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## DOES FINANCIAL DECENTRALIZATION IMPROVE ENERGY EFFICIENCY? EVIDENCE FROM CHINA

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## Abstract

Energy is a crucial material foundation for fostering economic development across society. Enhancing utilization efficiency is a requisite for promoting green and low-carbon economic development. Simultaneously, enhancing energy efficiency also hinges on the development of the financial system. As an informal system rooted in Chinese characteristics, financial decentralization may have diverse impacts on energy efficiency. Using an extensive panel dataset covering 30 provinces from 2005 to 2017, this study explores the dynamic relationship between financial decentralization and energy efficiency. Our results confirm that excessive financial decentralization significantly inhibits energy efficiency. The main influence paths involved are technological innovation, industrial structure upgrading, and government intervention. This result is also time heterogeneous. The relationship between financial decentralization in the post-financial crisis sample. Financial decentralization has a negative impact on energy efficiency. To address this issue, examining its root causes is essential. Therefore, achieving full cooperation between the upper and lower levels of government becomes particularly important. This enhances the effective allocation of financial resources and contributes to achieving the goals of energy conservation, emission reduction, and sustainable development.

Key words: energy efficiency, financial decentralization, government intervention, industrial structure upgrading, technological innovation

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