

Carbon tax, green credit, and financial stability: A macro-financial analysis based on the SFC model

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Extended Abstract

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Abstract Summary

This study constructs a four-sector macroeconomic framework encompassing households, firms, banks, and the government based on the stock-flow consistent (SFC) model. It simulates and analyzes the mechanisms and synergistic effects of carbon taxes and green credit policies (green support factor GSF and dirty penalty factor DPF) on climate risks and financial stability, aiming to provide a scientific basis for policy formulation. Based on the a series of green credit policy, carbon tax policy and collaborative policies of SFC simulations, it proposes the following policy recommendations. Firstly, the design of green credit policies should be optimized, taking into account the particularities of different industries, and differentiated policies should be formulated for different industries. Secondly, we need to improve the carbon tax policy framework, directing tax revenue towards green technology research and development and providing subsidies to low-income groups. Finally, policy coordination and regulation should be strengthened to ensure the mutual promotion of carbon tax, green credit, and fiscal subsidies.

Presenting Author Biography

Liu Bingyue, male, born in January 1989, from Yantai, Shandong. I am currently an associate professor in the Department of Quantitative Economics and Business Statistics at the School of Economics and Management, Beihang University. My research interests include energy economics and finance, quantitative finance and risk management, and applied statistics.