth in terms of underlying but unobservable random quantities called factors. The factor loadings indicated which common trend is related to which set of the series. The study found a functional positive relationship between the volume of insurance contributions and economic growth in Nigeria".

3.0   METHODOLOGY
The study therefore made use of survey research method through the use of questionnaire and gathered information from employees of manufacturing companiesbecause it is interested in analyzing the relationship between insurance and the performance of manufacturing companies without making any attempt to control or manipulate respondent's opinion. The sampling technique used for this study was stratified

sampling method and convenience sampling techniques. The stratified sampling method was used to choose the manufacturing companies where the questionnaires were administered in Lagos state. Convenience random sampling was used to select the participants in the chosen manufacturing companies for the filling of the questionnaires in this research because it was easier to select the participants needed from the target location. The research study selected 10 manufacturing companies in Lagos state. 20 respondents were selected in each of the 10 manufacturing companies to give a total of 200. 200 questionnaires were administered to the employees of the manufacturing companies in Lagos state that were willing to participate in this study.

4.0 DATA ANALYSIS
Hypothesis One

H_{01}: There is no relationship between the risk factors identified and the growth of the manufacturing industry.

In testing whether there is any relationship betweenvariables this study makes use of Pearson product-moment correlation.

Table 4.1A: Simple Statistics							
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
Risk factors identified	188	2.32447	1.12151	437.00000	1.00000	5.00000	The manufacturing premises is prone to natural disaster
The growth of the manufacturing industry	188	3.31915	1.30579	624.00000	1.00000	5.00000	When accident occurs the profit of the company is affected

Table 4.1B: Pearson Correlation Coefficients, N = 188 Prob > |r| under H0: Rho=0		
	Risk factors identified	The growth of the manufacturing industry
Risk factors identified	1.00000	0.73226 <.0001
The growth of the manufacturing industry	0.73226 <.0001	1.00000

Decision
According to the data presented in Table 4.1B, the relationship between the risk factors identified and the growth of the manufacturing industryis a strong relationship (r= 0.73226). Considering the "Coefficient of Determination", since the correlation of the risk factors identified and

the growth of the manufacturing industry is (r) is = 0.73226; then, the coefficient of determination is = 0.5362047. It implies the growth of the manufacturing industry is 53.62% as a result of risk factors identified while the remaining 46.38% is explained by other exogenous variables that are excluded in the model but that can also contribute to the growth of the manufacturing industry.The analysis presented in Table 4.1B revealed that the relationship between the risk factors identified and the growth of the

manufacturing industry is significant since the P-value is <.0001. Therefore, there is enough evidence to reject the null hypothesis (H_0) and uphold the alternative hypothesis (H_1). That is, "there is a relationship between the risk factors identified and the growth of the manufacturing industry".

Hypothesis Two
H_{02}: Risk transfer does not reduce the burden of the manufacturing

Table 4.2: Summary of Regression Analysis of Risk transfer on the burden of the manufacturing companies[a]						Model Summary[b]	
Variable	Label	Parameter Estimate	Standard Error	t Value	Pr > |t|		
Intercept	Intercept	1.39897	0.12972	10.78	<.0001	R-Square	0.6439
	Risk transfer	-0.92218	0.05029	-18.34	<.0001	Adj R-Square	0.6420

a. Predictors: (Constant),Risk transfer.
b. Dependent Variable: The burden of the manufacturing companies.

The effect of risk transfer on the burden of the manufacturing companies is summarized in Table 4.2; the coefficient of multiple determination (R^2 = 0.6439) implies that the model exhibited high explanatory power, and is a good fit. That is, within the context of the model, about 64.39 percent of total variations in the burden of manufacturing companies are attributed to risk transfer, and only 35.61 percent unexplained variations can be attributed to other factors outside our model.

As depicted in Table 4.2, the estimates of the model coefficients for $\beta 0$ (Intercept) is 1.39897, and β_1 (Risk transfer) is -0.92218. Therefore, the estimated model between risk transfer and the burden of the manufacturing companies is presented thus:
The burden of the manufacturing companies= 1.39897 - 0.92218 Risk transfer.

The regression equation shows that the relationship between risk transfer and the

burden of the manufacturing companies is negative. 1.39897 is the average value of theburden of the manufacturing companies when the effect of financial inclusion is constant. Table 4.2 shows that the reduced burden of the manufacturing companies is due to the per unit increment in effective risk transfer. If we increase effective risk transfer by 1 unit the average change in burden of the manufacturing companies will decrease by 0.92218.

Decision
Since t-calculated = 18.34> t-tabulated =

1.97266270. In conclusion, the results of the regression confirm with 95% confidence that we reject the null hypothesis. Based on the above explanatory variables and the slope coefficient, we therefore conclude that risk transfer reduces the burden of the manufacturing companies.

Hypothesis Three
H_{03}: Adequate insurance cover does not increase the profitability of manufacturing company.

Table 4.3: Summary of Regression Analysis of Adequate insurance cover on profitability of manufacturing company[a]						Model Summary[b]	
Variable	Label	Parameter Estimate	Standard Error	t Value	Pr > |t|		
Intercept	Intercept	0.97024	0.10427	9.30	<.0001	**R-Square**	0.5392
	Adequate insurancecover	0.59633	0.04042	14.75	<.0001	**Adj R-Square**	0.5367

a. Predictors: (Constant),Adequate insurancecover.
b. Dependent Variable: Profitability of manufacturing company.

Adequate insurance cover on profitability of manufacturing company is summarized in Table 4.3; the coefficient of multiple determination (R^2 = 0.5392) implies that the model exhibited high explanatory power, and is a good fit. That is, within the context of the model, about 53.92 percent of total variations in profitability of manufacturing companies are attributed to adequate insurance cover, and only 46.08 percent unexplained variations can be attributed to other factors outside our model.

As depicted in Table 4.3, the estimates of the model coefficients for β0 (Intercept) is 0.97024, and β_1 (Adequate insurancecover.) is 0.59633. Therefore, the estimated model between adequate insurance cover and profitability of manufacturing company is presented thus:Profitability of manufacturing company = 0.97024 + 0.59633 Adequate insurancecover.The regression equation shows that the relationship between adequate insurance cover and profitability of manufacturing company is positive. 0.97024is the average value of profitability

of manufacturing company when the adequate insurance cover is constant. Table 4.3 shows that profitability of manufacturing companyis due to the per unit increment in adequate insurance cover. If we increase adequate insurance cover by 1 unit the average change in profitability of manufacturing companywill increase by 0.59633.

Decision

Since t-calculated = 14.75> t-tabulated = 1.97266270. In conclusion, the results of the regression confirm with 95% confidence that we reject the null hypothesis. Based on the above explanatory variables and the slope coefficient, we therefore conclude that adequate insurance cover increases profitability of manufacturing company.

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS
5.1 Summary

In view of the analysis of hypothesis one, the result concludes that "there is a relationship between the risk factors identified and the growth of the manufacturing industry". This is evidenced by the value of Pearson Correlation Coefficient which was reported as 0.73226. The P-value (<.0001) led to rejecting the hypothesis which states that There is no relationship between the risk factors identified and the growth of the manufacturing industry.

The result of the simple linear regression analysis used in testing the significance of the impact of risk transfer on manufacturing companies, the analysis revealed a negative relationship between risk transfer and manufacturing companies as evidence in hypothesis one. The t-calculated (18.34) of risk transfer is greater than the t-tabulated (1.97266270), this led to the conclusion that risk transfer reduces the burden of the manufacturing companies.

Hypothesis three states that "adequate insurance cover does not increase the profitability of manufacturing company" and was analyzed with simple linear regression. The t-calculated of adequate insurance cover (14.75) are greater than the t-tabulated (1.97266270). The values of the adjusted R^2 indicate that that the model has solid match and it was concluded that adequate insurance cover increases profitability of manufacturing company as evidenced from the t-calculated greater than t-tabulated.

5.2 Conclusion

This study analyzesinsurance as the key player of manufacturing company's performance.

The findings are instructive. As a general note, insurance serves a number of valuable economic functions that are largely distinct from other types of financial intermediaries. In order to highlight specifically the unique attributes of insurance, it is worth focusing on those services that are not provided by other financial service providers, excluding for instance the contractual savings features of whole or universal life products. The indemnification and risk pooling properties of insurance facilitate commercial transactions and the provision

of credit by mitigating losses as well as the measurement and management of non-diversifiable risk more generally. Typically insurance contracts involve small periodic payments in return for protection against uncertainty, but potentially severe losses. Among other things, this income smoothing effect helps to avoid excessive and costly bankruptcies and facilitates lending to businesses. Most fundamentally, the availability of insurance enables risk averse individuals and entrepreneurs to undertake higher risk, higher return activities than they would do in the absence of insurance, promoting higher productivity and growth. This study concluded that there is a relationship between the risk factors identified and the growth of the manufacturing industry, and established that risk transfer reduces the burden of the manufacturing companies. This study also concluded that adequate insurance cover increases profitability of manufacturing companies.

5.3   Recommendations

It is therefore appropriate to highlight some recommendations which, if implemented could further increase the awareness of insurance as the keyplayer of manufacturing companies performance. The following policy considerations are recommended:

i. Basing on prevailing circumstances as highlighted in the study, it is recommended that the manufacturing companies in Nigeria should continue to engage the service of insurance companies in putting forward the risk management processes in all their dealings. This way, the gradual improvement in profitability levels will be expected

ii. To be successful in the long-term, manufacturing companies need to think beyond what is affecting them today to what is going to happen tomorrow. This is not just about addressing changes, but also taking into account alterations in social, environmental and governance issues which can be handled by insurance.

iii. The policy makers need to put up more stringent policies for the manufacturing firms to better manage risks that can hamper their performance. At the moment, pressure to manage risks is on the financial sector and the other sectors, especially the manufacturing sector, have been left out.

iv. This study also recommends the need for manufacturing firms to entrench more measures to manage risks as the level of use of instruments to manage such risks is still low. Engaging the service of insurance companies will help in ensuring that such risks are better managed for their gains to be realized.

v. The manufacturing firms should also work on enhancing their efficiencies in terms of their cost of inputs as well as their cost of outputs. This can also be enhanced by putting into place better financial risk management practices with the help of insurance companies.

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SERVICE QUALITY AND PATIENTS' SATISFACTION: A STUDY OF HEALTH CARE DELIVERY IN PLATEAU STATE

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ABSTRACT

The provision of health care services is very critical, yet the delivery of healthcare services in Nigeria is characterised by widespread inefficiencies. Therefore, the research set out to examine the relationship between service quality and patients' satisfaction and the delivery of health care services in Plateau State. Specifically, the research evaluated the impact of tangibility, reliability, responsiveness, assurance, courtesy and empathy on patients' satisfaction in Plateau State. To achieve the research objectives, 399 copies of the questionnaire were administered to Out-patients of Plateau State Specialist Hospital, Jos and Jos University Teaching Hospital. Out of this number, 370 were properly filled and returned. The retrieved questionnaires were analysed using Multiple Regression Analysis. The results show that tangibility, reliability, responsiveness, assurance and empathy have significant impact on patients' satisfaction. However, courtesy has no significant impact on patients' satisfaction in Plateau State. The research therefore recommends that tertiary hospitals in Plateau State should make tangibles like physical buildings and equipment virtually appealing to patients, accurately maintain patients' records so as to keep satisfying the patients as well as being responsive to patients by offering prompt services and explaining treatments to the patients or relatives. Also, health care service delivery staff should assure patients by building trust in their skills and knowledge via the exhibition of professionalism and demonstrate high degree of courtesy in the delivery of health care services with a view to improving the patients' satisfaction at all time.

Key words: Customer Satisfaction, health care delivery and Service Quality