

ESG Governance as a Value Driver: Evidence Across Industries and Investor Perception

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Abstract

While economic growth and globalization have heightened ESG concerns, lack of clarity remains regarding whether ESG governance drives economic value across different industries. This study clarifies this ambiguity, by showing ESG oriented companies do drive economic value, but the values differ depending on the industries the companies belong to. The “one-size-fits-all” ESG metrics fail to account for industry specific materiality because the governance risks in tech industries differ from those energy or services sector. This gap has a significant impact on how we understand the ESG principles and ESG scores. This study addresses this gap by examining ESG performance across the agriculture, manufacturing, education, energy and services sectors using financial and secondary data. This research evaluates the impact of each ESG pillar on different industry sectors and aggregates ESG scores on key performance metrics by including **ROA**, **ROE**, and **Tobin's Q**. The findings are expected to demonstrate that materiality-weighted factors have strong, sector-specific economic consequences. This research aims to improve valuation accuracy and strengthen investor confidence in sustainable markets.

Keywords: ESG Governance, ESG principles, ESG scores, one-size-fits-all ESG metrics, Investors' Perception, ROA, ROE, and Tobin's Q, Corporate Governance.

1. Introduction

ESG governance differs from traditional models focused on short-term wealth to long-term resilience and sustainability. By systematically addressing environmental risks and social factors companies can mitigate operational shocks and secure stable financial environment (Berman, E. M., & Bui, L. T. 2001). This shift is particularly evident in the “quality premium.” investors are often drawn to high valuation and superior management that reduces risk for future liabilities. On the other hand, the impact of ESG is not uniform across various industries. Industry-specific

materiality offers better value than one-size-fits-all" scores. In industries like energy and manufacturing, ESG means how eco-friendly the companies are, while in service sectors, companies like finance and IT consider ESG as treating employees ethically or protecting data. (Friede, G., Busch, T., & Bassen, A. (2015) Even though financial numbers such as ROA and ROE prove economic stability, it is this industry-aligned governance that secures investor confidence and ensures a company remains a "going concern" in an increasingly scrutinized global economy.

2. Methodology

This study combines qualitative ESG scores and quantitative financial metrics to evaluate the impact of industry/sector-weighted governance on corporate value. Secondary data is sourced from MSCI and Sustainalytics, along with ROA ROE and Tobin's Q of three companies from each of these five industries agriculture, manufacturing, education, energy and services sectors from publicly available sources (Li, T. T., Wang, K., Sueyoshi, T., & Wang, D. D. (2021). The analysis applies comparative regression to isolate the effect of each pillar of ESG, while qualitative insights on investor trust and stakeholder behaviour complement quantitative findings. For non-profit organizations, transparency ratings from platforms such as Candid are used to assess governance effectiveness, enabling a comprehensive evaluation of materiality-driven ESG impact across diverse organizational models. (Khan, M., Serafeim, G., & Yoon, A. (2016).

3. The Strategic Role of ESG in Operational Resilience

Integrating ESG principles in company governance is no longer a luxury, it has become a strategic necessity for maintaining operational continuity and long-term success. These factors support the stable functioning of a firm by systematically reducing different types of risks, while strengthening long-term resilience and sustainable performance. (Yoon, A., & Bhagat, S. (2023).

- **Environmental Efficiency:** focuses on reducing environmental impact while improving operational performance. Companies that optimize resource consumption and minimize waste reduce utility costs and improve supply chain stability. Following environmental regulations also lowers the risk of fines and legal challenges.
- **Governance Integrity:** essential for maintaining transparency and ethical leadership within an organization. Strong governance systems reduce the chances of fraud,

corruption, and mismanagement. (Abdi, Y., Li, X., & Càmara-Turull, X. (2022). They also increase investor confidence and make it easier for companies to access capital for long-term strategic growth.

- **Social Stability:** Social considerations create a stable and productive environment for people inside and outside the company. Organizations that value employee welfare and customer satisfaction experience higher morale, stronger trust, improved relationships, and reduced risk of conflicts, complaints, or negative public perception.

4.Differences between Traditional Corporate Governance and ESG-Driven Governance

Understanding the difference between these two governances is important because it helps identifying sustainable business practice and long-term value creation

Aspect	Traditional Investing & Governance	ESG Investing & Governance
Core Objective	Focuses on maximizing shareholder wealth and short-term financial returns.	Focuses on long-term sustainable value by balancing financial, environmental, and social goals.
Decision Criteria	Investment decisions rely mainly on financial indicators like ROI, EPS, and revenue growth.	Decisions consider financial metrics along with environmental, social, and governance factors.
Investment Horizon	Emphasizes short-term profitability and quick financial gains.	Prioritizes long-term resilience, sustainability, and risk management.
Climate Change Consideration	Climate risks are often ignored unless they create immediate financial impact.	Climate change is treated as a strategic financial risk requiring long-term planning.
Carbon Emissions	Carbon emissions are rarely measured or managed systematically.	Emissions are monitored and reduced through sustainability targets and reporting.
Energy	Energy decisions focus mainly on	Companies invest in renewable and

Aspect	Traditional Investing & Governance	ESG Investing & Governance
Strategy	cost and operational efficiency.	clean energy sources for sustainable growth.
Employee Welfare	Employees are generally viewed as operating costs.	Employee well-being, safety, and development are strategic priorities.
Diversity & Inclusion	Diversity is not a major governance priority.	Diversity and inclusion are actively promoted to improve leadership and innovation.
Stakeholder Focus	Primary focus is on shareholder interests.	Considers the interests of multiple stakeholders including employees, customers, and communities.
Governance Structure	Boards mainly focus on financial performance and compliance.	Boards include diverse members and actively oversee ESG risks and sustainability goals.

5. The Economic Consequences of ESG Integration

The economic consequences of ESG integration include improved risk management, enhanced investors trust, lower capital costs, and long-term value creation. ESG oriented companies often achieve higher profits, have a strong brand reputation, regulatory compliance, which create resilience against market uncertainties.

5.1. ESG in Different Sectors

Sustainable profitability is viewed by the integration of ROA, ROE and Tobin's q with ESG scores. High ROA indicates strong focus on environmental and governance by a company as efficient use of resources and ethical regulatory compliance improve operational performance. In case of ROE social and governance factors show higher importance than environment, where ethical practice, transparency, diversity and leadership enhance investors interest the strongest relationship is observed with Tobin's Q. (Velte, P. (2017)). Since ROE and ROA demonstrate the economic performance of the company whereas Tobin's Q reflects real life value and intangible assets which attract investors to the company

agriculture Company	ROA (24-25)	ROE (24-25)	Tobi n's Q	MSCI ESG	Sustainalytics Risk
Archer-Daniels (ADM)	3.30%	8.10%	~1.15	A	31.8 (High)
Bunge Global (BG)	3.90%	6.00%	~0.95	A	25.4 (Medium)
Deere & Co (DE)	8.20%	34.40%	~1.82	A	24.1 (Medium)
manufacturing Company	ROA (24-25)	ROE (24-25)	Tobi n's Q	MSCI ESG	Sustainalytics Risk
Siemens (SIEGY)	5.80%	17.20%	~1.18	AAA	16.2 (Low)
3M (MMM)	5.90%	36.50%	~1.38	AA	35.5 (High)
Caterpillar (CAT)	9.50%	45.10%	~2.05	A	22.8 (Medium)
Service Company	ROA (24-25)	ROE (24-25)	Tobi n's Q	MSCI ESG	Sustainalytics Risk
Accenture (ACN)	13.80%	27.90%	~4.45	AAA	9.8 (Negligible)
Visa (V)	16.20%	41.50%	~7.75	AA	14.5 (Low)
Salesforce (CRM)	7.00%	16.80%	~3.85	AAA	10.2 (Low)
Energy Company	ROA (24-25)	ROE (24-25)	Tobi n's Q	MSCI ESG	Sustainalytics Risk
NextEra Energy (NEE)	3.20%	12.50%	~2.12	AA	24.5 (Medium)
Shell (SHEL)	6.50%	16.20%	~0.84	A	36.8 (High)
Equinor (EQNR)	10.90%	23.80%	~1.04	AA	22.1 (Medium)

This data features a clear disintegration between physical assets and corporate value. Service-sector firms such as Visa, Salesforce, and Accenture operate with asset-light models, influencing in high ROA and exceptionally high Tobin's Q ratios, reflecting the market's valuation of intangible assets like brand and digital networks.

In distinction, Agriculture and Energy companies such as ADM, Bunge, and Shell remain heavily asset-dependent, leading to lower valuations. (Yahoo Finance. (2025). Shell's Tobin's Q below 1.0 indicates a "brick-and-mortar" discount, while even high-performing firms like Deere & Co face valuation limits due to their capital-intensive operations. (Investing.com (2025)

The Manufacturing sector occupies a middle position, where firms like Caterpillar and Siemens benefit from assimilating automation and smart services, improving their valuation multiples. ESG and risk ratings further influence market perception by acting as a quality filter companies with strong ESG ratings and low risk enjoy a "trust premium," although firms with high-risk scores, such as 3M, experience repressed market valuations despite solid profitability. Overall, while ROE showcases earning efficiency, asset intensity and ESG resilience ultimately conclude how the market values those earnings.

5.2. If focusing on environmental and social issues It improves a company's profit and value.

The data indicates a positive relationship between strong environmental and social practice and improved profitability and market valuation. in the service sector, companies like Accenture and visa with high ESG rating and low sustainability risk, exhibit strong ROE and high Tobin's Q, reflecting Superior financial performance and market Confidence. (Flammer, C. (2015). Similarly, companies in manufacturing and energy sector, such as Equinor and caterpillar, show relatively better profitability and valuation when supported by moderate and to high ESG performance. (Kim, S., & Li, Z. F. (2021). Even mission-driven organizations like Khan academy, UNCF and save the children demonstrate that emphasis on governance, transparency, social initiatives enhance Operational Efficiency and overall value creation

Overall, the findings suggest that integrating ESG practice into core strategy contributes positively to both financial performance and corporate value.

5.3. It explores whether investors trust "green" companies more and if that trust leads to higher stock values

The data shows that investors place greater trust in companies with strong ESG performance, especially those emphasizing environmental and social responsibility, services companies like visa and Accenture with high ESG ratings and minimal risk shows significantly high Tobin's Q, reflecting strong market confidence. (Serafeim, G. (2020).

Likewise, manufacturing and energy Companies such as caterpillar and Equinor gain higher ROE market valuation when supported by strong ESG score.

Overall, the findings suggest that investors reward ESG focused firms with stock valuation, linking sustainability practices directly to enhanced market value.

5.4. How does ESG-oriented governance help a company's profit measures

ESG-oriented governance, particularly the “G” component, has a definite impact on profitability and financial performance. Strong governance frameworks improve accountability, transparency, risk management, lessen frauds, regulatory violations, and operational inefficacy. Companies like Accenture and Visa, with high ESG governance scores and low risk ratings, illustrate strong ROA and ROE, reflecting improved efficiency and investor confidence. (Bae, K. H., El Ghouli, S., Gong, Z. J., & Guedhami, O. (2021).

Proficient governance aligns management decisions with long-term shareholder value, supports transparent reporting, lowers the cost of capital, and contributes to higher market valuations, as seen in elevated Tobin’s Q ratios. It also helps in promoting diversity, ethical conduct, and employee engagement, uplifting innovation and operational stability. In contrast, weak governance augments exposure to reputational and regulatory risks, which negatively affects returns. Overall, evidence across sectors signifies that strong ESG governance and profitability are very effectively interconnected and reciprocally reinforcing

5.5. The Materiality Gap: Why Industry-Specific ESG Matters

A “one-size-fits-all” ESG approach flops because it ignores the structural decoupling between physical assets and market value across sectors. For specification, Shell’s high carbon footprint contributes to a Tobin’s Q of 0.84, indicating that the market values it below the replacement cost of its physical assets a clear “brick-and-mortar” discount. In contrast, asset-light service firms like Visa and Salesforce record substantially higher Tobin’s Q ratios of D7.75 and ~3.85, respectively, largely because of their digital scale and intangible assets rather than environmental performance. (Khan, M., Serafeim, G., & Yoon, A. (2016).

Harnessing uniform ESG criteria to both different aspects wherein a steel manufacturer and a software company fundamentally disadvantage capital-intensive industries, regardless of their operational significance and potential within their sectors. This research highlights that ESG scores must reflect industry-specific materiality obtaining green transition costs in energy sectors and factors like data security and talent management in service industries. Without a specific

sector-weighted evaluation, universal ESG metrics risk misrepresenting risk management quality and undervaluing essential heavy industries. (Nardi, L. (2022).

6. ESG IN NON-PROFIT ORGANISATION

Organization	Program Efficiency	Transparency Score	ESG Strength
Khan Academy	91%	Platinum (Candid)	Social (S): High digital inclusion
UNCF	88%	4-Star (Charity Nav)	Governance (G): Strong DEI reporting
Save the Children	86%	Platinum (Candid)	Environmental (E): Climate resilience focus

Note: Since Non-Profits do not have equity or market prices for Tobin's Q, we use Efficiency and Transparency ratings from Charity Navigator or Candid (which mirror G-scores).

The world understood the importance of materiality Gap, the integration of ESG principles across sector demonstrates that value creation depends on industry specific materiality rather than uniform metric. A clear “materiality Gap” Emerges When Universal ESG Standards Ignores the Disassociation of Physical Assets from corporate worth. Asset-light service firms such as Visa and Salesforce achieve high Tobin’s Q ratios of Approx 7.75 and 3.85) driven by digital scale and data integrity. Conversely, Capital intensive energy firms like Shell face a “brick and mortar” discount, reflected in a Tobin’s Q of ~0.84, indicating market valuation below asset replacement cost due to carbon transition risks. Thus, ESG scores capture transition costs in energy sectors and governance and talent strength in service industries. (Caplan, S., Griswold, J. S., & Jarvis, W. F. (2022).

Investor trust further translates into a “Quality Premium,” were firms with lower sustainability risk command higher valuations. Companies in service sector exemplify this premium in this sector. while energy and manufacturing firms show comparatively stronger valuations when ESG

performance is higher. Similarly, in the non-profit sector, organizations such as Khan Academy and Save the Children achieve high program efficiency rates of 91% and 86%, supported by strong transparency scores. Overall, ESG metrics function as a key signal of resilience and value protection, reinforcing investor confidence in an uncertain global environment.

ESG scores are a measure of "resilience" and "risk management," not a guaranteed engine for high profit.

The data analysis that ESG scores do not assure stable financial performance. While strong ESG ratings may correspond with higher Tobin's Q, this denotes a "quality premium" rather than assured profitability. A rigid, uniform ESG model would unfairly Favor asset-light firms over capital-intensive yet essential industries.

The actual value of ESG lies in industry-specific context, determining data security and talent factors in services, and transition risks in energy. Consequently, ESG must be treated as a risk-management tool for evaluating responsible governance and long-term stability, and not as a predictor of short-term profits

7. Impact on investor confidence and firm valuation

When companies moved from traditional financial reports to integrated reporting, it changed the game. ESG metrics, things like environmental impact, social responsibility, and how a company is governed, are now a major factor in how investors think about value. Here is what is different. Investors do not just look at what a company earned last quarter anymore. They want to know if those earnings are going to keep coming. That is where ESG comes in. Take Visa and Accenture. Visa has a Tobin's Q around 7.75, meaning the market values it far above what its physical assets are worth. Accenture sits at about 4.45. Those numbers are not just about profitability. They reflect that investors see these companies as transparent and mature about risk. Strong ESG scores tell the market there probably are not any nasty surprises hiding underneath. That confidence lowers their cost of equity. Investors do not demand as high a return because they feel safer. (Broadstock, D. C., Chan, K., Cheng, L. T., & Wang, X. (2021).

Now look at the other side. Shell and ADM both trade below 1.15 on Tobin's Q. That does not mean they are bad businesses. They generate plenty of profit. But they carry what you might call a risk discount. Investors worry about environmental liabilities piling up. They worry about regulations tightening. Even when these companies' posts (Chen, Z., & Xie, G. (2022).trong returns, that cloud of uncertainty keeps valuations in check. High risk ratings from groups like

Sustainalytics create a kind of ceiling. There is only so high the stock can go when people are bracing for the next crisis. So, what is really going on here? ESG has become a way for investors to answer a basic question. Is how is the company running

When a company performs well on the ESG issues that matter in their industry, the material stuff, investors notice. They are willing to pay more. They stick around longer. And they are more likely to provide capital when it is needed.

The bottom line is that sustainability performance and financial value are not separate conversations anymore. They are woven together in how investors think about the future.

8. THE PILLARS OF ESG

Industry Sector	Environmental (E) Focus	Social (S) Focus	Governance (G) Focus
Energy (e.g., Shell, Equinor)	Highest Priority: Managing the high cost of a "green transition" and carbon compliance.	Medium: Maintaining community relations and safety to avoid catastrophic "tail risks" like spills.	High: Regulatory oversight and managing future environmental liabilities.
Manufacturing (e.g., Caterpillar, Siemens)	High: Optimizing resource consumption and waste limits to trigger innovation and efficiency.	High: Ensuring fair labor and ethical supply chains to prevent operational disruptions.	Medium: Anti-corruption and alignment of management incentives with sustainable growth.
Services / Tech (e.g., Visa, Salesforce)	Lower Priority: Focuses mainly on brand-reputation and attracting talent via	Highest Priority: Data privacy, cybersecurity, and talent retention in an	High: Transparency and ethical leadership to protect high

Industry Sector	Environmental (E) Focus	Social (S) Focus	Governance (G) Focus
	green initiatives.	asset-light model.	"intangible value" (brand).
Agriculture (e.g., ADM, Bunge)	High: Sustainable land use and biodiversity to ensure long-term "asset survival".	High: Ethical supply chain management and labor practices in global operations.	High: Resolving "Governance Gaps" to reduce the "Risk Discount" applied by investors.
Non-Profit (e.g., Khan Academy)	Variable: Focus on climate resilience specifically for humanitarian missions.	Highest Priority: Digital inclusion and program efficiency for social impact.	Highest Priority: Platinum-level transparency and accountability (Candid/Charity Nav ratings).

The data answers many of our questions Does ESG governance effectiveness vary across industries? Which ESG priorities are most material for different sectors? Is a universal ESG metric suitable for all industries? How does industry-aligned ESG contribute to resilience?

The data highlights that ESG governance effectiveness depends on industry-specific metrics, where every sector prioritizes its own core pillar. In Energy and Agriculture, emphasis is placed on asset survival and managing green transition and land-use costs to avoid investor risk discounts. Asset-light Service and Technology firms prioritize social factors such as data privacy and talent retention to safeguard their high intangible brand value. Manufacturing sectors use environmental and social standards to drive innovation and supply chain stability, converting compliance into operational efficiency. Meanwhile Non-Profit organizations focus on digital inclusion and high transparency to enhance program efficiency and stakeholder trust.

Overall, the analysis confirms that a universal ESG metric is inadequate; resilience is achieved by addressing the specific environmental, social, and governance risks most relevant to each sector's operational model.

9. CONCLUSION

To conclude the topic, this research finds that ESG integrated governance is not just a nice thing to have. It is essential for building value that lasts. Whether a company runs oil rigs or writes software, strong ESG performance tells investors the same thing. This management team knows what it is doing. They see risks coming. They can handle volatility. That confidence translates into what you might call a quality premium. It shows up in higher valuations and lower costs of capital. ESG only works when it fits the industry. Energy companies get rewarded for managing their carbon footprint. Tech firms get rewarded for protecting user data and keeping employees happy. Nonprofits get trusted when they are transparent about where money goes. A universal checklist misses the point entirely. The financial data backs this up. Meanwhile, firms carrying environmental or governance concerns trade at a discount, even when their books look fine. Strong returns alone cannot always outweigh the fear of what is coming next. So, the bottom line is this. Sustainability and financial performance are not separate conversations anymore. When companies get serious about the ESG issues that matter in their world, it closes valuation gaps. It builds real stability. And it gives investors a reason to stick around for the long-term.

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