

# Relational Capital Investment and Financial Performance of Manufacturing Companies in Nigeria

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## **Abstract**

*This study delved into the connection between Nigerian manufacturing enterprises' financial performance and relational capital investment. The investigation was conducted using the ex post facto research design. The populace of the study consist of 30 manufacturing companies cutting across several subsectors, including consumer goods, healthcare, oil and gas, industrial goods, natural resources, and conglomerates that have actively traded spanning from 2010 and 2019. The multiple regression model was employed to test the formulated hypotheses. The study observed that return on assets and relational capital investment of manufacturing companies were positively and significantly correlated. However, the return on equity and earnings per share of Nigerian manufacturing enterprises were positively and insignificantly correlated with relational capital investment. The study concluded that human capital investment, structural capital investment and relational capital investment make the most contribution to the financial performance of manufacturing companies in Nigeria. It is recommended that manufacturing businesses should invest more in human capital to maximize the already existing positive effect on financial performance. Also, manufacturing companies are advised to improve investment in relational capital to maximize returns.*

**Keywords:** *Relational Capital, Financial Performance, Manufacturing firms, Earnings per share, Return on Investment.*

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## **1. INTRODUCTION**

Relational capital, a significant component of intellectual capital, plays a crucial role in the success of business organizations, including manufacturing companies in Nigeria. It encompasses the development and maintenance of valuable relationships with various external entities such as clients, vendors, research and development partners, and public institutions. Manufacturing companies in Nigeria, like their global counterparts, recognize the strategic importance of relational capital. Building and nurturing these relationships is a vital but costly process. These relationships are a part of a company's intellectual capital, as recognized by Agndal and Nilsson (2006). Good relationships with customers, suppliers, and allies are essential for business success,

as they contribute to image, loyalty, satisfaction, commercial power, and other valuable aspects of relational capital (Meritum, 2002).

Developing relationships, referred to as relational capital, is acknowledged as a critical component of intellectual capital. It is also recognized as one of the most challenging components to develop, as it involves external factors over which the organization may have limited influence (Lenart-Gansinieć, 2016). However, an organization's ability to operate and adapt effectively depends on its ability to build and sustain partnerships with different organizations. Relational capital extends to all resources linked with external relationships, covering customers, suppliers, research and development partners, and public institutions (Lervik, 2006). It contributes significantly to a business organization's ability to succeed and adapt in a competitive environment. In comparison to visible and physical resources, such as lands, buildings, and equipment, intangible resources like good reputation, customer relations, and organizational practices are not explicitly visible but are equally important. These intangible resources and the capacity to take advantage of them properly form the essence of relational capital. Developing relationships, which is referred to as relational capital, is recognized as the most difficult component of intellectual capital to develop as it involves external factors and sources that the organization may have very little influence on.

According to Lenart-Gansinieć (2016), the ability to establish and sustain partnerships with a variety of organizations is a determinant of an organization's ability to adapt and operate effectively. This is especially true, as no business organization can truly succeed without a good relationship with its market. All resources that are linked with an external relationship of the firm, which covers both institutions and business, including customers, suppliers, research and development partners, and/or public institutions, are what Lervik (2006) referred to as relational capital. In addition to all the points mentioned above, Meritum (2002) adds that relational capital also covers image, loyalty, satisfaction, commercial power, and environmental activities, among others.

Last but not least is the component that combines both the human and relational capitals to give the semblance of an organized entity. This very important component of intellectual capital is called the structural capital. As Zyl (2005) put it, structural capital is the skeleton and glue of a firm which has been described as what is left behind after other components of intellectual capital have left the organization. For example, if employees comprising human capital were to depart from the company, this would also mean that the relational capital would also evaporate. However, the structural capital, which comprises the infrastructure that supports human capital, is the core of the firm. Structural capital includes information systems, proprietary databases, organizational charts, process manuals, laboratories and facilities, market intelligence, and intellectual property, including brand names and patents. According to Pena, et al. (2012), the ultimate function of structural capital is to empower managers and staff to utilize their human capital in order to guarantee the effective pursuit and accomplishment of organizational objectives. With an emphasis on earnings per share, return on equity, and return on asset, this study examines how relational capital investment affects the financial performance of publicly traded manufacturing companies in Nigeria. Manufacturing firms listed and traded on the Nigerian Exchange Group between 2010 and 2019 would be the subject of the study using annual data from their annual reports. Relational

capital, including information systems technology, innovation, and research and development, helps level the playing field and allows smaller firms to exploit advantages.

## **2. LITERATURE REVIEW**

### **2.1 Theoretical Framework**

#### **2.1.1 Resource-Based Theory**

The resource-based theory posits that a company's internal resources can serve as a direct source of sustained competitive advantage. This contrasts with the traditional perspective of competitive advantage, as proposed by Porter (1985), which centered on external factors like product type and business location. The resource-based theory provides a framework for identifying strategic resources capable of conferring competitive advantage. These resources, when properly utilized, enable organizations to achieve sustainable competitive advantage. At the core of the resource-based theory is a focus on an organization's internal resources as a means to streamline processes and gain a competitive edge. Barney (1991) stipulated that for a resource to serve as a potential source of sustainable competitive advantage, it must meet specific criteria: It must be rare, valuable, difficult to replace, and imperfectly imitable. According to this theory, companies need to create distinctive, firm-specific core competences in order to differentiate themselves from rivals and outperform them (Prahalad & Hamel, 1994).

In summary, the resource-based theory explicitly acknowledges the significance of intellectual capital components, including human and relational capital, as organizational resources. When harnessed effectively, these resources enhance the organization's competitive advantage over others. However, Mweru and Muya (2016) argue that, when applying the concepts of value, rareness, inimitability, and substitutability, the human capital pool must possess both high levels of skill and a willingness to exhibit productive behavior, as human resources practices alone cannot form the basis for sustainable competitive advantage, given their susceptibility to imitation by competitors.

### **2.2 Conceptual Review**

#### **Relational Capital**

Relational capital, in particular, serves as a reservoir from which firms can enrich themselves through external acquisition of information and knowledge, channeling this knowledge into the development of improved techniques. Notably, within the knowledge-based view of the firm, there has been an evolution in the usage of terms related to intellectual capital (Datta & De, 2017). Relational capital is internal resources accessible to other organizations, based on cooperation and trust. It reflects an organization's ability to establish and maintain enduring relationships, requiring transparency, social bonds, and shared values among the entities (Lenart-Gansiniec, 2016).

Edvinsson and Malone (1999) classify relational capital as a form of intellectual capital and divide it into three layers. The first layer comprises networks, collaborations, and associations related to knowledge sharing. The second layer centers on relationships with customers, input suppliers, business partners, and stakeholder groups, both internal and external to the organization. The final

layer encompasses mutual bonds formed based on trust, faith, and reputation (Datta & De, 2017). Relational capital does not exist in isolation but is interlinked with human capital efforts of supervisors and workers and the inputs of structural capital, such as information and more. It emerges as a result of deliberate actions and is contingent on strategic decisions and organizational initiatives. The building and cultivating relational capital heavily rely on the establishment of conditions conducive to nurturing and preserving connections within the organization and with external parties (Roberts, 2001).

### **Determinate of Relational Capital**

Relational capital can be understood in terms of networks, collaborations, and associations related to knowledge sharing, relationships with customers, input suppliers, business partners, and stakeholder groups, and mutual bonds based on trust, faith, and reputation (Datta & De, 2017). The Value-Added Relational Capital (VARC) can be calculated using the formula:

$$\text{VARC} = \text{VA}/\text{RC}$$

Where: VARC = Value Added Relational Capital

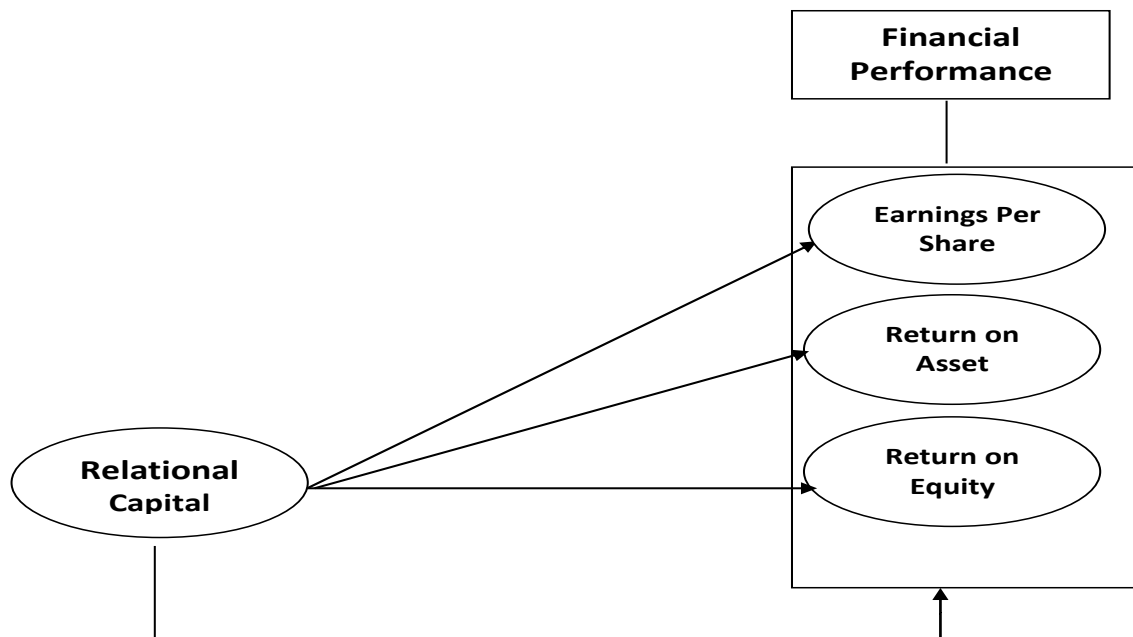
VA = Value Added

RC = Rational Capital

### **2.2.2 Financial Performance**

Business organizations are established to achieve specific objectives, typically centered on generating profits. Financial performance measures are often based on profitability, providing insights into an organization's financial health over a specified timeframe. There are two main categories: accounting measures and market-based measures. Accounting measures use financial information from balance sheets, income statements, and cash flows, analyzing variables like profitability, growth, leverage, liquidity, and cash flow.

Market-based financial performance measures, primarily available for publicly traded companies, consider an organization's market value and use ratios or rates of change. These measures include returns to shareholders, market value added, holding period returns, return on equity, and earnings per share. Financial performance analysis is crucial for monitoring and comparing an organization's performance. Decisions based on financial performance analysis contribute to the maximization of shareholder wealth (Jayawardhana, 2016).



**Figure 2.2:** Operational Framework for Relational Capital Investment and Financial Performance of Quoted Manufacturing Companies in Nigeria

### 2.3 Empirical Review

Nguyen (2024) investigates how intellectual capital (IC) affected the performance of Vietnamese listed companies between 2008 and 2021. The study determines factors impacting company performance using the structural equation model (SEM) and the value added intellectual coefficient (VAIC) model. The research finds that IC and its constituent parts are crucial for company success. Capital employed efficiency (CEE), human capital efficiency (HCE), and VAIC affect company performance.

Akinadewo and Falana (2024) evaluate how structural capital disclosure affects the worth of Nigerian listed service companies. This quantitative research study uses information from the financial statements and annual reports of 23 listed service companies in Nigeria. The sample was selected using a census sampling technique. Multiple regression analysis in conjunction with correlation analysis was employed in the investigation. Based on the results obtained, the study came to the conclusion that the value of listed service firms in Nigeria is greatly influenced by structural capital disclosure, which is proxied by organisational, process, and innovation capital disclosures.

Antwi-Boateng et al. (2024) found that Eco-Intellectual Capital (EIC) positively impacts the sustainability performance of small and medium-sized businesses (SMEs). The study used primary data and a quantitative research design, surveying 500 Ghanaian SMEs' employees and business owners. The findings revealed that EIC positively impacts social and environmental aspects of sustainability performance, but no discernible influence on the economic dimension.

Based on their intellectual capital, Mekonnen's 2024 study looked at the financial performance of consumer and industrial products firms listed in Nigeria. The study, which used a sample of 26 businesses, discovered that these businesses' financial performance was positively impacted by the cash they used. However, human capital had no obvious effect, whereas structural capital had a large negative impact. Secondary data and a longitudinal panel research approach were used in the study.

Vukmirović et al. (2024) studied green intellectual capital's effects on businesses' financial and non-financial metrics in the Serbian market. Data from 344 businesses showed that Green Relational Capital and Green Human Capital positively impacted financial and non-financial metrics, while green structural capital did not affect financial performance.

The study conducted by Habib and Dalwai in 2024 looks at how intellectual capital (ICE) and working capital management (WCME) affect company success in the GCC industrial arena. Data from 2015-2019 was collected from Standard & Poor's database. The study found that most businesses underutilize their investments and require improvement measures. ICE and WCME significantly impact firms' performance, aligning with pecking order, resource-based, and trade-off hypotheses.

Ahlawat et al. (2024) studied the relationship between financial competitiveness (FC) and intellectual capital (IC) of Standard & Poor's Bombay Stock Exchange Healthcare index constituents from 2013-2023. They measured IC using the Modified Value-Added Intellectual Coefficients model and used the Generalized Method of Moments model to determine the relationship between IC and FC. Human and relational capital positively impacted competitiveness, while structural, employed, and innovative capital negatively impacted it.

Ayinaddis et al. (2024) conducted a study on the impact of intellectual capital efficiency on the financial performance of insurance businesses in Ethiopia. The study used quantitative methodology, deductive techniques, and secondary data analysis. Results showed a significant positive correlation between financial performance and value-added intellectual capital, human capital, and capital employed efficiency. However, neither structural nor relational capital efficiency significantly affected the financial performance of Ethiopia's insurance industries.

Hariyono and Narsa (2024) study the strengthening of intellectual capital succession in Indonesian MSME's utilizing a sample of at least ten years-old businesses using technology. The study uses SEM analysis to ascertain the minimum sample size. Results show a strong correlation between human capital, relational and structural capital, and competitiveness in Indonesian MSME's. The high correlation between human capital and MSME survival can be mediated by relational and structural capital. However, structure and relational capital act as weak mediators.

In a study on the financial performance of manufacturing companies listed in Nigeria, Etim et al. (2024) concentrated on the connection between financial performance (ROE) and intellectual capital (IC). The study involved 26 organizations from 33 listed enterprises, analyzing data from 2013 to 2021. The findings showed that human capital and relational capital significantly impacted the ROE of these enterprises, using both descriptive and inferential statistics.

Yu, Zhang, and Huo (2021) investigate how relational capital and green supply chain management affect the financial performance of 308 manufacturing companies in China. They found that relational capital indirectly enhances financial performance through supplier and customer green management, while internal relational capital indirectly boosts financial performance through internal and supplier green management.

Udoh et al. (2021) study, conducted from 2015 to 2019, found that Relational Capital significantly impacts the performance of SMEs in North Central Nigeria. The research, which included 9586 SMEs and 384 respondents, used Taro Yamane's formula and multivariate regression. The findings indicated that the performance of SMEs is highly impacted by both internal and external relationship, while stored resources did not significantly impact their performance.

Mahmoud et al. (2020) studied relational capital's impact on public university performance in North Central Nigeria. They used data from 13 universities and 8,589 full-time academics. The study found a strong association between relational capital and teaching and community service performance, but contradicted findings regarding research performance. The study used GMM and OLS estimation techniques.

Research on relational capital is popular globally, but in Nigeria's manufacturing industry, there is a lack of focus on this subject due to limited literature review and limited research effort. From the few research works in Nigeria, three were concentrated on the service companies, SMEs in North and public university (Onyekwelu, Okoh, & Iyidiobi, 2017; and Yusuf, 2013), while the one by Etim et al. (2024) is focused on two manufacturing enterprises of the economy. Finally, Yu, Zhang, and Huo (2021). focused on the green supply chain management and relational capital on financial performance, using data gathered from 308 Chinese manufacturing enterprises. Therefore, as far as the researcher is aware, there are no existing relational capital research in three manufacturing sector in Nigeria.. Therefore, this study will contribute significantly to fill the aperture identified in the research literature.

### **3. METHODOLOGY**

For the purpose of this research, the ex post facto research design was chosen as the appropriate design. The population of the study are all the manufacturing companies listed on the Nigerian Exchange Group (NGX). Information available on the website of the NGX shows that there are 57 manufacturing companies cutting across several subsectors Considering that the population of the study is small, the research tried to work on all the population members in sample. However, this depended on the availability and accessibility of the required information. Initial investigations shows that the necessary information is available and easily accessible for 30 manufacturing companies out of the population of 57 companies. Thus, these 30 companies as shown in the table below comprise our sample. Furthermore, the period covered was ten years from 2010 to 2019, because this is the period with complete data for all the companies used as sample population in the research.

**Table 3.1 Listed Manufacturing Companies in Nigeria**

S/N	FIRMS	SECTOR
1	Champion Breweries Plc	Consumer Goods
2	Guinness Nig. Plc	Consumer Goods
3	International Breweries Plc	Consumer Goods
4	Nigerian Breweries Plc	Consumer Goods
5	Dangote Flour Plc	Consumer Goods
6	Dangote Sugar Refinery Plc	Consumer Goods
7	Flour Mills Plc	Consumer Goods
8	Honeywell Flour Mills Plc	Consumer Goods
9	National Salt Comp. Plc	Consumer Goods
10	Northern Nigeria Flour Mills Plc	Consumer Goods
11	Cadbury Nigeria Plc	Consumer Goods
12	Nestle Nigeria Plc	Consumer Goods
13	Nigerian Enamelware Plc	Consumer Goods
14	Vita Foam Nigeria Plc	Consumer Goods
15	PZ Cussons Nigeria Plc	Consumer Goods
16	Unilever Nigeria Plc	Consumer Goods
17	Fidson Healthcare Plc	Healthcare
18	May & Baker Plc	Healthcare
19	Neimeth Int'l Pharmaceuticals Plc	Healthcare
20	Glaxosmithkline Consumer Nigeria Plc	Healthcare
21	PharmaDeko Plc	Healthcare
22	Morrison Industries Plc	Healthcare
23	Berger Paints Plc	Industrial Goods
24	Chemicals & Allied Products Plc	Industrial Goods
25	Cement Company of Northern Nigeria Plc	Industrial Goods
26	Meyer (Former DN Meyer) Plc	Industrial Goods
27	Dangote Cement Plc	Industrial Goods
28	Lafarge Wapco Plc	Industrial Goods
29	BETA GLASS PLC	Industrial Goods
30	Cutix Plc	Industrial Goods

*Source: Nigerian Exchange Group Website.*

Pooled data from secondary sources - majorly from the annual financial reports of the companies in the sample was used in the study. Data were sourced from Nigerian Exchange Group Factbook among other reliable sources. The period covered for the study is ten years spanning 2010 to 2019, because this is the period with complete data for all the companies used as sample population in the research. And also, with a ten-year period data analysis, proper profitability trend can be established for EPS, which is one of the variables being tested in the research. Value Added Relational Capital (VARC) is used in this study as a measuring tool. It indicates the value created



by one unit of relational capital, and this is equal to net asset of the organization at the end of the period. Value Added Relational Capital (VARC) is calculated as:

$$VARC = VA/RC \dots \dots \dots (1)$$

Where

$$VARC = (\text{Value Added /Relational Capital}) * 100$$

VA = Value Added

RC = Rational Capital

### Model Specification

The basis of statistical analyses will be the ordinary least square method of multiple regression analysis. The formula is given as:

$$y = a + b_1x_1 + b_2x_2 + \dots + b_nx_n + e_i \dots \dots \dots (2)$$

Where  $y$  = the dependent or outcome variable

$a$  = constant term

$x_1, x_2 \dots x_n$  = set of independent variables or predictors

$b_1, b_2 \dots b_n$  = coefficients of the predictor variables and  $e_i$  = the error term.

This research will adopt the econometric model as put forward by Datta and De, (2017); and Okoye, Aroh, and Egbunike, (2015) who posit in their model that the financial performance business organizations is subject to investment in relational capital components. This written as follows:

$$\text{Financial Performance} = f(\text{relational capital}) \dots \dots (3)$$

This expanded to capture the different components of the intellectual capital which include human capital (*HC*), structural capital (*SC*) and relational capital (*RC*). Thus:

$$FP = f(VARC) \dots \dots \dots (4)$$

Explicitly, the above equation is restated as follows

$$FP = \beta_0 + \beta_1VARC + U_t \dots \dots \dots (5)$$

However, for the purpose of this study, financial performance will be calculated based on three different measurement metrics viz: *Return on Asset (ROA)*, *Return on Equity (ROE)* and *Earnings Per Share (EPS)*. In addition, it is expected that *firm size (SIZE)* will play a moderating role in the relationship between the variables. Thus, it is expected that financial performance proxied as *ROA, ROE* and *EPS* is a function of *Relational Capital (VARC)*. To this end, we restate the model in equation 5 above as:

In econometric terms, the above equations are restated as follow:

$$ROA = a + \beta_1VARC + \mu_t \dots \dots \dots (6)$$

$$ROE = a + \beta_1VARC + \mu_t \dots \dots \dots (7)$$

$$EPS = a + \beta_1VARC + \mu_t \dots \dots \dots (8)$$

The a priori expectation is that the coefficients of regression for human capital, structural capital and relationship capital is a positive value (greater than zero). This stated statistically as:

$$\text{A priori Expectation} = b_1 > 0$$

#### 4. RESULTS AND DISCUSSION

**Table 4. 2 Summary Result for Augmented Dickey-Fuller Unit Root Test**

Variable Name	ADF Statistic	T-Statistic (5%)	Probability of T-Stat	Order of integration
ROA	-17.2726	-2.8710	0.0000	I(0)
ROE	-6.7033	-2.8710	0.0000	I(0)
EPS	-6.5177	-2.8710	0.0000	I(0)
VARC	-17.2461	-2.8710	0.0000	I(0)

**Source:** Extracts from E-Views 10 output.

From the augmented Dickey-Fuller test results in table 4.2, it can be observed that all variables were stationary at level. This implies that there is no problem of unit root observed in the data. Consequently, the panel least square are appropriate decision tools for further econometric analyses and test of hypothesis.

**Table 4. 3 Summary Pearson Correlation Matrix**

	ROA	ROE	EPS	VARC
ROA	1.0000			
ROE	-0.0087	1.0000		
EPS	-0.0082	0.9963	1.0000	
VARC	<b>0.8675</b>	<b>-0.003</b>	<b>-0.0027</b>	1.0000

**Source:** Extracts from E-Views 10 output.

From the correlation results in table 4.3, it can be observed that the degree of correlation between return on assets (ROA) and value-added relational capital (VARC) is positive (0.8675-86.75%). This result implies that improvement in any of the measures of relational capital is predicted to result in improvement in financial performance in terms of return on assets (ROA). However, Return on Equity (ROE) and earnings per share (EPS) had a negative (-0.003 and -0.0027 respectively) relationship with value-added relational capital (VARC).

**Table 4.4 Summary Regression Results – model one**

Dependent Variable: ROA  
 Method: Panel Least Squares  
 Periods included: 10 (2010 2019)  
 Cross-sections (Sample): 30: Total Obs.: 300

Variable	Coefficient	Std. Error	T-Statistic	Prob.
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C	0.17809	0.075021	2.37385	0.0182
<b>VARC</b>	0.010376	1.49E-05	5.91110	0.0000

$R^2 = 0.4239$ ; Adjusted  $R^2 = 0.2678$ ; F-stat = 49.0111; Prob.(F-stat) = 0.000;

D-W stat = 1.5733

**Source:** Extracts from E-Views 10 output.

Value added relational capital (VARC) has a positive and statistically significant relationship with return on asset (ROA). Thus, increasing investment in relational capital is predicted to lead to an increase in ROA. This can be observed from the coefficient of regression value of 0.010376 and probability of t-statistic value of 0.0000, implying a statistically significant relationship. Finally, the adjusted R-Squared value of 0.4239 implies that all the independent variables in the model can account for about 42.39% of the variations in financial performance in terms of ROA.

**Table 4.5: Summary Regression Results – model two**

Dependent Variable: ROE  
 Method: Panel Least Squares  
 Periods included: 10 (2010 2019)  
 Cross-sections (Sample): 30: Total Obs.: 300

Variable	Coefficient	Std. Error	T-Statistic	Prob.
C	-2.343295	0.236639	-9.902395	0.0000
<b>VARC</b>	0.000476	0.001486	0.320079	0.7491

$R^2 = 0.2687$ ; Adjusted  $R^2 = 0.2588$ ; F-stat = 27.0943; Prob.(F-stat) = 0.000;

D-W stat = 1.5733

**Source:** Extracts from E-Views 10 output.

In table 4.5, value added relational capital (VARC) had a positive and non-significant relationship with return on equity (ROE). Thus, increasing investment in relational capital is predicted to lead to an increase in ROE. This can be observed from the coefficient of regression value of 0.000476 and probability of t-statistic value of 0.7491, implying a non-significant relationship. Finally, the adjusted R-Squared value of 0.2687 implies that all the independent variables in the model can account for about 26.87% of the variations in financial performance in terms of ROE.

**Table 4.6: Summary Regression Results – model three**

Dependent Variable: EPS  
 Method: Panel Least Squares  
 Periods included: 10 (2010 2019)  
 Cross-sections (Sample): 30: Total Obs.: 300

Variable	Coefficient	Std. Error	T-Statistic	Prob.
C	-1.720125	0.174212	-9.873775	0.0000
<b>VARC</b>	0.000343	0.001094	0.313502	0.7541

$R^2 = 0.2671$ ; Adjusted  $R^2 = 0.2572$ ; F-stat = 26.8822; Prob.(F-stat) = 0.000;

D-W stat = 1.5733

Table 4.6 show that value added relational capital (VARC) had a positive and non-significant relationship with earnings per share (EPS). Thus, increasing investment in relational capital is predicted to lead to increase in EPS. This can be observed from the coefficient of regression value of 0.00343 and probability of t-statistic value of 0.7541, implying a non-significant relationship. The adjusted R-Squared value of 0.2671, implied that all the independent variables in the model can account for about 26.71% of the variations in financial performance in earnings per share (EPS).

#### **Relational Capital Investment and Return on Asset**

The study reveals a positive correlation between investments in value-added relational capital (VARC) and the return on assets of Nigerian manufacturing companies. The coefficient of regression value is 0.010376, indicating that an increase in VARC investment leads to a 0.010376 unit increase in return on assets. The probability value is 0.0000, indicating a statistically significant relationship, rejecting the null hypothesis and indicating that investment in relational capital significantly impacts manufacturing companies' financial performance. This means that relational capital is an important determinant of the return on assets of manufacturing companies in Nigeria. This study support the findings of Carlucci, et al. (2004) observed that, enhanced investment in relationships (relational capital) with internal and external stakeholders aimed at improving the organization's performance will usually have multiple layers of positive effects in the production and distribution networks.

#### **Relational Capital Investment and Return on Equity.**

The study found a positive relationship between investment in value-added relational capital and the return on equity of Nigerian manufacturing companies. However, the relationship was non-statistically significant, with a probability value of 0.7491, higher than the critical probability limit of 5%. The null hypothesis was not rejected, indicating that investment in relational capital does not significantly affect the return on equity of Nigerian manufacturing companies. This means that relational capital is not an important factor in the financial performance of manufacturing companies in terms of return on equity. This findings is against the study of Zhang, and Wang (2018), Datta, and De (2017) and Aziz, et al. (2019), that relational capital gives significant and positive impact on life insurance company performance.

#### **Relational Capital Investment and Earnings per Share**

Furthermore, the study found a positive relationship between relational capital investment (VARC) and earnings per share of Nigerian manufacturing companies. A unit increase in VARC was predicted to increase earnings per share by 0.000343, but the relationship was not statistically significant. Therefore, the null hypothesis was accepted, indicating that relational capital investment does not significantly impact earnings per share within the study period. Idowu, and Ogundipe (2013), examined the effect of business relational capital components on business' performance of female-owned small-scale enterprises in Nigeria and found that relationship with suppliers, customers and employees were found to be positively and significantly related to business performance.

## 5. CONCLUSIONS AND RECOMMENDATIONS

From the findings of this research, the following conclusions are made:

1. Relational capital investment is not a major factor in the earnings per share of manufacturing companies in Nigeria.
2. Investment in relational capital contributes considerably to the financial performance of manufacturing companies in terms of return on assets.
3. Relational capital is not an important factor in the financial performance of manufacturing companies in terms of return on equity.
4. From the above, it is further concluded that human capital investment, structural capital investment and relational capital investment make the most contribution to the financial performance of manufacturing companies in Nigeria.

Based on the above findings and conclusions, the following recommendations are proposed:

1. It is recommended that manufacturing companies increase their investment in human capital to maximize the already existing positive effect on financial performance. Investing in employee education, training programs, professional certifications, increased remuneration, and recruitment of qualified individuals can enhance manufacturing companies' productivity and financial performance by boosting employee motivation and recruitment.
2. Manufacturing companies should investigate their investment in structural capital to understand the areas that require changes to optimize performance. For example, the adoption of certain technology that is expected to enhance human capital performance may be failing to do so as a result of environmental/social/economic related issues. Such issues are specific to organization and can be understood by understudying the problem at firm-specific levels.
3. Relational capital is contributing to financial performance albeit at a very low rate. Thus, manufacturing companies are advised to improve investment in relational capital to maximize returns. This should take the form of offering better services to customers and clients in order to incentivize them to continue patronizing the products and services of

manufacturing companies in the country. They are also advised to engage more with customers to understand the expectations of customers from the companies.

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