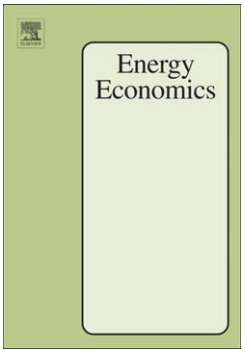

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Understanding recent oil price dynamics: A novel empirical approach

Rita L. D'Ecclesia* Emiliano Magrini† Pierluigi Montalbano‡
Umberto Triulzi§

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Abstract

Crude oil is a major driver of the global economy and its price dynamics are a key indicator for producers, consumers and investors. The increasing volatility of crude oil prices in the last decade has encouraged many researchers to model its dynamics. Recent studies have tried to explain this dynamics by taking into account the role of various market participants many of whom have increasingly used crude oil for portfolio diversification. We propose a modified supply-demand framework which assumes the real price of crude oil is affected not only by fundamental shocks but also by financial shocks. We assess the role of what we define as the financial shock component when describing the dynamics of the real crude oil price and endeavour to measure a possible equilibrium relationship between standard supply/demand variables and our financial shock component. Using a Dynamic Ordinary Least Squares (DOLS) approach and an ECM framework we are able to empirically assess the significant role of "hedging pressure" on the real price of oil and find evidence that the impact of the "hedging pressure" is not only affecting quick reverting short-term deviations but also the structural long-run equilibrium of the oil price.

Keywords: oil price, hedging, financialisation, futures, DOLS, ECM.

JEL: C32, Q40, Q43

*Corresponding Author, Sapienza University *rita.decclesia@uniroma1.it*

†Agricultural Development Economics Division, Food and Agriculture Organization of the United Nations, Rome, Italy *emiliano.magrini@fao.org*

‡University of Sussex and Sapienza University *pierluigi.montalbano@uniroma1.it*

§Sapienza University *umberto.triulzi@uniroma1.it*