

Dataset:

<https://www.kaggle.com/datasets/shriyashjagtap/esg-and-financial-performance-dataset>

My Dashboard:

https://public.tableau.com/views/ESGandFinancialPerformance/ESGStoryDashboard?:language=en-US&:sid=&:redirect=auth&:display_count=n&:origin=viz_share_link

The dataset, titled *Company ESG and Financial Data*, was sourced from Kaggle and contains environmental, social, and governance (ESG) metrics alongside key financial indicators for companies across multiple industries and global regions. It includes variables such as ESG scores (overall, environmental, social, and governance), carbon emissions, revenue, profit margins, market capitalization, and valuation multiples from 2015 to 2025. This dataset provides a comprehensive view of how firms' sustainability efforts correlate with their financial and market performance. When exploring similar data online, one will find that ESG datasets are widely used in both academic and financial research to examine how sustainability practices impact long-term profitability, investor sentiment, and valuation premiums. In essence, this dataset bridges two major fields, corporate sustainability and finance, making it particularly valuable for analyzing how environmentally responsible behavior translates into measurable market outcomes.

While the dataset is rich in scope, it shows some typical limitations common in financial and ESG reporting. The data is somewhat imbalanced across industries and regions, with certain sectors, such as finance, manufacturing, and energy, having significantly more observations than others like utilities or retail. This may reflect real-world reporting discrepancies, as larger firms and heavily regulated industries tend to disclose ESG data more consistently. Additionally, the coverage is biased toward companies from North America and Europe, while data from emerging markets, such as Africa or Latin America, is comparatively sparse. Another issue is potential survivorship bias: the dataset primarily includes companies with continuous reporting histories through 2025, which might exclude firms that failed or were delisted. Missing data points for smaller firms or for early years (e.g. pre-2015) could further skew analysis, especially when calculating multi-year trends.

Across all three visualizations, the data reveals a clear and consistent relationship between strong ESG performance and positive financial and environmental outcomes. The heatmap shows that, over time, most industries have gradually improved their average ESG scores, with technology and finance leading in sustainability performance while energy and transportation continue to lag. The scatterplot also contradicts several critics of ESG who claim that companies can manipulate these scores while still having high emissions. It directly shows that companies with higher environmental scores tend to have significantly lower emissions intensity, meaning that better environmental management is directly tied to operational efficiency. Finally, the valuation trend chart demonstrates that firms in the top ESG quartile consistently trade at higher P/S multiples compared to mid- and low-ESG peers, suggesting that markets reward sustainability leadership with valuation premiums. However, since we have not performed statistical analysis, we cannot make a firm conclusion. We must note that it is also

possible that companies with higher revenue have more resources to dedicate towards sustainability.

It takes statistical analysis to make absolute conclusions. However, taken together, the findings suggest that responsible environmental practices not only reduce emissions; they are also associated with stronger investor confidence and long-term financial performance.