Granger Predictability of Oil prices after the Great Recession*

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Abstract

Real oil prices surged from 2009 through 2014, comparable to the 1970’s oil shock period. Standard explanations based on monopoly markup fall short since inflation remained low after 2009. This paper contributes strong evidence of Granger (1969) predictability of nominal factors to oil prices, using one adjustment to monetary aggregates. This adjustment is the subtraction from the monetary aggregates of the 2008-2009 Federal Reserve borrowing of reserves from other Central Banks (Swaps), made after US reserves turned negative. This adjustment is key in that Granger predictability from standard monetary aggregates is found only with the Swaps subtracted.

Keywords: Oil Price Shocks, Granger Predictability, Monetary Base, M1 Divisia, Swaps, Inflation.

JEL Code: Q43, E510, E520

1 Introduction

Oil shocks have been explained by episodes of unrest (Baumeister and Kilian, 2016), supply and demand (Kilian, 2009), monopoly power (Mankiw, 2014), and by money supply growth (Alquist et al., 2013). There is a lack of consensus especially about the 2009-2014 oil price "shock". For example, unrest and monopoly power theses are countered by US oil fracking creating a tremendous oil supply increase during the 2009-2014 period.

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