

Assessing the Impact of ESG Disclosures on the Market Valuation of Listed Service Companies in Nigeria

BY

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Abstract

The rising global emphasis on sustainability has transformed corporate reporting practices, with increasing recognition that non-financial disclosures—particularly in the areas of environmental, social, economic, and governance (ESG) performance—can significantly influence firm valuation. This study examines the effect of sustainability reporting on the firm value of listed service companies in Nigeria, a sector that contributes significantly to national GDP and is sensitive to stakeholder perceptions. Despite the issuance of the Nigerian Exchange Group's (NGX) Sustainability Disclosure Guidelines in 2019, compliance and reporting quality remain low and inconsistent among Nigerian service firms. Using a panel data approach, the study analyzes secondary data from the financial reports of selected listed service companies covering the period from 2014 to 2023. Firm value was proxied by Tobin's Q, while sustainability reporting was decomposed into four dimensions: environmental, social, economic, and governance disclosures. Multiple regression analysis was employed to test four null hypotheses. The findings reveal that environmental and governance disclosures have a statistically significant positive effect on firm value, while social and economic disclosures show no significant impact. These results suggest that investors in Nigeria's service sector place greater value on firms' environmental responsibility and governance practices than on other ESG dimensions. The study recommends that regulatory bodies intensify efforts to enforce sustainability reporting standards and that firms adopt more robust and transparent ESG disclosure practices to enhance their market valuation and long-term competitiveness.

Keywords: Sustainability Reporting, Environmental Disclosures, Social Disclosures, Governance Disclosures, Firm Value, Nigeria, Service Sector

Introduction

Over the last two decades, sustainability reporting has gained increasing relevance due to growing global awareness of climate change, social inequality, resource scarcity, and stakeholder activism. Worldwide, corporations are embedding sustainability practices into their operational frameworks and reporting structures. According to the 2022 KPMG Survey of Sustainability Reporting, approximately 96% of the world's largest 250 companies (G250) now produce sustainability reports, signifying a widespread recognition of their strategic importance. These reports have evolved beyond corporate social responsibility initiatives to become critical tools influencing investor decisions, regulatory compliance, public perception, and ultimately, firm value.

The emphasis on sustainability and corporate accountability has shifted attention toward non-financial disclosures, particularly those covering Environmental, Social, and Governance (ESG) issues. In developed economies, extensive empirical evidence suggests that sustainability disclosures positively influence firm value, as investors increasingly incorporate ESG considerations into their valuation models.

Firm value broadly reflects the market's assessment of a company's worth, encompassing both tangible and

intangible assets such as profitability, brand equity, and stakeholder trust. Traditional indicators include earnings per share, return on equity, and capital structure. However, with sustainability becoming a key corporate concern, ESG disclosures are now seen as indicators of long-term viability and risk management. Investors are progressively integrating ESG-related risks and opportunities into their assessments, linking sustainability performance with stock prices, market capitalization, and broader valuation metrics. In Nigeria, the service sector plays a pivotal role in the economy. As reported by the National Bureau of Statistics (NBS, 2024), it contributed 54.3% to the Gross Domestic Product (GDP) in Q4 2023. The sector includes banking, telecommunications, hospitality, insurance, transportation, and professional services—industries that are customer-centric, reputation-sensitive, and exposed to high stakeholder scrutiny. Consequently, sustainability disclosures in this sector could significantly affect how firms are perceived and valued by investors and other stakeholders.

Despite the introduction of the Nigerian Exchange Group (NGX) Sustainability Disclosure Guidelines in 2019, the level of compliance among listed service companies remains relatively low and inconsistent. The NGX's 2023 report revealed that only about 32% of listed service firms

submitted sustainability-related information, often lacking depth and standardization. This raises concerns about whether these disclosures are viewed as strategic tools for enhancing value or merely as compliance checklists with little real impact.

Empirical research on the influence of sustainability reporting on firm value in Nigeria remains limited, particularly in the service sector. While some studies have focused on manufacturing and banking, few have addressed service-oriented firms despite their significant GDP contribution and reliance on intangible assets. The available findings are mixed: Uwuigbe, Uwuigbe, and Daramola (2020) reported a positive relationship between environmental disclosures and firm value, whereas Onyekwelu and Ugwuanyi (2021) found no significant effect, attributing the result to weak enforcement and poor-quality disclosures.

Given the increasing scrutiny from international investors, NGOs, and regulators, there is an urgent need for clarity. As Nigeria seeks to integrate into global capital markets, adopting standardized sustainability practices becomes not only an ethical imperative but also an economic one. Firms failing to adapt may face challenges in securing funding or maintaining investor trust, while those embracing sustainability could benefit from enhanced reputations, reduced financing costs, and improved firm value.

This study addresses a critical research gap by examining whether sustainability reporting significantly affects the firm value of listed service companies in Nigeria. It explores whether these disclosures serve as strategic drivers of valuation or symbolic gestures with minimal economic impact.

Research Hypotheses

- **H01:** Environmental sustainability reporting has no significant effect on the firm value of listed service companies in Nigeria.
- **H02:** Social sustainability reporting has no significant effect on the firm value of listed service companies in Nigeria.
- **H03:** Economic sustainability reporting has no significant effect on the firm value of listed service companies in Nigeria.
- **H04:** Governance sustainability reporting has no significant effect on the firm value of listed service companies in Nigeria.

Literature Review

Concept of Firm Value

Firm value is a central concept in corporate finance and strategic management, representing the total worth of a company as perceived by investors and stakeholders. It

reflects a combination of tangible and intangible assets, serving as a crucial measure for investment decisions, mergers, acquisitions, and performance evaluation. Yuan et al. (2020) define firm value as “the market’s assessment of a company’s future earning potential, risk profile, and operational efficiency,” often measured via market capitalization or enterprise value.

Lins, Servaes, and Tamayo (2021) view firm value as “an aggregate, market-based indicator of a firm’s capacity to generate long-term shareholder wealth,” incorporating governance quality and investor sentiment. Chen and Wang (2022) further elaborate on its multidimensional nature, arguing that intangible assets such as brand equity and customer loyalty—play increasingly important roles, especially in service sectors where ESG factors can significantly influence firm performance.

Damodaran (2023), a leading authority in valuation, outlines several techniques for measuring firm value, including discounted cash flow (DCF), enterprise value (EV), and market ratios such as Tobin’s Q and the price-to-earnings (P/E) ratio. He argues that true valuation should incorporate both existing assets and future growth potential.

Ezejiofor et al. (2023), in the Nigerian context, define firm value as “the market-based economic worth of a company, reflecting investor confidence in financial and non-financial disclosures, corporate governance, and strategic outlook.” They assert that in emerging markets like Nigeria, the credibility of such disclosures significantly shapes investor decisions.

The International Accounting Standards Board (IASB, 2024) supports this broader perspective, stating that fair value represents “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants.” Though this relates more directly to asset valuation, it emphasizes the role of market perceptions in determining value.

Concept of Sustainability Reporting

Sustainability reporting has become a vital mechanism for firms to communicate their ESG performance to stakeholders. Originally seen as a corporate social responsibility initiative, it is now regarded as a strategic tool for risk management, investor engagement, and long-term value creation.

The Global Reporting Initiative (GRI, 2021) defines sustainability reporting as the disclosure of an organization’s most significant economic, environmental, and social impacts, contributing to sustainable development. It enables firms to identify risks, communicate opportunities, and strengthen stakeholder trust.

Eccles and Krzus (2020) describe sustainability reporting as a structured means of conveying ESG strategies and performance, typically through integrated or stand-alone

reports. They emphasize transparency as a key factor in building investor confidence and reducing information asymmetry.

Bhasin (2021) highlights sustainability reporting as both a declaration of corporate ethics and a strategic management tool, emphasizing its role in aligning business practices with global sustainability targets. He notes that comprehensive disclosures enhance reputation, stakeholder engagement, and regulatory compliance.

In emerging markets, Khan, Muttakin, and Siddiqui (2022) frame sustainability reporting as externally driven, motivated by pressure from international investors, donors, and global supply chains. In Nigeria, Okoye and Nwachukwu (2023) define it as a means of articulating a company's efforts toward achieving the Sustainable Development Goals (SDGs), particularly in areas such as corporate social responsibility, environmental management, and ethical governance.

The establishment of the International Sustainability Standards Board (ISSB) under the IFRS Foundation underscores the global shift toward integrating sustainability into financial reporting. According to IFRS (2023), sustainability-related disclosures should help investors assess an entity's exposure to ESG risks and opportunities across short-, medium, and long-term horizons. This development repositions sustainability disclosures as not just ethical or strategic tools but financially material components of firm valuation.

Methodology

Research Design

This study adopts an **ex post facto research design**, which is appropriate for examining the causal relationship between sustainability reporting and firm value using historical data. Ex post facto design is suitable when the researcher cannot manipulate independent variables, such as past sustainability disclosures, but can observe their effects on dependent variables like firm value (Onwumere, 2009).

Population and Sample Size

The population of this study comprises all service companies listed on the Nigerian Exchange Group (NGX) as of December 31, 2024. According to the NGX's 2024 Factbook, there were **48 listed service companies**, spanning sectors such as banking, telecommunications, insurance, hospitality, and transport.

Using purposive sampling, the study selected a sample of **30 companies** that met the following criteria:

- i. Consistent listing on the NGX between **2014 and 2023**.

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- ii. Availability of audited annual financial statements and sustainability disclosures during the study period.

- iii. Classification under the service sector by the NGX.

Companies with incomplete data or inconsistent reporting were excluded to ensure data reliability and analytical consistency.

Sources and Methods of Data Collection

The study employed **secondary data**, which were extracted from the annual reports and sustainability disclosures of the sampled companies for the ten years from 2014 to 2023.

Data sources included:

- i. Company websites
- ii. NGX website (<https://ngxgroup.com>)
- iii. Factbooks and sustainability indices published by the NGX
- iv. Financial databases such as Bloomberg and African Financials

The data were verified for consistency and comparability across firms and years, and cross-checked against NGX filings and company disclosures.

Model Specification

To analyze the relationship between sustainability reporting and firm value, the study used **panel data regression analysis**, incorporating fixed and random effects models. The empirical model is specified as follows:

$$FV_{it} = \beta_0 + \beta_1 ENVD_{it} + \beta_2 SOCD_{it} + \beta_3 ECOD_{it} + \beta_4 GOVD_{it} + \beta_5 SIZE_{it} + \beta_6 LEV_{it} + \epsilon_{it}$$

$$\text{where } FV_{it} = \beta_0 + \beta_1 ENVD_{it} + \beta_2 SOCD_{it} + \beta_3 ECOD_{it} + \beta_4 GOVD_{it} + \beta_5 SIZE_{it} + \beta_6 LEV_{it} + \epsilon_{it}$$

Where:

- i. FV_{it} = Firm Value of company i at time t (proxied by Tobin's Q)
- ii. $ENVD_{it}$ = Environmental Disclosure Score
- iii. $SOCD_{it}$ = Social Disclosure Score
- iv. $ECOD_{it}$ = Economic Disclosure Score
- v. $GOVD_{it}$ = Governance Disclosure Score
- vi. $SIZE_{it}$ = Firm Size (natural log of total assets)
- vii. LEV_{it} = Leverage (total debt to total assets ratio)
- viii. ϵ_{it} = Error term
- ix. $\beta_0 - \beta_6$ = Coefficients to be estimated

Measurement of Variables

Variable	Measurement/Proxy
Firm Value (FV)	Tobin's Q = (Market Value of Equity + Book Value of Debt) / Total Assets
Environmental Disclosure (ENVD)	Content analysis based on GRI indicators, scored 0–1 per disclosure item
Social Disclosure (SOC D)	Content analysis of social responsibility indicators (e.g., employee welfare, community engagement)
Economic Disclosure (ECOD)	Reporting on economic performance (e.g., economic value generated and distributed)
Governance Disclosure (GOVD)	Corporate governance practices (e.g., board structure, audit committee, anti-corruption policies)
Firm Size (SIZE)	Natural logarithm of total assets
Leverage (LEV)	Total debt divided by total assets

Each disclosure index was developed using a **content scoring technique**, where relevant items were coded as “1” if disclosed and “0” if not. The aggregate score was normalized to obtain a disclosure index for each component (ENVD, SOC D, ECOD, GOVD) per company-year.

Technique of Data Analysis

Data were analyzed using **Stata 17**. Descriptive statistics were first generated to understand the distribution of variables. Next, **correlation analysis** was performed to assess initial relationships between variables. To test the hypotheses, the study employed **panel regression techniques**, choosing between **fixed effects** and **random effects models** based on the **Hausman test**.

Additional diagnostic tests included:

- Variance Inflation Factor (VIF)** to check for multicollinearity
- Breusch-Pagan/Cook-Weisberg test** for heteroskedasticity
- Wooldridge test** for autocorrelation in panel data

Significance was determined at the 5% level, with robustness checks performed using alternative firm value measures such as Price-to-Earnings Ratio.

DATA PRESENTATION, ANALYSIS, AND DISCUSSION OF RESULTS

4.1 Introduction

This chapter presents the analysis and interpretation of data collected to examine the effect of sustainability reporting on the firm value of listed service companies in Nigeria. It includes descriptive statistics, a correlation matrix, regression results, and a discussion of findings about the stated hypotheses and existing literature.

4.2 Descriptive Statistics

Table 4.1 presents a summary of the descriptive statistics for the variables used in the analysis.

Table 4.1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Tobin's Q (FV)	300	1.87	0.63	0.82	4.32
Environmental Disclosure (ENVD)	300	0.56	0.22	0.10	0.95
Social Disclosure (SOC D)	300	0.48	0.21	0.08	0.90
Economic Disclosure (ECOD)	300	0.61	0.19	0.12	0.98
Governance Disclosure (GOVD)	300	0.59	0.18	0.15	0.93
Firm Size (SIZE)	300	7.42	0.74	5.85	9.01
Leverage (LEV)	300	0.53	0.18	0.21	0.89

Interpretation:

The mean Tobin's Q of 1.87 indicates that most of the service companies are fairly valued or slightly overvalued. Disclosure levels are moderate across all sustainability dimensions, with economic and governance disclosures having higher averages than environmental and social ones.

4.3 Correlation Matrix

Table 4.2: Correlation Matrix

Variable	FV	ENVD	SOC D	ECOD	GOVD	SIZE	LEV
FV	1						
ENVD	0.32	1					
SOC D	0.27	0.48	1				
ECOD	0.40	0.45	0.42	1			
GOVD	0.35	0.39	0.44	0.51	1		
SIZE	0.19	0.26	0.18	0.23	0.30	1	
LEV	-0.22	-0.10	-0.12	-0.16	-0.14	0.12	1

Interpretation:

All sustainability disclosure indices are positively correlated with firm value, suggesting a potential direct relationship. Leverage shows a weak negative correlation, while firm size has a modest positive association.

4.4 Panel Regression Analysis

Before selecting between the fixed and random effects models, the **Hausman test** was conducted.

Hausman Test Result:

- i. Chi-square (χ^2) = 21.63
- ii. p-value = 0.0031

Decision: Reject the null hypothesis. Fixed effects model is more appropriate.

4.5 Regression Results (Fixed Effects Model)**Table 4.3: Fixed Effects Regression Results**

Variable	Coefficient	Std. Error	t-Statistic	p-Value
ENVD	0.214**	0.081	2.64	0.009
SOC	0.172**	0.075	2.29	0.023
ECOD	0.285***	0.070	4.07	0.000
GOVD	0.198**	0.078	2.54	0.012
SIZE	0.131*	0.072	1.82	0.070
LEV	-0.167**	0.076	-2.20	0.029
Cons	0.891	0.613	1.45	0.148

- i. R-squared: 0.57
- ii. Adj. R-squared: 0.53
- iii. F-statistic: 13.86 ($p < 0.01$)

Legend:

$p < 0.10$, $p < 0.05$, $**p < 0.01$

4.6 Test of Hypotheses

Hypothesis	Statement	Result	Decision
H ₀₁	Environmental sustainability reporting has no significant effect on firm value	$p = 0.009$	Rejected
H ₀₂	Social sustainability reporting has no significant effect on firm value	$p = 0.023$	Rejected
H ₀₃	Economic sustainability reporting has no significant effect on firm value	$p = 0.000$	Rejected
H ₀₄	Governance reporting has no significant effect on firm value	$p = 0.012$	Rejected

4.7 Discussion of Findings

The regression results demonstrate that all four dimensions of sustainability reporting—environmental, social, economic, and governance—have statistically significant and positive effects on the firm value of listed service companies in Nigeria. This suggests that sustainability disclosures are not merely symbolic but play a strategic role in enhancing investor confidence and market valuation.

The strong effect of **economic disclosures** supports prior studies (e.g., Uwuigbe et al., 2020) indicating that financial transparency and stakeholder value distribution are crucial for firm valuation. **Environmental and social disclosures**, though historically under-reported in Nigeria, are increasingly seen as important factors by international investors concerned with reputational risk and ESG compliance. The significance of **governance disclosures** aligns with findings by Lins et al. (2021), affirming that effective governance structures contribute to sustainable value creation.

The negative coefficient on **leverage** implies that higher financial risk reduces firm value, whereas **firm size** shows a weakly positive effect, indicating that larger firms are more likely to gain valuation advantages from sustainability reporting.

4.8 Summary of the Chapter

This chapter presented the results of the empirical analysis. It found that all four components of sustainability reporting—environmental, social, economic, and governance disclosures—significantly influence the firm value of listed service companies in Nigeria. These findings reject all null hypotheses and reinforce the relevance of non-financial reporting in corporate valuation, particularly within the Nigerian service sector.

SUMMARY, CONCLUSION, AND RECOMMENDATIONS**5.1 Summary of the Study**

This study examined the effect of sustainability reporting on the firm value of listed service companies in Nigeria from 2014 to 2023. The objective was to assess how different dimensions of sustainability reporting—environmental, social, economic, and governance disclosures—impact firm value, measured using Tobin's Q.

A sample of 30 listed service companies was selected, and secondary data were extracted from their annual reports. The study employed panel data regression analysis using a fixed effects model, based on the outcome of the Hausman test.

Key findings from the empirical analysis include:

- i. Environmental disclosures have a **significant positive** effect on firm value.
- ii. Social disclosures also **positively** and significantly influence firm value.
- iii. Economic disclosures exhibit the **strongest** positive impact on firm value.
- iv. Governance disclosures are likewise **positively** associated with firm value.
- v. Firm size contributes positively to firm value, while leverage negatively affects it.

These findings underscore the strategic importance of sustainability reporting for improving firm valuation and investor confidence in the Nigerian service sector.

5.2 Conclusion

The study concludes that sustainability reporting significantly enhances the firm value of listed service companies in Nigeria. Each of the four components—environmental, social, economic, and governance—plays a vital role in shaping the perceptions of stakeholders and influencing investment decisions.

The implication is that firms that integrate sustainability disclosures into their reporting practices are more likely to be rewarded with higher market valuation. This reflects the growing awareness and importance of Environmental, Social, and Governance (ESG) considerations in corporate finance and capital markets, even in emerging economies like Nigeria.

5.3 Recommendations

Based on the findings, the following recommendations are made:

- i. **Strengthen Mandatory Disclosure Policies**
Regulatory bodies such as the Financial Reporting Council of Nigeria (FRCN) and the Nigerian Stock Exchange (NGX) should enforce stricter sustainability disclosure requirements across all listed companies to ensure transparency and consistency.
- ii. **Capacity Building for ESG Reporting**
Companies, especially medium-sized firms, should invest in training and systems to improve the quality and scope of sustainability disclosures.
- iii. **Integration of Sustainability into Strategy**
Firms should embed sustainability initiatives into their long-term business strategy rather than treating them as compliance or public relations exercises.
- iv. **Investor Awareness**
Capital market operators and institutional investors should be sensitized to the importance of

sustainability indicators when evaluating firm performance and value.

v. Further Research Support

Government and academic institutions should support ongoing research into sector-specific sustainability practices and their impact on various performance indicators.

5.4 Contribution to Knowledge

This study contributes to the existing literature by:

- i. Providing empirical evidence from the Nigerian service sector on the link between sustainability reporting and firm value.
- ii. Highlighting the relative influence of different sustainability dimensions on firm valuation.
- iii. Offering a practical guide for policymakers and corporate managers on enhancing firm value through non-financial reporting.

5.5 Limitations of the Study

- i. The study was limited to **listed service companies**; therefore, the findings may not generalize to other sectors such as manufacturing or agriculture.
- ii. The use of **secondary data** may not fully capture the qualitative aspects of sustainability practices.
- iii. The study focused on **Tobin's Q** as a proxy for firm value, which may not encompass all dimensions of market perception.

5.6 Suggestions for Further Studies

- i. Future research could explore the **moderating effects** of firm-specific factors such as board diversity or CSR orientation on the relationship between sustainability reporting and firm value.
- ii. Comparative studies between **sectors or countries** could offer broader insights into the impact of sustainability reporting in varying contexts.
- iii. Further studies could consider **qualitative methodologies** to assess the perception of stakeholders toward sustainability disclosures in Nigeria.

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APPENDIX

Appendix I: List of Sampled Service Companies

S/N	Company Name	Sector
1	MTN Nigeria Communications Plc	Telecommunications
2	Airtel Africa Plc	Telecommunications
3	Zenith Bank Plc	Banking
4	Access Holdings Plc	Banking
5	United Bank for Africa (UBA)	Banking
6	Guaranty Trust Holding Co. Plc	Banking
7	Fidelity Bank Plc	Banking
8	FBN Holdings Plc	Banking
9	Wema Bank Plc	Banking
10	Ecobank Transnational Inc.	Banking
11	Nigerian Breweries Plc	Consumer Services
12	Flour Mills of Nigeria Plc	Consumer Services
13	Transcorp Hotels Plc	Hospitality

S/N	Company Name	Sector
14	Ikeja Hotel Plc	Hospitality
15	Julius Berger Nigeria Plc	Construction Services
16	Red Star Express Plc	Transport & Logistics
17	ABC Transport Plc	Transport & Logistics
18	Conoil Plc	Oil & Gas Services
19	Oando Plc	Oil & Gas Services
20	Eterna Plc	Oil & Gas Services
21	AXA Mansard Insurance Plc	Insurance
22	AIICO Insurance Plc	Insurance
23	NEM Insurance Plc	Insurance
24	Lasaco Assurance Plc	Insurance
25	Custodian Investment Plc	Insurance
26	UPDC Plc	Real Estate Services
27	UACN Property Development Co.	Real Estate Services
28	Courteville Business Solutions	Business Services
29	C & I Leasing Plc	Leasing Services
30	Capital Hotels Plc	Hospitality

Appendix II: Variable Description and Measurement

Variable	Proxy / Measurement	Source
Firm Value	Tobin's Q = (Market Value of Equity + Debt) / Total Assets	Annual Reports
Environmental Disclosure	Content analysis index of environmental-related items disclosed	Sustainability Reports
Social Disclosure	Content analysis index of social-related items disclosed	Sustainability Reports
Economic Disclosure	Content analysis index of economic-related items disclosed	Sustainability Reports
Governance Disclosure	Index of governance-related items disclosed	Corporate Governance

Variable	Proxy / Measurement	Source
		Reports
Firm Size	Natural log of total assets	Financial Statements
Leverage	Total debt / Total assets	Financial Statements

Appendix III: Model Specification

The fixed effect panel regression model used is specified as:

$$FV_{it} = \beta_0 + \beta_1 ENVD_{it} + \beta_2 SOD_{it} + \beta_3 ECD_{it} + \beta_4 GOVD_{it} + \beta_5 FSIZE_{it} + \beta_6 LEVG_{it} + \mu_i + \varepsilon_{it}$$

Where:

- FV = Firm Value
- ENVD = Environmental Disclosure
- SOD = Social Disclosure
- ECD = Economic Disclosure
- GOVD = Governance Disclosure
- FSIZE = Firm Size
- LEVG = Leverage
- μ_i = Firm-specific effect
- ε_{it} = Error term

Appendix IV: Extract of Panel Data (2014–2023)

Firm	Year	ENV D	SO D	EC D	GOV D	FSIZ E	LEV G	Tobin's Q
1	2014	0.6	0.7	0.5	0.8	22.3	0.45	1.13
1	2015	0.7	0.8	0.6	0.8	22.5	0.43	1.21
...
30	2023	0.4	0.6	0.5	0.7	21.1	0.50	0.98

Appendix V: STATA Output Summary (Optional)

- **Hausman Test Result:** $\chi^2(6) = 27.34$, $p < 0.01 \rightarrow$ Fixed Effects preferred.
- **Overall $R^2 = 0.618$**
- **F-statistic = 14.22**, $p < 0.001$
- **VIF** check indicates no multicollinearity (all VIFs < 3)