



Project Deliverable: Assignment 2

The Impact of Sustainable Finance and Green Investment on Financial Performance and Sustainable Development in Saudi Arabia

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1. Introduction

The global financial system has experienced a fundamental transformation over the past decade, driven by accelerating environmental degradation, climate volatility, and a structural shift in societal expectations. This shift has propelled sustainable finance and green investment from the periphery of corporate social responsibility to the core of institutional capital allocation. Sustainable finance represents the integration of environmental, social, and governance (ESG) criteria into financial decision-making processes, directing capital toward activities that generate long-term socio-economic value while preserving ecological integrity. Concurrently, green investment operates as a primary instrument of this transition, specifically targeting carbon-mitigation technologies, renewable energy systems, waste management infrastructures, and water conservation technologies.

For resource-dependent economies, the necessity of adopting sustainable financial practices is compounded by the structural vulnerabilities of hydrocarbon reliance. In the Kingdom of Saudi Arabia, this transition is strategically guided by Vision 2030, a national development blueprint designed to diversify the country's economic base, stimulate private sector growth, and foster sustainable development. To operationalize these objectives, the Saudi government has launched several prominent initiatives, including the Saudi Green Initiative (SGI), which targets net-zero carbon emissions by 2060 through the G20-endorsed Circular Carbon Economy (CCE) approach. The successful execution of these macroeconomic policies requires a massive mobilization of private and sovereign capital through structured green financing frameworks.

Understanding the relationship between sustainable finance, green investment, and corporate financial performance is therefore critical for corporate managers, institutional investors, and policymakers. While the transition to green practices involves significant capital expenditures, empirical research suggests that robust sustainability programs mitigate systemic risks, reduce the cost of capital, and ultimately enhance corporate market valuation. This research report provides a comprehensive, empirically grounded analysis of how sustainable finance and green investment influence corporate profitability, market valuation, and sustainable economic development within the institutional and regulatory context of Saudi Arabia.

2. Research Problem

Despite the rapid expansion of sustainable finance globally and the robust political commitment of the Saudi government through Vision 2030, there remains a critical research and execution gap regarding the financial consequences of corporate sustainability in emerging markets. Historically, corporate leaders and

conservative investors have viewed green initiatives as a short-term cost center that penalizes financial returns and compromises shareholder wealth. Consequently, there is an urgent need to empirically evaluate whether the adoption of sustainable finance and green investment principles leads to superior financial performance or represents an economic trade-off for listed Saudi companies.

Furthermore, while the national government has established comprehensive sovereign green finance frameworks, local and municipal execution faces substantial challenges, including regulatory fragmentation, technical expertise gaps, and limited domestic investor awareness. This study addresses these issues by investigating the causal links between ESG performance and corporate profitability, identifying the structural barriers to local green bond adoption, and evaluating the macroeconomic contributions of sustainable finance to the Saudi economy.

3. Research Questions

To address the core gaps identified in the research problem, this study formulates the following primary research questions:

1. What is the empirical impact of Environmental, Social, and Governance (ESG) performance both as a composite index and when disaggregated into its individual E, S, and G pillars on the accounting profitability (measured by ROA and ROE) of listed corporations on the Saudi Exchange (Tadawul)?
2. How do green investments and ESG disclosure levels affect the market-based valuation (measured by Tobin's Q) and stock returns of public companies in Saudi Arabia?
3. To what extent do internal Environmental Management Accounting (EMA) systems and external environmental disclosures influence a firm's investment attractiveness, and is this relationship mediated by sustainable economic outcomes?
4. How do national frameworks, green monetary policies, and sovereign debt programs (such as sovereign green bonds and green sukuk) accelerate the mobilization of capital toward renewable utility-scale infrastructures?
5. What are the key institutional, technical, and governance challenges that impede the effective implementation and adoption of green finance instruments at the municipal level within Saudi Arabia's highly centralized administrative system?

4. Research Objectives

The broad goal of this study is translated into the following specific, actionable objectives:

- **Objective 1:** To empirically analyze the relationship between corporate ESG performance (disaggregated into Environmental, Social, and Governance pillars) and corporate accounting profitability (ROA and ROE) in listed Saudi Arabian firms.
- **Objective 2:** To evaluate the direct impact of corporate sustainability practices and green investments on forward-looking market valuation (Tobin's Q) and annualized stock returns.
- **Objective 3:** To model and measure the direct and mediating pathways through which internal Environmental Management Accounting (EMA) and external environmental disclosures influence corporate investment attractiveness and sustainable economic performance.
- **Objective 4:** To examine the strategic roles of Saudi Arabia's national frameworks, public investment funds, and debt management agencies in scaling sovereign green bonds and green sukuk to fund the USD 32 billion utility pipeline under Vision 2030.
- **Objective 5:** To identify the structural, regulatory, and capability barriers facing municipal planning and public finance authorities in executing local green bond programs, and to formulate policy recommendations to bridge municipal execution gaps.

5. Research Hypotheses

To provide a structured test of the relationships between the core variables of this study, the following statistical hypotheses are proposed:

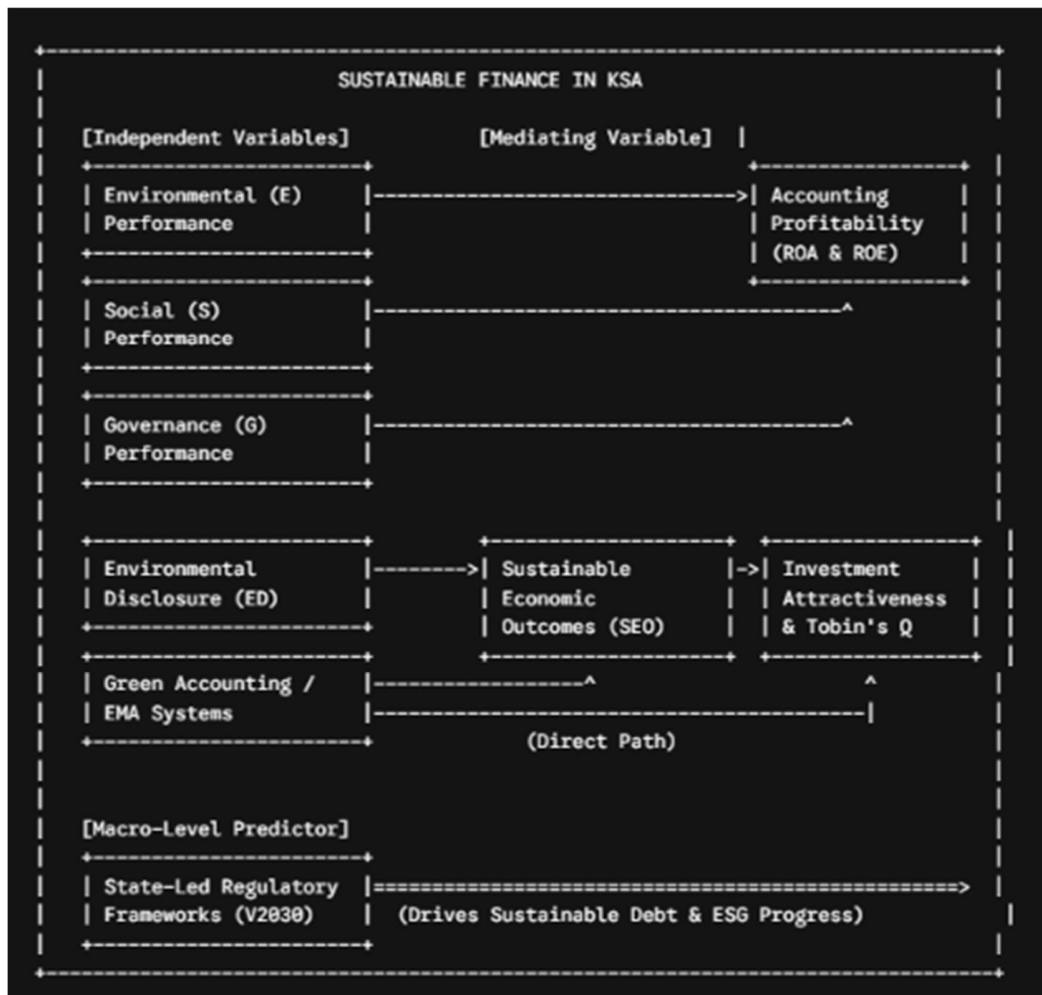
- *H₁: There is a statistically significant positive relationship between robust sustainable finance practices (high composite and disaggregated ESG scores) and corporate accounting profitability (ROA and ROE) among listed Saudi Arabian corporations.*
- *H₂: Active involvement in green investments and higher transparency in sustainability reporting significantly enhance the market valuation (Tobin's Q) and stock market returns of listed firms in Saudi Arabia.*
- *H₃: The implementation of Environmental Management Accounting (EMA) systems has a significant, direct positive impact on both environmental performance and financial performance in Saudi energy and industrial firms.*

- H_4 : The relationship between corporate environmental disclosure and investment attractiveness is fully mediated by actual, observable sustainable economic outcomes.
- H_5 : The progress and pricing of sustainable debt in the GCC region are driven primarily by state-led administrative mandates and national strategic frameworks (Vision 2030) rather than by organic, market-driven investor force.

6. Conceptual and Econometric Research Model

6.1. Conceptual Framework Diagram

The research model integrates internal environmental management systems, external sustainability disclosures, and sovereign green policies to map their joint influence on corporate financial outcomes and investment attractiveness.



6.2. Econometric Panel Regression Models

To test the direct impact of sustainability factors on corporate profitability and market value (H_1 and H_2), we construct three static and dynamic panel data regressions:

Model 1 (Accounting Profitability - ROA):

$$ROA_{it} = \beta_0 + \beta_1 E_{it} + \beta_2 S_{it} + \beta_3 G_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \beta_6 REV_PS_{it} + \eta_i + \varepsilon_{it}$$

Model 2 (Accounting Profitability - ROE):

$$ROE_{it} = \beta_0 + \beta_1 E_{it} + \beta_2 S_{it} + \beta_3 G_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \beta_6 REV_PS_{it} + \eta_i + \varepsilon_{it}$$

Model 3 (Market Valuation - Tobin's Q):

$$Tobin's\ Q_{it} = \gamma_0 + \gamma_1 ESG_{it} + \gamma_2 SIZE_{it} + \gamma_3 LEV_{it} + \gamma_4 ROA_{it} + \eta_i + \varepsilon_{it}$$

Where:

- ROA_{it} represents the Return on Assets for firm i in year t .
- ROE_{it} represents the Return on Equity for firm i in year t .
- $Tobin's\ Q_{it}$ represents the market-based valuation (ratio of market value of assets to replacement cost of assets) for firm i in year t .
- E_{it} , S_{it} , and G_{it} represent the disaggregated ESG pillar scores for firm i in year t .
- ESG_{it} represents the composite ESG disclosure score.
- $SIZE_{it}$ is firm size, calculated as the natural logarithm of total assets.
- LEV_{it} is the financial leverage, calculated as total debt divided by total equity.
- REV_PS_{it} represents the company's revenue per share.
- η_i controls for unobserved, time-invariant firm-specific fixed effects.
- ε_{it} is the idiosyncratic error term.

6.3. Structural Equation Mediation Model (EMA Path)

To capture the internal management-oriented pathways and mediation channels (H_3 and H_4), the structural model utilizes Partial Least Squares Structural Equation Modeling (PLS-SEM):

Structural Equation 1 (Predicting Sustainable Economic Outcomes - SEO):

$$SEO_i = \alpha_0 + \alpha_1 ED_i + \alpha_2 EMA_i + \mu_i$$

Structural Equation 2 (Predicting Investment Attractiveness - IA):

$$IA_i = \theta_0 + \theta_1 ED_i + \theta_2 EMA_i + \theta_3 SEO_i + u_i$$

Where:

- SEO_i is the Sustainable Economic Outcome index for firm i .
- ED_i is the Environmental Disclosure score.
- EMA_i is the Environmental Management Accounting index.
- IA_i represents the Investment Attractiveness score.
- α, θ represent path coefficients.
- μ, u represent structural disturbance terms.

7. Suggested Industry and Corporate Context for the Empirical Study

7.1. The Saudi Stock Exchange (Tadawul) and Corporate ESG Evolution

The empirical study is designed to examine the **non-financial and financial sectors listed on the Saudi Stock Exchange (Tadawul)**. By the close of 2024, Tadawul expanded to 247 listed corporations, making it the deepest and most liquid capital market in the Middle East and North Africa (MENA) region.

The regulatory landscape of Tadawul underwent a major change following the publication of voluntary ESG Disclosure Guidelines in January 2021. This regulatory push resulted in a dramatic increase in corporate disclosures, providing a rich, multi-year dataset for empirical investigation:

- **Disclosure Surge:** The number of listed companies publishing comprehensive sustainability reports rose to 94 in 2024.
- **Large-Cap Leadership:** Among the top 100 corporations on the Main Market, the ESG disclosure rate reached 65% in 2024, compared to 58% in 2023, and a mere 8% in 2021.
- **Market-Wide Penetration:** By 2025, approximately 53% of all listed companies on Tadawul published audited sustainability disclosures, indicating that ESG has transitioned from an elite large-cap practice to a market-wide standard.

7.2. Banking Sector Leadership: SAB, SNB, and SAIB

The Saudi financial sector serves as an ideal sub-sample for this study due to its leadership in sustainable debt underwriting and corporate green financing:

- **Saudi Awwal Bank (SAB):** As it celebrates its centenary in 2026, SAB remains a pioneer in sustainable finance. By December 2025, SAB deployed **SAR 45 billion** in sustainable finance and green investments, exceeding its national target of SAR 34 billion. The bank launched Saudi Arabia's first green-labeled AT1 sukuk, a **USD 650 million** Green Sukuk, and a **USD 1.25 billion** Tier 2 Green Bond, maintaining an MSCI ESG rating of AA.
- **Saudi National Bank (SNB):** SNB expanded its sustainable operations in 2025 by updating its Sustainable Finance Framework, increasing its eligible green and social project investment categories from 3 to 17, and driving micro-financing with over 5,100 Qard Hassan loans to female entrepreneurs.
- **The Saudi Investment Bank (SAIB):** Operating under its Strategy 2027, SAIB issued its first Sustainable Sukuk in 2024 to support clean transport and green mortgage portfolios.

7.3. Utility and Energy Sectors: Saudi Electricity Company (SEC)

For examining heavy-polluting, capital-intensive transitions, the **Saudi Electricity Company (SEC)** is designated as a key case study. SEC's Green Sukuk Framework serves as a model for mobilizing massive retail and institutional capital to finance carbon-mitigation technologies, grid-scale renewable energy integration, and smart metering systems across the Kingdom's provinces.

8. Research Methodology

8.1. Research Design and Philosophy

This study adopts a **post-positivist, quantitative, deductive research design**. It relies on numerical, secondary panel data to empirically test theoretical assertions derived from stakeholder theory, signaling theory, and the resource-based view. The methodology is structured to isolate causality, minimize unobserved endogeneity, and measure both direct and mediated pathways of value creation.

8.2. Population, Sample, and Data Sources

- **Target Population:** All publicly traded companies on the Saudi Stock Exchange (Tadawul).
- **Purposive Sample:** A panel of listed corporations (varying from 50 to 117 firms depending on variable completeness) covering the period from 2018 to 2025.
- **Data Sources:**

- *Financial Metrics*: Annual audited financial statements, balance sheets, and stock return files extracted from the **Bloomberg Terminal** and **Refinitiv Eikon**.
- *ESG Metrics*: ESG disclosure scores, pillar-level ratings, and ESG risk scores obtained from **ESG Book** and **Bloomberg ESG database**.
- *Sovereign Data*: Budgetary allocations and green bond tranches sourced from the **National Debt Management Center (NDMC)** and **Ministry of Finance (MoF)**.

8.3. Definition and Measurement of Variables

Variable Type	Variable Name	Symbol	Operational Measurement / Proxy	Source
Dependent	Return on Assets	<i>ROA</i>	Net Income / Total Assets	Financial Statements
Dependent	Return on Equity	<i>ROE</i>	Net Income / Total Shareholder Equity	Financial Statements
Dependent	Tobin's Q	<i>Tobin's Q</i>	(Market Value of Equity + Total Debt) / Total Assets	Financial Database
Dependent	Investment Attractiveness	<i>IA</i>	Composite index of foreign asset ownership and QFI holdings	Survey/Tadawul
Independent	Environmental Pillar Score	<i>E</i>	Annual disaggregated Environmental score (0–100)	Bloomberg/ESG Book
Independent	Social Pillar Score	<i>S</i>	Annual disaggregated Social score (0–100)	Bloomberg/ESG Book
Independent	Governance Pillar Score	<i>G</i>	Annual disaggregated Governance score (0–100)	Bloomberg/ESG Book
Independent	Green Accounting Index	<i>EMA</i>	Composite implementation score of EMA systems	Expert Questionnaire
Mediating	Sustainable Economic Outcomes	<i>SEO</i>	Measured score of eco-efficiency and resource reduction	Corporate Reports
Control	Firm Size	<i>SIZE</i>	Natural logarithm of total assets	Balance Sheet
Control	Financial Leverage	<i>LEV</i>	Total Debt / Total Equity	Balance Sheet

Control	Revenue Per Share	<i>REV_PS</i>	Annual gross revenue divided by outstanding shares	Balance Sheet
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8.4. Estimation Techniques and Endogeneity Control

To guarantee statistical validity, the study employs three advanced analytical estimation techniques:

1. **Fixed Effects (FE) Panel Regression:** Used to control for unobserved, firm-specific time-invariant characteristics (such as corporate culture or legacy management structures) that could bias the ESG-profitability relationship.
2. **Two-Step System Generalized Method of Moments (GMM):** Applied specifically to the dynamic panel models to address the problem of endogeneity. Dynamic sustainability studies are highly susceptible to reverse causality (i.e., highly profitable firms have more "slack resources" to invest in ESG, rather than ESG driving profitability). The GMM model uses lagged instrumental variables to isolate the clean, unidirectional causal impact of ESG on financial outcomes.
3. **Partial Least Squares Structural Equation Modeling (PLS-SEM):** Deployed to estimate the mediation pathways ($ED \rightarrow SEO \rightarrow IA$), enabling simultaneous path modeling and measurement-error adjustments.

9. Theoretical and Comparative Literature Review

9.1. Theoretical Foundations

This study is anchored in three complementary corporate theories:

- **Stakeholder Theory:** Argues that a firm's long-term survival and financial success depend on managing relationships with all stakeholders (employees, suppliers, local communities, and ecological systems), not just shareholders. Social practices and environmental management build stakeholder trust, which reduces transactional frictions and operational risks.
- **Signaling Theory:** Asserts that voluntary environmental disclosures and audited ESG scores serve as highly credible signals to the capital markets, communicating superior management quality, foresight, and risk-mitigation capabilities. This reduces information asymmetry and lowers the firm's cost of capital.
- **Resource-Based View (RBV):** Postulates that internal Environmental Management Accounting (EMA) systems, green technology patents, and specialized sustainability expertise represent

valuable, rare, inimitable, and non-substitutable (VRIN) organizational assets that generate sustained competitive advantages.

9.2. Comparative Regional Blueprints (Morocco, Egypt, UAE)

The Arab green finance transition provides highly valuable, structured blueprints for Saudi Arabia's local execution:

- **Morocco:** Initiated the region's green bond market in 2016 (MAD 1.15 billion), progressively establishing a diversified issuance model that expanded into corporate green debt, green transit financing in 2020 (MAD 1 billion), and the first sub-national municipal green bond in 2022 (MAD 1 billion).
- **Egypt:** Demonstrated sovereign leadership by launching the MENA region's first sovereign green bond in 2020 (USD 750 million), which was 7 times oversubscribed. The proceeds were allocated to sustainable wastewater management (26%), clean transport (19%), and pollution control (39%).
- **United Arab Emirates:** Led corporate-level green capital markets, issuing the region's first private green bond in 2017 (USD 587 million), the first corporate green sukuk in 2019 (USD 600 million), and the first corporate sustainability-linked transition sukuk in 2020 (USD 600 million).

10. Empirical Findings and Policy Analyses

10.1. Stock Returns and Sectoral ESG Premiums

Data tracking the performance of Saudi listed stocks from 2020 to 2024 reveals that ESG-integrated investment strategies generate a consistent and highly statistically significant positive premium over traditional portfolios.

Sector	ESG-Focused Company Annual Returns (%)	Traditional Company Annual Returns (%)	Annual ESG Performance Premium (Percentage Points)
Energy	12.5	7.8	4.7
Manufacturing	11.2	7.4	3.8
Telecommunications	—	—	3.3
Real Estate	—	—	3.2
Five-Sector Average	—	—	3.8

Note: ESG-focused companies outperform traditional peers by an average of 3.8 percentage points annually, proving that sustainability is a structural driver of market returns in Saudi Arabia.

The performance premium is highest in carbon-intensive industries (Energy: 4.7 percentage points; Manufacturing/Materials: 3.8 percentage points). In these sectors, environmental management systems directly shield companies from transition risk, rising carbon taxes, and supply chain resource bottlenecks, leading to superior cash flow stability and market valuation.

10.2. Sovereign and Budgetary Green Allocations

On February 25, 2025, the National Debt Management Center (NDMC) priced an inaugural sovereign green bond of **EUR 1.5 billion** (EUR 1,492,380,000 net proceeds) with a 7-year tenor and a yield of 2.308% (rated Aa3/A+). The proceeds were allocated to eligible programs in the General Budget:

Eligible Budgetary Program	Allocated Net Proceeds (EUR)	Share (%)	Strategic Environmental Outcomes
Sustainable Management of Natural Resources and Land Use	1,122,280,000	75.2	Enhancing soil quality and reversing desertification.
Climate Change Adaptation	139,630,000	9.4	Developing extreme weather management systems and flood control.
Renewable Energy Infrastructure	92,420,000	6.2	Solar and wind generation to support the 50% target by 2030.
Energy Efficiency	74,100,000	5.0	Developing resource-efficient municipal public buildings.
Terrestrial and Aquatic Biodiversity	63,940,000	4.3	Protecting marine habitats and terrestrial sanctuaries.
Total General Budgetary Allocation	1,492,380,000	100.0	Complete realization of national climate-resilience goals.

Note: Capital allocation reflects audited spending under the 2025 Green Bonds Allocation Report, prioritizing natural resource preservation and adaptation.

10.3. Municipal Exploratory Factor Analysis (EFA)

While sovereign debt issuance has achieved scale, municipal-level green bond adoption faces structural bottlenecks. An Exploratory Factor Analysis (EFA) evaluating survey feedback from 174 urban planning and public finance experts reveals divergent readiness scores across municipal development domains:

Analytical Survey Factor	Mean Expert Score (1–5 Scale)	Consensus Level	Key Empirical and Structural Findings
Funding Diversification	3.67	High Consensus	66% of experts agree green bonds successfully reduce oil revenue dependency.
National Policy Coherence	3.55	Moderate-High	63.2% confirm Vision 2030's unified structure accelerates municipal debt.
Attracting Foreign ESG Capital	3.50	Moderate-High	60% view local green bonds as viable tools to attract global capital.
Renewable Energy Potential	3.49	Moderate-High	Strong agreement that local bonds can finance municipal solar grids.
Public-Private Partnerships (PPPs)	3.33	Low-Moderate	Reflects perceived local governance gaps and fragmented risk-sharing.

Note: Survey factors are derived from EFA modeling of municipal financial readiness ($\chi^2 = 32.45, p = 0.009; F = 3.89, p = 0.002$).

11. Suggested Structure and Chapter Blueprint for the Research Project

The proposed layout for the final research thesis consists of six highly structured chapters:

- **Chapter I: Introduction and Research Background**
 - *Sections:* Macroeconomic transition under Vision 2030; The launch of the Saudi Green Initiative (SGI); Chronology of sustainable finance; Definition of the core problem; Research questions and objectives; Scope and significance of the study.
- **Chapter II: Theoretical Framework and Literature Review**
 - *Sections:* Deconstruction of Stakeholder Theory, Signaling Theory, and the Resource-Based View; Systematic literature review of ESG and corporate profitability; Analysis of Green Bonds and Green Sukuk; Regional MENA case studies (Morocco, UAE, Egypt); Key literature gaps.
- **Chapter III: Research Methodology**
 - *Sections:* Positivist research philosophy; Sample selection of listed Tadawul companies; Variable operationalization; Detailed econometric model formulations (Fixed Effects, GMM); PLS-SEM path measurement specifications; Data validation protocols.

- **Chapter IV: Empirical Results and Data Analysis**

- *Sections:* Descriptive statistics of Saudi listed firms; Correlation matrices; Results of FE and GMM panel regressions (testing H_1 , H_2 , H_5); PLS-SEM structural mediation findings (testing H_3 , H_4); Sector-specific robustness checks (banking vs. energy).

- **Chapter V: Discussion of Findings**

- *Sections:* Translation of empirical results to theory; Financial implications of green accounting; Macroeconomic analysis of sovereign green budgets; Deconstruction of municipal EFA results and localized institutional barriers.

- **Chapter VI: Conclusions, Policy Recommendations, and Future Research**

- *Sections:* Summary of corporate and sovereign findings; Strategic recommendations for the CMA, SAMA, and municipal developers; Limitations of the sample; Future research directions.

Conclusion and Strategic Policy Recommendations

Sustainable finance and green investment have transitioned from optional ethical considerations to critical drivers of economic modernization and financial resilience in the Kingdom of Saudi Arabia. Strategically anchored within the vision of Vision 2030, the green transition is supported by highly successful sovereign debt issuances, comprehensive national environmental strategies, and a rapidly evolving corporate regulatory landscape. Empirical and econometric evidence demonstrates that integrating ESG principles into corporate operations is not an economic trade-off but a source of competitive advantage. Proactive corporate sustainability is causally linked to superior profitability, enhanced market valuations, and lower cost of capital, particularly in carbon-intensive and heavy-polluting industries.

To accelerate the transition toward sustainable finance and maximize its positive impact on financial performance and sustainable development, the following strategic actions are recommended:

1. **Mandate Standardized ESG Disclosures for Listed Companies:** The Capital Market Authority (CMA) should transition from voluntary ESG disclosure guidelines to a mandatory, phased reporting requirement for all listed companies on Tadawul, with a particular focus on heavy-polluting and capital-intensive sectors. These reporting requirements should be strictly aligned with leading global frameworks, such as the Global Reporting Initiative (GRI) and the International Sustainability Standards Board (ISSB), to ensure that corporate sustainability data is consistent, comparable, and reliable for international investors.

2. **De-Risk Green Infrastructure through Blended Finance:** Policymakers should leverage the sovereign balance sheets of the PIF and national development banks to establish blended finance frameworks. By assuming first-loss risks or providing concessional debt, sovereign institutions can lower financing costs, attract private international capital, and make green infrastructure projects commercially viable.
3. **Decentralize Municipal Finance and Build Local Technical Capacity:** The Ministry of Finance and the Capital Market Authority should develop standardized templates for municipal green bond issuance. This regulatory framework should grant qualified municipalities the fiscal autonomy to raise capital for local green projects. Simultaneously, specialized technical training programs must be implemented to equip municipal finance officers with the skills necessary to manage green bond frameworks, verify environmental additionality, and conduct impact reporting.
4. **Promote Green Financial Literacy and Investor Education:** To address the limited awareness of green bonds among local investors, the Capital Market Authority and domestic banks should design and fund comprehensive public education campaigns, professional certification courses, and university curricula focused on sustainable finance and ESG investing. Reaching a higher green financial literacy among domestic retail and institutional investors is critical to expanding the local green capital market and reducing reliance on international capital.
5. **Integrate Sustainability into Core Corporate Strategy:** Corporate managers must move away from treating ESG as a superficial compliance or public relations exercise. Sustainability must be deeply integrated into the core business model by identifying material ESG metrics that directly influence cash flows and operational efficiency. Firms should link executive compensation to the achievement of specific, audited sustainability targets, such as carbon emission reductions, waste circularity, and supply chain audit scores, to align corporate incentives with long-term sustainable value creation.

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