Does financial macroenvironment impact on carbon intensity: evidence from ARDL-ECM model in China

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Abstract

Carbon finance is considered one of the most efficient methods to address the issue of climate change. The problem of how to establish and improve China's carbon financial system requires theoretical study as well as practical policies. A literature review of the effects of financial macroenvironment on carbon emissions was conducted. The purpose is to investigate the relationships of long-run equilibrium and short-run dynamics through the ARDL-ECM model among carbon intensity and macroenvironment factors including financial development, financial innovation, stock market turnover and foreign direct investment. And the former three are proven as long-term drivers of carbon intensity decline while FDI are insignificant to mitigate it. There is also a short-term dynamic adjustment among them. A main contribution to the literature in China studies the methods to reduce

carbon intensity by taking into account the role of financial macroenvironment, especially the financing environment. Considering establishing an efficient carbon finance system, indirect financing tools represented by financial development could be more significant than direct financing ones represented by stock market turnover.

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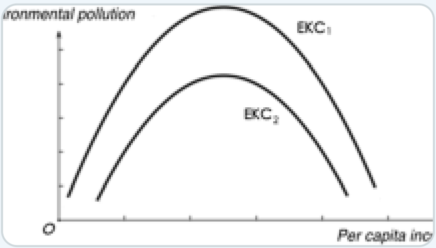

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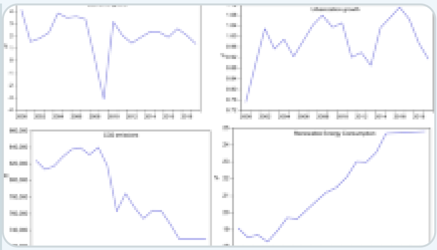

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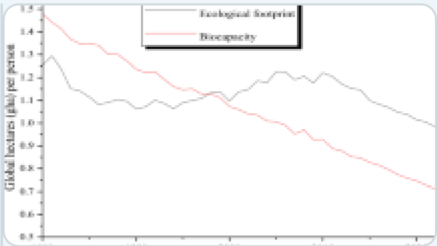

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Notes

1. Social financing refers to the total funds raised by real economy from the financial system in a certain period of time.

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