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"The green premium: evaluating the cost of capital."



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Abstract:

The shift to low-carbon development, corporate environmental responsibility, and ESG-focused investment frameworks increases interest in whether ecologically friendly businesses benefit from a quantifiable financial premium—the so-called "green economy premium." With an emphasis on variations in cost of equity, cost of debt, and weighted average cost of capital, this thesis examines whether companies with more robust environmental sustainability measures have lower capital costs than their high-emission counterparts. Understanding the financial effects of sustainability is crucial for businesses, politicians, and capital providers because investors are increasingly integrating climate performance into risk assessments, regulators, and financial markets.

The study provides a hypothetical basis by drawing from stakeholder theory, signaling theory, and modern portfolio theory, situating environmental sustainability as a strategic signal that reduces perceived risk, increases legitimacy, and strengthen investor confidence by ultimately lowering their required returns. Comparatively, high-emission firms are thought to bear higher financing costs related to regulatory, reputational, and transition risks.

This research follow quantitative approach. The study analyzed panel data of publicly listed firms across the manufacturing, energy, consumer goods, and technology sectors. In measuring environmental sustainability, the environmental score, carbon-emission intensities, and green-certification indicators were used. The capital-cost variables were derived from financial statements, market data, and secondary databases. The statistical analysis-which included correlation, regression, and hypothesis testing-was done using Stata to determine whether environmental performance significantly predicts the level of capital costs.

The results highlight the significance of the inverse link between the cost of capital and environmental sustainability, indicating that sustainable businesses do benefit from a premium in the green economy. Regression research shows that environmental scores are strong determinants of lower cost of loan and lower cost of equity. Since the perceived increase in risk is coupled with more limited financing options, high-emission companies consistently exhibit higher WACC. The theoretical predictions that sustainability lowers uncertainty and extends long-term financial stability are supported by these results. This study makes the assumption that environmental performance is linked to both cheap capital costs and possible financial consequences for the businesses. The thesis provides guidance for firms that want to enhance their access to capital,

investors considering the sustainability-linked portfolios, and policymakers who are designing climate-finance incentives. It finally provides some directions for future research and methodological reflections that could encourage further academic work.

JEL classification codes: G32, G38, Q56, M14

Keywords: Green Economy Premium, Environmental Sustainability, Capital cost, cost of equity, Weighted Average cost of capital, ESG performance, Sustainable finance, Carbon intensity, corporate environmental performance.

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