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PORTFOLIO MANAGEMENT

The Eco-Efficiency Premium Puzzle

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Abstract

Does socially responsible investing (SRI) lead to inferior or superior portfolio performance? This study focused on the concept of "eco-efficiency," which can be thought of as the economic value a company creates relative to the waste it generates, and found that SRI produced superior performance. Based on Innovest Strategic Value Advisors' corporate eco-efficiency scores, the study constructed and evaluated two equity portfolios that differed in eco-efficiency. The high-ranked portfolio provided substantially higher average returns than its low-ranked counterpart over the 1995–2003 period. This performance differential could not be explained by differences in market s… the results remaine… incremental benefits…

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Our study focused on a concept called “eco-efficiency,” which can be thought of as the economic value a company produces relative to the waste it generates. Using corporate eco-efficiency scores from Innovest Strategic Value Advisors, we evaluated self-composed equity SRI portfolios. Focusing exclusively on the environmental element of social responsibility, we investigated whether a long-run premium or penalty exists for holding environmentally responsible companies.

In the first part of the research, we constructed two mutually exclusive portfolios with distinctive eco-efficiency scores. We applied performance attribution models to test whether any performance differential between the portfolios was significant and attributable to the environmental component. This method allowed us to examine the long-term benefits of including environmental criteria in the investment process. We demonstrate that a stock portfolio composed of U.S. companies with high eco-efficiency scores sizably outperformed stocks with low scores over the 1995–2003 period. Using single-factor and multifactor attribution models, we also show that this performance differential cannot be explained by differences in market risk, investment style, or industry exposure.

Obtaining evidence by adjusting returns after the fact may not be very useful, however, from an investor's perspective. Therefore, we also outline the economic implications of our findings by demonstrating how one can construct an environmentally responsible investment portfolio under practical conditions. For this part of the study, we constructed industry-balanced SRI portfolios based on “best-in-class” analysis, in which all stocks were allocated into specific industries and, subsequently, ranked relative to their industry peers. Stocks with high (low) eco-efficiency scores were allocated into the best-in-class (worst-in-class) portfolio. In the absence of transaction costs, the best-in-class portfolio outperformed the worst-in-class portfolio by approximately 6 percentage points on a risk- and style-adjusted basis. Even in the presence of transaction costs, the different

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