"How social initiatives affect the value of manufacturing companies in Nigeria"

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BUSINESS PERSPECTIVES

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HOW SOCIAL INITIATIVES AFFECT THE VALUE OF MANUFACTURING COMPANIES IN NIGERIA

Abstract

Eighty percent of listed manufacturing firms in Nigeria (4 out of 5 firms) had negative and fluctuating returns on equity eighty-three percent of the time (5 out of 6 years), while inexplicable fluctuations in philanthropic expenditures, labor costs, and creditor days correspondingly occurred during the 6-year period under review (2018–2023). This study looks at how social initiatives affect the value of listed manufacturing firms in Nigeria. Its specific goal was to determine whether a firm's value (measured as return on equity) is influenced by the cost of corporate giving, the cost of employee well-being, and the time taken to settle creditors. Data were obtained from the financial reports of 5 companies. the sample of which was judgmentally drawn from 16 listed companies using a quantitative method of research. EViews statistical package was used to analyze data. It was found that investments in social initiatives as supported by corporate giving {B1 = 0.010162, P = .2691 or P > .05}, employee well-being {B2 = .012285, P = .3836 or P > .05}, and obligations to creditors {B3 = .012018, P = .8327 or P > .05} are not value-enhancing in Nigeria's manufacturing sector. In light of the above, it was concluded that listed companies in the manufacturing sector in Nigeria are not legitimately and strategically investing their resources in social initiatives, and corporate value is consequently not enhanced and maximized.

Keywords	philanthropy, welfare, promptitude, integrity, ethics, profitability
JEL Classification	G32, I31, M14, M52, M54

INTRODUCTION

Over a decade, the field of corporate social initiatives has evolved quite well, although there are varying views about a company's role in society. The fundamental aim of every enterprising organization is to boost shareholders' value, and as the demand for a company's shares rises, share price also rises. Corporate social initiatives boost the positive image of a firm and attract investors, and it has been discovered that genuine social initiatives increase corporate profits and share value. Businesses are therefore under constant pressure to reveal their social, environmental, and sustainability policies, and they are encouraged to get heavily involved in the community in order to boost return on equity, increase share market price, and foster stronger customer loyalty (Husam-Aldin & Saima, 2018; Mahjoub, 2019; Sethi 2003a; Al-Ghamdi et al., 2019). Businesses actively participate in and contribute large amounts of resources to the community projects of non-profit organizations in addition to giving them cash donations (Alperson, 1996, 1998; Hess et al., 2002).

In Nigeria, listed firms in the manufacturing sector have carried out and are still carrying out various forms of social initiatives. In general, more participation in charitable endeavors may indicate risk to investors, which may reflect in the value of the company's stock. Sulaiman et al. (2018), Oladele et al. (2022), Igbekoyi (2020), Ofurum et al. (2019), and many other corporate social initiatives-firm value relationship

studies in the Nigeria manufacturing sector did not sufficiently examine the relationships between corporate giving, employee well-being, obligations to creditors and firm value.

The adoption of social initiatives often involves unprofitable expenditures, which might be short-term or long-term in nature. According to Cheers (2011), expenditures on corporate social initiatives often threaten shareholders' wealth if not strategically and genuinely made.

Unfortunately, 83% of the time, 80% of 5 sampled manufacturing firms in Nigeria had an average return on equity of 8% (less than 15-20% industry average). Negative and fluctuating ROE was also recorded most of the time over a 6-year period (2018 to 2023). During the same period, expenditures on corporate giving and employee wellbeing also continued to fluctuate, while creditor days of all the firms also fluctuated and averaged 157 days longer than their industry average of 30 days. The reasons for the foregoing negative financial indicators were not immediately apparent. The financial reports of the foregoing firms further revealed that in years where losses were made, expenditures were still being incurred on the three dimensions of social initiatives already highlighted above. Furthermore, these social initiative expenditures were arbitrarily incurred as they were not based on any defined criteria. The problem suggested by the above scenarios is that the expenditures incurred on these firms' social initiatives are not legitimately and effectively made to enhance the value of these firms, and this constitutes a threat to shareholders' wealth.

1. LITERATURE REVIEW AND HYPOTHESES

This paper is based on Freeman's Stakeholder Theory (1984) and Friedman's Shareholder Value Theory (1970). Friedman introduced the shareholder theory in 1970, which holds that management's main goal should be to boost shareholder value. The concerns of other companies' stakeholders, including workers, consumers, suppliers, and society, depend on this goal. Concerning shareholder theory, managers and boards should prioritize safeguarding corporate value for shareholders' benefit since they are the ultimate owners of the business. Furthermore, dividends and share price are two measurable factors used by stockholders to assess business assets. On the other hand, Freeman argued that managers are required to meet the needs of various parties, such as investors, staff members, clients, suppliers, rival businesses, the community, and the government. According to Mitchell et al. (1997), the stakeholder approach extends the goals beyond profit maximization to encompass the rights and interests of other non-shareholders. A company's charitable giving is a long-term strategic investment that will pay off financially for all stakeholders in the company (Wycliffe, 2020). This viewpoint runs counter to Milton Friedman's shareholder value theory, which was put forth by an economist who was solely concerned with a company's profitability and shareholders (Inyang et al., 2023).

On average, a 2% expenditure on socially conscious activities resulted in a 4.1% decrease in companies' share prices, suggesting that investors view social efforts as risky and may lower stock prices (Manchiraju & Rajgopal, 2017). Environmental disclosure correlated negatively with financial performance (Aliyu & Noor, 2015), and a marginal negative relationship was found between earnings after taxes and expenditures on social initiatives (Akinyele & Adebayo, 2017). Babalola (2012) also discovered an inverse link between CSR and profit-after-tax, while CSR spending had no discernible effect on banks' profitability (Sanni et al., 2014), and Kwaning et al. (2014) revealed an adverse correlation between CSR spending and financial success.

However, corporate donations had significant positive effects on share price and firm value (Houqe et al., 2019; Gustafsson et al., 2017). Olaroyeke and Tabitha (2015) in their study found that industrial firms listed on the Nigeria Exchange Group perform better as a result of their CSR initiatives. In the same vein, Mwangi and Jerotich (2013) found that financial success and corporate social efforts had a significant correlation, while Hermawan et al. (2023) used content analysis to reveal that pharmaceutical businesses in Indonesia benefited financially from fulfilling their CSR obligations.

Corporate social responsibility practices improved the value of businesses (Emezi, 2015; Chiara & Silvia,

2017; Makanyeza et al., 2018; Riyadh et al., 2019; Rashid & Radiah, 2017). Furthermore, Inyang et al. (2023) studied Nigeria's industrial goods companies and discovered that CSR parameters had a positive impact on firm value and concluded that profit maximization is threatened by rent-seeking corporate managers and not by CSR. CSR disclosures positively correlated with a bank's profitability (Ajide & Aderemi, 2012), but in Eyad and Murad's (2016) study, the CSR and firm value relationship was negligible.

Four CSR dimensions, namely employee, environment, community, and product, significantly impacted earnings per share in a study done by Mohammed et al. (2016). Additionally, a survey of 439 manufacturing firms carried out by Handayani et al. (2017) revealed that corporate social activities positively and significantly correlated with firm performance.

The study reviewed some empirical studies that had been done on social initiatives and firm values in industrial goods firms, oil and gas companies, agricultural firms, and market valuation in Nigeria and beyond. Consequently, the empirical studies reviewed also revolved around the following variable combination: economic, social, and environmental initiatives on firm values in Nigeria and these include: Akinyele and Adebayo (2017), Inyang et al. (2023), Babalola (2012), Inyang et al. (2023), Taophic et al. (2017), Inyang et al. (2023) and Handayani et al. (2017). To the best of the authors' knowledge, there is no study specifically focusing on the manufacturing sector in Nigeria. As a result, the findings of previous studies on social initiatives and their connections to investor perspective, shareholder value, and financial performance, among other economic and financial variables, are not entirely conclusive.

Therefore, this paper aims to examine how corporate giving, employee well-being, and obligation to creditors affect firm value in Nigeria's manufacturing sector. This study's literature survey has revealed the following hypotheses.

H_1:   Investment in corporate giving will generate a significant positive effect on the value of firms.

H_2:   Investment in employee well-being will generate a significant positive effect on the value of firms.

H_3:   Investment in the fulfillment of the obligation to creditors will generate a significant positive effect on the value of firms.

2. METHODOLOGY

This study employed the causal-comparative research design after judgmentally selecting a 5-firm sample from a population of 16 firms based on a six-year period (2018 to 2023). The foregoing research design was chosen because the data required for analysis were already in existence, and the researchers had no control over them. The judgmental sampling method was adopted to select firms that had been in existence carrying out full business activities without a break within the period of this study and that constantly and annually reported erratically fluctuating corporate giving expenditures and employee wellbeing expenditures, fluctuating and long creditor days, fluctuating returns on equity (ROE) and negative ROE. The other 11 firms (16 minus 5) that did not meet the foregoing criteria were not included in the sample and the sample size constituted over 30 percent of the small population of 16 as required (St Olaf College, n.d.).

The data collected were from the firms' annual financial reports and Nigerian Exchange Group Fact Book. These data mainly comprised reported corporate giving expenditures, employee wellbeing expenditures, and obligations to creditors (time taken to settle creditors) as key independent variables and turnover, total assets and invested capital as control independent variables while each firm's return on equity (profit for the year divided by total shareholders' equity) as dependent variable.

Data on corporate giving and employee well-being were derived directly from each firm's financial statement for six years, while return on equity and obligation to creditors of each of the five firms for the same period were computed using the information provided by the financial reports of the firms. Turnover, total assets, and invested capital were included in the study models to check-mate the effects of confounding and extraneous variables and to make provision for the heterogeneous nature of the firms. The raw data obtained for the variables of interest and control variables were log-transformed to arrive at robust data analysis results. African Markets,

Security and Exchange Commission, Investing.com, Nigerian Exchange Group, Wall Street Journal, and AfricanFinancials were used to authenticate the firms' financial reports. A firm-year observation of 210 (5x6x7) was generated for this study using the sample size, period scope, and seven variables. Three-panel data regression models were adopted for this study as follows:

Model 1

$$ROE_{it} = \beta_{oi} + \beta_1 COG_{it} + \beta_2 TNOV \qquad (1)$$
$$+ \beta_3 TOAS + \beta_4 INVC + \mu_{it},$$

Model 2

$$ROE_{it} = \beta_{oi} + \beta_1 EWB_{it} + \beta_2 TNOV \qquad (2)$$
$$+ \beta_3 TOAS + \beta_4 INVC + \mu_{it},$$

Model 3

$$ROE_{it} = \beta_{oi} + \beta_1 OTC_{it} + \beta_2 TNOV \qquad (3)$$
$$+ \beta_3 TOAS + \beta_4 INVC + \mu_{it},$$

where i – 5 firms as follows: ID1, ID2, ID3, ID4, and ID5, t – 6 years: 2018–2023, ROE – the listed firms' Return on Equity for a 6-year period, β_{oi} – the listed firms' Intercepts, $\beta_1 - \beta_4$ – the listed firms' coefficients of regression, COG – the listed firms' corporate giving for a 6-year period, EWB – listed firms' Employee well-being for a 6-year period, OTC – listed firms'

Obligations to creditors for a 6-year period, $TNOV$ – listed firms' Turnover for a 6-year period, $TOAS$ – listed firms' Total assets for a 6-year period, $INVC$ – listed firms' Invested capitals for a 6-year period, μ_{it} – Regression model residuals.

2.1. Diagnostic tests

The three-panel data regression models' residuals and variables were subjected to cross-section dependence and stationarity tests prior to regression analysis. The foregoing tests were performed to confirm the reliability and validity of the models. The choice between random effect and fixed effect models was facilitated by performing the Hausman test. The conformity of the signs and directions of the regression coefficients with theory were also tested, while the accuracy and significance of the regression models and regression parameters were tested using the regression coefficients, standard error test, t-test, F-test, Durbin-Watson test statistic, and R^2 {coefficient of determination}.

3. RESULTS

The variables, both key and control, were found to be stationary at the level and 1st difference, confirming the fitness of the regression models for analysis (Table 1). The residuals of the research models were stationary at level as needed to confirm the models' reliability and validity (Table 2).

Table 1. Test of variables and residuals done before performing regression analysis

Source: Stationarity Test from EViews version 9.

Key variables	Method of test	Test statistics	Probability Value	Null hypothesis	Decision rule	Remarks
Key variables						
ROE (Return on Equity)	Fisher Chi-square (ADF)	37.9776	0.0000	Unit root present	H_0 rejected if P val. < .05	At level var., is stationary
ROE (Return on Equity)	Choi Z-stat (ADF)	−2.81209	0.0025	Unit root present	H_0 rejected if P val. < .05	At level var., is stationary
COG (Corporate Giving)	F. Chi-square-ADF	22.8856	0.0112	Unit root present	H_0 rejected if P val. < .05	At 1st diff., var. is stationary
EWB (Employee wellbeing)	F. Chi-square-PP	19.6392	0.0329	Unit root present	H_0 rejected if P val. < .05	At level var., is stationary
OTC (Obligation to Creditors)	Levin, Lin, and Chu t	3.68654	0.0001	Unit root present	H_0 rejected if P val. < .05	At level var., is stationary
Variables requiring control						
TNOV (Turnover)	F. Chi-square-ADF	30.5357	0.0007	Unit root present	H_0 rejected if P val. < .05	At level var., is stationary
TOAS (Total Assets)	F. Chi-square-ADF	22.0027	0.0151	Unit root present	H_0 rejected if P val. < .05	At 1st diff., var. is stationary
INVC (Invested Capital)	Levin, Lin, and Chu t	2.73160	0.0032	Unit root present	H_0 rejected if P val. < .05	At level var., is stationary

Table 2. Test of residuals' stationarity done before performing regression analysis

Model residuals	Method of test	Test statistics	Probability Value	Null hypothesis	Decision rule	Remarks
Model 1 residual	Fisher Chi-square (ADF)	21.1816	0.0199	Unit root present	H_0 rejected if P val. < .05	At level var., is stationary
Model 2 residual	Fisher Chi-square (ADF)	25.0377	0.0053	Unit root present	H_0 rejected if P val. < .05	At level var., is stationary
Model 3 residual	Fisher Chi-square (ADF)	24.5659	0.0062	Unit root present	H_0 rejected if P val. < .05	At level var., is stationary

3.1. Hypothesis one testing

Hausman test showed a p-value of 0.5027 after procedurally applying the pooled OLS method and random and fixed effects estimates. This result confirmed the appropriateness of the random effect model for model 1 (table 5 applies). The regression result of the effect of corporate giving (COG) on return on equity (ROE) is shown in Table 4, and model 1 now becomes $ROE_{it} = 0.373945 + 0.010162COG_{it} + \mu_{it}$. It can be deduced from this model 1 that a 1% increase in corporate giving (COG) will correspondingly increase the ROE of the listed firms by 1%. Confounding variables like turnover, total assets, and invested capital were constant as they also affected the COG-ROE relationship. COG ($B_1 = 0.010162$, p = 0.2691) indicates that the COG-ROE relationship is positive and not significant. For control variables, TNOV ($B_2 = -0.041855$, p = 0.2723) indicates that the TNOV-ROE relationship is negative and not significant, TOAS ($B_3 =$ 0.004328, p = 0.9064) indicates that the TOAS-ROE relationship is positive and not significant, and INVC ($B_4 = 0.000846$, p = 0.9003) indicates that the INVC-ROE relationship is positive and not significant. R^2 of 0.382498 indicates a moderate ROE change, as COG, TNOV, TOAS, and INVC explained. Residuals of 0.617502 indicate variations in ROE not explained. The reliability of model 1 is established since its residuals were stationary at the level, and they all passed the cross-section dependence test (Table 3). Model 1 is significant at an F-Statistic of 3.871427 and p-value of 0.013964. Durbin-Watson of 2.002261 > R^2 of 0.382498 and is between 2 and 4, indicating the absence of autocorrelation and serial correlations. Model 1 is, therefore, reliable and fit for prediction purposes (Table 4). The Hausman test recommended a random effect estimate for model 1. H_1 is therefore rejected since investment in corporate giving has a positive relationship with the value of firms, but that relationship is not significant.

Table 3. Test of residuals' cross-section dependence done before regression analysis

Model residuals	Method of test	Test statistics	Probability value	Null hypothesis	Decision rule	Remarks
MODEL1 RESID	B − Pagan LM	15.89961	0.1025	Cross-section dependence – not correlated	if P val. > .05, Accept Null	Nil cross-section dependence
	P. scaled LM	0.201158	0.8406			
	B. scaled LM	−0.298842	0.7651			
	Pesaran CD	−0.467510	0.6401			
MODEL 2 RESID	B − Pagan LM	12.85837	0.2317	Cross-section dependence – not correlated	if P val. > .05, Accept Null	Nil cross-section dependence
	P. scaled LM	−0.478882	0.6320			
	B − scaled LM	−0.978882	0.3276			
	Pesaran CD	0.144385	0.8852			
MODEL 3 RESID	B − Pagan LM	11.48368	0.3211	Cross-section dependence – not correlated	if P val. > .05, Accept Null	Nil cross-section dependence
	P. scaled LM	−0.786273	0.4317			
	B. scaled LM	−1.286273	0.1983			
	Pesaran CD	0.012672	0.9899			

Table 4. Panel data regression results – model 1

Dependent Variable: ROE
Method: Panel EGLS (Cross-section random effects)
Date: 06/22/24 Time: 16:18
Sample: 2018 2023
Periods included: 6
Cross-sections included: 5
Total panel (balanced) observations: 30

Swamy and Arora estimator of component variances				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	0.373945	0.146003	2.561215	0.0168
COG	0.010162	0.008991	1.130356	0.2691
TNOV	−0.041855	0.037290	−1.122423	0.2723
TOAS	0.004328	0.036430	0.118791	0.9064
INVC	0.000846	0.006684	0.126562	0.9003
Effects Specification				
			S.D.	**Rho**
Cross-section random			4.74E−09	0.0000
Idiosyncratic random			0.066744	1.0000
Weighted Statistics				
R-squared	0.382498	Mean dependent var		0.054009
Adjusted R-squared	0.283698	S.D. dependent var		0.077813
S.E. of regression	0.065857	Sum squared resid		0.108427
F-statistic	3.871427	Durbin–Watson stat		2.002261
Prob(F-statistic)	0.013964			
Unweighted Statistics				
R-squared	0.382498	Mean dependent var		0.054009
Sum squared resid	0.108427	Durbin–Watson stat		2.002261

Table 5. Hausman test results – model 1

Correlated Random Effects – Hausman Test
Equation: RANDOMCOG2

Test cross-section random effects			
Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Cross-section random	3.339303	4	0.5027
Cross-section random effects test comparisons			
Variable	**Fixed**	**Random**	**Var(Diff.)**	**Prob.**
COG	0.005326	0.010162	0.000793	0.8636
TNOV	0.046974	−0.041855	0.003387	0.1270
TOAS	−0.061413	0.004328	0.014461	0.5846
INVC	0.004234	0.000846	0.000033	0.5552

3.2. Hypothesis two testing

The Hausman test showed a p-value of 0.4348 after procedurally applying the pooled OLS method and random and fixed effects estimates. This result confirmed the appropriateness of the random effect for model 2 (Table 7). The regression result of the effect of employee wellbeing (EWB) on return on equity (ROE) is shown in Table 6, and model 2 now becomes $ROE_{it} = 431778 + 0.012285EWB_{it} + \mu_{it}$. It can be deduced from this model 2 that a 1% increase in employee wellbeing (EWB) will correspondingly increase the ROE of the listed firms by 1%. Confounding variables like turnover, total assets, and invested capital were constant as they also affected the EWB-ROE relationship. EWB ($B_1 = 0.012285$, p = 0.3836) indicates that the EWB-ROE relationship is positive and not significant. For control variables, TNOV ($B_2 = -0.052969$, p = 0.1618) indicates that the TNOV-ROE relationship is negative and not significant, TOAS ($B_3 = 0.008860$, p = 0.8078) indi-

cates that the TOAS-ROE relationship is positive and not significant, and INVC (B_4 = -0.000740, p = 0.9120) indicates that the INVC-ROE relationship is negative and not significant. Model 2 R^2 of 0.370065 indicates a moderate ROE change, as EWB, TNOV, TOAS, and INVC explained. Model 2 residuals of 0.629935 indicate variations in ROE not explained. The reliability of model 2 is established since its residuals were stationary at the level, and they all passed the cross-section dependence test (see Table 3). Model 2 is significant at

an F-Statistic value of 3.671653 and a p-value of 0.017434. The Durbin-Watson of 1.997720 > R^2 of 0.370065 is between 2 and 4, indicating the absence of autocorrelation and serial correlations. Model 2 is reliable and, therefore, suitable for prediction purposes (Table 6). The Hausman test recommended a random effect estimate for model 2. H_2 is therefore rejected since investment in employee wellbeing has a positive relationship with value of firms, but that relationship is not significant.

Table 6. Panel data regression results – model 2

Source: Results of panel data regression analysis from EViews version 9, 2024.

Dependent Variable: ROE
Method: Panel EGLS (Cross-section random effects)
Date: 06/22/24 Time: 16:31
Sample: 2018 2023
Periods included: 6
Cross-sections included: 5
Total panel (balanced) observations: 30

Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.431778	0.125761	3.433330	0.0021
EWB	0.012285	0.013853	0.886830	0.3836
TNOV	−0.052969	0.036744	−1.441576	0.1618
TOAS	0.008860	0.036036	0.245858	0.8078
INVC	−0.000740	0.006629	−0.111662	0.9120
Effect Specification				
			S.D.	Rho
Cross-section random			7.57E−09	0.0000
Idiosyncratic random			0.066794	1.0000
Weighted Statistics				
R-squared	0.370065	Mean dependent var		0.054009
Adjusted R-squared	0.269275	S.D. dependent var		0.077813
S.E. of regression	0.066516	Sum squared resid		0.110610
F-statistic	3.671653	Durbin-Watson stat		1.997720
Prob(F-statistic)	0.017434			
Unweighted Statistics				
R-squared	0.370065	Mean dependent var		0.054009
Sum squared resid	0.110610	Durbin-Watson stat		1.997720

Table 7. Hausman test results – model 2

Source: Results of the Hausman test from EViews version 9, 2024.

Correlated Random Effects – Hausman Test
Equation: RANDOMEWB

Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.792786	4	0.4348
Cross-section random effects test comparisons:			
Variable	Fixed	Random	Var(Diff.)	Prob.
EWB	−0.005852	0.012285	0.023073	0.9050
TNOV	0.051424	−0.052969	0.004071	0.1018
TOAS	−0.052099	0.008860	0.016301	0.6330
INVC	0.004108	−0.000740	0.000034	0.4048

3.3. Hypothesis three testing

The Hausman test showed a p-value of 0.2809 after procedurally applying the pooled OLS method and random and fixed effects estimates. This result confirmed the appropriateness of the random effect for model 3 (Table 9). The regression results of the effect of obligations to creditors (OTC) on return on equity (ROE) are shown in Table 8, and model 3 now becomes $ROE_{it} = 0.429929 + 0.012018OTC_{it} + \mu_{it}$. It can be deduced from this model 3 that a 1% increase in obligations to creditors (OTC) will correspondingly increase the ROE of the listed firms by 1%. Confounding variables like turnover, total assets, and invested capital were constant as they also affected the OTC-ROE relationship. OTC ($B_1 = 0.012018$, p = 0.8327) indicates that the OTC-ROE relationship is positive and insignificant. For control variables, TNOV ($B_2 = -0.039760$, p = 0.5165) indicates that the TNOV-ROE relationship is negative and not significant, TOAS ($B_3 = 0.001932$, p = 0.9730) indicates that

the TOAS-ROE relationship is positive and not significant, and INVC ($B_4 = 0.000507$, p = 0.9471) indicates that the INVC-ROE relationship is positive and not significant. Model 3 R^2 of 0.351216 indicates a moderate change in ROE, as explained by OTC, TNOV, TOAS, and INVC. Model 3 residuals of 0.648784 indicate variations in ROE not explained. The reliability of model 3 is established since its residuals were stationary at the level, and they all passed the cross-section dependence test (Table 3). Model 3 is significant at the F-Statistic value of 3.383407 and p-value of 0.024147. Durbin-Watson of $1.922870 > R^2$ value of 0.351216 and is approximately between 2 and 4, indicating the absence of autocorrelation and serial correlations. Model 3 is, therefore, reliable and fit for prediction purposes (Table 8). The Hausman test recommended a random-effect estimate for model 3. H_3 is, therefore, rejected since investment in the fulfillment of the obligation to creditors has a non-significant positive relationship with the value of firms.

Table 8. Panel data regression results of – model 3

Source: Results of panel data regression analysis from EViews version 9, 2024.

Dependent Variable: ROE
Method: Panel EGLS (Cross-section random effects)
Date: 06/22/24 Time: 16:37
Sample: 2018 2023
Periods included: 6
Cross-sections included: 5
Total panel (balanced) observations: 30

Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.429929	0.232794	1.846818	0.0766
OTC	0.012018	0.056310	0.213432	0.8327
TNOV	−0.039760	0.060426	−0.658006	0.5165
TOAS	0.001932	0.056485	0.034201	0.9730
INVC	0.000507	0.007573	0.067013	0.9471
Effect Specification				
			S.D.	Rho
Cross-section random			9.15E−09	0.0000
Idiosyncratic random			0.066114	1.0000
Weighted Statistics				
R-squared	0.351216	Mean dependent var		0.054009
Adjusted R-squared	0.247411	S.D. dependent var		0.077813
S.E. of regression	0.067504	Sum squared resid		0.113920
F-statistic	3.383407	Durbin-Watson stat		1.922870
Prob(F-statistic)	0.024147			
Unweighted Statistics				
R-squared	0.351216	Mean dependent var		0.054009
Sum squared resid	0.113920	Durbin-Watson stat		1.922870

Table 9. Hausman test results – model 3

Correlated Random Effects – Hausman Test
Equation: RANDOMOTC2

Test cross-section random effects			
Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Cross-section random	5.062521	4	0.2809
Cross-section random effects test comparisons			
Variable	**Fixed**	**Random**	**Var(Diff.)**	**Prob.**
OTC	0.063646	0.012018	0.006127	0.5095
TNOV	0.089744	−0.039760	0.004299	0.0483
TOAS	−0.107437	0.001932	0.017257	0.4051
INVC	0.007330	0.000507	0.000042	0.2925

4. DISCUSSION

The main objective of this study was to determine whether a firm's value (measured as return on equity) is influenced by three components of social initiatives namely, corporate giving, employee well-being and time taken to settle creditors. On the basis of the foregoing objective, we ran multiple regressions using three regression models after collecting panel data and subjecting it to cross-section dependent and stationarity tests and using fixed and random effects estimators to determine the appropriateness of the models.

Our results indicated that all the three components of social initiatives we examined, had non-significant positive effects on the value of manufacturing companies in Nigeria. This implies that there is no sufficient evidence to conclude that the moneys spent on philanthropic gestures and catering for employee welfare are enhancing the value of the foregoing companies and there is also no evidence to conclude that time taken to settle creditors is value-enhancing. These findings further imply that funds invested in pursuing any social cause and not effectively and efficiently used, cannot boost corporate profitability. What fundamentally boosts corporate value is the legitimate and strategic use of the amount invested. The research community and managers pursuing social initiatives, should now be able to invest legitimately and strategically.

Furthermore, the non-significant positive effect of creditor days on firm value implies that other favorable market conditions can even mask the adverse effect of long creditor days on profitability and corporate managers should be mindful of the fact that this masking may not likely be for too long. The benefits of prompt settlement of creditors cannot be overemphasized and corporate managers will find this result useful when deciding on ways to reduce creditor days. It would be counter-productive for corporate managers to wait until long creditor days begin to reduce corporate profitability before taking the appropriate actions.

However, the findings of this study undermine the studies conducted by Wycliffe (2020), Houqe et al. (2019, Gustafsson et al. (2017), Olaroyeke and Tabitha (2015), Emezi (2015, Chiara and Silvia (2017), Makanyeza et al. (2018), Riyadh et al. (2019, Rashid and Radiah (2017), Inyang et al. (2023), Ajide and Aderemi (2012), Mohammed et al. (2016), and Handayani et al. (2017) where it was discovered that social initiatives significantly influenced firm value.

Studies that are in agreement with the findings of the current study are the ones carried out by Manchiraju and Rajgopal (2017), Akinyele and Adebayo (2017), Eyad and Murad (2016), Aliyu and Noor (2015), Babalola (2012), Kwaning et al. (2014), and Sanni et al. (2014) where it was revealed that social initiatives had non-significant positive relationships with firm value. These results are indicative of indiscriminate expenditures on social initiatives, which, if not checked, will threaten the future prospects and the going concern of the companies under investigation.

CONCLUSION

This study's aim was to investigate the level to which three dimensions of social initiatives, namely, corporate giving, employee well-being, and obligation to creditors, influence the value of manufacturing companies in Nigeria. This study reveals that the social initiatives of these manufacturing companies are currently not enhancing their corporate values.

The non-significant positive relationships between corporate giving, employee well-being, and firm value suggest that not all social initiatives carried out by corporate institutions are value-enhancing. Investment in social initiatives ought to be profitable, so managers of corporate organizations should incur expenditures on social initiatives in a way and manner that adds value to their shareholders' wealth. It is, therefore, not a good business practice to put financial resources into supporting social causes that cannot maximize the wealth of their shareholders. Similarly, the non-significant positive relationship between obligations to creditors is probably due to the long creditor days revealed by the financial reports of the five manufacturing firms.

Social initiatives, which represent a categorical independent variable in this study, can be further decomposed into product responsibility and consumer protection, and these should be distinctively measured by future researchers using data collected from primary sources. This paper analyzed only five manufacturing companies, and it was impossible to include all the manufacturing companies in the sample when conducting this study. A bigger sample size is suggested for future researchers in this study area to obtain a more robust result. Future research in this study area should get samples from other industries, including stakeholders that perceive firms' social initiatives differently. This study's outcome is restricted to Nigeria and some developing countries in similar situations. When factors such as economic status, culture, and lifestyle are considered, different study outcomes may be obtained from developed countries.

AUTHOR CONTRIBUTIONS

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