Discussion of

“A New Comparative Approach to Macroeconomic Modeling and Policy Analysis"

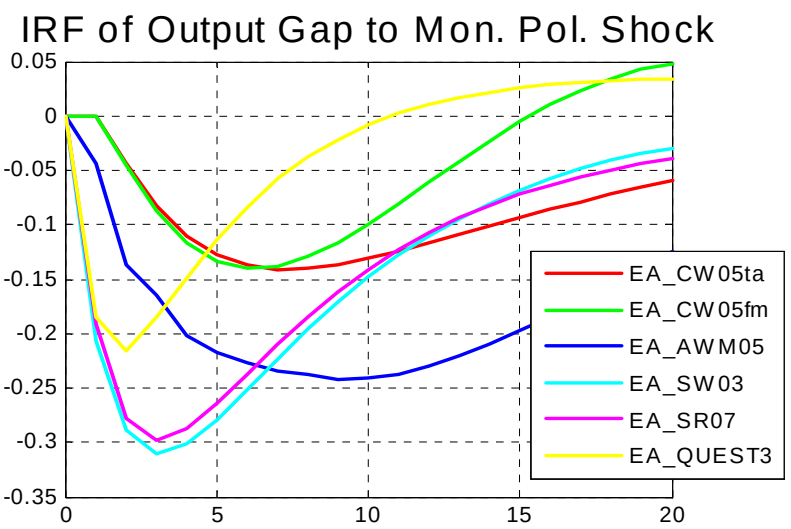
Volker Wieland, Tobias Cwik, Gernot J. Müller,
Sebastian Schmidt and Maik Wolters

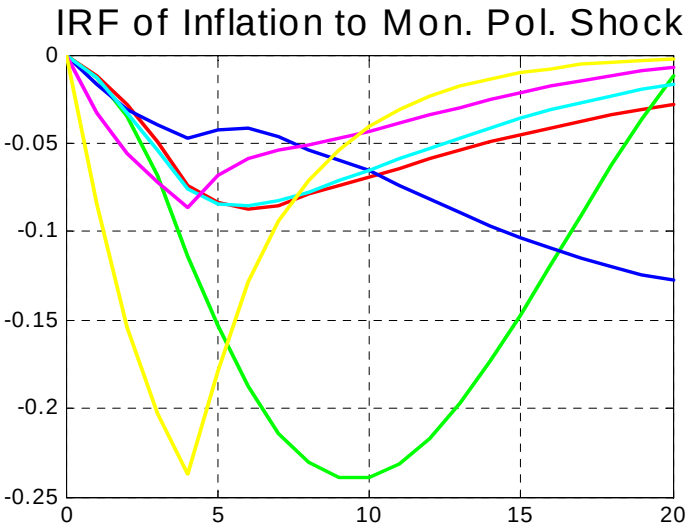
by Raf Wouters (NBB)

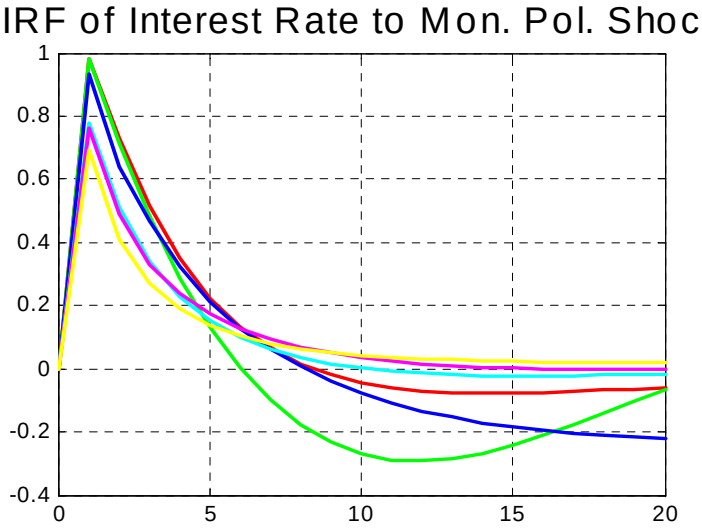
Monetary Policy Transmission Mechanism in the Euro Area in its first 10 Years,
ECB-Workshop, Frankfurt, 28-29 September 2009

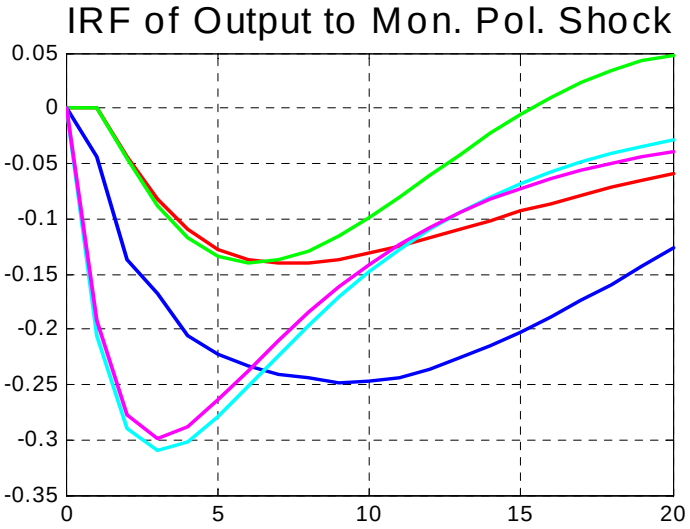
This project and the underlying model database

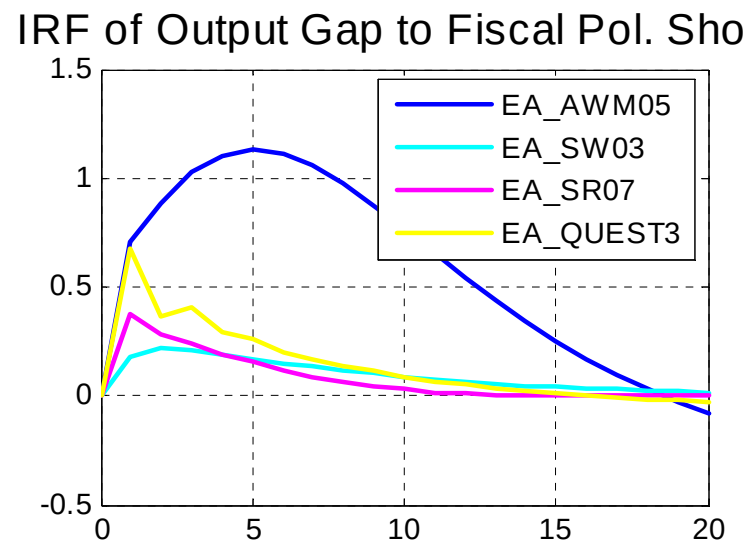
- is an extremely useful instrument for monetary policy analysis;
- contains an interesting selection of existing academic and central bank models;
- the setup with common variables simplifies a cross-model comparison exercise;
- the organisation is very user-friendly.

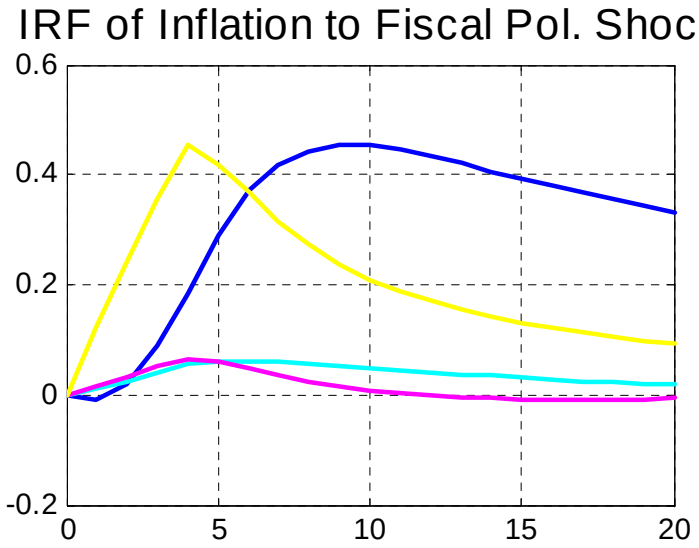


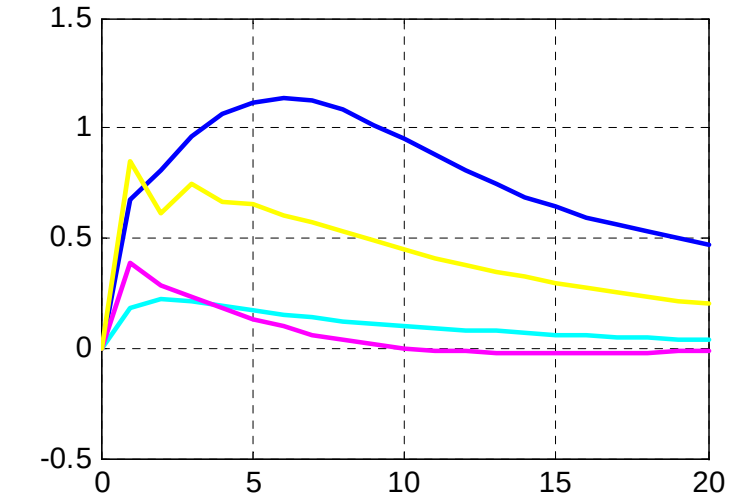


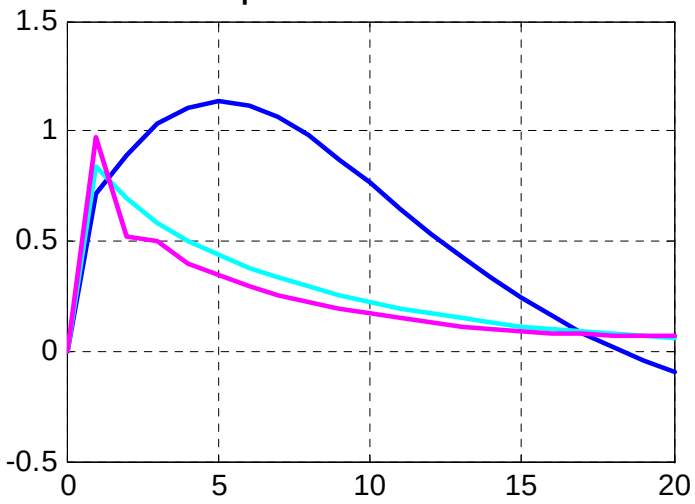












Possible applications: model comparison

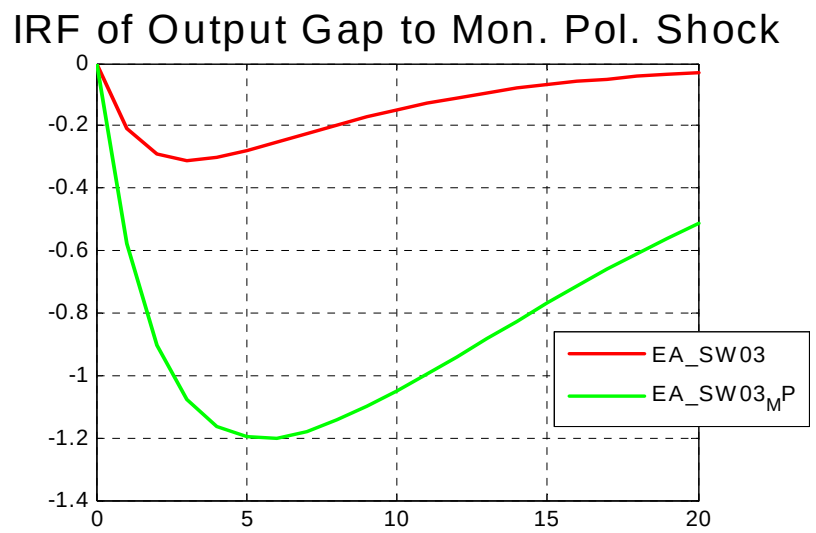
- Comparison of the transmission mechanism of monetary policy shocks across models:
  - relation aggregate demand (output gap, demand components) - real interest rate;
  - relation marginal cost - output gap;
  - relation inflation - marginal cost;

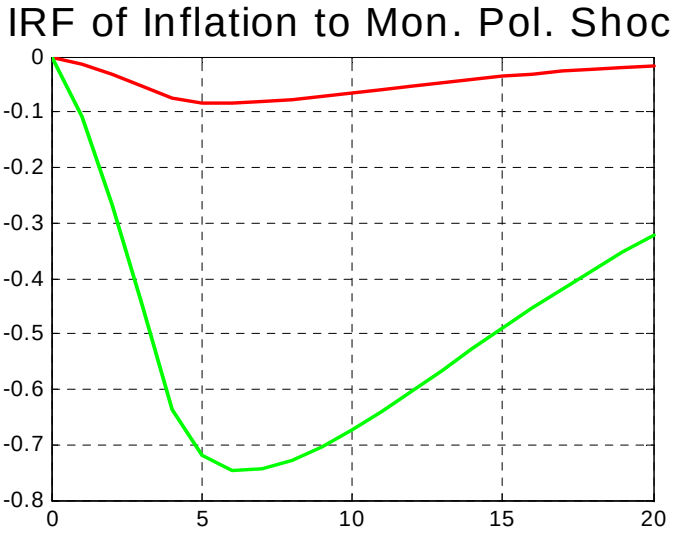
Useful extensions in this context:

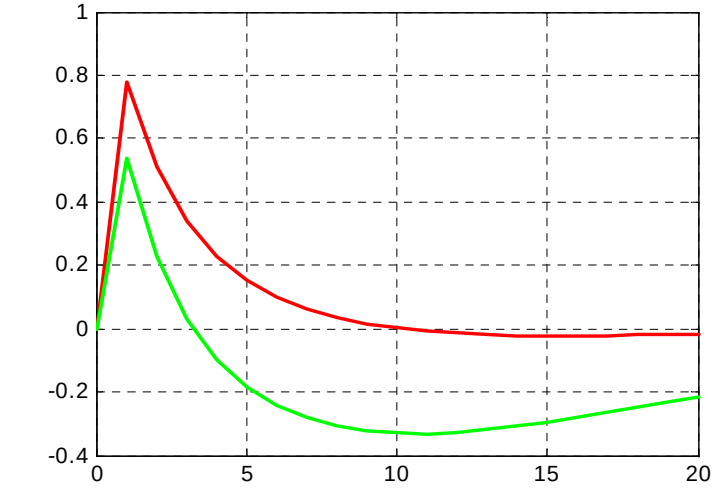
⇒ larger common variable set: real interest rate, marginal cost, demand components.

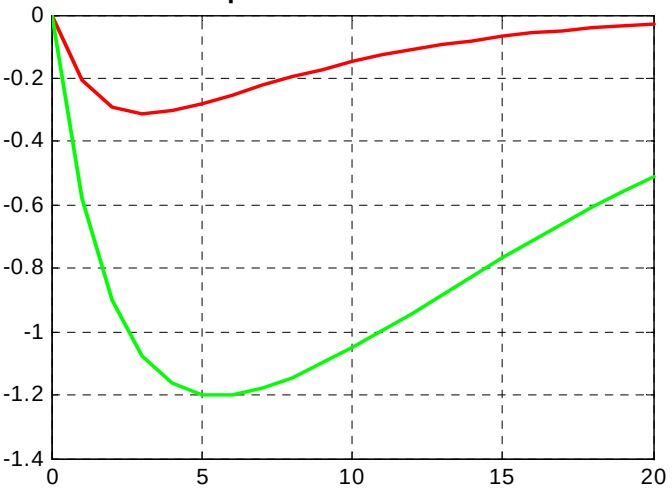
⇒ option for cross-correlation or covariance matrix for different leads & lags.

⇒ option to use the model specific monetary policy rule









Possible applications: robust optimal monetary policy rules

- Research on robust monetary policy rules across models for the euro area has been limited:
  - Adalid, Coenen, McAdam, Siviero (IJCB 2005)
  - Kuester, Wieland, forthcoming JEEA

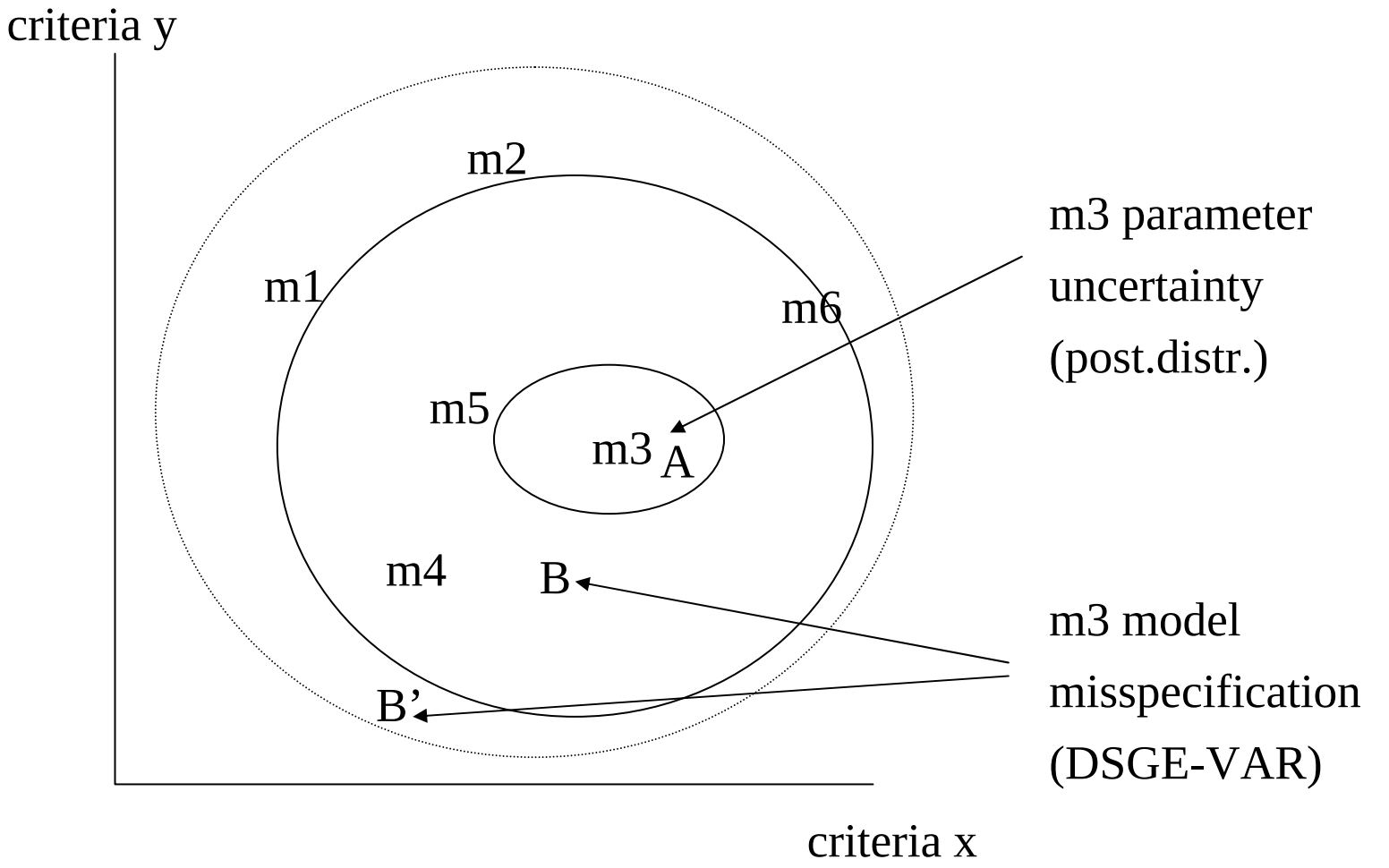
- Resulting robust rules tend to be dominated by the OMP in the backward-looking & reduced form models:
  - aggressive and low-inertia rules work relatively well in all models, while the history-dependent rules perform badly in BL-RF models;
  - partially solved by considering forward-looking MP rules or by using Bayesian model averaging instead of Minimax methods;

- Alternative approaches are possible for analysing robust MP rules:
  - Consider a discrete set of models:

    How much weight should we give to backward looking models ?
  - Consider parameter uncertainty and/or model misspecification for a given model:

    Del Negro & Schorfheide 2009

Possible applications: robust optimal monetary policy rules



Possible applications: robust optimal monetary policy rules

- Useful to have information on parameter uncertainty (and model misspecification):

  ⇒ adding posterior distribution information on parameters would be a useful extension

  ⇒ information on the posterior model probabilities allows for Bayesian averaging instead of extreme Minimax approach

Possible applications: fiscal policy analysis

- The model database allows to compare discretionary fiscal policy shocks
  - But there is not a simple fiscal multiplier !

- Recent discussion on fiscal policy suggests that the systematic fiscal policy rule is crucial for the outcomes
  - anticipated versus unanticipated shocks: Cwik et al (2009), Ramey (2008), Mertens and Ravn (2009)
  - persistence and reversals of policy measures: Corsetti et al (2009), Laxton (2009)

- Detailed fiscal block and fiscal policy rules are typically missing in most of the models in this database

Possible applications: empirical analysis

- Most of the models are empirically estimated, so it would be interesting to compare the models in terms of:
  - business cycle accounting: variance decomposition of the data/cycle in terms of the various shocks;
  - historical decompositions of the historical and actual data: which shocks are responsible for the recessions and the booms;
  - forecasting implications;
  - projections under alternative policy rules;

=> including original (and updated) databases;

=> updating of the estimated parameters.

The model database illustrates how similar the existing macro models are:

- The models differ mainly in terms of size, role of expectations, relative weight to forward or backward looking dynamics;

- most belong to the class of new-keynesian models: imperfect competition, sticky price-wage assumption, RE, perfect capital markets, infinite horizon households:
  - ⇔ flexible price and wages (no info on marginal cost or mrs) with different source of stickiness;
  - ⇔ optimal price and wage rigidities due to risk sharing or efficiency wages;
  - ⇔ limited capital market participation, liquidity or credit constraints
  - ⇔ increasing returns to scale or externalities => multiple equilibria and endogenous cycles;

- same list of endogenous variables:
  - ⇔ no role for financial variables (asset prices, monetary variables, risk premiums, defaults),
  - ⇔ labor market variables (labor participation, vacancies, layoffs, new hiring),
  - ⇔ detailed fiscal policy, etc.

- reduced form dynamics or rational expectations:
  - ⇔ explicit survey information on expectations or confidence;
  - ⇔ learning dynamics

Concluding

- Very useful work !
- and I hope that this model database will stimulate research using existing macromodels,
- and that in the future many new models will be developed and included in this database.