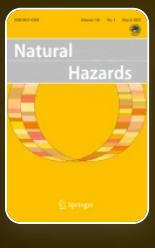
Does financial macroenvironment impact on carbon intensity: evidence from ARDL-ECM model in China

Original Paper | Published: 18 May 2017

Volume 88, pages 759–777, (2017) Cite this article



Natural Hazards

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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.

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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Acknowledgements

The first author gracefully acknowledges the experience of study in the Economics Department of Columbia University and the exchange program in Columbia Consortium of Risk Management and the Director Graciela Chichilinisky. We would like to thank “Shanghai Planning Office of Philosophy and Social Science” Grant No. 2013BGL014, “National Fund of Natural Science” Grant No. 71572033, “Fundamental Research Funds for the Central Universities” Grant No. CUSF-DH-D-2014067, as well as the scholarship sponsored by Chinese Scholar Council.

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Cite this article

Tian, Y., Chen, W. & Zhu, S. Does financial macroenvironment impact on carbon intensity: evidence from ARDL-ECM model in China. *Nat Hazards* **88**, 759–777 (2017). https://doi.org/10.1007/s11069-017-2925-0

Received	Accepted	Published
23 November 2016	20 April 2017	18 May 2017

Issue date

September 2017

DOI

https://doi.org/10.1007/s11069-017-2925-0

Keywords

Carbon intensity | Financial development | Financial innovation degree | Stock market turnover | ARDL-ECM