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GOVERNMENT SUBSIDY AND CORPORATE GREEN INNOVATION: A REEXAMINATION BASED ON A NEW PERSPECTIVE OF ENVIRONMENTAL REGULATION

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Abstract

Studying the impact of environmental regulation policies on the incentive effect of green innovation of government subsidies is an important exploration direction to promote green innovation and achieve sustainable economic development. Starting with the research of the connection among government subsidies and green innovation, this paper empirically examines the impact of government subsidies on corporate green innovation and its mechanism from the perspective of environmental regulation based on China's provincial panel data. The findings reveal: (1) There is a considerable inverted U-shaped curve association among government subsidies and corporate green innovation. Currently, China's subsidies for corporate green innovation are too large and have entered an inhibition stage after the curve's inflection point. (2) Environmental regulation can effectively enhance government subsidies' innovation motivation effect. (3) Mechanism analysis demonstrates that environmental regulation primarily transforms government subsidies' impact on green innovation by strengthening their "incentive effect" and "leverage effect", weakening or even reversing their "crowding-out effect." (4) According to the regional heterogeneity test, the central region has the most obvious improvement in government subsidies' incentive effect for innovation, under environmental regulation policies' influence in each region. (5) A heterogeneity test of regulation types shows that two combinations work best: government R&D subsidies with market-incentive environmental regulation and tax incentives with government-ordered environmental regulation. Accordingly, the government should understand the adjustment characteristics of environmental regulation on government subsidies' innovation effect, attend to the use of cross-combination policies, and weigh the participation of the government and market to help enterprises achieve green and sustainable development.

Key words: environmental regulation, green innovation, government subsidy, policy combination effect, sustainable development

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