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Carbon Bias in Index Investing

"Carbon bias on stock markets exposes institutional investors to carbon transition risks"

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Many institutional investors seek to increase the sustainability of their investment portfolios. Popular value-weighted stock market indices serve as a benchmark for such active equity strategies. Our research reveals these have a carbon bias, which is due to firms operating in carbon-intensive sectors being more capital-intensive and so more likely to be publicly listed. This bias exposes institutional investors to carbon transition risks and we therefore explore several strategies for investors to reduce such risks in their equity allocation.

Principal Findings

- The US Russell 1000 has a carbon bias close to 70% and the MSCI Europe index close to 90%.
- This means the carbon intensity of the US and European market indices is 70% and 90% higher than that of the US and European economies, respectively.
- Therefore a value-weighted stock market index is not an adequate representation of the overall economy.
- Passive managers can compensate for this by tracking various low-carbon indices that reweigh companies in the market index based on their carbon intensity.
- Active managers can integrate carbon emissions, other ESG factors and climate risks in company valuation models used for stock selection to calculate risk-adjusted returns.

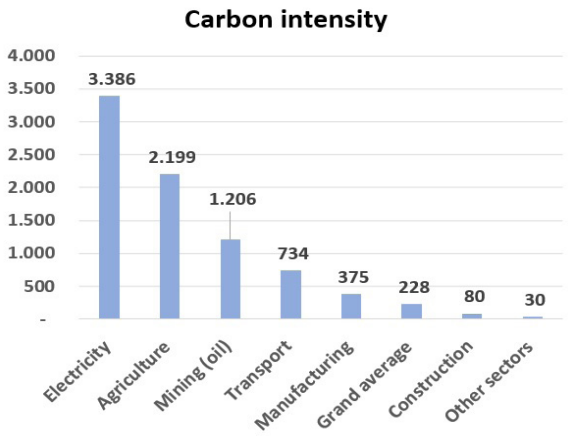

Figure: Carbon intensity

Key Takeaways for the Industry

- Actively inform clients and fund participants about how the expected risk-return profile of their portfolio will be influenced by adopting a low-carbon strategy.
- Returns may decrease when moving into green assets to reduce the carbon bias of a portfolio, but exposure to climate risks will decrease too.

Want to know more? Read the paper
"Carbon Bias in Index Investing"