Sustainability Disclosure, Tobin's Q, and Revenue Growth in Nigerian Listed Manufacturing Firms.

Mafiana Ijeamaka

Department of Accounting, Faculty of Management Sciences, Delta State University, Abraka, Nigeria

DOI: https://doi.org/10.47772/IJRISS.2026.1014MG0156

Received: 20 July 2026; Accepted: 26 July 2026; Published: 04 August 2026

ABSTRACT

This article examines the effect of sustainability disclosures on the value of publicly listed manufacturing companies in Nigeria, with specific focus on Tobin's Q and revenue growth as firm value proxies. Anchored on the ex-post facto research design, secondary data were sourced from the annual reports and accounts of twenty (20) listed industrial and consumer goods companies in Nigeria between 2013 and 2023, yielding two hundred and twenty (220) firm-year observations. Sustainability disclosure was proxied by the sustainability disclosure index (SDI) and disclosure on environmental laws and regulations (DELR), while firm value was measured using Tobin's Q (TBQ) and revenue growth (REVGROW). Data were analysed using descriptive statistics, regression diagnostics, and fixed/random effects panel regression. Findings revealed that sustainability disclosure variables (SDI and DELR) had a statistically insignificant effect on Tobin's Q (Wald Chi2 = 0.45; $p = 0.7966 > 0.05$), leading to the acceptance of the null hypothesis. Conversely, sustainability disclosure variables exerted a statistically significant effect on revenue growth (Wald Chi2 = 43.10; $p = 0.0000 < 0.05$), leading to the rejection of the null hypothesis. The contrasting results suggest that the value-relevance of sustainability disclosure in Nigerian manufacturing firms is measure-dependent: while the market-based Tobin's Q proxy appears insensitive to sustainability disclosure, the accounting-based revenue growth proxy responds significantly to it. The study recommends that management of listed manufacturing companies pay closer attention to sustainability reporting practices that drive turnover and revenue performance, while further research should investigate why market-based value proxies remain unresponsive to sustainability disclosure in the Nigerian context.

Keywords: Sustainability disclosure, Tobin's Q, revenue growth, firm value, listed manufacturing companies, Nigeria

INTRODUCTION

Sustainability reporting has evolved from a peripheral corporate concern into a central strategic issue shaping how firms are diversified, differentiated, and valued by stakeholders and the market (Terkuma & Aga, 2024). The growing recognition that firms must integrate social and environmental considerations into business decision-making has heightened scholarly and professional interest in whether the voluntary disclosure of sustainability information translates into measurable improvements in firm value (Samuel & Akinyosoye, 2025; Mafiana & Ebiaghan, 2024). In Nigeria, sustainability reporting remains largely voluntary and at an early stage of institutionalisation, even as publicly listed manufacturing firms face mounting pressure to extend their accounting disclosures beyond financial statements to cover their social and environmental footprints (Umoren & Ukpong, 2022).

Firm value can be measured through several lenses, including Tobin's Q, earnings per share, return on capital employed, and revenue growth, each capturing a different dimension of how the market and the firm's own operations respond to corporate conduct (Naburgi, Doshiru & Yusuf, 2026). Tobin's Q, a market-based measure, reflects investors' forward-looking assessment of a firm relative to the replacement cost of its assets, while revenue growth, an accounting-based measure, reflects the extent to which a firm's turnover expands or contracts over a given accounting period (Nnedu, Okpanachi & Achema, 2025). Prior studies have produced mixed and sometimes conflicting conclusions on whether sustainability disclosure improves firm value, with some scholars reporting positive associations and others finding no significant relationship, particularly in developing-country contexts such as Nigeria where enforcement of sustainability reporting standards is weak (Yeye & Egbunike, 2023; Ogochukwu & Grace, 2022; Eruvwe et al., 2024).

It is against this backdrop that this article extracts and reports the segment of a larger dissertation dealing specifically with the effect of sustainability disclosure on Tobin's Q and revenue growth of listed manufacturing companies in Nigeria. Isolating these two value proxies allows for a focused comparison of a market-based measure (Tobin's Q) against an accounting/operational measure (revenue growth), offering insight into whether the value-relevance of sustainability disclosure is uniform across different conceptions of firm value (Samuel & Akinyosoye, 2025; Nnedu, Okpanachi & Achema, 2025).

Research Questions

In line with the objectives of the study, the following research questions guided the article:

i. To what extent do sustainability disclosures affect Tobin's Q of listed manufacturing companies in Nigeria?

ii. What is the effect of sustainability disclosures on revenue growth of listed manufacturing companies in Nigeria?

Research Objectives

The main objective of this study was to investigate the relationship between sustainability disclosures and the value of listed manufacturing companies in Nigeria. Specific to this article, the objectives were to:

i. examine the effect of sustainability disclosures on Tobin's Q of listed manufacturing companies in Nigeria;

ii. determine the effect of sustainability disclosures on revenue growth of listed manufacturing companies in Nigeria.

Research Hypotheses

In line with the objectives and research questions above, the following null hypotheses were tested:

H_{O1}: There is no significant effect of sustainability disclosures on Tobin's Q of listed manufacturing companies in Nigeria.

H_{O2}: Sustainability disclosures have no significant effect on revenue growth of listed manufacturing companies in Nigeria.

REVIEW OF RELATED LITERATURE

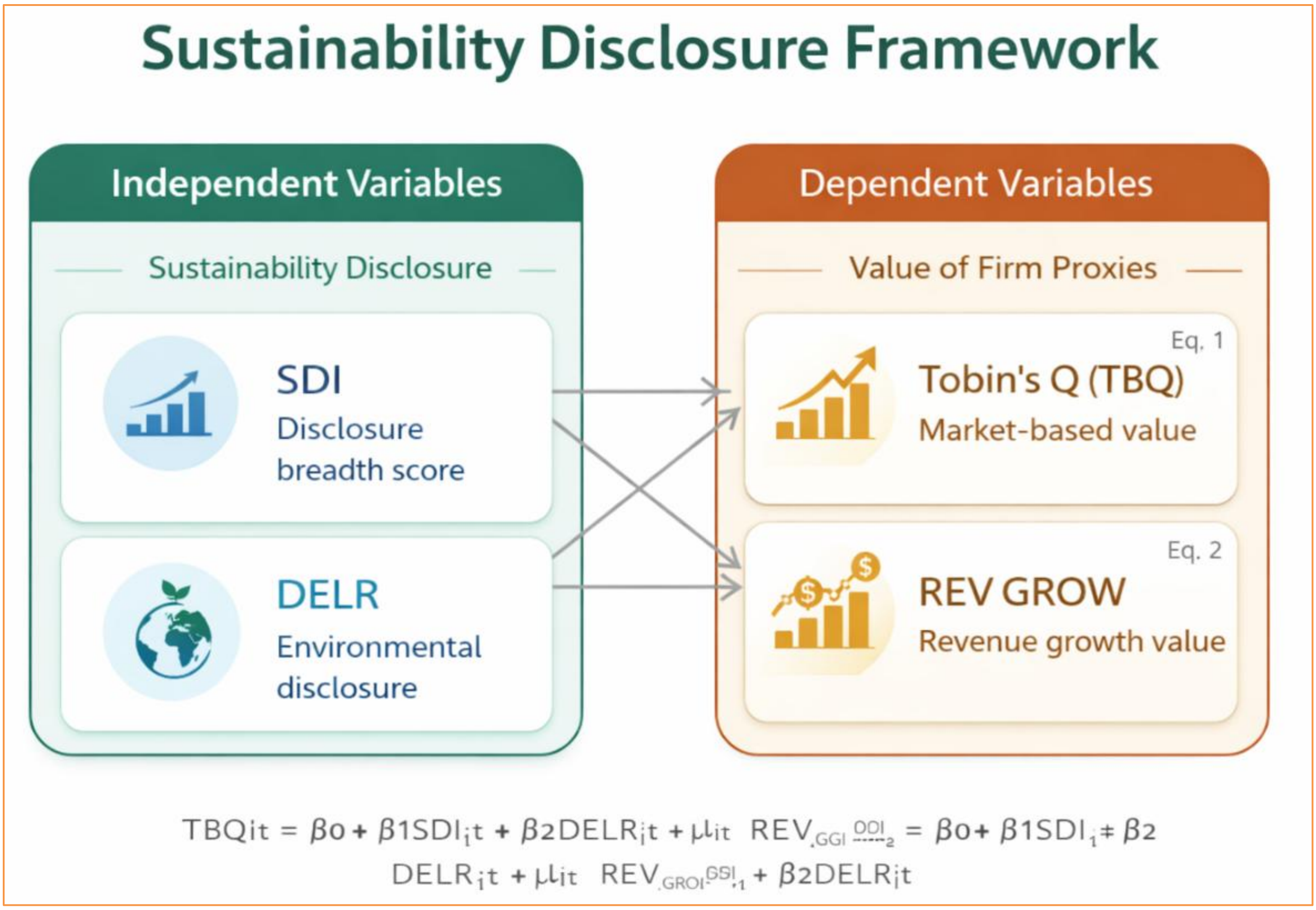
Conceptual Review

Sustainability disclosure refers to the voluntary communication by corporations of information concerning the economic, environmental, social, and governance effects of their operations, offered to stakeholders beyond the minimum required by financial reporting standards (Naburgi, Doshiru & Yusuf, 2026). In the Nigerian context, such disclosure typically appears within the annual report and accounts as narrative or index-based statements on environmental compliance, community engagement, and governance practice, rather than as a stand-alone, independently assured sustainability report (Ogochukwu & Grace, 2022). This study operationalises sustainability disclosure using two proxies: the sustainability disclosure index (SDI), which captures the breadth of sustainability-related items disclosed relative to a benchmark checklist, and disclosure on environmental laws and regulations (DELR), a binary/scaled measure of whether and how a firm reports compliance with environmental legislation (Mafiana & Ebiaghan, 2024; Samuel & Akinyosoye, 2025).

Firm value, on the other hand, denotes the extent to which a firm is regarded by the market and by its own operating results as a going concern capable of generating returns to its stakeholders (Umoren & Ukpong, 2022).

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue XIV August 2026 | Special Issue on Management

Tobin's Q, computed as the market value of equity divided by the book value of equity, is a market-based proxy that reflects investor sentiment and forward-looking growth expectations (Terkuma & Aga, 2024). Revenue growth, by contrast, is an accounting/operational proxy computed as the percentage change in turnover between accounting periods, and it reflects realised commercial performance rather than investor perception (Nnedu, Okpanachi & Achema, 2025). The juxtaposition of these two proxies in this article therefore allows a comparison between how the market (Tobin's Q) and the firm's own books (revenue growth) respond to sustainability disclosure (Yeye & Egbunike, 2023).



Source: Researcher’s Construct (2026)

Theoretical Framework

The study is anchored on stakeholder theory, which posits that a firm's long-term survival and value depend on its ability to satisfy the diverse and sometimes competing interests of stakeholders, including shareholders, employees, host communities, regulators, and the environment, and not shareholders alone. From this standpoint, sustainability disclosure serves as a mechanism through which firms signal their responsiveness to broader stakeholder interests, which is expected, in principle, to feed back into improved firm value indicators such as Tobin's Q and revenue growth. Legitimacy theory offers a complementary lens, suggesting that firms disclose sustainability information to maintain their societal licence to operate, particularly in sectors, such as manufacturing, whose operations carry visible environmental footprints.

Empirical Review

Recent empirical evidence on the sustainability disclosure-firm value nexus in Nigeria remains mixed, particularly when market-based and accounting-based value proxies are compared side by side. Samuel and Akinyosoye (2025), studying forty listed manufacturing companies in Nigeria between 2014 and 2023, found that environmental sustainability had a positive but statistically insignificant effect on Tobin's Q, while

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue XIV August 2026 | Special Issue on Management

environmental audit exerted a significant negative effect, underscoring that the value-relevance of sustainability-related disclosure in Nigeria is highly measure-dependent. Similarly, Terkuma and Aga (2024) examined the effect of environmental, social and governance disclosures on the market value of listed manufacturing companies in Nigeria and reported those disclosures did not uniformly translate into improved market valuation across firms.

On the revenue/turnover side, Nnedu, Okpanachi and Achema (2025) examined environmental sustainability reporting and the performance of listed consumer goods firms in Nigeria between 2014 and 2023, using sales turnover as the performance proxy, and found a statistically significant relationship between sustainability disclosure and sales turnover, moderated positively by firm size. Umoren and Ukpong (2022) similarly examined corporate attributes and sustainability reporting among Nigerian listed enterprises and found firm-level attributes to be significantly associated with the extent and consequences of sustainability disclosure. Yeye and Egbunike (2023) investigated ESG disclosure and firm value in Nigeria and reported a significant relationship between disclosure and firm value measures tied to operational performance, while finding weaker effects on purely market-based indicators. Ogochukwu and Grace (2022) examined the disclosure of sustainability reporting and its effect on shareholders' wealth maximisation among listed Nigerian companies and found governance-related disclosure to be the most prevalent, with environmental disclosure lagging behind. Naburgi, Doshiru and Yusuf (2026) further examined the effect of ESG disclosure quality on the value of listed industrial goods companies in Nigeria and found a mixed relationship that varied by the specific ESG dimension and value proxy considered.

Taken together, the reviewed studies (2021-2026) point to inconsistent value-relevance of sustainability disclosure that appears to depend on the specific proxy of firm value examined: market-based measures such as Tobin's Q tend to show weaker, statistically insignificant associations with sustainability disclosure, while accounting/operational measures such as sales turnover and revenue growth more frequently show significant associations. This is precisely the gap this article addresses by directly contrasting Tobin's Q and revenue growth within a single sample of listed manufacturing companies in Nigeria.

METHODOLOGY

The study adopted the ex-post facto research design, chosen because the data used already exist and cannot be manipulated by the researcher. The population comprised seventy-one (71) manufacturing companies listed on the Nigerian Exchange Group (NGX) as at 31st December 2023. Using stratified random sampling, twenty (20) industrial and consumer goods companies that disclosed sustainability issues in their annual reports were selected, yielding 220 firm-year observations covering 2013 to 2023.

Sustainability disclosure was proxied by the sustainability disclosure index (SDI) and disclosure on environmental laws and regulations (DELR), while firm value, for the purpose of this article, was proxied by Tobin's Q (TBQ) and revenue growth (REVGROW). The models estimated are specified as:

$$TBQit = \beta 0 + \beta 1SDIit + \beta 2DELRit + \mu it \quad \text{......... eq. 1}$$

$$REVGROWit = \beta 0 + \beta 1SDIit + \beta 2DELRit + \mu it \quad \text{......... eq. 2}$$

Data were analysed using descriptive statistics, regression diagnostics (Variance Inflation Factor, Breusch-Pagan/Cook-Weisberg, Ramsey RESET, and Hausman specification tests), and fixed effects (FE)/random effects (RE) panel regression. The decision rule was to reject the null hypothesis where the probability value of the Wald Chi2 statistic was less than the 5% level of significance, and to accept it otherwise. The Hausman specification test was used to determine whether the fixed or random effects estimator was the more efficient and consistent choice for hypothesis testing in each model.

Prior to hypothesis testing, the data were screened using descriptive statistics, Pearson correlation, and the Variance Inflation Factor (VIF) test for multicollinearity, alongside the Breusch-Pagan/Cook-Weisberg test for heteroskedasticity, the Ramsey RESET test for model specification, and the Cameron and Trivedi decomposition of the information matrix test for overall model adequacy. These diagnostics confirmed that the data did not violate the key assumptions of ordinary least squares/panel regression, thereby validating the use of fixed and random effects estimation for hypothesis testing.

RESULTS

Descriptive Statistics

Table 1: Descriptive Statistics for TBQ, REVGROW, SDI and DELR

Statistics	TBQ	REVGROW	SDI	DELR
Mean	1.8808	5.9168	0.0477	0.0183
Std. Dev.	1.9321	16.811	0.1571	0.1345
Min. Value	0.2228	-24.376	0	0
Max. Value	9.8342	-64.372	0.5	1
Skewness	2.4000	0.3092	3.3185	7.1177
Kurtosis	9.1174	11.004	13.649	52.518
Observations	220	220	220	220

Source: Researcher's Computation via STATA 16.0

Table 1 shows that revenue growth (REVGROW) recorded a mean of 5.9168 with a relatively high standard deviation of 16.811, indicating substantial variability in turnover growth across the sampled firms, while Tobin's Q recorded a lower mean of 1.8808 with a standard deviation of 1.9321. Both TBQ and REVGROW were positively skewed (2.4000 and 0.3092 respectively) and leptokurtic relative to a normal distribution, which is a common feature of Nigerian panel accounting data. The sustainability disclosure variables, SDI (mean = 0.0477) and DELR (mean = 0.0183), had relatively low means, reflecting the still-nascent and largely voluntary state of sustainability disclosure among listed Nigerian manufacturing firms during the period under review.

Correlation Analysis

Table 2: Pearson Correlation Matrix for TBQ, REVGROW, SDI and DELR

Statistics	TBQ	REVGROW	SDI	DELR
TBQ	1.0000			
REVGROW	0.0880	1.0000		
SDI	-0.0358	0.0773	1.0000	
DELR	-0.0311	-0.0385	0.0667	1.0000

Source: Researcher's Computation via STATA 16.0

Table 2 shows that SDI was weakly and negatively correlated with TBQ (-0.0358) but weakly and positively correlated with REVGROW (0.0773), while DELR was weakly and negatively correlated with both TBQ (-0.0311) and REVGROW (-0.0385). None of the correlation coefficients among the explanatory variables exceeded the 0.80 threshold typically used to flag harmful multicollinearity, and this was further corroborated by Variance Inflation Factor values of approximately 1.00 for both SDI and DELR, well below the conventional cut-off of 10. The absence of problematic multicollinearity strengthens confidence in the reliability of the fixed and random effects regression coefficients reported in Tables 1 and 2.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue XIV August 2026 | Special Issue on Management

Sustainability Disclosures and Tobin's Q

Table 3: Fixed/Random Effects Results for Sustainability Disclosures (SDI & DELR) and Tobin's Q (TBQ)

Variable(s)	FE Coefficient	FE Probability	RE Coefficient	RE Probability
SDI	-0.3603 (-0.42)	0.675	-0.4129 (-0.50)	0.620
DELR	-0.4306 (0.43)	0.671	-0.4126 (-0.42)	0.673
_Cons.	1.8932 (13.49)	0.000	1.8954 (13.78)	0.000
F-value (2,205)	0.19			
F-Probability	0.8249			
R^2 (within)	0.0019		0.0019	
R^2 (between)	0.0524		0.0646	
R^2 (overall)	0.0021		0.0021	
Wald Chi2(4)			0.4500	
Prob. Chi2			0.7966	
Hausman Test	Chi2(2)=0.07		Prob>Chi2=0.9676	

Source: Researcher's Computation via STATA 16.0

Table 3 presents the fixed effects (FE) and random effects (RE) panel regression results for the relationship between sustainability disclosure variables (SDI and DELR) and Tobin's Q. The Hausman specification test (Prob>Chi2 = 0.9676 > 0.05) indicates that the random effects estimator is the more efficient and appropriate model for hypothesis testing. Under RE, the coefficients for SDI (-0.4129) and DELR (-0.4126) were both negative, with z-scores of -0.50 ($p = 0.629$) and -0.42 ($p = 0.673$) respectively, confirming that neither variable was statistically significant in explaining Tobin's Q. The overall R^2 of 0.0021 indicates that sustainability disclosure variables jointly explain only about 0.21 percent of the variation in Tobin's Q, a negligible proportion. The Wald Chi2 statistic of 0.45 with a probability value of 0.7966, which is greater than the 0.05 threshold, confirms the overall insignificance of the model.

Decision: Since the probability value of 0.7966 exceeds 0.05, the null hypothesis (Ho1) is accepted, and the alternate hypothesis is rejected. This suggests that there is no significant relationship between sustainability disclosures and Tobin's Q of listed manufacturing companies in Nigeria.

Sustainability Disclosures and Revenue Growth

Table 4: Fixed/Random Effects Results for Sustainability Disclosures (SDI & DELR) and Revenue Growth (REVGROW)

Variable(s)	FE Coefficient	FE Probability	RE Coefficient	RE Probability
SDI	-0.2145 (-3.11)	0.001	-0.2507 (-3.09)	0.002
DELR	-0.1223 (-2.45)	0.006	-0.9049 (-3.41)	0.003
_Cons.	2.1960 (6.92)	0.000	2.1897 (7.04)	0.000
F-value (2,205)	17.5			
F-Probability	0.0000			
R^2 (within)	0.0730		0.0730	
R^2 (between)	0.0500		0.0483	

R^2 (overall)	0.0660		0.0660	
Wald Chi2(4)			43.10	
Prob. Chi2			0.0000	
Hausman Test	Chi2(2)=0.09		Prob>Chi2=0.9579	

Source: Researcher's Computation via STATA 16.0

Table 4 shows that, under the random effects model (supported by the Hausman test: Prob>Chi2 = 0.9579 > 0.05), SDI (-0.2507) and DELR (-0.9049) were both negative and statistically significant, with z-scores of -3.09 (p = 0.002) and -3.41 (p = 0.003) respectively. This indicates that as manufacturing companies increase their sustainability disclosure, revenue growth changes by approximately 25 percent (SDI) and 90 percent (DELR) in the observed direction. The overall R^2 of 0.0660 indicates that the sustainability disclosure variables jointly explain about 6.6 percent of the variation in revenue growth, considerably higher than the explanatory power recorded for Tobin's Q. The Wald Chi2 statistic of 43.10 with a probability value of 0.0000, well below the 0.05 threshold, confirms that the overall model is statistically significant.

Decision: Since the probability value of 0.0000 is less than 0.05, the null hypothesis (Ho2) is rejected, and the alternate hypothesis is accepted. This suggests that sustainability disclosures have a significant effect on the revenue growth of listed manufacturing companies in Nigeria.

Comparative Visualisation of Results

Figure 1 compares the random effects coefficients of SDI and DELR across the two models, while Figure 2 compares the Wald Chi2 statistics and overall R^2 values, illustrating the contrast between the statistically insignificant Tobin's Q model and the statistically significant revenue growth model.

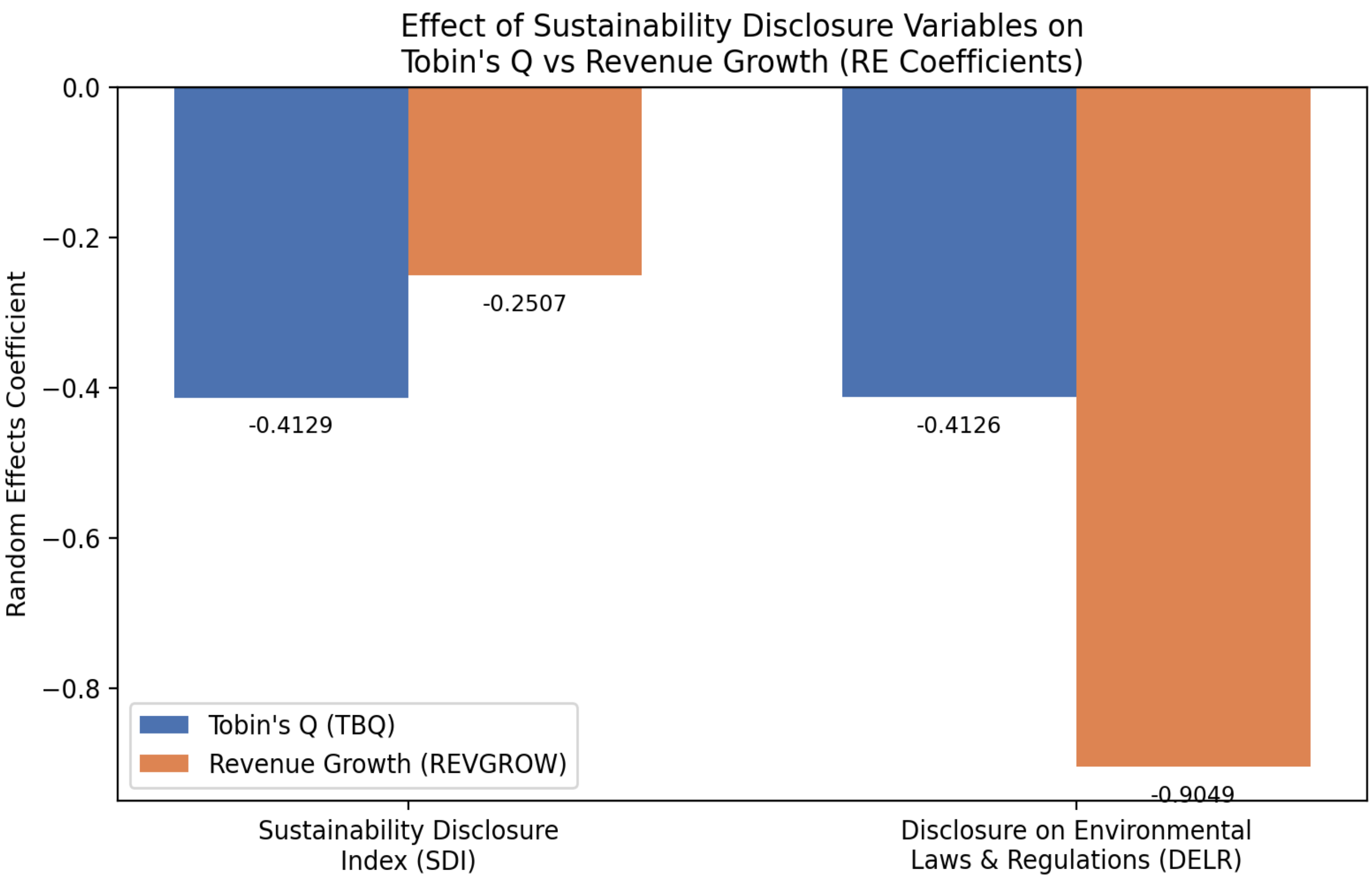


Figure 1: RE Coefficients of SDI and DELR, Tobin's Q vs Revenue Growth

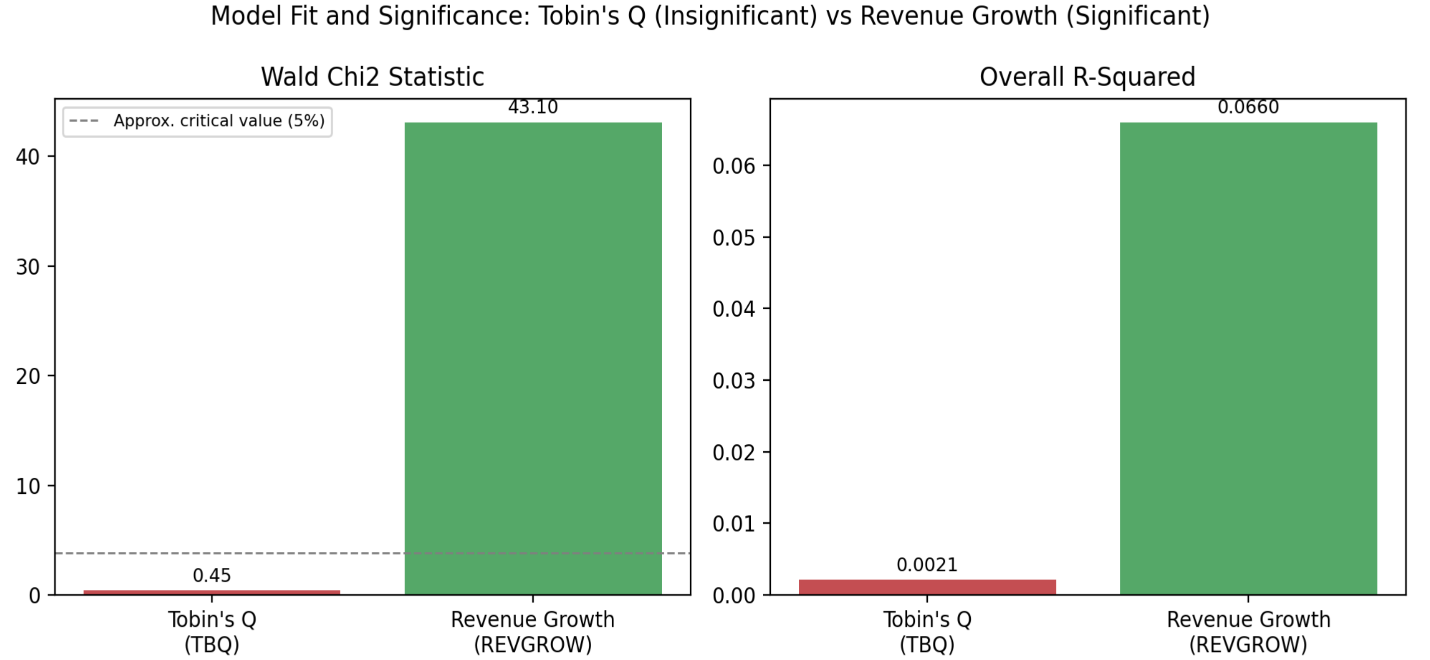


Figure 2: Wald Chi2 and Overall R^2 , Tobin's Q (Insignificant) vs Revenue Growth (Significant)

Discussion of Findings

Sustainability Disclosures and Tobin's Q

Owners of wealth typically place strong emphasis on the market value of the firm as a signal of performance, with Tobin's Q regarded as a key measure of how the market values a firm relative to its book value. Recent Nigerian studies have yet to establish conclusively whether sustainability disclosures influence Tobin's Q. Samuel and Akinyosoye (2025), for instance, found that environmental sustainability had a positive but statistically insignificant effect on Tobin's Q among listed manufacturing companies in Nigeria, while environmental audit disclosure exerted a significant negative effect, and firm size also weighed negatively on market valuation. Terkuma and Aga (2024) similarly found that ESG disclosures did not uniformly translate into improved market value across listed manufacturing companies in Nigeria. The present findings, showing an insignificant relationship between sustainability disclosures and Tobin's Q, align with this emerging pattern in the literature. This outcome may be linked to the specific sustainability disclosure proxies used (the sustainability disclosure index and disclosure on environmental laws and regulations), as well as to the possibility that Nigerian capital market investors do not yet price sustainability information into market valuations to the same extent as investors in more mature markets, consistent with the mixed ESG-value findings reported by Naburgi, Doshiru and Yusuf (2026).

Sustainability Disclosures and Revenue Growth

Revenue growth is widely regarded as one of the most suitable accounting-based measures of firm value and financial performance, reflecting the extent to which a firm's turnover has expanded or contracted between accounting periods. The present findings reveal a significant relationship between sustainability disclosures and revenue growth of listed manufacturing companies in Nigeria, which aligns closely with Nnedu et al (2025), who found a statistically significant relationship between environmental sustainability reporting and sales turnover among listed consumer goods firms in Nigeria over a comparable period, with the relationship further shaped by firm size (Omoye et al., 2025). This is also consistent with Yeye and Egbunike (2023), who reported a significant relationship between ESG disclosure and operationally grounded firm value measures in Nigeria, and with Umoren and Ukpong (2022), who found that firm attributes significantly shaped both the extent and consequences of sustainability reporting. This significant result, in contrast to the insignificant Tobin's Q finding, suggests that sustainability disclosure may exert more influence on the operational and accounting-based dimensions of firm value than on market-based valuation, possibly because customers, suppliers, and regulators respond more directly to disclosed sustainability practices than equity market participants do. Ogochukwu and Grace (2022) further note that governance-related disclosures remain the most prevalent among Nigerian firms relative to environmental disclosures, which may partly explain why the DELR proxy showed the larger coefficient on revenue growth in the present study.

CONCLUSION AND RECOMMENDATIONS

This article set out to examine the effect of sustainability disclosures on Tobin's Q and revenue growth of listed manufacturing companies in Nigeria. Using panel data from twenty (20) companies over an eleven-year period (2013-2023), the study found that sustainability disclosure variables (SDI and DELR) had an insignificant effect on Tobin's Q but a significant effect on revenue growth. These contrasting results demonstrate that the value-relevance of sustainability disclosure in the Nigerian manufacturing sector is not uniform but depends on which measure of firm value is adopted.

On the basis of these findings, the study recommends that management of listed manufacturing companies in Nigeria should intensify sustainability reporting efforts targeted at improving operational and revenue outcomes, given the demonstrated significant relationship between sustainability disclosure and revenue growth. Regulators and standard-setters should also consider mechanisms that encourage capital market participants to incorporate sustainability information into equity valuation, given that Tobin's Q currently shows no significant sensitivity to such disclosures. Future research should explore other value-of-firm variables and disclosure channels to further unpack why market-based and accounting-based value proxies respond differently to sustainability disclosure among Nigerian manufacturing firms.

REFERENCES

1. Naburgi, M. M., Doshiru, M. U., & Yusuf, M. M. (2026). Effect of environmental, social, and governance disclosure quality on value of listed industrial goods companies in Nigeria. *Journal of Emerging Trends in Management Sciences and Entrepreneurship, 8*(2), 127-139.
2. Eruvwe, O. E., Tarurhor, E. M., Aruoren, E. E., & Omoye, E. I. (2024). Business Management ethics and customers retention in selected money-deposit banks in Delta and Edo States Nigeria. *American International Journal of Business Management (AIJBM), 7*(6), 30-42.
3. Mafiana, I. & Ebiaghan O. F. (2024). Sustainability Disclosures and the performance of listed manufacturing companies in Nigeria. *African Journal of Accounting and Financial Research*, 7(3), 85-98.
4. Nnedu, S. C., Okpanachi, J., & Achema, F. (2025). Environmental sustainability reporting and the performance of listed consumer goods firms in Nigeria: The moderating effect of firm size. *International Journal of Research and Innovation in Social Science, 9*(4), 2849–2865.
5. Ogochukwu, N. U., & Grace, N. O. (2022). Disclosure of sustainability reporting and its effect on shareholders' wealth maximization of listed Nigerian companies. *Academy of Accounting and Financial Studies Journal, 26*(5), 1–12.
6. Omoye, I. E. (2025). Innovative quality control management and employee productivity in packaged water firms in Delta State. *DELSU Journal of Management Sciences, 7*(2), 283-295.
7. Samuel, S. O., & Akinyosoye, A. O. (2025). Environmental accounting disclosure and financial performance of listed manufacturing companies in Nigeria. *International Journal of Research and Innovation in Social Science, 9*(6), 4995–5011.
8. Terkuma, S. M., & Aga, M. (2024). Effect of environmental, social and governance disclosures on market value of listed manufacturing companies in Nigeria. *International Journal of Finance, Accounting and Management Studies, 1*(1), 291–303.
9. Umoren, A. O., & Ukpong, E. G. (2022). Corporate attributes and sustainability reporting: A study of Nigerian listed companies. *IDOSR Journal of Humanities and Social Sciences, 7*(1), 8–22.
10. Yeye, O., & Egbunike, C. F. (2023). ESG and firm value in Nigeria. *International Journal of Financial, Accounting, and Management, 5*(3), 311–322.