Accepted Manuscript

Dynamic linkages among global oil market, agricultural raw material markets and metal markets: An application of wavelet and copula approaches

Yonghong Jiang, Jiashun Lao, Bin Mo, He Nie

PII: S0378-4371(18)30643-5
DOI: https://doi.org/10.1016/j.physa.2018.05.092
Reference: PHYSA 19632

To appear in: *Physica A*

Received date : 29 January 2018
Revised date : 23 February 2018

Please cite this article as: Y. Jiang, J. Lao, B. Mo, H. Nie, Dynamic linkages among global oil market, agricultural raw material markets and metal markets: An application of wavelet and copula approaches, *Physica A* (2018), https://doi.org/10.1016/j.physa.2018.05.092

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

*Manuscript
Click here to view linked References

ACCEPTED MANUSCRIPT

Dynamic linkages among global oil market, agricultural raw material markets and metal markets: An application of wavelet and copula approaches

Yonghong Jiang[a, c], Jiashun Lao[b], Bin Mo[a, *], He Nie[a]

[a] *Institute of Finance, Jinan University, Guangzhou 510632, China*

[b] *Department of Mathematics, College of Information Science and Technology, Jinan University, Guangzhou 510632, China*

[c] *Economics Department, Wisconsin University, Eau Claire, WI 54701, USA*

[*] Corresponding author

E-mail address: jnumo2015@gmail.com (B. Mo)

Highlights

- The long-term linkages among the markets are stronger than the short-term.
- The tail dependence structures among these markets change abruptly during the financial crisis.
- The results help the investors to optimize the investment portfolios and the policymakers to stabilize the financial markets.

ABSTRACT

This paper aims to study the dynamic dependence among global oil market, agricultural raw material markets and metal markets. For this purpose, the wavelet squared coherence approach is used to capture the interdependence level and lag-lead relationship of three markets across time at different frequencies. We also combine wavelet and copula to analyze tail dependence among the three markets at different time-horizons. The results reveal that global oil market lags behind agricultural raw material markets but leads metal markets while metal markets change in parallel with agricultural raw material markets. In addition, the long-term linkages are stronger and more lasting than the corresponding short-term ones. The results also suggest that the dependence structure changes over time and the financial crisis has a great shock to the degree of dependencies among the three markets. All of these results are not only beneficial to optimize asset allocation and risk management for investors, but also play significant roles in maintaining the stability of the financial market.

Download English Version:

https://daneshyari.com/en/article/7374844

Download Persian Version:

https://daneshyari.com/article/7374844

Daneshyari.com