

Effect of Green Innovation on Market Returns: An Industry 4.0 Perspective

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Abstract

The world is emphasizing the adoption of the industry 4.0 framework as much research has identified the positive effect of industry 4.0 on the company's profitability. There is a growing realization of sustainable practices in business that significantly affect the stock performance of the companies. But, almost no literature exists on the impact of green innovation on the market returns of the companies under industry 4.0. To fill this gap, this paper uses regression models on the panel data to estimate the positive and significant relation between green innovation, measured by the number of patents published by the companies and the investment in research and development (R&D) on the stock returns of fortune 500 companies over the span of 8 years. The analysis shows that an increase in green innovation can leverage the market performance of the company. This indicates that companies that invest in research and development (R&D) and patents publication have higher stock returns. The findings of this paper provide insights to the policy-makers and regulatory authorities regarding strategic investment decision-making to implement green innovation practices in organizations to increase the market value of the company.

Keywords: Panel data, Patents, Research and development, Sustainability, Tobin's Q