

Oil price dynamics: is there a short-term speculation?

Emiliano Magrini, Pierluigi Montalbano, Rita D'Ecclesia, Umberto Triulzi

Abstract

Oil price dynamics represents a crucial issue in economic and financial contexts. Scholars and policymakers have to assess how extensively oil price changes are affected by macroeconomics fundamentals or by financial markets behavior. The aim of this paper is twofold: i) to understand the oil price dynamics using a structural model approach ii) to assess the role played by “speculation” in the short-run volatility of oil prices. In this paper the long-run equilibrium is investigated using an *Error Correction Model* Framework and standard demand and supply data. The role of financial speculation and how it affects the oil price equilibrium in the short-run is also analyzed. A cointegration relationship is estimated between the real oil price, the global economic activity and the world oil production. Monthly data of real oil prices together with data on a set of 5 macroeconomic variables over the period 1992 to 2011 are used. The speculative activity is measured using data by the Committee of Traders (COT) reports of the CFTC. The results show that the long-run equilibrium of the real oil price can be explained using a standard demand and supply model while other factors such as inventories, US/EUR exchange rate, expectations on future prices and - more interesting – speculation contribute to the short-run fluctuations.

Key words: Cointegration; oil price volatility; ECM framework; Speculation