

Technological innovation and the quality of environmental information disclosure: Evidence from a-share companies listed on China's Shanghai and Shenzhen stock exchanges

ABSTRACT

High costs of technological innovation and insufficient technological innovation capabilities may impede the ability of firms to communicate relevant environmental protection information to the public. This study aims to analyze the impact of technological innovation on the quality of environmental information disclosure conducted by firms. A non-balanced panel dataset comprising A-share listed companies in Shanghai and Shenzhen from 2007 to 2020 was subjected to ordinary least squares (OLS) regression analysis in the study. The model included year-fixed and industry-fixed effects to eliminate the influence of unobservable factors during the sample period. The results revealed a statistically significant positive relationship between the quality of environmental information disclosure by enterprises and the quantity and quality of technological innovation. The study's findings indicate that technological innovation offers a more sustainable path for the advancement of environmental information disclosure. By utilizing environmentally friendly and energy-saving technologies, the negative impact of the environment on technological innovation can be mitigated, leading to a more sustainable approach to environmental information disclosure. The practical implications of this study include fostering innovation to enhance disclosure quality, which benefits policymaking and industry practices. The understanding of the positive relationship between technological innovation and environmental information disclosure is enriched by the empirical evidence from this study, emphasizing its role in promoting sustainability and transparency.