

# BUSINESS REVIEW

### CORPORATE SOCIAL RESPONSIBILITY AND SHAREHOLDERS' WEALTH OF INDUSTRIAL GOODS PRODUCING COMPANIES LISTED ON THE EXCHANGE GROUP PLC OF NIGERIA

William Smart Inyang<sup>A</sup>, Efiong Eme Joel<sup>B</sup>, Okoi Innocent Obeten<sup>C</sup>,Akaniyene Billy Orok<sup>D</sup>, Ije Ubana Ubi<sup>E</sup>, Geraldine Banku Mbu-Ogar<sup>F</sup>



#### **ARTICLE INFO**

#### **Article history:**

Received 17 March 2023

Accepted 13 June 2023

#### **Keywords:**

CSR to Society;

CSR to Employees;

CSR to Suppliers;

CSR to Customers;

CSR to Tax Authorities;

CSR to Lenders;

Shareholders' Wealth;

Economic Value Added.



#### **ABSTRACT**

**Purpose:** The purpose of this study is to determine how the practices of corporate social responsibility (CSR) influence the wealth of shareholders of industrial goods producing companies listed on the Exchange Group Plc of Nigeria and other developing countries.

**Theoretical Framework:** The role played by CSR practices in enhancing shareholders' wealth has attracted the interests of companies' executives and policy makers all over the world. The theoretical foundations of this research work are provided by the Shareholder Value Theory, the stakeholder theory, the Business Ethics theory and the Agency theory. However, this work is anchored on the shareholder value theory propounded by Milton Friedman in 1970 and this is used to evaluate the influence of corporate social responsibility on shareholders' wealth.

**Design/methodology/approach:** The study uses the ex-post facto research design and judgemental sampling technique to select a sample of 10 industrial goods producing firms listed on the Nigerian Exchange Group Plc as at 31<sup>st</sup> December, 2021. Social responsibility relationships with the society, employees, suppliers, customers, tax authorities and lenders provide the basis for sample selection. Information from the financial statements of the sampled companies was used to compute weighted average cost of capital (WACC), rate of stock turnover, actual corporate tax rate, invested capital, leverage, return on equity (ROE), value of debts and value of equity. This approach facilitates the computation of economic value added (EVA) which is used as proxy for shareholders' wealth. Firm-year observations of 1,840, ordinary least squares panel data regression, fixed and random effects models, stationarity test, cross-section dependence test and the Hausman test are used for data diagnosis and analysis.

**Findings:** The research has disclosed that CSR to society positively and significantly influences shareholders' wealth while CSR to suppliers and lenders have non-significant positive effect on shareholders' wealth. Contrastingly, it is further revealed that CSR to employees and tax authorities have significant negative effects on shareholders' wealth while CSR to customers negatively and non-significantly influences shareholders' wealth.

F Masters of Sciences. Lecturer II. Department of Accounting, University of Calabar. Cross River State, Nigeria. E-mail: <a href="mailto:geraldineokafa@gmail.com">geraldineokafa@gmail.com</a> Orcid: <a href="mailto:https://orcid.org/0000-0002-4006-6026">https://orcid.org/0000-0002-4006-6026</a>



<sup>&</sup>lt;sup>A</sup> PhD. Senior Lecturer. Department of Accounting, University of Calabar. Cross River State, Nigeria.

E-mail: wismarti@gmail.com Orcid: https://orcid.org/0000-0002-0407-1194

<sup>&</sup>lt;sup>B</sup> PhD. Senior Lecturer. Department of Accounting, University of Calabar. Cross River State, Nigeria.

E-mail: ejefiong@unical.edu.ng Orcid: https://orcid.org/0000-0002-0229-3973

<sup>&</sup>lt;sup>C</sup> PhD. Lecturer I. Department of Banking and Finance, University of Calabar. Cross River State, Nigeria.

E-mail: innobetokoi@gmail.com Orcid: https://orcid.org/0000-0002-1224-0576

<sup>&</sup>lt;sup>D</sup> PhD. Lecturer 1. Department of Banking and Finance, University of Calabar. Cross River State, Nigeria. E-mail: akaninyene.orok@unical.edu.ng Orcid: https://orcid.org/0000-0002-0449-7523

<sup>&</sup>lt;sup>E</sup> PhD, Lecturer II. Department of Business Management, University of Calabar. Cross River State, Nigeria. E-mail: offije2000@gmail.com Orcid: https://orcid.org/0000-0002-5479-5190

Research, Practical & Social implications: The implication for managers is that CSR relationship with society is value enhancing in Nigeria's industrial goods sector while CSR relationships with employees and tax authorities are value destroying. Value enhancing results of the dealings with suppliers and lenders and the value destroying result of the dealings with customers lack sufficient evidence. This research has helped in filling the gap in the existing literature and in serving as the basis for the economic and social development of Nigeria and other developing and developed countries of the world.

**Originality/value:** This is the first time in the industrial goods sector that we are associating four new corporate social responsibility variables namely, CSR to suppliers, CSR to customers, CSR to tax authorities and CSR to lenders with shareholders' wealth. This study encourages the revival of CSR to employees and CSR to tax authorities which are currently value destroying in the industrial goods sector of Nigeria.

Doi: https://doi.org/10.26668/businessreview/2023.v8i6.2476

### RESPONSABILIDADE SOCIAL CORPORATIVA E RIQUEZA DOS ACIONISTAS DE EMPRESAS PRODUTORAS DE BENS INDUSTRIAIS LISTADAS NO EXCHANGE GROUP PLC DA NIGÉRIA

#### **RESUMO**

**Objetivo:** O objetivo deste estudo é determinar como as práticas de responsabilidade social corporativa (RSC) influenciam a riqueza dos acionistas de empresas produtoras de bens industriais listadas no Exchange Group Plc da Nigéria e de outros países em desenvolvimento.

**Estrutura teórica:** O papel desempenhado pelas práticas de RSC no aumento da riqueza dos acionistas tem atraído o interesse de executivos de empresas e formuladores de políticas em todo o mundo. Os fundamentos teóricos deste trabalho de pesquisa são fornecidos pela Teoria do Valor para o Acionista, a Teoria das Partes Interessadas, a Teoria da Ética Empresarial e a Teoria da Agência. Entretanto, este trabalho está ancorado na teoria do valor para o acionista, proposta por Milton Friedman em 1970, que é usada para avaliar a influência da responsabilidade social corporativa sobre a riqueza dos acionistas.

Projeto/metodologia/abordagem: O estudo usa o desenho de pesquisa ex-post facto e a técnica de amostragem criteriosa para selecionar uma amostra de 10 empresas produtoras de bens industriais listadas no Nigerian Exchange Group Plc em 31 de dezembro de 2021. As relações de responsabilidade social com a sociedade, funcionários, fornecedores, clientes, autoridades fiscais e credores fornecem a base para a seleção da amostra. As informações das demonstrações financeiras das empresas da amostra foram usadas para calcular o custo médio ponderado de capital (WACC), a taxa de rotação de ações, a taxa real de imposto corporativo, o capital investido, a alavancagem, o retorno sobre o patrimônio líquido (ROE), o valor das dívidas e o valor do patrimônio líquido. Essa abordagem facilita o cálculo do valor econômico agregado (EVA), que é usado como proxy da riqueza dos acionistas. Observações empresa-ano de 1.840, regressão de dados em painel por mínimos quadrados ordinários, modelos de efeitos fixos e aleatórios, teste de estacionariedade, teste de dependência de seção cruzada e o teste de Hausman são usados para diagnóstico e análise de dados.

**Conclusões:** A pesquisa revelou que a RSC para a sociedade influencia de forma positiva e significativa a riqueza dos acionistas, enquanto a RSC para fornecedores e credores tem um efeito positivo não significativo sobre a riqueza dos acionistas. Por outro lado, também foi revelado que a RSC para os funcionários e as autoridades fiscais tem efeitos negativos significativos sobre a riqueza dos acionistas, enquanto a RSC para os clientes influencia de forma negativa e não significativa a riqueza dos acionistas.

**Originalidade/valor:** Esta é a primeira vez no setor de bens industriais que associamos quatro novas variáveis de responsabilidade social corporativa, a saber, RSC para fornecedores, RSC para clientes, RSC para autoridades fiscais e RSC para credores com a riqueza dos acionistas. Este estudo incentiva o renascimento da RSC para os funcionários e da RSC para as autoridades fiscais, que atualmente estão destruindo o valor no setor de bens industriais da Nigéria.

**Palavras-chave:** RSC para a Sociedade, RSC para os Funcionários, RSC para os Fornecedores, RSC para os Clientes, RSC para as Autoridades Fiscais, RSC para os Credores, Riqueza dos Acionistas, Valor Econômico Agregado.

### RESPONSABILIDAD SOCIAL DE LAS EMPRESAS Y RIQUEZA DE LOS ACCIONISTAS DE LAS EMPRESAS PRODUCTORAS DE BIENES INDUSTRIALES QUE COTIZAN EN EXCHANGE GROUP PLC EN NIGERIA

#### **RESUMEN**

**Objetivo:** El objetivo de este estudio es determinar cómo influyen las prácticas de responsabilidad social corporativa (RSC) en la riqueza de los accionistas de las empresas productoras de bienes industriales que cotizan en el Exchange Group Plc de Nigeria y otros países en desarrollo.

Marco teórico: El papel que desempeñan las prácticas de RSC en la mejora de la riqueza de los accionistas ha despertado el interés de los directivos de empresas y los responsables políticos de todo el mundo. Los fundamentos teóricos de este trabajo de investigación proceden de la Teoría del Valor para el Accionista, la Teoría de las Partes Interesadas, la Teoría de la Ética Empresarial y la Teoría de la Agencia. Sin embargo, este documento se basa en la teoría del valor para el accionista propuesta por Milton Friedman en 1970, que se utiliza para evaluar la influencia de la responsabilidad social de las empresas en la riqueza de los accionistas.

Diseño/metodología/enfoque: El estudio utiliza un diseño de investigación ex-post facto y una técnica de muestreo intencional para seleccionar una muestra de 10 empresas productoras de bienes industriales que cotizan en el Nigerian Exchange Group Plc a 31 de diciembre de 2021. Las relaciones de responsabilidad social con la sociedad, los empleados, los proveedores, los clientes, las autoridades fiscales y los acreedores proporcionan la base para la selección de la muestra. La información de los estados financieros de las empresas de la muestra se utilizó para calcular el coste medio ponderado del capital (WACC), la tasa de rotación de acciones, el tipo real del impuesto de sociedades, el capital empleado, el apalancamiento, el rendimiento de los fondos propios (ROE), el valor de la deuda y el valor de los fondos propios. Este enfoque facilita el cálculo del valor económico añadido (EVA), que se utiliza como indicador de la riqueza de los accionistas. Para el diagnóstico y el análisis de los datos se utilizan 1.840 años de observación de la empresa, regresión por mínimos cuadrados ordinarios de datos de panel, modelos de efectos fijos y aleatorios, prueba de estacionariedad, prueba de dependencia de corte transversal y prueba de Hausman.

Conclusiones: La investigación reveló que la RSC hacia la sociedad influye positiva y significativamente en la riqueza de los accionistas, mientras que la RSC hacia los proveedores y acreedores tiene un efecto positivo no significativo en la riqueza de los accionistas. Por otro lado, también se reveló que la RSC hacia los empleados y las autoridades fiscales tiene efectos negativos significativos en la riqueza de los accionistas, mientras que la RSC hacia los clientes tiene una influencia negativa y no significativa en la riqueza de los accionistas.

**Originalidad/valor:** Es la primera vez en el sector de los bienes industriales que vinculamos cuatro nuevas variables de responsabilidad social de las empresas, a saber, la RSE con los proveedores, la RSE con los clientes, la RSE con las autoridades fiscales y la RSE con los acreedores, con la riqueza de los accionistas. Este estudio anima a reactivar la RSE hacia los empleados y la RSE hacia las autoridades fiscales, que actualmente destruyen valor en el sector de bienes industriales de Nigeria.

**Palabras clave:** RSE hacia la Sociedad, RSE hacia los Empleados, RSE hacia los Proveedores, RSE hacia los Clientes, RSE hacia las Autoridades Fiscales, RSE hacia los Acreedores, Riqueza de los Accionistas, Valor Económico Agregado.

#### **INTRODUCTION**

Shareholders' wealth is an additional value to shareholders when managers increase sales, earnings and free cash flow (Hayes & Scott, 2021). It has been acknowledged as return on investment and wealth collectively conferred on shareholders (McMahon, 2021) while Carlson (2021) considers it as an increase in market price of shares. Motley Fool staff (2016) defines it as per share price plus per share earnings multiply by shares held by the individual shareholder. Shareholders' wealth reveals how well companies' directors or corporate managers are performing their fiduciary duties of working in the best interest of shareholders.

Nyeadi, Ibrahim and Sare (2018) described corporate social responsibility as ethical business behaviour which enhances the quality of life of the society. CSR has been basically classified into economic, environmental and social dimensions (Niskala, Pajunen & Tarna-Mani, 2009 as cited in Jokinen, 2012).

At the global stage, CSR is an important corporate strategy component, partly because of fraudulent financial news, losses and the fact that CSR has become an important business tool (Becchetti, Ciciretti, & Hasan, 2009). Corporate managers desire to attain competitive advantage (De Villiers, & Ma, 2017) and relate with and pay attention to key stakeholders that control firms' resources (de Villiers, Ma & Marques, 2020). The foregoing therefore, suggest that CSR should be viewed as an additional investment strategy for creating shareholders' wealth. In corporate practices and academic literature, CSR has been accorded a wider recognition and vigorously accepted and companies engage in it to fulfil stakeholders' expectations (Chaudhry, Ramakrishnan, Sulimany & Sharif, 2021). Furthermore, the influence of companies' economic activities on society and environment has made the world to focus on corporate social responsibility practices (Relaiza et al., 2023) and this global realization of the importance of this research area has resulted in 'Social Responsibility Journal' being recently declared as the most productive Journal (Yazdani et al., 2022).

Pastoors (2018) asserts that corporate social responsibility is getting more important every year. In Nigeria, CSR has become a serious issue as firms are under pressure to behave responsibly. Every business survives by accomplishing its objectives which are broadly categorized into economic and social (Osisioma, Nzewi & Paul, 2015). The areas of CSR which have been affected by both overinvestment and underinvestment as revealed by the yearly financial reports of these listed firms in Nigeria are: corporate social responsibility to society (giving donations even in years where huge losses are recorded and lack of uniform CSR expenditures), corporate social responsibility to employees (inexplicable rise in personnel cost without a corresponding rise in personnel number), corporate social responsibility to suppliers (abnormal increase in creditor days), corporate social responsibility to customers (frequent fluctuations and abnormal decline in stock turnover rates), corporate social responsibility to tax authorities (fluctuating and abnormally high company income tax expenses) and corporate social responsibility to lenders (abnormal increase in debt/equity ratio or leverage).

Unfortunately, the type, level and direction of the relationships between the foregoing CSR dimensions and shareholders' wealth are unknown in the industrial goods sector of Nigeria. These research gaps have been filled by the current research. This study's principal

aim was to examine how corporate social responsibility affects shareholders' wealth of industrial goods producing companies listed on the Exchange Group of Nigeria. Specifically, this research was carried out, to determine how corporate social responsibilities to society, employees, suppliers, customers, tax authorities and lenders affect economic value added.

#### Scope of this Study

The country where this study was carried out is Nigeria which is precisely in the West African sub-region of Africa. Generally, this study covered industrial goods manufacturing firms which are listed on the Exchange Group, Nigeria plc. Practically, only industrial firms whose annual reports are available on the selected listed companies' and Nigerian Exchange Group Plc official websites were included in the study. The study covered the period between 2003 and 2021 which is precisely 19 years. The base year 2003 was used in order to achieve firm-year observations of 1900 which is what is required for a panel data.

#### LITERATURE REVIEW

#### **Theoretical Framework**

The theories that guide this study are as follows: the shareholder value theory of CSR, the stakeholder theory of CSR, Business Ethics Theory of CSR and Agency theory. However, this research was anchored on the shareholder value theory of Friedman. The researcher's position in this study is that corporate social responsibility will decrease shareholders' wealth because of the rent-seeking behaviour of corporate managers in the industrial goods manufacturing sector of Nigeria. Milton Friedman's shareholder value theory which supports the value destroying hypothesis, will therefore, provide the basis for these researchers' position.

#### **Review of Literature and Development of Hypotheses**

Specific CSR categories have been found to have association with economic value added such as CSR towards society, CSR towards employees, CSR towards suppliers, CSR towards customers, CSR towards tax authorities and CSR towards lenders. Past corporate social responsibility-shareholders' wealth relationship studies have disclosed various shareholders' wealth related measures and these extant studies have also used both monetary and non-monetary units to measure CSR.

#### Corporate Social Responsibility to Society and Economic Value Added

Cheers (2011) evaluated the debate over corporate social responsibility and argued that most social progressives support CSR even though it is not the ultimate solution for societal ills. He further said that striking a balance between shareholder value and stakeholder theories is what corporate managers will attempt to do. CSR does not always enhance firm value. The Value of Malaysian Pharmaceutical Companies was not affected by corporate social responsibility (Hermawan et al., 2023).

In Pakistan, CSR constituted an additional expense which might later reduce financial performance (Sayed, Malik, Ahmed & Ali, 2017). Philanthropic gifts had a positive and non-significant effects on Nigeria's manufacturing firms' economic value added (Frank & Binaebi, 2020).

Similarly, in the Romanian listed firms, donations and firm performance correlated positively with market value of firm (Hategan & Curea-Pitorac, 2017) while in Nigeria, donations positively and significantly influenced market to book value and human capacity building positively and significantly influenced firms' performance (Emeka-Nwokeji, 2019). From the foregoing literature survey, we proposed the following hypothesis:

H1: Corporate social responsibility to society positively influences the economic value added of industrial goods producing companies listed on the Exchange Group of Nigeria.

#### Corporate Social Responsibility (CSR) to Employees and Economic Value Added

It is widely acknowledged that a strong association exists between employee welfare and long-term firm value. Corporate investment in employees maximizes long-term shareholder value (Bookbinder, 2018). Firm value was enhanced by engagement of physically challenged, staff training and development in Nigeria's consumer goods sector (Otuya & Akporien, 2020).

Few studies have however, shown that CSR to employees does not always improve firm value. Social sustainability disclosures in the important areas of labour and management relations, labour practices and grievance mechanism, freedom of association, employee collective bargaining and anti-corruption and public policy, were not value relevant (Amedu, Iliemena & Umaigba, 2019). People who have at least a single adverse relationship at workplace were less satisfied significantly and they appeared to be less committed to their organizations (Morrison, 2008) while the study carried out by Fernández-Guadaño and Sarria-

Pedroza (2018) and Inyang et al. (2023) revealed that firm value was not enhanced when CSR negatively influenced employees and did not have any influence on other stakeholders. Chief executive officers' salary and cash compensation to board members had significant negative and non-significant positive relationships respectively with quoted consumer goods firms' performance in Nigeria (Ibeawuchi & Onuora, 2021). Intellectual capital was not a mediating variable between CSR, corporate value and firm's monetary performance (Sumiati & Sueztianingrum, 2020). On the basis of the foregoing literature survey, the following hypothesis was proposed:

H2: Corporate social responsibility to employees negatively influences the economic value added of industrial goods producing companies listed on the Exchange Group of Nigeria.

#### Corporate Social Responsibility to Suppliers and Economic Value Added

A company's economic value added or shareholder value is enhanced when its DPO and CCC are consistently low and DPO and CCC are two working capital management components that help in enhancing firm value. Number of days or time taken to pay suppliers is DPO while number or days or time taken to convert stocks of goods and other resources into cash is CCC. In this study, we used DPO and CCC as indicators of the degree of responsibility of a company to its suppliers. Low DPO and low CCC mean *company is ethically responsible to suppliers* i.e. they pay their suppliers at reasonable time while high DPO and high CCC mean *company is not ethically responsible to suppliers*. Value declined when CCC increased (Ibrahim, Usaini & Elijah, 2021).

It follows therefore that days payable outstanding (DPO) will be low when CCC is low. The length of time cash is buried in net current assets or working capital is determined by DPO. Responsible relationship with suppliers creates sustained firm value and continuous revenue growth (Anderson 2013). Few studies affirmed that responsibility to suppliers sometimes failed to add value to shareholders. CCCs of Nigeria's food and beverages and Oil and Gas firms had significant negative effects on profitability (Ibrahim & Dengel, 2022) while Murugesu (2013) revealed CCC's negative impacts of 48.5%, 61.6% and 60.2% on ROE, ROA and profit-after-tax respectively.

However, some studies have confirmed that responsibility to suppliers enhances firm value. In Vietnamese steel producing firms, DPO had a stronger impact on profitability than CCC (Pham, Nguyen & Nguyen, 2020). Similarly, working capital management added value

to the business efforts of medium-level transport firms through the efficient management of cash, inventory and receivables (Mazanec, 2022). Profitability, shareholder value and economic value added were enhanced by shorter cash conversion cycle (Högerle, Charifzadeh, Ferencz & Kostin, 2020). Finally, in a study carried out by Kundu (2014) in Kenya, it was discovered that DPO and CCC both had non-significant positive effects of (r=0.24, p>.05) and (r=0.2, p>.05) respectively on return on assets. Consequently, we propose the following hypothesis:

H3: Corporate social responsibility to suppliers positively enhances the economic value added of industrial goods producing companies listed on the Exchange Group of Nigeria.

#### Corporate Social Responsibility (CSR) to Customers and Economic Value Added

Product responsibility, good quality product and fair product price lead to customer satisfaction which was measured in this study by stock turnover rate. High stock turnover rate means 'company is socially responsible to customers while low stock turnover rate means company is not socially responsible to customers. Firm value is determined by the buying public (Exforsys, 2015). In the research of Oyeyemi, Enyi and Emmanuel (2019), it was found that growth in sales had non-significant negative effect on firm value while Neupane (2014) confirmed in UK Lloyds Bank that customer satisfaction and performance had a non-significant positive relationship (p=.139 or >.05;  $\beta$ =.343).

Satisfied customers enhance and stabilize future cash flows which becomes maximized in the long term (Singh & Pattanayak, 2014) while customer loyalty and satisfaction had a significant positive effect on banks' profitability (Eklof, Podkorytova & Malova, 2020). Finally, shareholder value positively associated with customers' satisfaction (Anderson, Fornell & Mazvancheryl, 2004). On the basis of the foregoing survey of literatures, we propose the following hypothesis:

H4: Corporate social responsibility to customers positively enhances the economic value added of industrial goods producing companies listed on the Exchange Group of Nigeria.

#### Corporate Social Responsibility (CSR) to Tax Authorities

Payment of corporate taxes is a responsibility to the tax authorities and some studies revealed that this responsibility failed to enhance corporate performance. For example, firm performance, corporate tax and tax aggressiveness had significant negative relationships

(Mgbame, Chijoke-Mgbame, Yekini & Yekini, 2017; Inyang et al., 2023). Similarly, company income tax negatively and non-significantly influenced firms' monetary performance (Kurawa & Saidu, 2018) while effective tax rate had non-significant positive effect on operating cash flows (Udeh & Eze, 2021).

But it has been empirically established that payment of corporate tax is value enhancing. Increases in marginal, average and effective tax rates enhanced firm value while corporate tax, education tax, withholding and value-added taxes had significant positive effects on profitability (Nubia & Okolo, 2018). Consequently, we proposed the following hypothesis:

H5: Corporate social responsibility to tax authorities positively enhances the economic value added of industrial goods producing companies listed on the Exchange Group of Nigeria.

#### Corporate Social Responsibility to Lenders and Economic Value Added

In this research, the extent of CSR to lenders is determined by a company's capital structure, leverage and gearing ratios. Leverage or ratio of debt to equity positively and non-significantly influenced shareholder value, market value, firm's profitability, ROE and ROCE and negatively and significantly influenced ROA (Venugopal & Reddy, 2016). Similarly, outsiders' funds positively and non-significantly influenced current ratio and per share dividend and had a significant negative effect on net profit (Onwumere, Ibe & Ozoh, 2012). Furthermore, debt to equity and creditors ratios (measures of responsibility to lenders) had non-significant negative effects on company profitability (Enekwe, 2015) and negatively and significantly influenced ROE and per share earnings (Ezejiofor, Nwakoby & Okoye, 2019). Based on the foregoing literature survey, we proposed the following hypothesis:

H6: Corporate social responsibility to lenders negatively influences the economic value added of industrial goods producing companies listed on the Exchange Group of Nigeria.

#### MATERIALS AND METHODS

#### This Study's Research Design

We made use of the causal comparative research design. This option was chosen because it was not possible to carry out this study before the industrial firms fulfil their corporate social responsibilities. The six CSR independent variables and single dependent variable generated by the study could not be subjected to treatments meaning that these

researchers did not have any direct control over them (Isangedighi, Joshua, Asim & Ekuri, 2004; Nworgu, 1991). We were only able to examine how the criterion variable was influenced by the predictor variables.

#### **Population of this Study**

Twenty-four (24) Nigeria's industrial goods producing companies listed at the end of December 31, 2021 were the target population of this research. 2003 to 2021 was the time scope covered by this research. The choice of this period scope enabled us to obtain a firm-year observations of 1,840 (10 firms X 19 years X 10 variables – 60 missing observations) for the study.

#### **Method of Sampling and Sample Size**

Judgemental sampling method was used to select 10 listed firms subject to the availability of comprehensive annual reports within the period between 2003 and 2021. 14 industrial firms that did not have full financial reports for the sample period i.e. 19 years precisely, were eliminated from this study. Usual disclosure practices of CSR recommended for Nigerian companies were not followed by the eliminated firms and their CSR expenditures were not consistently and extensively disclosed. Only those firms that consistently complied with the disclosure requirements of the Exchange Group, Nigeria plc were selected and included in the sample.

#### **Method of Data Collection**

These researchers carried out the analyses using secondary data which were obtained from the sampled firms' annual financial reports, Exchange Group, Nigeria plc official website, African Financials official website and other relevant online databases. 190 financial reports of 10 firms for 19 years with 1,840 firm-year observations (10 firms X 19 years X 10 variables – 60 missing observations) was thoroughly examined and the information contained therein was used to compute the following: WACC or weighted average cost of capital, rate of stock turnover, actual corporate tax rate, invested capital, leverage, ROE or return on equity, actual interest rate, economic value added, value of debts and value of equity. The foregoing financial ratios and information facilitated the measurement of shareholders' wealth and corporate social responsibility.

#### **Explanation and Indicators of Research Variables**

TABLE 1: INDICATORS (	OF VARIABLES
-----------------------	--------------

Variable Acronym	Variable name	Variable Definition and Measurement Scale
Dependent Variables		
EVA	Economic Value Added	This is an economic measure of shareholder value. <i>EVA</i> = <i>NOPAT</i> – ( <i>Invested Capital</i> × <i>WACC</i> ) (Okoye & Ndum, 2020; Siburian & Yohanes, 2019). EVA was devised by Stern Value Management formerly incorporated as Stern Stewart & Co.
Independent Variables		
CSRTS	Corporate social responsibility to society	Amount spent or donated by the listed firms on social initiatives (Otuya & Akporien, 2020; Emeka-Nwokeji, 2019).
CSRTE	Corporate social responsibility To Employees	Expenditures incurred on employees' wellbeing (Emeka-Nwokeji, 2019)
CSRTSP	Corporate social responsibility To Suppliers	The length of time in days it takes the listed firms to settle their suppliers for goods and services obtained on credit. This is a specific quantitative social responsibility disclosure i.e., non-monetary units adopted by Kundu (2014) and Pham, Nguyen and Nguyen (2020). Qualitative measurements by Exforsys (2015).
CSRTC	Corporate social responsibility To Customers	Rate of stock turnover as a measure or evidence of good quality product, fair price charges and transparency that win customers' loyalty. This was computed as cost of goods sold divided by average stock. High rates of turnover imply that customers are satisfied with product quality and prices and that business is transparent. Exforsys (2018) and Sekhar (2018) listed business attributes that obligations to customers are being fulfilled.
CSRTA	Corporate social responsibility To Tax Authorities	This is measured as amount spent on company income tax annually. This is an economic dimension of corporate social responsibility used in improving the peoples' living standards (Niskala, Pajunen & Tarna-Mani, 2009 as cited in Jokinen, 2012). Annual CSR monetary expenditure approach.
CSRTL	Corporate social responsibility To Lenders	This was measured using annual leverage or debt/equity ratio. High ratio depicts that, obligations to lenders are not being fulfilled and vice versa. It provides evidence for the repayment of the medium and long-term loans (Enekwe, 2015; Venugopal & Reddy, 2016).
Control Variables		
TNOV	Turnover	Revenue from Sales
TOAS	Total Assets	Fixed Assets + Current Assets
INVC	Invested Capital	Total Assets – Current Liabilities
β	Intercept	
μ	Error Term	
it	Firm i at time t	

Source: Prepared by the authors (2022).

#### **Model Specification for the Study**

The nineteen (19) years panel data collected in respect of the sampled firms was analysed using single equation multiple regression models as stated below:

$$\begin{split} EVA_{it} &= \beta_{oi} + \beta_1 CSRTS_{it} + \beta_2 TNOV_{it} + \beta_3 TOAS_{it} + \beta_4 INVC_{it} + \mu_{it} \\ EVA_{it} &= \beta_{oi} + \beta_1 CSRTE_{it} + \beta_2 TNOV_{it} + \beta_3 TOAS_{it} + \beta_4 INVC_{it} + \mu_{it} \\ EVA_{it} &= \beta_{oi} + \beta_1 CSRTSP_{it} + \beta_2 TNOV_{it} + \beta_3 TOAS_{it} + \beta_4 INVC_{it} + \mu_{it} \\ EVA_{it} &= \beta_{oi} + \beta_1 CSRTC_{it} + \beta_2 TNOV_{it} + \beta_3 TOAS_{it} + \beta_4 INVC_{it} + \mu_{it} \\ EVA_{it} &= \beta_{oi} + \beta_1 CSRTC_{it} + \beta_2 TNOV_{it} + \beta_3 TOAS_{it} + \beta_4 INVC_{it} + \mu_{it} \\ EVA_{it} &= \beta_{oi} + \beta_1 CSRTA_{it} + \beta_2 TNOV_{it} + \beta_3 TOAS_{it} + \beta_4 INVC_{it} + \mu_{it} \\ EVA_{it} &= \beta_{oi} + \beta_1 CSRTL_{it} + \beta_2 TNOV_{it} + \beta_3 TOAS_{it} + \beta_4 INVC_{it} + \mu_{it} \\ \end{split}$$

#### Where:

 $I=10 \ firms: \ Cutix, \ Lafarge, \ Premier \ Paints, \ Beta \ Glass, \ Meyer \ Paints, \ UAC, \ Trans \ Nationwide \ Express,$ 

C & I Leasing, John Holt and Chellarams

t = 19 years: 2003 - 2021

EVA<sub>it</sub> = economic value added of the 10 listed companies for 19 years.

 $B_{0i}$  = intercepts of the 10 listed companies

 $\beta_1$ -  $\beta_4$  = regression coefficients

CSRTS<sub>it</sub> = corporate social responsibility to society fulfilled by the 10 listed companies for 19 years.

CSRTE<sub>it</sub>= corporate social responsibility to employees fulfilled by the 10 listed companies for 19 years.

CSRTSP<sub>it</sub> = corporate social responsibility to suppliers fulfilled by the 10 listed companies for 19 years.

CSRTC<sub>it</sub>= corporate social responsibility to customers fulfilled by the 10 listed companies for 19 years.

CSRTA<sub>it</sub> = corporate social responsibility to tax authorities fulfilled by the 10 listed companies for 19 years.

 $CSRTL_{it} = corporate$  social responsibility to lenders fulfilled by the 10 listed companies for 19 years.

 $TNOV_{it}$  = turnover (sales) of the 10 listed companies for 19 years.

 $TOAS_{it}$  = total assets of the 10 listed companies for 19 years.

INVC<sub>it</sub> = invested capitals of the listed companies for 19 years.

 $\mu_{it}$  = the error term capturing other predictor variables excluded from the model of the 10 listed companies for 19 years

#### **Method of Data Analysis**

The determination of the extent of relationship between variables was done using the linear multiple regression analysis and the hypotheses were either validated or invalidated accordingly.

#### **RESULTS AND DISCUSSION**

#### Test of Reliability and Validity of the Six Regression Models

From tables 2 and 3, the key variables and the control variables were stationary both at level and first difference (P < 0.05) while the models' residuals were stationary at level (P < 0.05). From table 4 there was no cross section dependence in the models' residuals (P > 0.05). From table 5, the absence of autocorrelations and serial correlations in all the models was confirmed by all the six values of DW Statistic which complied with the range of 1.5 and 2.5 and greater than  $R^2$  (coefficients of determination) while the appropriateness of random effects was established by Hausman test (P < 0.05) for only models 1, 2, 3, 4 and 5 and fixed effects for model 6 (P > 0.05). All the regression models were therefore confirmed as reliable and fit for prediction purpose.

TABLE 2: STATIONARITY TEST RESULTS FOR ALL VARIABLES OF INTEREST AT LEVEL AND AT  $1^{\rm ST}$  DIFFERENCE

VARIABLES OF INTEREST	TEST METHOD	TEST STATISTIC	P VALUE	NULL HYPO	DECISION CRITERIA	REMARKS
EVA	ADF - Fsh Ch-sq.	66.9797	0.00	There is unit root	Reject H <sub>0</sub> if P value < 0.05	Stationary at level
	ADF - Ch Z-st	-5.36554	0.00			Stationary at level
CSRTS	ADF - Fsh Ch-sq.	42.4650	0.02			Stationary at level
	ADF - Ch Z-st	-0.73440	0.23			Stationary at level
CSRTE	ADF - Fsh Ch-sq.	66.9708	0.00			Stationary at 1 <sup>st</sup> difference
	ADF - Ch Z-st	-5.23895	0.00			Stationary at 1 <sup>st</sup> difference
CSRTSP	ADF - Fsh Ch-sq.	72.3198	0.00			Stationary at 1 <sup>st</sup> difference
	ADF - Ch Z-st	-4.96862	0.00			Stationary at 1 <sup>st</sup> difference
CSRTC	ADF - Fsh Ch-sq.	80.8622	0.00			Stationary at level
	ADF - Ch Z-st	-5.39664	0.00			Stationary at level
CSRTA	ADF - Fsh Ch-sq.	56.4511	0.00			Stationary at level
	ADF - Ch Z-st	-3.27978	0.05			Stationary at level
CSRTL	ADF - Fsh Ch-sq.	86.2491	0.00			Stationary at level
	ADF - Ch Z-st	-6.69304	0.00			Stationary at level

## Inyang, W. S., Joel, E. E., Obeten, O. I., Orok, A. B., Ubi, I. U., Mbu-Ogar, G. B. (2023) Corporate Social Responsibility and Shareholders' Wealth of Industrial Goods Producing Companies Listed on the Exchange Group PLC of Nigeria

CONTROL VARIABLES										
TNOV	ADF - Fsh Ch-sq.	Stationary at 1st difference								
	ADF - Ch Z-st	-4.35625	0.00		Stationary at 1st difference					
TOAS	ADF - Fsh Ch-sq.	66.4559	0.00		Stationary at 1st difference					
	ADF - Ch Z-st	-5.38919	0.00		Stationary at 1st difference					
INVC	ADF - Fsh Ch-sq.	91.1701	0.00		Stationary at 1st difference					
	ADF - Ch Z-st	-6.90547	0.00		Stationary at 1 <sup>st</sup> difference					

Source: Prepared by the authors (2022) using Eviews 9

REGRESSION RESIDUALS	TEST METHOD	TEST STATISTIC	P VALUE	NULL HYPO	DECISION CRITERIA	REMARKS
DTRESID FOR MODEL 1	ADF - Fsh Ch-sq.	87.0735	0.00	There is unit root	Reject H <sub>0</sub> if P value < 0.05	Stationary at level
	ADF - Ch Z-st	-5.97378	0.00			Stationary at level
ERESIDFOR MODEL 2	ADF - Fsh Ch-sq.	61.7198	0.00			Stationary at level
	ADF - Ch Z-st	-4.78382	0.00			Stationary at level
SRESID FOR MODEL 3	ADF - Fsh Ch-sq.	62.9809	0.00			Stationary at level
	ADF - Ch Z-st	-3.72011	0.01			Stationary at level
CRESID FOR MODEL 4	ADF - Fsh Ch-sq.	57.5554	0.00			Stationary at level
	ADF - Ch Z-st	-3.52460	0.02			Stationary at level
TRESID FOR MODEL 5	ADF - Fsh Ch-sq.	76.7508	0.00			Stationary at level
	ADF - Ch Z-st	-3.63940	0.01			Stationary at level
LRESID FOR MODEL 6	ADF - Fsh Ch-sq.	71.5475	0.00			Stationary at level
	ADF - Ch Z-st	-4.94345	0.00			Stationary at level

Source: Prepared by the authors (2022) using Eviews 9

#### TABLE 4: CROSS-SECTION DEPENDENCE TEST FOR REGRESSION RESIDUALS

REGRESSION RESIDUALS	TEST METHOD	TEST STATISTIC	P VALUE	NULL HYPO	DECISION CRITERIA	REMARKS
DTRESID FOR MODEL 1	Pesaran scaled LM	0.897803	0.3693	No crosssection dependence (correlation)	Accept H <sub>0</sub> if P value > 0.05	No cross-sect dependence
	Bias-corrected scaled LM	0.620025	0.5352			No cross-sect dependence

## Inyang, W. S., Joel, E. E., Obeten, O. I., Orok, A. B., Ubi, I. U., Mbu-Ogar, G. B. (2023) Corporate Social Responsibility and Shareholders' Wealth of Industrial Goods Producing Companies Listed on the Exchange Group PLC of Nigeria

	Pesaran CD	1.571310	0.1161	No cross-sect dependence
ERESID FOR MODEL 2	Breusch- Pagan LM	53.35299	0.1839	No cross-sect dependence
	Pesaran scaled LM	-0.173610	0.8622	No cross-sect dependence
	Bias-corrected scaled LM	-0.451388	0.6517	No cross-sect dependence
	Pesaran CD	0.975559	0.3293	No cross-sect dependence
SRESID FOR MODEL 3	Breusch- Pagan LM	50.63793	0.2608	No cross-sect dependence
	Pesaran scaled LM	-0.459802	0.6457	No cross-sect dependence
	Bias-corrected scaled LM	-0.737580	0.4608	No cross-sect dependence
	Pesaran CD	0.078272	0.9376	No cross-sect dependence
CRESID FOR MODEL 4	Pesaran scaled LM	0.829365	0.4069	No cross-sect dependence
	Bias-corrected scaled LM	0.551587	0.5812	No cross-sect dependence
TRESID FOR MODEL 5	Breusch- Pagan LM	53.90849	0.1704	No cross-sect dependence
	Pesaran scaled LM	-0.115056	0.9084	No cross-sect dependence
	Bias-corrected scaled LM	-0.392833	0.6944	No cross-sect dependence
	Pesaran CD	0.013255	0.9894	No cross-sect dependence
LRESID FOR MODEL 6	Breusch- Pagan LM	40.44382	0.6651	No cross-sect dependence
	Pesaran scaled LM	-1.534356	0.1249	No cross-sect dependence
	Bias-corrected scaled LM	-1.812134	0.0700	No cross-sect dependence
	Pesaran CD	1.547356	0.1218	No cross-sect dependence

Source: Prepared by the authors (2022) using Eviews 9

#### TABLE 5: REGRESSION OUTPUTS OF THE SIX MODELS

Variables/other	Model 1		Model 2		Mode	Model 3		Model 4		Model 5		I 6
Regression Details	Coef.	Sig.	Coef.	Sig.	Coef.	Sig.	Coef.	Sig.	Coef.	Sig.	Coef.	Sig.
Constant or Intercept	450.275	0.417	96.736	0.873	157.879	0.835	404.558	0.585	1009.200	0.063	2026.431	0.145
Key Variables												
Responsibility to Society	18.485	0.000										
Responsibility to Employees			4.034	0.002								
Responsibility to Suppliers					0.979	0.753						
Responsibility to Customers							-16.449	0.787				

Responsibility to									-1.581	0.000		
Tax Authorities									1.001	0.000		
Responsibility to											859.894	0.103
Lenders											000.007	0.100
Control Variables												
Turnover	0.031	0.450	0.112	0.045	0.011	0.820	0.010	0.839	-0.017	0.681	-0.029	0.514
Total Assets	0.052	0.093	-0.027	0.418	0.037	0.291	-0.036	0.300	-0.101	0.001	-0.015	0.671
Invested Capital	0.050	0.056	-0.045	0.102	0.038	0.195	-0.038	0.196	0.099	0.001	-0.028	0.338
Other Regression												
Parameters												
R2	0.5	21	0.438		0.405		0.405		0.563		0.372	
F-Stat	14.5	559	10.197		8.900		8.897		16.867		26.479	
F-Stat Prob.	0.0	00	0.00		0.00		0.00		0.00		0.00	
D W Stat.	2.2	00	1.946		1.729		1.728		1.967		1.637	
Hausman Test												
Results												
Hausman Test	0.005		0.0	0.004		0.000		0.022		0.040		E
Value*	0.005 0.0		U <del>4</del>	0.033		0.033		0.046		0.065		
Model Type Based on HTV*	Random	Effects	Random Effects		Random Effects		Random Effects		Random Effects		Fixed Effects	

Source: Prepared by the authors (2022) using Eviews 9

#### **Test of Hypothesis One**

H1: Corporate social responsibility to society positively influences the economic value added of industrial goods producing companies listed on the Exchange Group of Nigeria.

From table 5, the effect of CSRTS on EVA as expressed by regression Model 1 EVA<sub>it</sub> = 450.275 + 18.486CSRTS<sub>it+</sub> $\mu_{it}$  was influenced by control variables TNOV ( $\beta_2$  = 0.032), TOAS ( $\beta_3$  = -0.052) and INVC ( $\beta_4$  = -0.050). The intercept was positive and not significant ( $\beta_0$  = 450.275, P = 0.417 or P > 0.05) and the joint contributions of the predictor variables ( $R^2$  = 0.527) to the criterion variable were moderate while Model 1 was significant (F = 14.559, P = 0.000 or P < 0.05). **Decision:** H1 was validated by the significant positive relationship between CSRTS and EVA ( $\beta_1$  = 18.486, P = 0.000 or P < 0.05).

#### **Test of Hypothesis Two**

H2: Corporate social responsibility to employees negatively influences the economic value added of industrial goods producing companies listed on the Exchange Group of Nigeria.

From table 5, the influence of CSRTE on EVA as expressed by regression Model 2 EVA<sub>it</sub> = 96.736 - 1.034CSRTE<sub>it +</sub>  $\mu_{it}$  was influenced by control variables TNOV ( $\beta_2$  = 0.112), TOAS ( $\beta_3$  = -0.027) and INVC ( $\beta_4$  = -0.046). The intercept was positive and not significant ( $\beta_0$  = 96.736, P = 0.873 or P > 0.05) and the joint contributions of the predictor variables ( $R^2$  =

0.438) to the criterion variable was moderate while Model 2 was significant (F = 10.197, P = 0.000 or P < 0.05). **Decision:** H2 was validated by the significant negative relationship between CSRTE and EVA ( $\beta_1$  = -1.034, P = 0.002 or P < 0.05).

#### **Test of Hypothesis Three**

H3: Corporate social responsibility to suppliers positively enhances the economic value added of industrial goods producing companies listed on the Exchange Group of Nigeria.

From table 5, the influence of CSRTSP on EVA as expressed by regression Model 3 EVA<sub>it</sub> = 157.879 + 0.979CSRTSP<sub>it+</sub> $\mu_{it}$  was influenced by control variables TNOV ( $\beta_2$  = 0.011), TOAS ( $\beta_3$  = -0.037) and INVC ( $\beta_4$  = -0.038). The intercept was positive and not significant ( $\beta_0$  = 157.879, P = 0.835 or P > 0.05) and the joint contributions of the predictor variables (R<sup>2</sup> = 0.405) to the criterion variable was moderate while Model 3 was significant (F = 8.900, P = 0.000 or P < 0.05). **Decision:** H3 was invalidated by the non-significant positive relationship between CSRTSP and EVA ( $\beta_1$  = 0.979, P = 0.753 or P > 0.05).

#### **Test of Hypothesis Four**

H4: Corporate social responsibility to customers positively enhances the economic value added of industrial goods producing companies listed on the Exchange Group of Nigeria.

From table 5, the influence of CSRTC on EVA as expressed by regression Model 4  $EVA_{it} = 404.558 - 16.449CSRTC_{it+} \mu_{it}$  was influenced by control variables TNOV ( $\beta_2 = 0.010$ ), TOAS ( $\beta_3 = -0.036$ ) and INVC ( $\beta_4 = -0.038$ ). The intercept was positive and not significant ( $\beta_0 = 404.558$ , P = 0.585 or P > 0.05) and the joint contributions of the predictor variables ( $R^2 = 0.405$ ) to the criterion variable was moderate while Model 4 was significant (F = 8.897, P = 0.000 or P < 0.05). **Decision:** H4 was invalidated by the non-significant negative relationship between CSRTC and EVA ( $\beta_1 = -16.449$ , P = 0.787 or P > 0.05).

#### **Test of Hypothesis Five**

H5: Corporate social responsibility to tax authorities positively enhances the economic value added of industrial goods producing companies listed on the Exchange Group of Nigeria.

From table 5, the influence of CSRTA on EVA as expressed by regression Model 5 EVA<sub>it</sub> =  $1009.200 - 1.581CSRTA_{it} + \mu_{it}$  was influenced by control variables TNOV ( $\beta_2$  = -0.017), TOAS ( $\beta_3$  = -0.101) and INVC ( $\beta_4$  = 0.099). The intercept was positive and not significant ( $\beta_0$  = 1009.200, P = 0.063 or P > 0.05) and the joint contributions of the predictor variables ( $R^2$  = 0.563) to the criterion variable was moderate while Model 5 was significant (F = 16.867, P = 0.000 or P < 0.05). **Decision:** H5 was invalidated by the significant negative relationship between CSRTA and EVA ( $\beta_1$  = -1.581, P = 0.000 or P < 0.05).

#### **Test of Hypothesis Six**

H6: Corporate social responsibility to lenders negatively influences the economic value added of industrial goods producing companies listed on the Exchange Group of Nigeria.

From table 5, the influence of CSRTL on EVA as expressed by regression Model 6 EVA<sub>it</sub> = -2026.431 + 889.894CSRTL<sub>it +</sub>  $\mu_{it}$  was influenced by control variables TNOV ( $\beta_2$  = -0.029), TOAS ( $\beta_3$  = -0.015) and INVC ( $\beta_4$  = -0.028). The intercept was positive and not significant ( $\beta_0$  = 2026.431, P = 0.145 or P > 0.05) and the joint contributions of the predictor variables ( $R^2$  = 0.372) to the criterion variable was moderately low while Model 6 was significant (F = 26.479, P = 0.000 or P < 0.05). **Decision:** H6 was invalidated by the non-significant positive relationship between CSRTL and EVA ( $\beta_1$  = 889.894, P = 0.103 or P > 0.05).

From table 5, the coefficients of CSR to society (CSRTS) {Model 1}, CSR to suppliers (CSRTSP) {Model 3} and CSR to lenders (CSRTL) {Model 6} are positive implying that the CSR variables change together in the same direction. CSRTS positively and significantly influences economic value added (EVA) { $B_1$  = 18.486, P<0.05}. This result is corroborated by the study carried out by Emeka-Nwokeji (2019) where expenditures on the building of human capacity and donations had significant positive influence on firm value. The influence of CSRTSP on EVA { $B_3$  = 0.979, P>0.05} is positive and not significant. This finding is supported by the outcome of a study carried out by Kundu (2014) in Kenya where time taken to pay suppliers and time taken to convert stocks into cash both had non-significant positive effects of (r=0.24, p>.05) and (r=0.2, p>.05) respectively on return on assets. Similarly, CSRTL and EVA { $B_6$  = 889.894, P>0.05 is non-significantly positive. This outcome aligns with the findings of a study carried out by Venugopal and Reddy (2016) where firstly, ratio of debt to equity (leverage) positively and non-significantly influenced firm's profitability, market value

and shareholders' wealth. Finally, this outcome also aligns with the finding of the research conducted by Onwumere, Ibe and Ozoh (2012) where outsiders' funds had a non-significant positive impact on dividend per share.

Continuing with table 5, the coefficients of CSR to employees (CSRTE) {Model 2}, CSR to customers (CSRTC) {Model 4} and CSR to tax authorities (CSRTA) {Model 5} are negative implying that the CSR variables change in the opposite directions. CSRTE has a significant negative relationship with economic value added (EVA)  $\{B_2 = -1.034, P < 0.05\}$ . This finding is supported by a study carried out by Ibeawuchi and Onuora (2021) where it was revealed that chief executive officers' salary (CSR to employees) had significant negative effect on quoted consumer goods firms' performance in Nigeria. This outcome is further supported by the study conducted by Morrison (2008) where People who have at least a single adverse relationship at workplace were less satisfied significantly and they appeared to be less committed to their organizations. Similarly, CSRTA and EVA {B<sub>5</sub> = -1.581, P<0.05 is negative and significant. This outcome is consistent with the findings of the research of Mgbame, Chijoke-Mgbame, Yekini and Kemi (2017) where aggressiveness of tax negatively and significantly influenced firm performance. The relationship between CSRTC and EVA  $\{B_4 = -1\}$ 16.449, P>0.05} is negative and not significant. This outcome is in line with the finding of the research of Oyeyemi, Enyi and Emmanuel (2019) where it was found that sales growth (an indicator of responsibility to customers) negatively and non-significantly influenced value of the firm.

#### **CONCLUSION**

The study revealed that corporate social responsibility to society enhanced shareholders' wealth while corporate social responsibility to employees did not enhance shareholders' wealth. Furthermore, corporate social responsibilities to suppliers and lenders increased shareholders' wealth non-significantly while corporate social responsibility to customers decreased shareholders' wealth non-significantly. However, the wealth of shareholders decreased significantly when corporate social responsibility to tax authority was fulfilled.

Factors that may affect the shareholders' wealth of listed industrial goods producing companies in Nigeria were established by this research. On the bases of the outcomes of this research, we conclude that only CSR practice towards the society enhances the wealth of shareholders. Secondly, we were also able to conclude that CSR practices towards employees and tax authorities are value destroying. Unfortunately, we were unable to conclude that the

practices of corporate social responsibility towards suppliers and lenders are adding value to shareholders' wealth and we could not also conclude that CSR practice towards customers is value destroying. Our ability and inability to arrive at a conclusion were based on the statistically significant level of 0.05. Based on the outcomes of this research and the need to enhance shareholders' wealth, we recommended that Nigeria's industrial firms take the following actions: choose CSR investment as the best option, provide employees' benefit and welfare as at when due, engage in fair and transparent business deals with suppliers, provide customers with standard quality products at fair and reasonable prices and fulfil their obligations to tax authorities and lenders promptly.

Comprehensive financial reports from all the 24 listed firms was lacking and so time scope was extended to increase firm year observations. Historical share prices from the Nigerian Exchange Group Plc and Security and Exchange Commission websites were not comprehensive and so we obtained the missing share prices from african-markets.com and wsj.com (Wall Street Journal). Quantitative data on economic value added were not directly obtainable from the listed firms' annual reports and so we used relevant financial statement information to compute EVA. Some financial reports from the listed firms' websites were poorly scanned and not readable. However, such difficult-to-read reports were obtained from africanfinancials.com and african-markets.com online databases. Environmental dimension of CSR has been unavoidably omitted from the current study due to the non-disclosure of its monetary expenditures. Subsequent study in this area should consider the inclusion of environmental dimension of CSR using content analysis.

#### **ACKNOWLEDGMENTS**

The basis for the current study was the Nnamdi Azikiwe University PhD Dissertation which was funded by Tertiary Education Trust Fund of Nigeria. We are sincerely grateful to the University of Calabar in Nigeria for making this funding possible.

#### **COMPETING INTERESTS**

We declare that no competing interests exist.

#### **REFERENCES**

Amedu, J. M., Iliemena, R. O. & Umaigba, F. T. (2019). Value relevance of sustainability reporting in Nigerian manufacturing companies. *Journal of Global Accounting Department of Accountancy*, 6(2), 131-147. www.unizikjga.com Awka

Anderson, E. W. Fornell, C. & Mazvancheryl, S. K. (2004). Customer satisfaction and shareholder value. *Journal of Marketing* 68, 172–185. <a href="https://doi.org/10.1509/jmkg.68.4.172.42723">https://doi.org/10.1509/jmkg.68.4.172.42723</a>

Anderson, G. (2013). 10 Best ways to create shareholder value from supplier relationships. *Direct works https://www.thomasnet.com/insights/procurement/2013/11/07/10-best-ways-to-create-shareholder-value-from-supplier-relationships/* 

Becchetti, L., Ciciretti, R. & Hasan, I. (2009). Corporate social responsibility and shareholder's value: An empirical analysis. *Bank of Finland Research Discussion Papers*, 3-53. https://www.econstor.eu/bitstream/10419/212122/1/bof-rdp2009-001.pdf

Bookbinder, D. (2018). Invest in your employees now to maximize shareholder value for the long term https://www.linkedin.com/pulse/why-you-need-investing-your-people-...

Carlson, R. (2021). The goals of shareholder wealth maximization: What every business should know about shareholder wealth maximization. https://www.thebalancesmb.com/shareholder-wealth-maximization-392844

Chaudhry, A. A., Ramakrishnan, S., Sulimany, H. G. H. & Sharif, A. (2021). Enhancing shareholder value through corporate social responsibility disclosure in a developing country *Studies of Applied Economics*, 39(4), 1-9. http://dx.doi.org/10.25115/eea.v39i4.4315

Cheers, Z. (2011). The corporate social responsibility debate. A thesis submitted to and accepted by Liberty University, Spring. 1-37. https://digitalcommons.liberty.edu/honors/219/

De Villiers, C. & Ma, D. (2017). The association between corporate social responsibility and dividend pay-outs. *International Journal of Critical Accounting*, 9(5/6), 460-480.

De Villiers, C., Ma, D. & Marques, A. C., (2020). CSR disclosure, and firm value – Relations and mediating effects. https://ssrn.com/abstract=3700880 or http://dx.doi.org/10.2139/ssrn.3700880

Eklof, J., Podkorytova, O. & Malova, A. (2020). Linking customer satisfaction with financial performance: an empirical study of Scandinavian banks, Total Quality Management & Business Excellence, 1684-1702. 10.1080/14783363.2018.1504621. <a href="https://doi.org/10.1080/14783363.2018.1504621">https://doi.org/10.1080/14783363.2018.1504621</a>

Emeka-Nwokeji, N. A. (2019). Nexus between corporate social responsibility disclosures and market value of listed non-financial firms in Nigeria. *International Journal for Innovative Research in Multidisciplinary Field*, 5(3), 247-255. www.ijirmf.com

Enekwe, C. I. (2015). The relationship between financial ratio analysis and corporate profitability: A study of selected quoted oil and gas companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 3(2), 17-34. www.eajournals.org

- Exforsys (2015). Corporate social responsibility towards customers. *Exforsys Inc. Execution for System Consulting, Services and Training.* Retrieved from: http://www.exforsys.com/career-center/corporate-social-responsibility/...
- Ezejiofor, R. A., Nwakoby, N. P. & Okoye, J. A. (2019). Financial leverage and shareholders' wealth: An empirical analysis of foods and beverages firms in Nigeria. *International Journal of Application or Innovation in Engineering & Management*, 8(12), 19-26. www.ijaiem.org.
- Fernández-Guadaño, J., & Sarria-Pedroza, J. (2018). Impact of corporate social responsibility on value creation from a stakeholder perspective. *Sustainability*, 10(6), 20-62.
- Frank, B. P. & Binaebi, B. (2020). Corporate social responsibility and the economic value added (EVA) of non-bank financial organizations in Nigeria. *International Journal of Scientific & Engineering Research*, 11(4), 1427-1441. https://www.ijser.org/researchpaper/CORPORATE-SOCIAL-RESPONSIBILITY-AND-THE-ECONOMIC-VALUE-ADDED-EVA-OF-NON-BANK-FINANCIAL-ORGANIZATIONS-IN-NIGERIA.pdf
- Hategan, C. D., & Curea-Pitorac, R. I. (2017). Testing the correlations between corporate giving, performance and company value. *Sustainability*, *9*, 1210.
- <u>Hayes</u>, A. & <u>Scott</u>, G. (2021). Shareholder value definition: What is shareholder value? *Investopedia* <a href="https://www.investopedia.com/terms/s/shareholder-value.asp">https://www.investopedia.com/terms/s/shareholder-value.asp</a>
- Hermawan, S., Sari, Y. A., Biduri, S., Rahayu, D. & Rahayu, R. A. (2023). Corporate social responsibility, firm value, and profitability: Evidence from pharmaceutical companies in Indonesia and Malaysia. *International Journal of Professional Business Review*, 8(2), 01-24. <a href="https://doi.org/10.26668/businessreview/2023.v8i2.625">https://doi.org/10.26668/businessreview/2023.v8i2.625</a>
- Högerle, B., Charifzadeh, M., Ferencz, M. & Kostin, K. B. (2020). The development of working capital management and its impact on profitability and shareholder value: Evidence from Germany. *Strategic Management*, 25(2), 27-39. 10.5937/StraMan2002027H.
- Ibeawuchi, R. O. & Onuora, J. K. J. (2021). Executive compensation and performance of quoted consumer goods companies In Nigeria (2011-2018). *International Journal of Business & Law Research*, 9(2), 24-35. www.seahipaj.org
- Ibrahim, K. Y., Usaini, M. & Elijah, S. (2021). Working capital management and business performance. *Nigerian Journal of Marketing*, 7(1), 1-17. <a href="https://www.researchgate.net/publication/350239377">https://www.researchgate.net/publication/350239377</a>
- Ibrahim, M. & Dengel, B. Y. (2022). Cash Conversion Cycle and Value of Listed Oil and Gas Companies in Nigeria. *Review of Market Integration*, 13(1) 20–41. 10.1177/09749292211065191 http://journals.sagepub.com/home/rmi
- Inyang, W. S., Efiong, E. J., Ije, U. U., Eyo, I. E., Oboh, J. O. & Inyang, O. I. (2023). Corporate social responsibility and value of industrial goods manufacturing firms in Nigeria. *International Journal of Professional Business Review*, 8(5), 1-23 Doi: https://doi.org/10.26668/businessreview/2023.v8i5.1870

Isangedighi, A. J, Joshua, M. T. Asim, A. E. & Ekuri, E. E. (2004). *Fundamentals of Research and Statistics in Education and Social Sciences*. University of Calabar Press.

Jokinen, M. (2012). Corporate responsibility reporting based on GRI reporting standard development of reporting of case companies Cargolux, Finnair and SAS. *Thesis: Helsinki Metropolia University of Applied Sciences* 

Kundu, N. J. (2014). The relationship between working capital management and profitability of petroleum companies in Kenya. University Of Nairobi, 1-57. <a href="http://erepository.uonbi.ac.ke/handle/11295/76767">http://erepository.uonbi.ac.ke/handle/11295/76767</a>

Kurawa, J. M. & Saidu, H. (2018). Corporate tax and financial performance of listed Nigerian consumer goods. *Journal of Accounting and Financial Management*, 4(4), 30-43. www.iiardpub.org

Mazanec, J. (2022). The impact of working capital management on corporate performance in small–medium enterprises in the Visegrad Group. *Mathematics*, 10, 951. <a href="https://doi.org/10.3390/math10060951">https://doi.org/10.3390/math10060951</a>

McMahon, M. (2021). What is shareholder wealth? *Smartcapitalmind*. https://www.smartcapitalmind.com/what-is-shareholder-wealth.htm

Mgbame, C. O., Chijoke-Mgbame M. A., Yekini, S., & Yekini, C. K. (2017). Corporate social responsibility performance and tax aggressiveness. *Journal of Accounting and Taxation*, *9*(8), 101-108. 10.5897/JAT2017.0266

Morrison, R. L. (2008). Negative relationships in the workplace: Associations with organizational commitment, cohesion, job satisfaction and intention to turnover. *Journal of Management & Organization*, 14, 330-344. 10.1017/S1833367200003126. <a href="http://journals.cambridge.org/abstract\_S1833367200003126">http://journals.cambridge.org/abstract\_S1833367200003126</a>

Motley Fool Staff (2016). How to calculate the number of shares in a firm. *The Motley Fool*. https://www.fool.com/knowledge-center/how-to-calculate-the-number-of-shares-in-a-firm.aspx

Murugesu, T. (2013). Effect of cash conversion cycle on profitability: Listed plantation companies in Sri Lanka. *Research Journal of Finance and Accounting*, 4(18), 132-137. www.iiste.org

Nakamura, E. (2013). The impact of shareholders' types on corporate social responsibility: Evidence from Japanese firms. *Journal of Global Responsibility*, 4 (1), 113-130. https://doi.org/10.1108/20412561311324104

Neupane, R. (2014). Relationship between customer satisfaction and business performance in Lloyds bank UK: A case study. *International Journal of Social Sciences and Management*, 1(2), 74-85. 10.3126/ijssm.v1i2.10019

Nnubia, I. C. & Okolo, M. N. (2018). Effect of corporate tax on profitability of business organizations in Nigeria. *International Journal of Management Studies, Business & Entrepreneurship Research*, 3(4), 14-23.

- Nworgu, B. G. (1991). *Educational research: Basic issues and methodology*. Wisdom Publishers.
- Nyeadi, J. D., Ibrahim, M. & Sare, Y. A. (2018). Corporate social responsibility and financial performance nexus: Empirical evidence from South African listed firms. *Journal of Global Responsibility*, 9(3), 301-328.
- Okoye, E. I. & Ndum, N. B. (2020). Effect of sustainability reporting on economic value added of manufacturing firms listed on Nigeria Stock Exchange. *Journal of Economics, Management and Trade*, 26(10), 15-33. 10.9734/JEMT/2020/v26i1030295
- Onwumere, J.U.J., Ibe, I. G. & Ozoh, F. O. (2012). Does the use of outsiders' fund enhance shareholders' wealth? Evidence from Nigeria. *Journal of Finance and Investment Analysis*, *1*(1), 173-197. http://hdl.handle.net/10419/58004
- Osisioma, H., Nzewi, H. & Paul, N. (2015). Corporate social responsibility and performance of selected firms in Nigeria. *International Journal of Research in Business Management*, 3(3), 57-68.
- Otuya, S. & Akporien, F. (2020). Do corporate social responsibility activities influence employees' job performance? *Journal of Contemporary Research in Social Sciences*, 2(2), 26-34.
- Oyeyemi, O. G., Enyi, E. P. & Emmanuel, O. G. (2019). Shareholders' return and value of manufacturing firms listed on the Nigerian Stock Exchange. *African Journal of Business Management*, 13(10), 318-326. 10.5897/AJBM2018.8678
- Pastoors, G. (2018). The influence of CSR performance on shareholders wealth. *Radboud Universiteit*Nijmegen https://theses.ubn.ru.nl/bitstream/handle/123456789/6201/Pastoors%2C\_Gijs\_1.pdf?sequence =1
- Pham, K. X., Nguyen, Q. N. & Nguyen, C. V. (2020). Effect of working capital management on the profitability of steel companies on Vietnam Stock Exchanges. *Journal of Asian Finance*, *Economics and Business*, 7(10), 741–750. 10.13106/jafeb.2020.vol7.n10.741
- Relaiza, H. R. S. M., Núñez, L. A. L., Temple, M. M. S., Miranda, P. S. Y., Bellido, I. E. A. (2023). Corporate Social Responsibility and Financial Control. *International Journal of Professional Business Review*, 8(1), 01-11. https://doi.org/10.26668/businessreview/2023.v8i1.936
- Sayed, S., Malik, I. R., Ahmed, M. & Ali, M. (2017). Does corporate social responsibility improve the firm's financial performance: A theoretical perspective of agency and stakeholder theory by financial sector of Pakistan? *Journal of Contemporary Management Sciences*, 3(2), 137-156. https://ssrn.com/abstract=3105343
- Sekhar, S. (2018). Consumer social responsibility and consumer. *Law Times Journal*, 1-5. https://lawtimesjournal.in/consumer-social-responsibility/

- Siburian, E. & Yohanes, A. (2019). Shareholder value creation measurement analysis in healthcare, materials, and real estate industry in Indonesia. *Advances in Economics, Business and Management Research*, 89, 380-387.
- Singh, P. K. & Pattanayak, J. K. (2014) Linking of customer satisfaction with shareholders' value: A Review *Global Journal of Finance and Management*, 6(5), 403-412. <a href="http://www.ripublication.com">http://www.ripublication.com</a>
- Sumiati, S. & Sueztianingrum, R. Y. (2020). The role of CSR on shareholders wealth through intellectual capital. *Advances in Economics, Business and Management Research*, 115, 17th International Symposium on Management (INSYMA 2020)
- Udeh, F. N. & Eze, M. N. (2021). Effect of corporate tax avoidance on operating cash flow performance: An empirical study of manufacturing firms in Nigeria. *International Journal of Advanced Academic Research*, 7(7), 37-54. www.ijaar.org Journal. 10.46654/ij.24889849.s775
- Venugopal, M. & Reddy, M. R. (2016). Impact of capital structure on firm's profitability and shareholder wealth maximization: A study of listed Indian cement companies *IOSR Journal of Business and Management*, 18(4), 21-27. www.iosrjournals.org
- Yazdani, W., Sami, L. & Ansari, M. S. (2022). A Bibliometric Analysis of Mandatory Corporate Social Responsibility Using Rstudio: Based On Scopus Database. *International Journal of Professional Business Review*, 7(6), 01-28. <a href="https://doi.org/10.26668/businessreview/2022.v7i6.744">https://doi.org/10.26668/businessreview/2022.v7i6.744</a>.