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ANALYSIS OF GREEN INNOVATION EFFECTS OF GREEN FINANCE POLICIES ON HEAVY-POLLUTING ENTERPRISES

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Abstract

This study examines the impact of green finance policies, specifically the 2016 issuance of China's "Guiding Opinions on Building a Green Financial System," on green innovation among heavy-polluting manufacturing enterprises. Utilizing difference-in-differences (DID) and triple-difference (DDD) empirical methodologies, the research finds that the policy significantly enhances the green innovation capabilities of these enterprises. The impact is notably stronger within Green Finance Reform and Innovation Pilot Zones, demonstrating substantial regional spillover effects. Analysis reveals two main channels for this positive influence: improvements in green total factor productivity (GTFP) due to enhanced efficiency and increased R&D investments in green technologies. These results underscore the dual role of green finance policies in driving targeted innovation and generating positive externalities across regions. The study further suggests policy enhancements including refining operational mechanisms to stimulate substantive innovation, extending targeted support for green innovation beyond current pilot zones, and strategically expanding pilot zones to maximize beneficial spillovers. This research provides valuable insights for policymakers aiming to balance environmental sustainability with technological advancement in heavily polluting industries.

Key words: green financial policies, green innovation, heavy-polluting enterprises

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