

Discussion

Learning in the Oil Futures Market:
Evidence & Macroeconomic Implications

Brent Bundick
Federal Reserve Bank of Kansas City

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The opinions expressed herein are those of the authors & do not reflect the views of the Federal Reserve Bank of Kansas City or Federal Reserve System.

Compelling explanation for outcomes in oil & futures markets

I highly suggest reading the paper

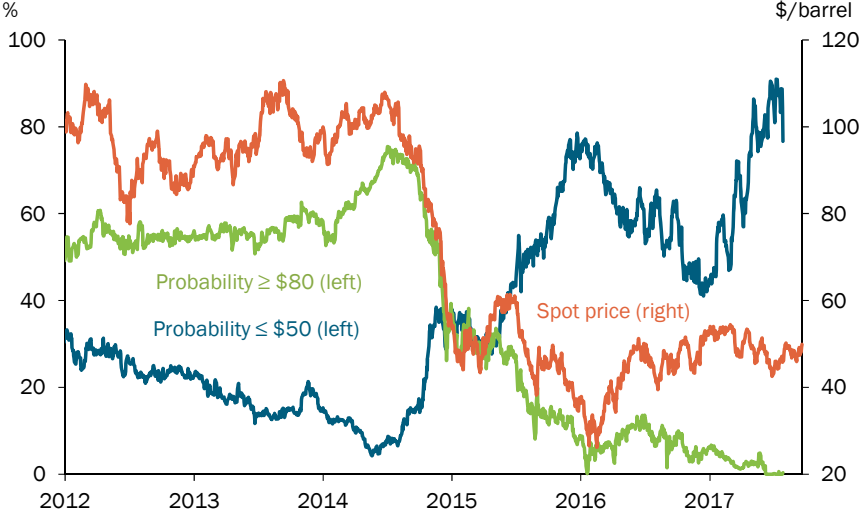
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Comments

1. Can option markets also help us understand the recent decline?
2. What are the empirical effects of temporary or permanent shocks?
3. Additional applications of their intuitive explanation

Options-Implied Probabilities For December 2017



Empirical Effects of Filtered Oil Shocks

Estimate VAR(1) over the 1999Q1 – 2015Q1 sample period

Temporary or permanent shock

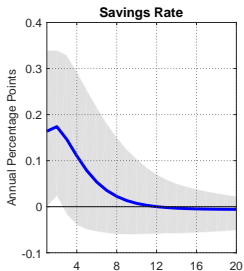
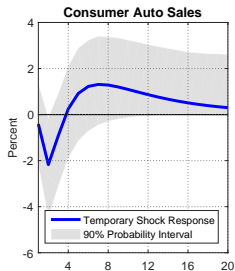
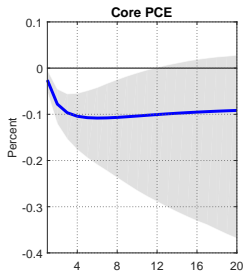
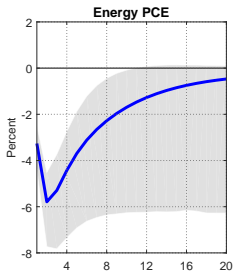
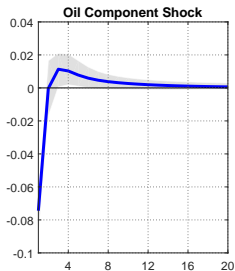
Energy & core PCE Inflation

Consumer automobile sales

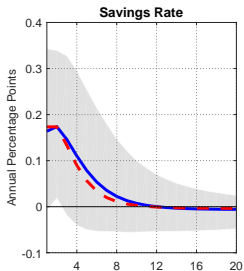
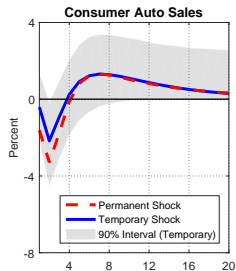
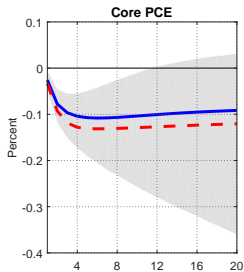
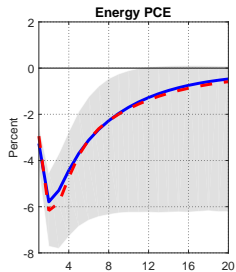
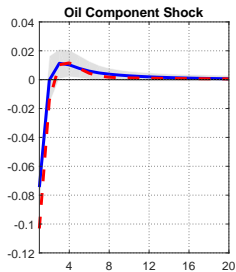
Household savings rate

Cholesky identification with oil shock ordered first

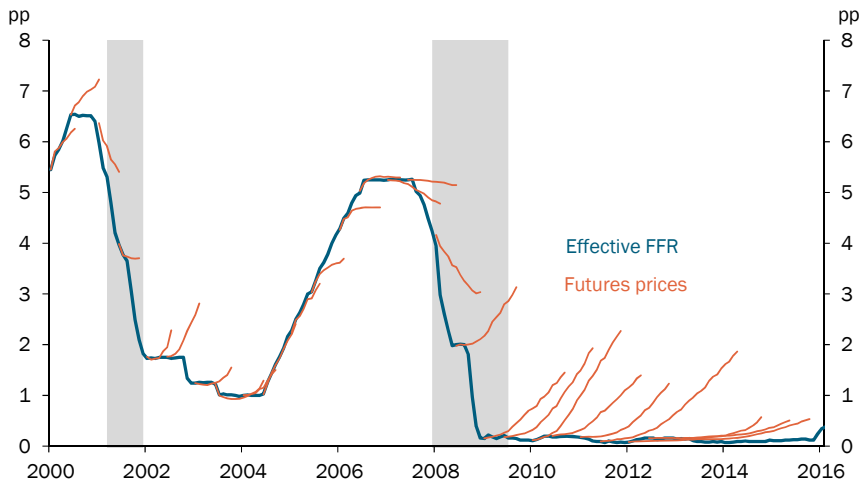
Empirical Responses to Temporary Oil Shock



A Permanent Shock to Oil Prices?



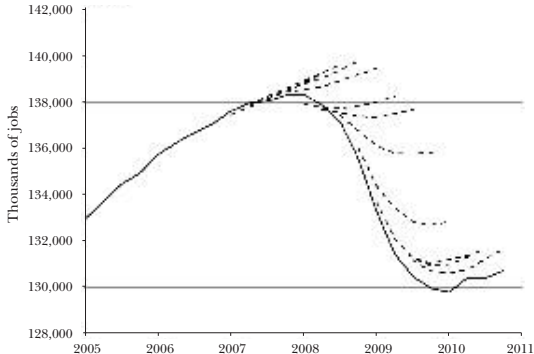
Additional Application: Learning About R^* ?



Explaining Employment Following the Great Recession

Figure 10

“The Mother of All Forecast Errors”: Survey of Professional Forecasters Median Forecast for Nonfarm Business Employment during the 2007–2009 Recession and Early Recovery



Source: Philadelphia Fed Survey of Professional Forecasters.

Note: This figure shows the real-time median forecast of the log of nonfarm employment recorded by the Survey of Professional Forecasters in the quarters leading up to and through the financial crisis. Even well after the crisis began and real-time information about the collapse of the economy was available, these forecasters consistently predicted a mild recession.

Source: Stock and Watson (2017)

Conclusions

Very interesting and intuitive explanation

Use empirical checks to help select among filtering models

Broader conclusions

Futures markets remain useful for policymakers

Forecasting the macroeconomy is extremely difficult

Futures markets provide view on market perceptions