

# THE IMPACT OF INTERNATIONAL PROPRIETARY RIGHTS ON FINANCIAL PERFORMANCE OF LISTED MANUFACTURING COMPANIES IN NIGERIA

Yakubu Yahaya<sup>1</sup> & Dr. Hafiz Baba<sup>2</sup>

Department of Business Administration, School of Management Studies  
Abubakar Tatari Ali Polytechnic Bauchi P.O Box 0094 Bauchi State, Nigeria

Author Email: [yakubuyahayayy@gmail.com](mailto:yakubuyahayayy@gmail.com), [babahafiz@yahoo.com](mailto:babahafiz@yahoo.com)

---

**Abstract:** Business internationalization has created distinctive characteristics in the manufacturing industry, one of which is the removal of trade barriers among nations to facilitate market expansion and improve healthy competitions among business organizations. This study sought to establish the effect of international proprietary rights on financial performance of listed manufacturing companies in Nigeria. Correlational survey research was utilized in this study. The study's target population is 74 seventy-four listed manufacturing companies in Nigeria. The study used 30% of the target population as the sample size which was 22 companies. The study used stratified random sampling to select 22 companies from the list of 74 listed manufacturing companies. The study targeted the top management of the companies. The secondary data was collected from the company's financial reports in order to inquire about business internationalization and financial performance of listed manufacturing companies. Descriptive and inferential statistics were used to analyse the data in this research. Specifically, descriptive statistics related to means, minimum, maximum and standard deviation. The study used multiple linear regression models to show the effect of international proprietary rights on financial performance of the listed Nigerian manufacturing companies. The effect of international proprietary rights on financial performance was found to be positive but insignificant using primary data but they findings were significant using secondary data. Based on the finding of the study, the study concludes that international proprietary rights influence the financial performance of the companies that have internationalized their operations. The study concluded that listed manufacturing companies that are struggling to finance their operations must seek international partners to partner with. The study recommended that efforts should be made by the management of the listed manufacturing companies to make the sector attractive in order to attract more foreign direct investment, engage in foreign trade and seek for foreign funding into the listed manufacturing companies in Nigeria in order to increase their financial performance.

**Keywords:** Financial performance, manufacturing companies, international proprietary rights.

---

## 1. INTRODUCTION

The internationalization of firms has generated interest not just because of the benefits to firm growth, survival and competitive position, but also because of its positive influence on a nation's economic growth and development (Mayer & Ottaviano, 2008). While internationalization can be a source of growth for firms, it can also be a risky venture that can

generate losses which may adversely affect the long term survival of a firm. Any company seeking to be an industry leader in the twenty-first century must not focus on domestic market leadership only, but must also focus on global market leadership. O'Cass and Weerawardena (2009) assert that global competition for African businesses is not an option but an economic priority. An organized system of company internationalization assessment covers both objective and particular criteria. Among objective criteria are those related to the structure, for example the number of foreign units of a company, capital ownership structure according to its origin, organizational structure of the company as well as criteria of productivity, for example value of foreign revenues and value of fixed capital located abroad (Agndal & Chetty, 2007). Internationalization based only on exporting products is 'shallow' as it does not require involvement of resources necessary for their production abroad. 'Deep' internationalization is based on the second dimension, which is transition of production infrastructure from domestic market to other countries. Its 'depth' results from the size of financial, material and human resources engaged in the process of internationalization, which are necessary to launch production outside home country (Dawson, 2007).

As firms operate in more diverse market environments, they face a greater need to integrate their activities and logically therefore, encounter an escalation in the cost of coordinating their activities. At higher levels of international expansion, diseconomies can set in due to escalating costs of coordination and from the greater information processing demands on managers and administrative systems. With continued international diversification, the complexities of managing information and communication among widespread units imply that extensive international diversification is likely to result in net costs (Ellis, 2007). The increasing economic integration of markets associated with globalization has not only driven the internationalization of companies, it has also influenced the nature of their strategies (Melén & Nordman, 2009). Technological change and the ease of trade have enabled managers to effectively monitor and control their company's global activities and have resulted in major changes in organizational relationship and strategy. While historically many companies have had foreign sales operations, the ability to conduct business efficiently and effectively across the boundaries has enabled managers to make strategic decisions on where to geographically locate the different activities that constitute a firm's value chain (Melén & Nordman, 2009).

### 1.1 Business internationalization

Analysing a panel data set of UK firms Greenaway, Upward and Wakelin (2002) applied matching techniques and found a feedback relationship between the firms' export activities and productivity (labour productivity as well as total factor productivity): Highly productive firms become exporters, but exporting also increases productivity. Apparently, using matching techniques leads to results that are more in favour of a causal effect of international business activities on firm performance. Hatum and Micheline (2011) investigate the relationship between firm performance and internationalization behaviour for the period from the firms' start-up until 1997, using data from the first survey. They found that an international engagement improves labour productivity and increases sales growth rate, but does not affect employment growth rate. The foreign market may be particularly important for young, small, technology oriented firms, especially for those operating in a narrow market position. In order to be competitive in international markets, Malaysian companies have taken the opportunities which are available worldwide through internationalization strategies where there are no transactional or geographical boundaries, and time zones where business transaction can now be performed more rapidly (Ganotakis & Love, 2012). Kaur and Sandhu (2014) noted that internationalization has become one of the most interesting topics discuss among companies internationally. The transforming process of information technology communication across countries has displacing all the business activities into information technology based activities. The most significant element in improving the firm's effectiveness and efficiency is fully utilizing of their resources, learning knowledge and networking available.

Liberalization, privatization and globalization measures adopted by countries all over the globe have led to the reduction in trade barriers and allowed for the smooth flow of goods and services across borders. A large number of firms in both developing and developed economies are entering global markets to take advantage of the availability of cheap labour, inexpensive land and abundant resources. Recent decades have witnessed rapid growth in international business and because of this rapid internationalization; MNEs now consider the entire world as one market (Hsu, 2006). Regional internationalization can be defined as internationalization into a relatively homogeneous cluster of countries which are physically and culturally less distant. The physical proximity and cultural similarity should lead to lower costs of transaction and coordination (Pan, Tsai & Kuo, 2010). Multinational firms face high costs related to cultural differences

which are associated with difficulties in transferring competitive advantages and knowledge between different regions (Benito & Gripsrud, 1992)

In Nigeria, internationalization just began a few years ago with the advent of democracy when organizations realized international market would offer them more opportunity and unlimited scope for growth. At the early 2000s some ambitious service firms, especially Banks, manufacturing industries and Insurance institutions, began their first experiment abroad, which means internationalization is still at its early stage in Nigerian (Ezeoha, 2007). However, there are no coherent frameworks that may help practitioners to gain a convergent understanding of the internationalization decisions of these service firms. Despite the long-time awareness of the impact of internationalization and economic growth which can be influenced by its industry, many firms still find it difficult to acclimatize themselves with this recent trend in business especially in Nigeria, which is most times due to the size of the firm, technological availability, the firm competitive advantage (position of the firm in its industry whether a market leader or follower), its market characteristics, management attitude, profitability for foreign subsidiaries (Ezeoha, 2007). According to Ezeoha, Ebele and Okereke (2009) Nigeria has thus, become relatively integrated with the global economic system. It has applied various policies over the year to stimulate the productive and external sector of the economy so as to ensure she benefit positively from business internationalization.

### 1.2 Statement of the problem

The world is turning into a global village as a result of internationalization of business across various divides; many traditionally local businesses are now searching for growth opportunities in foreign markets (Fernandez & Nieto, 2005). Most domestic companies are not performing up to the expected level as a result of competition from foreign companies, studies have observed that a great deal of inconsistency exists in addressing this factors that influence internationalization (Segaro, 2012). There have been contradicting results on the effect of internationalization on financial performance of listed manufacturing companies in Nigeria. Ezeoha (2007) examines the effect of internationalization on financial performance, the result shows significant positive relationship between internationalization and financial performance of listed companies. Furthermore, Adenikinju and Chete (2002) posit that internationalization have negative effect on financial performance of listed companies. Lee (2010) investigated the impact of internationalization on firm performance using quartile regression. The study findings show that for firms with high performances, their performances were sensitive to internationalization activities; however, for firms with low performances, the stock market barely recognized their attempts to internationalize. The findings further revealed that firms with different firm performance across the distribution respond differently in magnitude to their degree of internationalization.

Furthermore, there is inadequate knowledge due to the early stage of internationalization of manufacturing companies in Nigeria (Ezeoha, 2012). Similarly, studies (Graves & Thomas, 2006; Alkaabi, & Dixon, 2014; Senik, 2010; Zahra, 2003) have been conducted on internationalization in different countries such as the US, China, and Europe show divergent results foreign direct investment have positive impact on companies, foreign funding improve financial performance of companies while delivery of foreign raw materials have significant negative effect on the companies and product export increase the financial return of companies. Hsu and Pereira (2008) conducted a study on the effects of the degree of internationalization on firm performance. The results based on data from a cross-sectional set of U.S. multinational firms find evidence of positive relationship between degree of internationalization and firm performance. The rate of return on assets declines, then increases, and finally decreases slightly as the degree of internationalization increases. Nigerian economy is facing contraction due to dwelling global oil price, reduced oil revenue and growing statutory expenditure, however listed manufacturing companies can leverage on FDI to improve productivity, quality and competitiveness it also increases knowledge about training the workforce, contributes to the acquisition and dissemination of new knowledge, and allows managers to learn new organizational practices to enhance return on asset through internationalization of the goods and services (Thériault & Beckman 2008).

Research has indicated that most domestic companies are not performing up to the expected level as a result of competition from foreign companies, studies have observed that a great deal of inconsistency exists in addressing this factors that influence internationalization (Segaro, 2012). There have been contradicting results on the effect of internationalization on financial performance of listed manufacturing companies in Nigeria. More precisely the impact of international proprietary rights and its influence of the performance of manufacturing companies in Nigeria.

Research done on foreign trade reveal that product export increases the financial return of the listed companies (Awolusi, 2013). While Oyeniyi and Omotayo (2009) report that foreign trade led to loss of profit and has negative financial performance. Anfofum, Gambo and Suleiman (2013) investigate the impact of FDI on performance and the findings shows positive impact of FDI on recipient companies. Foreign funding of operation improves financial performance of manufacturing companies (Kareem, Bakare & Ologunla, 2013). Furthermore, there is inadequate knowledge due to the early stage of international proprietary rights of manufacturing companies in Nigeria (Ezeoha, 2012). Review of previous theoretical and empirical literature revealed that there is a knowledge gap on the effects of international proprietary rights on firm performance since the findings presented are contradictory to theoretical arguments.

### 1.3 Objectives of the study

The objective of this study was to investigate the impact of international proprietary rights on financial performance of listed manufacturing companies in Nigeria.

### 1.4 Research Hypothesis

The study sought to test the hypotheses that;

**H<sub>01</sub>** International proprietary rights has no significant effect on financial performance of listed manufacturing companies in Nigeria

### 1.5 Scope of the Study

The study covered the effect of international proprietary rights on financial performance of listed manufacturing companies in Nigeria. The study was anchored on resourced based theory, internalization theory and internationalization process theory to expound on the relationship between business internationalization and financial performance of listed manufacturing companies in Nigeria. The study reviewed previous literature related to the effect of business internationalization on firm performance. The study population was all listed 74 manufacturing companies in Nigeria. The scope of the study covered the period of 2006 to 2015. The study focused on this period since the concept of business internationalization is increasingly being adopted by many manufacturing companies in Nigeria with the view to explore international markets.

## 2. THEORETICAL REVIEW

### 2.1 Theoretical Review

#### 2.1.1 Resource Based Theory

The Resource-Based View (RBV) of the firm initiated in 1980s by Wernerfelt (1984), Rumelt (1984) and Barney (1986) has become one of the dominant contemporary approaches to the analysis of sustained competitive advantage and its implication on firm performance. The RBV posits that the possession of key resources along with their effective development and deployment enables firms to achieve and sustain competitive advantage. It focuses on the relationship between firm's resources and performance and helps to answer the question why different firms perform differently in the same market (Jena, 2008). The resource-based view suggests that valuable firm resources comprising tangible and intangible elements are usually scarce, imperfectly imitable, and lacking in direct substitutes (Brouthers & Hennart, 2007). The resource-based view suggests that firms develop unique resources that they can exploit in foreign markets or use foreign markets as a source for acquiring or developing new resource-based advantages (Luo, 2002). Foss (1998) stated that the resource-based perspective does not escape the general problem of finding the appropriate unit of analysis. Most contributions within the RBV take the individual resource as the relevant unit of analyze are to study competitive advantage. Although the resource-based view (RBV) has emerged as one of the substantial theories of strategic management, it is said that it has overlooked the role of entrepreneurial strategies and entrepreneurial abilities as one of the crucial sources of the competitive advantage of a firm (Fink & Kraus, 2007). For the purpose of this study, resource based theory is found relevant as it provides theoretical foundation for explaining how companies organize resources to enhance internationalization process and its effect on financial performance.

### 2.1.2 Internalization Theory

This theory was developed by Buckley and Casson (1976) and followed by Hennart (1982). The origin of this theory was by Coase (1937) in a national context and Hymer (1976) in an international context. Hymer (1976) established two major determinants of FDI. The Internalization theory lies on why companies do not prefer to sign contract with a subcontractor in a foreign country instead of engaging in Foreign Direct Investment themselves. Hymer (1976) discussed the problem of information costs for international firms with respect to local firms, different currency risk and differences in government's fiscal policies. The theory of internalization explains the motivations of the transnational companies for making foreign direct investment by taking advantage of various government fiscal policies and other policies. The internalization advantages include the following: avoid governmental intervention such as tariffs, price controls and quotas; avoidance of litigation and violated contract; control of conditions and supply of sale of inputs; application of transfer pricing; avoidance of negotiation and search costs and control of market outlets.

### 2.1.3 Internationalisation Process Theory

This theory was first proposed by Johanson and Wiedersheim-Paul (1975) and Johanson and Vahlne (1977) and states that internationalization is a staged process and firms gradually progress from early to latter stages of internationalization. Internationalization Process theory states that firms moved from the one stage to the next sequentially as they incrementally gained knowledge of their export markets. An increase in knowledge with respect to international business facilitates increase in level of internationalization by reducing the psychic distance between firms from home and host countries. Incremental internationalization process theory builds on knowledge accumulation and experience (Andersen, 1993) it incorporates several related approaches, which are similar in their explanatory power. Both the Uppsala internationalization model and the innovation-related internationalization model contend that firms become international in a slow and incremental process with a limited number of targeted geographic markets (Andersen, 1993). Zahra (2005) investigate the nature of foreign market entry, incremental internationalization and accelerated early cross-border engagements have come to form the dominant paradigms in internationalization process research. The incremental view of internationalization has not been without its critics. As the environment has changed significantly since the traditional internationalization theories were developed, firms have quite often been required to speed up their foreign market entry processes.

## 2.2 Literature review

### 2.2.1 International Proprietary Rights and Financial Performance

Arora (2009) conducted a study on intellectual property rights and the international transfer of technology in developing countries. The study aimed at exploring one of the main areas to which research efforts have been devoted, namely, the determinants of the use of different appropriability strategies at the firm and sectoral level. The data was analysed using Statistical package of social studies. The data was analysed using inferential statistics; correlation and regression model. The study concluded that it is useful to note that it is essential to analyse the impact of patenting and other appropriability tools on variables such as profits or innovation activities.

Bejesky (2003) conducted a study on managing the patent versus trade secret protection decision for the multinational corporation in China. The study considered two factors related to this risk in the context of China associated with the global importance of this market and serious apprehensions encompassing China's International Proprietary Rights protections. First, it considered objective enforcement of codified legal institutions" that protect patents and trade secrets while examining political, cultural, and informal" influences on legal frameworks. MNCs often must negotiate with government officials and build political relationships in the investee country. Second, within the context of dynamic interactions between political and legal influences, the article appraises the important trade-off between filing for patent protection or protecting process technology internally via trade secret. In order to protect a patent, a firm must comply with filing requirements, the invention must fall within the scope of patent protection as defined by the host government, and the holder must take measures to enforce patent rights if there is a potential infringement.

Hall and Helmers (2010) conducted a study on the role of patent protection in technology transfer. The study reviewed the evidence on the role of patents for innovation and international technology transfer in general. The literature suggested that patent protection in a host country encourages technology transfer to that country but that its impact on innovation



and development is much more ambiguous. The study discussed the implications of these findings and other technology-specific evidence for the diffusion of climate change-related technologies. The study concluded that the double externality problem, that is the presence of both environmental and knowledge externalities, implies that international proprietary rights may not be the ideal and cannot be the only policy instrument to encourage innovation in this area and that the range and variety of green technologies as well as the need for local adaptation of technologies means that patent protection may be neither available nor useful in some settings.

### 2.2.2 Financial Performance

Financial performance is a measure of an organization's financial condition or financial outcomes resulting from management decisions carried out by organization members (Campbell & Mínguez-Vera, 2008). According to Chi and Gursoy (2009) financial performance refers to the level of companies' financial performance relative to their major competitors over the past years. It literally refers to financial measures, such as return equity (ROE), return on investment (ROI), operating profit, and sales growth rate (Kuhle, Walther & Wurtzbech, 2009). Pratheepkanth (2011) claimed that these indicators are the best to identify whether an organization is doing things right and hence these indicators can be used as the primary measure of organization success. The financial performance of international manufacturing companies depends on the success of firms in the market, both locally and internationally. Information on financial performance is useful in predicting the capacity of the enterprise hence analysing how well or poorly an enterprise is doing against its set objectives. Financial performance is commonly used as an indicator of a firm's financial health over a given period of time. This puts financial performance as the dependent variable key issues of international firms. Therefore, in this study financial performance refers to return on equity, return on asset and return on investment.

### 2.3 Critique of Existing Literature

Musuva (2013) study focused on the firm level factors and international performance of companies listed on the Nairobi Securities Exchange. Specifically, the research focused on the effect of institutional capital, management characteristics, organizational demographics, firm capabilities, internationalization orientation and degree of internationalization on firm international performance. This study was conducted in Kenya hence the finding cannot be generalized to listed manufacturing companies in Nigeria. Similarly, the context of this study is different from the context of the current study. Ghanatabadi, (2005) study was conducted on internationalization of small and medium-sized enterprises in Iran while the current study will be conducted on listed manufacturing companies in Nigeria. Kraśnicka and Głód (2013) conducted a study on the impact of the internationalization of Polish SMEs on their performance. Kraśnicka and Głód (2013) study was conducted on impact of the internationalization of Polish SMEs on their performance while the current study will be conducted on listed manufacturing companies in Nigeria. Similarly, Thériault and Beckman (2008) investigate the internationalization of Indian firms. Thériault and Beckman (2008) study findings may not be applied to the context of Nigeria since Nigeria had different socio-economic settings.

Roy (2007) estimates the demand and supply functions of the manufactured exports for India, using a time series data over the period 1960-2006. The study did not focus on the effects on internationalization on financial performance of listed firms. Martinez (2006) examines the relationship between industrial districts and the export performance of SMEs in Spain using panel data. These study findings may not be applied to the context of Nigeria since Nigeria had different socio-economic settings. Buster (2012) examine effects of foreign source of debt on firm performance: a survey of commercial banks listed on Nairobi securities exchange the study use a longitudinal research design in collection of data. The current study was conducted in Nigeria that has different socio-economic and political settings. Owino (2015) examine the effect of foreign capital on the financial performance of investment and banking firms listed at the Nairobi Securities Exchange in Kenya this study therefore sought to examine the extent to which foreign capital influences financial performance, secondary data were collected from investment companies and banking institutions listed on the Nairobi Securities Exchange (NSE). The current study was conducted in Nigeria that has different socio-economic and political settings.

### 2.4 Research Gaps

Manufacturing firms play an increasingly significant role in Nigeria economy, and are expected to grow fast given the growth prospects and the various internationalization policies of the federal government (Awolusi, 2013). The Nigeria

manufacturing companies began internationalization when they realized world market would offer them more opportunity and unlimited scope for growth; some ambitious service firms, especially Banks and Insurance institutions, began their first experiment abroad, which means Nigerian internationalization, is still at its early stage (Onafowora & Owoye, 2006).

Literature review revealed that studies have been conducted on financial performance of listed manufacturing companies in Nigeria (Ezeoha, 2007); Adenikinju and Chete (2002); Awolusi, 2013; Oyeniyi and Omotayo (2009). However literature on the effect of business internationalization on financial performance of listed manufacturing firms especially in the Nigerian context is very scarce. The inadequate knowledge on effect of business internationalization on financial performance of listed manufacturing firms may be due to the early stage of internationalization of manufacturing companies in Nigeria (Ezeoha, 2012). The results based on data from a cross-sectional set of U.S. multinational firms find evidence of positive relationship between degree of internationalization and firm performance. The rate of return on assets declines, then increases, and finally decreases slightly as the degree of internationalization increases. Based on the above mentioned research and knowledge gaps, this study sought to determine the impact of international proprietary rights and business foreign funding on financial performance of listed manufacturing companies in Nigeria.

## 2.5 Financial Performance

The business performance consists of two aspects: market performance and financial performance. Market performance relates to customer behaviour. Higher sales volume, customer satisfaction increases, customer loyalty, and growth of market shares are indicators of market performance while the financial performance is measured in accounting terms. This study defines firm performance as a goal achievement and financial performance that are indicated by the net income goal achievement, sales amount and market share increases, the better return on investment, and the growth and continuance of overall performance (Mella, 2012). Business operation focus on highest potential profit and a common approach is a cost control that is expected to produce the greatest overall financial performance (Wu, Lin & Chang, 2011). The four useful profitability ratios and measures are the return on assets (ROA), return on equity (ROE), operating profit margin and net income. The ROA measures the returns to all assets and is often used as an overall index profitability and the higher the value, the more profitable the business. ROE measures the rate of return on the owners' equity employed in the business.

## 3. METHODOLOGY

The objective of this study was to investigate the impact of international proprietary rights on financial performance of listed manufacturing companies in Nigeria. A descriptive research design was applied for this study. The target population for this study was a total of 74 seventy-four listed manufacturing companies in Nigeria. The study used both primary and secondary data. For Primary data, a single questionnaire was administered to all the 74 listed Manufacturing companies. The study targeted the top management of the companies. Data collected was analyzed with the help of the Statistical Packages for Social Sciences (SPSS) package. Pearson correlation was used to test the association between the international proprietary rights and the financial performance of manufacturing firms in Nigeria. Regression analysis was also used to determine the nature of the relationship between the two. Data collected was analysed by editing, coding and categorizing through the use of statistical package for social sciences (SPSS) version 20.0 computer software. The multiple regression model Equation shows the linear regression model of the independent variables against the dependent variable. The following model was used in this study;

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where:

Y= Financial performance (ROA)

X<sub>1</sub>=International Proprietary Rights

$\beta_0$ = Regression Output the Constant

$\beta_1$ = the coefficient of independent variable

$e$  = Error Term

#### 4. RESEARCH FINDINGS AND DISCUSSION

##### 4.1 Descriptive Research

The descriptive findings of International Proprietary Rights are presented in Table 4.1.

**Table 4.1 International Proprietary Rights Descriptive Results**

Statements	SD	D	N	A	SA	Mean	Std Dev
We enhance our income streams by relying on international trade marks	2.9%	7.1%	38.6%	20.0%	31.4%	3.70	1.08
We enhance our trade through the use of international patents rights	1.4%	10.0%	40.0%	22.9%	25.7%	3.61	1.03
Royalties income from proprietary rights make an important portions of our international operations	7.1%	8.6%	25.7%	28.6%	30.0%	3.66	1.20
Foreign business ownership has been made easy through internationalisation	8.6%	2.9%	31.4%	25.7%	31.4%	3.69	1.20
Countries worldwide have adopted Foreign investment rights that make easy for foreign companies to invest	5.7%	5.7%	31.4%	25.7%	31.4%	3.71	1.14

The study sought to establish listed manufacturing companies enhanced our income streams by relying on international trade marks. The result in Table 4.1 showed that 38.6% of the respondents were neutral while 31.4% strongly agreed, 20.0% agreed. Only 2.9% and 7.1% of the respondents strongly disagreed and disagreed respectively. The statement had a mean response of 3.70 and standard deviation of 1.08. The study further sought to establish listed manufacturing companies enhanced our trade through the use of international patents rights. The result in Table above showed that 40.0% of the respondents were neutral while 25.7% strongly agreed, 22.9% agreed. Only 1.4% and 10.0% of the respondents strongly disagreed and disagreed respectively. The statement had a mean response of 3.61 and standard deviation of 1.03.

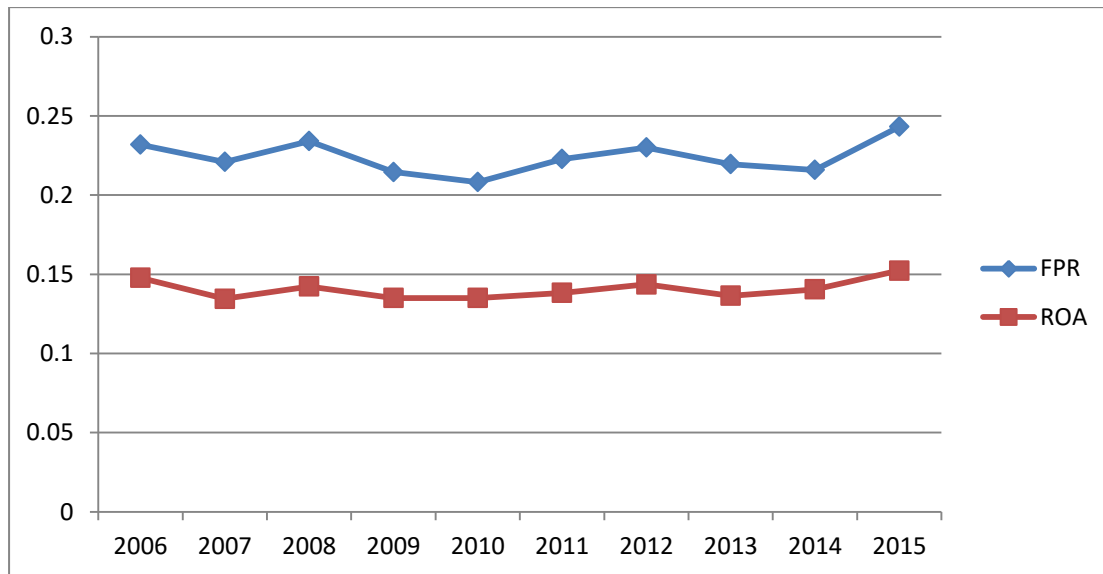
The study further intended to find out respondents opinion if royalties income from proprietary rights make an important portions of our international operations. The statement had a mean response of 3.66 and a standard deviation of 1.20. This results indicated that majority of the respondents agreed and strongly agreed with the statement. The standard deviation on the other hand indicated that the response did not vary much from one respondent to another. On whether the foreign business ownership had been made easy through internationalization, majority of the respondents agreed and strongly agreed as shown by the mean response of 3.69 and a standard deviation of 1.20.

The finding presented in table further showed that majority of the respondents as shown by the mean of 3.71 and standard deviation of 1.14 agreed that countries worldwide have adopted foreign investment rights that make easy for foreign companies to invest. The above findings implied that international proprietary rights influenced the degree of internationalisation by the manufacturing companies since it influences the business licencing and registration process. Therefore business friendly international proprietary rights could massively influence the financial performance of manufacturing companies by ensuring companies that internationalise their operation do so in less bureaucratic manner.

International proprietary rights come in many forms, trade secrets, copyrights, and patents being the most important in relation to technology transfer (Arora, 2009). The literature on trade secrecy and copyrights is sparse, especially for trade secrecy, and particularly as it relates to international technology transfer; much of the empirical evidence at hand deals with patents (Graves, 2007).



The study further analysed the trend in international proprietary rights. International proprietary right was measured using the R&D cost ratio which was computed by dividing R&D cost and Total Costs.



**Figure 4.8 Trend Analysis for International Proprietary Rights**

The results presented in figure 4.8 showed that the trends in international proprietary right measured by R&D cost ratio was in tandem with the financial performance of the manufacturing companies in Nigeria. The finding implied that increased in R&D cost resulted to a corresponding increase in financial performance measured by ROA. Also in a similar study Katila and Ahuja (2002) posited that companies that invest in R&D tend to strengthen their-market positions and provide opportunities to enter new product-market domains thereby improving financial performance. Muñoz-Bullón and Sanchez-Bueno (2011) results also found that a firm engaging in R&D activities earns 4% to 11% higher sales and generates 4% to 13% more profits than firms that do not engage in R&D activities.

## 4.2 Correlation Analysis Results

### 4.2.1 International Proprietary Rights and Financial performance

The study further employed correlation tests to ascertain the association between international proprietary rights and financial performance of listed manufacturing companies in Nigeria. The findings are presented in table 4.2.

**Table 4.2 International Proprietary Rights and Financial performance**

		International Proprietary Rights	ROA
International Proprietary Rights	Pearson Correlation	1	.571**
	Sig. (2-tailed)		.000
	N	70	70
ROA	Pearson Correlation	.571**	1
	Sig. (2-tailed)	.000	
	N	70	70

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

The correlation test results also revealed a positive and significant association ( $r=0.626$ ,  $p=0.000$ ) between International Proprietary Rights and Financial performance of listed manufacturing companies in Nigeria. The findings implied that when International Proprietary Rights is positive and higher then financial performance of listed manufacturing companies in Nigeria will also be positive and high showing significant association. The result contradicts Adeoye and

Elegunde (2012), who examines the impact of international proprietary rights on organizational financial performance in the food and beverage industry in Nigeria. Renko (2011) also reported that international proprietary rights are a major determinant of return on assets especially for manufacturing industry.

#### 4.3 Regression Analysis Results

**Table 4.3 Regression Coefficients for International Proprietary Rights and ROA**

	B	Std. Error	Beta	t	Sig.
(Constant)	0.057	0.015		3.805	0.000
International Proprietary Rights	0.023	0.004	0.571	5.731	0.000

a Dependent Variable: ROA

The null hypothesis state that,  $\beta$  (beta) = 0, meaning there is no significant relationship between the international proprietary rights and financial performance as the slope  $\beta$  (beta) = 0 (no relationship between the two variables). The results on the beta coefficient of the resulting model in table 4.26 revealed that the constant  $\alpha = 0.057$  which is significantly different from 0, while the p- value = 0.000 which is less than 0.05.

The coefficient  $\beta = 0.023$  was also significantly different from 0 with a p-value=0.000 which was also less than 0.05 indicating that financial performance of listed manufacturing companies in Nigeria was significantly influenced by the international proprietary rights. This implies that the null hypothesis  $\beta_1=0$  was rejected and the alternative hypothesis  $\beta_1 \neq 0$  is taken to hold implying that the model  $ROA=0.057+0.023$  (*international proprietary rights*)  $+\varepsilon$  is significantly fit. The model holds as suggested by the above test. This confirmed that there is a significant positive linear relationship between the international proprietary rights and company's return on assets. The null hypothesis that international proprietary rights have no significant effect on financial performance of listed manufacturing companies in Nigeria was rejected.

The result contradicts Adeoye and Elegunde (2012), who examines the impact of international proprietary rights on organizational financial performance in the food and beverage industry in Nigeria. Renko (2011) also reported that international proprietary rights are a major determinant of return on assets especially for manufacturing industry.

## 5. CONCLUSION AND RECOMMENDATION

### 5.1 Conclusion

The study was to determine the impact of international proprietary rights on financial performance of listed manufacturing companies in Nigeria. The finding of the descriptive analysis also showed that majority of the respondents agreed and strongly agreed with most of the statements regarding the effects of international proprietary rights on financial performance as measured by ROA of listed manufacturing companies in Nigeria. The study further used correlation and regression analysis to ascertain the relationship between foreign direct investments and financial performance of listed manufacturing companies in Nigeria. The correlation test results also revealed a positive and significant association between international proprietary rights and financial performance of listed manufacturing companies in Nigeria. The study established that international proprietary rights had a positive but insignificant relationship with financial performance of listed manufacturing companies in Nigeria. The study therefore concluded that international proprietary rights do not influence in any way the financial performance of the companies that have internationalized their operations. International proprietary rights play a significant role in simplifying the business registration and licensing processes but do not impact on financial performance of the companies.

### 5.2 Recommendation

The findings revealed that the management and the board of directors of the listed manufacturing companies should intensify efforts on how the locally produced products will be able to penetrate into the foreign countries as it was discovered that majority of the goods produced by the manufacturing companies in Nigeria are consumed locally. Any company seeking to be an industry leader in the twenty-first century must not focus on domestic market leadership only, but must also focus on global market leadership.

### 5.3 Area for further research

The study examined the impact of international proprietary rights on firm financial performance, measured by return on equity. It may be useful to re-examine matter using other market based performance variables such as EVA and Tobin's  $Q$  and compare the relationship. The use of economic value added will enable the measurement of financial performance using both quantitative and qualitative data from the company. Another avenue for further research is to test additional internationalization variables not considered in this study that may influence firm performance.

### REFERENCES

- [1] Adenikinju, A. F. & Chete, L. N. (2002). *Productivity, market structure and trade liberalization in Nigeria* (Vol. 126). Nairobi: *African Economic Research Consortium*, 19(2), 53
- [2] Agndal, H. & Chetty, S. (2007). The impact of relationships on changes in internationalisation strategies of SMEs. *European Journal of Marketing*, 41(11/12), 1449-1474.
- [3] Alkaabi, S. K. & Dixon, C. (2014). Factors affecting internationalization decision making in family businesses: An integrated literature review. *Journal of Applied Management and Entrepreneurship*, 19(2), 53.
- [4] Andersen, O. (1993). On the internationalization process of firms: A critical analysis. *Journal of international business studies*, 24(2), 209-231.
- [5] Arora, A. (2009). Intellectual property rights and the international transfer of technology: Setting out an agenda for empirical research in developing countries. *The Economics of Intellectual Property*, 41.
- [6] Awolusi, O. D. (2013). The effects of total quality management on customer service management in the Nigerian banking industry: an empirical analysis. *International Journal of Management and Network Economics*, 3(1), 57-77.
- [7] Beck, K. (2003). *Test-driven development: by example*. Addison-Wesley Professional.
- [8] Bejesky, R. (2003). Investing in the dragon: Managing the patent versus trade secret protection decision for the multinational corporation in China. *Tulsa J. Comp. & Int'l L.*, 11, 437.
- [9] Benito, G. R., & Gripsrud, G. (1992). The expansion of foreign direct investments: discrete rational location choices or a cultural learning process? *Journal of International Business Studies*, 23(3), 461-476.
- [10] Brouthers, K. D., & Hennart, J. F. (2007). Boundaries of the firm: Insights from international entry mode research. *Journal of management*, 33(3), 395-425.
- [11] Buckley, P. J., Clegg, L. J., Cross, A. R., Liu, X., Voss, H., & Zheng, P. (2007). The determinants of Chinese outward foreign direct investment. *Journal of international business studies*, 38(4), 499-518.
- [12] Burns, N., & Grove, S. K. (2010). *Understanding nursing research: Building an evidence-based practice*. Elsevier Health Sciences.
- [13] Buster, B. D. (2012). Relationship between asset allocation and financial performance of mutual funds in Kenya (*Doctoral dissertation, University of Nairobi, Kenya*).
- [14] Büthe, T., & Milner, H. V. (2008). The politics of foreign direct investment into developing countries: increasing FDI through international trade agreements?. *American Journal of Political Science*, 52(4), 741-762.
- [15] Campbell, K., & Mínguez-Vera, A. (2008). Gender diversity in the boardroom and firm financial performance. *Journal of business ethics*, 83(3), 435-451.
- [16] Dawson, J. A. (2007). Scoping and conceptualising retailer internationalisation. *Journal of economic geography*.
- [17] Ellis, P. D. (2007). Paths to foreign markets: does distance to market affect firm internationalisation? *International Business Review*, 16(5), 573-593.
- [18] Ezeoha, A. (2007). Structural effects of banking industry consolidation in Nigeria: A review. *Journal of banking regulation*, 8(2), 159-176.
- [19] Ezeoha, A., Ebele, O., & Ndi Okereke, O. (2009). Stock market development and private investment growth in Nigeria. *Journal of Sustainable Development in Africa*, 11(2), 20-35.

- [20] Fink, M., & Kraus, S. (2007). Mutual trust as a key to internationalization of SMEs. *Management Research News*, 30(9), 674-688.
- [21] Foss, N. J. (1998). The resource-based perspective: an assessment and diagnosis of problems. *Scandinavian Journal of management*, 14(3), 133-149.
- [22] Ganotakis, P., & Love, J. H. (2012). Export propensity, export intensity and firm performance: The role of the entrepreneurial founding team. *Journal of International Business Studies*, 43(8), 693-718.
- [23] Graves, C. T. (2007). *Trade Secrets as Property: Theory and Consequences*. *J. Intell. Prop.*, 15, 39.
- [24] Graves, C., & Thomas, J. (2004). Internationalisation of the family business: a longitudinal perspective. *International Journal of Globalisation and Small Business*, 1(1), 7-27.
- [25] Greenaway, D., Upward, R., & Wakelin, K. (Eds.). (2002). *Trade, investment, migration and labour market adjustment*. Springer.
- [26] Grove, J. W., & Burns, N. H. (2003). Experimental assessment of factors affecting transfer length. *Structural Journal*, 100(6), 740-748.
- [27] Hall, B. H., & Helmers, C. (2010). *The role of patent protection in (clean/green) technology transfer* (No. w16323). National Bureau of Economic Research.
- [28] Hatum, A., & Michelini, J. (2010). Going global: the process of internationalisation of Latino multinational firms. *International Journal of Business and Emerging Markets*, 3(1), 36-56.
- [29] Hennart, J. F. (1982). *A theory of multinational enterprise*. Univ of Michigan Pr.
- [30] Hitt, M. A. Hoskisson, R. E. & Kim, H. (1997). International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of Management journal*, 40(4), 767-798.
- [31] Hsu, C. C. (2006). Internationalization and performance: the S-curve hypothesis and product diversity effect. *Multinational Business Review*, 14(2), 29-46.
- [32] Hymer, S. H. (1976). The international operations of national firms: A study of foreign direct investment.
- [33] Jackson, S. A. (2002). On the boundaries of theological tolerance in Islam.
- [34] Johanson, J. & Mattsson, L. G. (2015). Internationalisation in industrial systems—a network approach. In *Knowledge, Networks and Power* (pp. 111-132). Palgrave Macmillan UK.
- [35] Johanson, J., & Vahlne, J. E. (1977). The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments. *Journal of international business studies*, 8(1), 23-32.
- [36] Johanson, J. & Vahlne, J. E. (1990). The mechanism of internationalisation. *International marketing review*, 7(4).
- [37] Kareem, R. O. Bakare, H. A. & Ologunla, E. S. (2013). Globalization and Economic Growth in Nigeria: Any Nexus? *Service Science and Management Research (SSMR)*, 2(1), 9-17.
- [38] Kaur, S. & Sandhu, M. S. (2014). Internationalisation of born global firms: Evidence from Malaysia. *Journal of the Asia Pacific Economy*, 19(1), 101-136.
- [39] Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
- [40] Kraśnicka, T. & Głód, W. (2013). The Impact of the Internationalization of Polish SMEs on Their Performance. *Journal of Economics & Management*, 13, 67-83.
- [41] Kuhle, J. Walther, C. & Wurtzbech, C. (2009). The financial performance of real estate investment trusts. *Journal of Real Estate Research* 13, 67-83
- [42] Lee, J. J. (2010). International students' experiences and attitudes at a US host institution: Self-reports and future recommendations. *Journal of Research in International Education*, 9(1), 66-84.
- [43] Lu, J. W. & Beamish, P. W. (2004). International diversification and firm performance: The S-curve hypothesis. *Academy of management journal*, 47(4), 598-609.
- [44] Luo, Y. (1998). Timing of investment and international expansion performance in China. *Journal of International Business Studies*, 29(2), 391-407.

- [45] Mayer, T. & Ottaviano, G. I. (2008). The happy few: The internationalisation of European firms. *Intereconomics*, 43(3), 135-148.
- [46] Melén, S. & Nordman, E. R. (2009). The internationalisation modes of Born Globals: A longitudinal study. *European Management Journal*, 27(4), 243-254.
- [47] Mella, P. (2012). Performance indicators in business value-creating organizations. *Economia Aziendale Online*, (2), 25-52.
- [48] Mugenda, O. M. (1999). *Research methods: Quantitative and qualitative approaches*. African Centre for Technology Studies.
- [49] Mugenda, O. M., & Mugenda, A. G. (2012). *Research methods dictionary*.
- [50] Mugenda, O., & Mugenda, A. (2003). *Research methodology: qualitative and quantitative techniques*.
- [51] O'Cass, A. & Weerawardena, J. (2009). Examining the role of international entrepreneurship, innovation and international market performance in SME internationalisation. *European Journal of Marketing*, 43(11/12), 1325-1348.
- [52] Olusegun, A. I. (2012). Is small and medium enterprises (SMEs) an entrepreneurship?. *International Journal of Academic Research in Business and Social Sciences*, 2(1), 487.
- [53] Onafowora, O. A. & Owoye, O. (2006). An empirical investigation of budget and trade deficits: the case of Nigeria. *The Journal of Developing Areas*, 39(2), 153-174.
- [54] Onkelinx, J. & Sleuwaegen, L. E. (2010). Internationalization strategy and performance of small and medium sized enterprises.
- [55] Osborne, J. W. Christensen, W. R. & Gunter, J. (2001). Educational psychology from a statistician's perspective: A review of the power and goodness of educational psychology research. In *national meeting of the American Education Research Association (AERA)*, Seattle, WA.
- [56] Owino, A. O. (2015). *The Effect Of Funding On The Financial Performance Of Commercial Banks In Kenya* (Doctoral dissertation, University of Nairobi).
- [57] Pan, W. H. Tsai, W. C. & Kuo, T. Y. (2010). Internationalization and firm performance: Exploring the moderating effects of regional diversification. *African Journal of Business Management*, 4(18), 4049.
- [58] Polit, D. F. Beck, C. T. Hungler, B. P. & Bartholomeyczik, S. (2004). *Lehrbuch Pflegeforschung: Methodik, Beurteilung und Anwendung*. Huber.
- [59] Rumelt, R. P. & Lamb, R. (1984). Competitive strategic management. *Toward a Strategic Theory of the Firm*, 556-570.
- [60] Segaro, E. (2012). Internationalisation of family SMEs: the impact of ownership, governance, and top management team. *Journal of Management & Governance*, 16(1), 147-169.
- [61] Senik, Z., Isa, R. Scott-Ladd, B., & Entekin, L. (2010). Influential factors for SME internationalization: Evidence from Malaysia. *International Journal of Economics and Management*, 4(2), 285-304.
- [62] Sleuwaegen, L. & Onkelinx, J. (2014). International commitment, post-entry growth and survival of international new ventures. *Journal of Business Venturing*, 29(1), 106-120.
- [63] Thériault, L. É. & Beckman, K. (2008). Trends in Foreign Direct Investment and Mergers and Acquisitions: International and Canadian Performance and Implications. Conference Board of Canada.
- [64] Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic management journal*, 5(2), 171-180.
- [65] Zahra, S. A. (2005). Entrepreneurial risk taking in family firms. *Family Business Review*, 18(1),
- [66] Zahra, S. A., Ireland, R. D., & Hitt, M. A. (2000). International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of Management journal*, 43(5), 925-950.