Exchange-Rates-Modelling

Marco Hassan

May 17, 2019

Outline

Work in progress..

Download the data using quantmod. Multiple data provider: OECD, FED, SNB, BJP etc. . .

Data cleaning:

- Step 1: detrend the data series.
- Step 2: check the seasonality frequency using FFT
- Step 3: remove seasonality
- Step 4: Run unit root tests
- Step 5: Perform structural break tests

Linear Modelling:

Step 1: Random Walk forecasting with multiple lags.

Step 2: VAR

2.1 Lag estimation via information criteria and likelihood ratio tests.

2.2 Model estimation via maximum likelihood.

2.3 Variance decomposition of the implied impulse response and the within implied vector moving average model in order to check for endogeneity in the series.

Step 3: ARIMAX

Out of Sample Performance:

In detrended and seasonally adjusted series \LaTeX \LaTeX