



BANK FOR INTERNATIONAL SETTLEMENTS

Nowcasting and big data

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*Discussion of the papers by:
Galbraith and Tkacz
Koop and Onorante*

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Nowcasting and policy making

- Need to gauge the state of the economy in real time
- But key series available with considerable lags
 - and often revised
- Use indicators available at a higher frequency
 - and possibly stable
- Bridge equations (Baffigi, Golinelli and Parigi 2004)
- Use of large datasets: Giannone, Reichlin and Small (2008)

Are large datasets worth the effort?

Small

- Easy to implement and maintain
- Indicator may not be timely (eg Industrial production)
- One single indicator may perform differently over different phases of the business cycle

Large

- Optimally exploit all information available
- Real-time revisions of the forecasts
- Key series drive the results

Forecasts based on PMI are hard to beat (Lombardi and Meier 2011)

Large datasets vs Big data

- The two papers summarize the information contained in large datasets:
 - Payment data (Galbraith and Tkacz)
 - Google data (Koop and Onorante)
- Neither paper uses PMIs...



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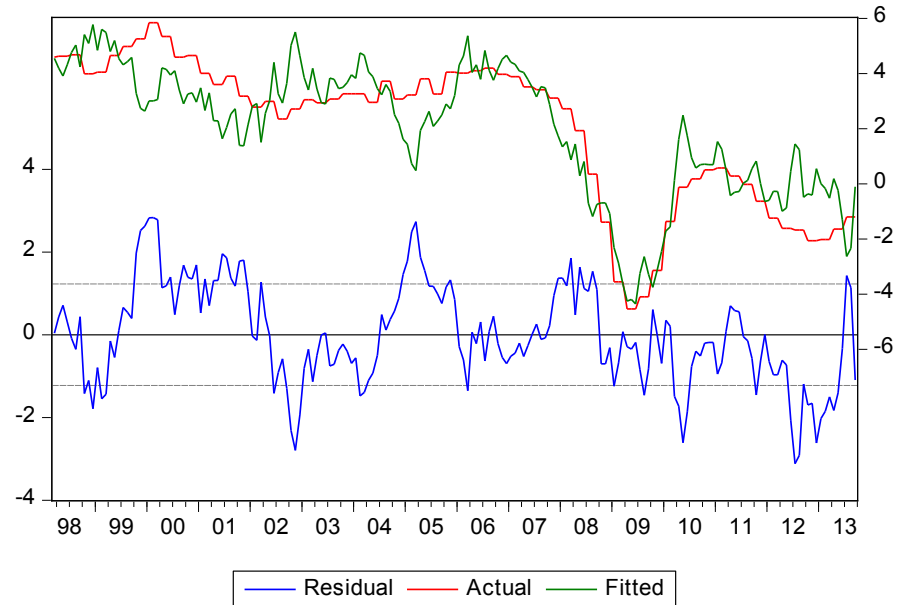
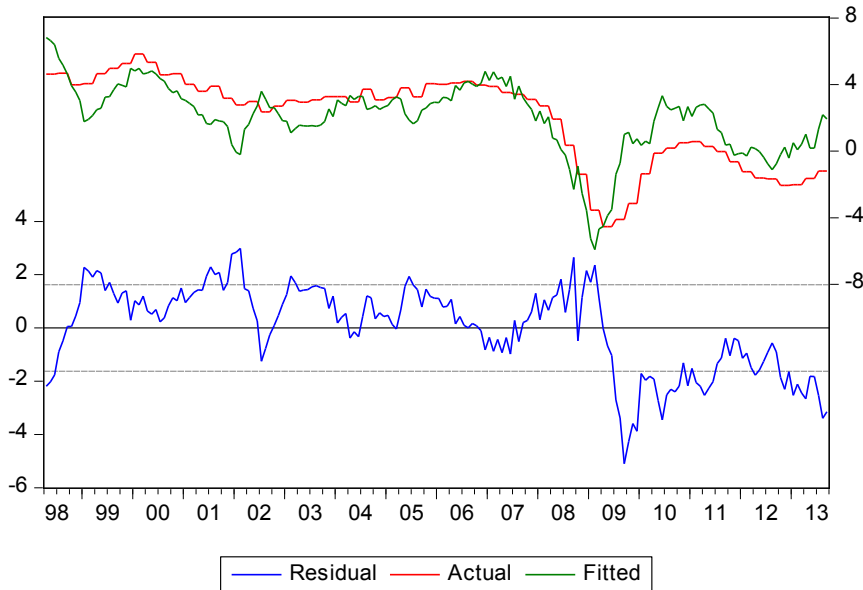
Galbraith and Tkacz



Timeliness

- The appeal of payment data lies in its timeliness
 - In principle, forecasts could be updated at daily frequency
- CLI is not as timely
 - Why not use PMI instead?
- Time-varying coefficients to capture the different role of payments at different stages of the cycle?

Bridge equation: PMI vs SNCE values



$relmse_{vol} =$
0.8712 0.6820 0.5686
 $relmse_{pmi} =$
0.8456 0.8181 0.8014



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Koop and Onorante



Google probabilities

- Original use of Google data: model selection
 - Clever idea!
 - Would be interesting to see time-varying weights over the business cycle
- But focus of the exercise is a bit unclear:
 - Forecasts of real and nominal variables
 - Shouldn't explanatory variables be chosen according to the dependent?
 - Why would you nowcast the oil price?