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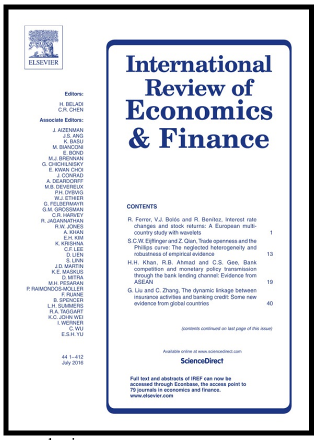

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PII: S1059-0560(17)30186-7
DOI: http://dx.doi.org/10.1016/j.iref.2017.03.007
Reference: REVECO1392

To appear in: *International Review of Economics and Finance*

Received date: 12 December 2015
Revised date: 7 March 2017
Accepted date: 7 March 2017

Time-varying causality between crude oil and stock markets: What can we learn from a multiscale perspective?

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Abstract.

This paper investigates the presence of time-varying causal linkages in mean and variance between oil price changes and stock returns for six major oil-importing countries (France, Germany, Italy, Spain, the UK and the US) in a multiscale framework that combines wavelet analysis and a modified version of the dynamic causality test of Lu et al. (2014). The results show significant bidirectional causal relations between oil and stock markets at the different time horizons for all countries. The causal links tend to be stronger at coarser scales and in periods of financial turmoil, mainly during the recent global financial and European sovereign debt crises. This evidence provides useful insights to participants in oil and stock markets and to policymakers.

Keywords: Oil price, stock returns, wavelet analysis, Granger causality.

J.E.L. classification: C22, E44, G15, Q43