

Synergistic Effects of Dual-Pilot Policies on the Supply Chain Resilience of Energy Enterprises

Xixi Zhang, Yue Tang, Yixin Li*

School of Economics and Management, China University of Petroleum (East China), Qingdao, China

Email address:

tanghbu@163.com (Xixi Zhang), 2840978389@qq.com (Yue Tang), wfliyixin@163.com (Yixin Li)

*Corresponding author

Abstract

China's pursuit of carbon peaking and carbon neutrality has driven the implementation of both the Low-Carbon City Pilot Policy and the Carbon Emission Trading Pilot Policy. To systematically assess the synergistic effects of these two landmark initiatives on the supply chain resilience of energy enterprises, this study treats their overlapping implementation as a quasi-natural experiment and employs a multi-period difference-in-differences (DID) model based on panel data of China's A-share energy enterprises from 2007 to 2023. The empirical results reveal that the dual-pilot policies significantly enhances the supply chain resilience of energy enterprises, with its synergistic impact exceeding that of either policy alone. Mechanism analysis further indicates that green technological innovation and government subsidies serve as key transmission channels through which the dual-pilot policies strengthens resilience. Heterogeneity analysis shows that the policy effect is more pronounced among state-owned enterprises, resource-based cities, and regions in eastern China. By uncovering the mechanisms and regional variations of policy synergy, this study enriches the literature on low-carbon policy evaluation and provides actionable insights for enhancing the resilience of energy enterprise supply chains under China's "dual carbon" strategy

Keywords

Ow-carbon City Pilot Policy, Carbon Emission Trading Policy, Supply Chain Resilience, Collaborative Empowerment