Graduate Seminar

Department of Economics and Finance

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MA Candidate

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Crude oil price and Macroeconomic relationship: A Factor Augmented Vector Error Correction Approach.

This paper critically examines short-run and long-run equilibrium relationship between crude oil prices and US macro-economy within the context of Factor-Augmented Vector Error Correction Model. We employed the principal component analysis to extract two common factors from hundred and twenty-one (121) US macroeconomic series between the periods of 1959Q1 to 2015Q4. In line with Lian, Jin and Ren (2014), the first factor is related to real economic activity whereas the second factor can be interpreted as monetary policy. We found both short and long-term equilibrium relationship between crude oil prices and real economic activity and monetary policy. The impulse responses analysis shows that a positive crude oil price shock has a significant negative impact on real economic activity and positive effect on monetary policy. Our major contribution is that FAVECM outperforms the traditional VECM. In particular, crude oil prices accounts for higher proportion of variability in real economic activity in the FAVECM. Hence, the FAVECM offers a simplified channel through which crude oil prices can affect the economy .

Date: Wednesday August 17th 2016 Time: 10:00am Room: Mackinnon 720