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THE IMPACT OF DIGITAL FINANCE ON ENVIRONMENTAL POLLUTION: EMPIRICAL EVIDENCE FROM CHINA

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Abstract

Mitigating environmental pollution is crucial to improving environmental quality and achieving green development. In curbing environmental pollution, digital finance has a significant role to play as a new form of financial allocation. This research adopts panel data of 30 Chinese provinces to measure regional pollution levels using the entropy weight method. The impact of digital finance on environmental pollution is empirically analyzed. In addition, the research examines the heterogeneity effects of digital finance on environmental pollution under different factors. Results show that: (1) The development of digital finance can significantly reduce environmental pollution, which mainly includes wastewater and sulfur dioxide. The results of the robustness test prove that the conclusion still holds. In addition, the usage depth of digital finance has an inhibitory effect on environmental pollution. (2) According to the heterogeneity test, digital finance's inhibitory effect on environmental pollution is more pronounced in high digital divide regions, high environmental regulation intensity regions and eastern regions. (3) The transmission mechanism test results show that digital finance can promote industrial structure upgrading and increase government environmental expenditure, thus reducing environmental pollution. The findings of this research enrich the literature on digital finance and environmental pollution. Also, it can provide a reference for the government to develop digital finance and achieve sustainable development.

Key words: digital divide, digital finance, environmental pollution, industrial structure upgrading, government environmental expenditure

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