

# The Macroeconomic Model Data Base

Version 2.0, [www.macromodelbase.com](http://www.macromodelbase.com)



March 12, 2014

## What is new?

The MMB 2.0 features:

- Greater functionality
- A user-friendly interface
- Enlarged model data base

## Greater functionality

The MMB 2.0 offers an extended menu of:

- **Exercises to perform:**
  - One policy rule, many models
  - One model, many policy rules
- **Models to choose from:**
  - Calibrated models (14)
  - Estimated US models (26)
  - Estimated Euro Area models (9)
  - Calibrated/Estimated multi-country models (7)
  - Estimated other country models (5)
- **Monetary policy rules to choose from:**
  - Common policy rules (7)
  - User-specified policy rule
  - Model-specific policy rule (42)

In addition, MMB offers the possibility for studying individual models in detail under their model-specific rules and shocks. This allows the replication of the original results in the paper of the model developers.

## Software requirements

The MMB 2.0 runs on MATLAB and DYNARE. The software is currently compatible with DYNARE 4.2, 4.3, 4.4.0, 4.4.1 and 4.4.2. For more details please refer to the MMB documentation provided with the software and to:

- [1] Wieland, Volker, Tobias Cwik, Gernot J. Mueller, Sebastian Schmidt and Maik Wolters: *A New comparative approach to macroeconomic modeling and policy analysis*, Journal of Economic Behavior and Organization, August 2012, Vol. 83, 523-541.
- [2] Taylor, John B. and Volker Wieland: *Surprising Comparative Properties of Monetary Models: Results from a New Monetary Model Base*. Review of Economics and Statistics, August 2012, Vol. 94 (3), 800-816.

## Coming next on MMB

We are currently working on two additional features:

- Robust policy rules
- Adaptive learning in expectations formation

The first option will allow the MMB user to determine robust monetary policy rules that perform well across a set of models. The second option, available in MMB 1.2., will be integrated soon under the new MMB interface.

## Acknowledgment

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## A few words....

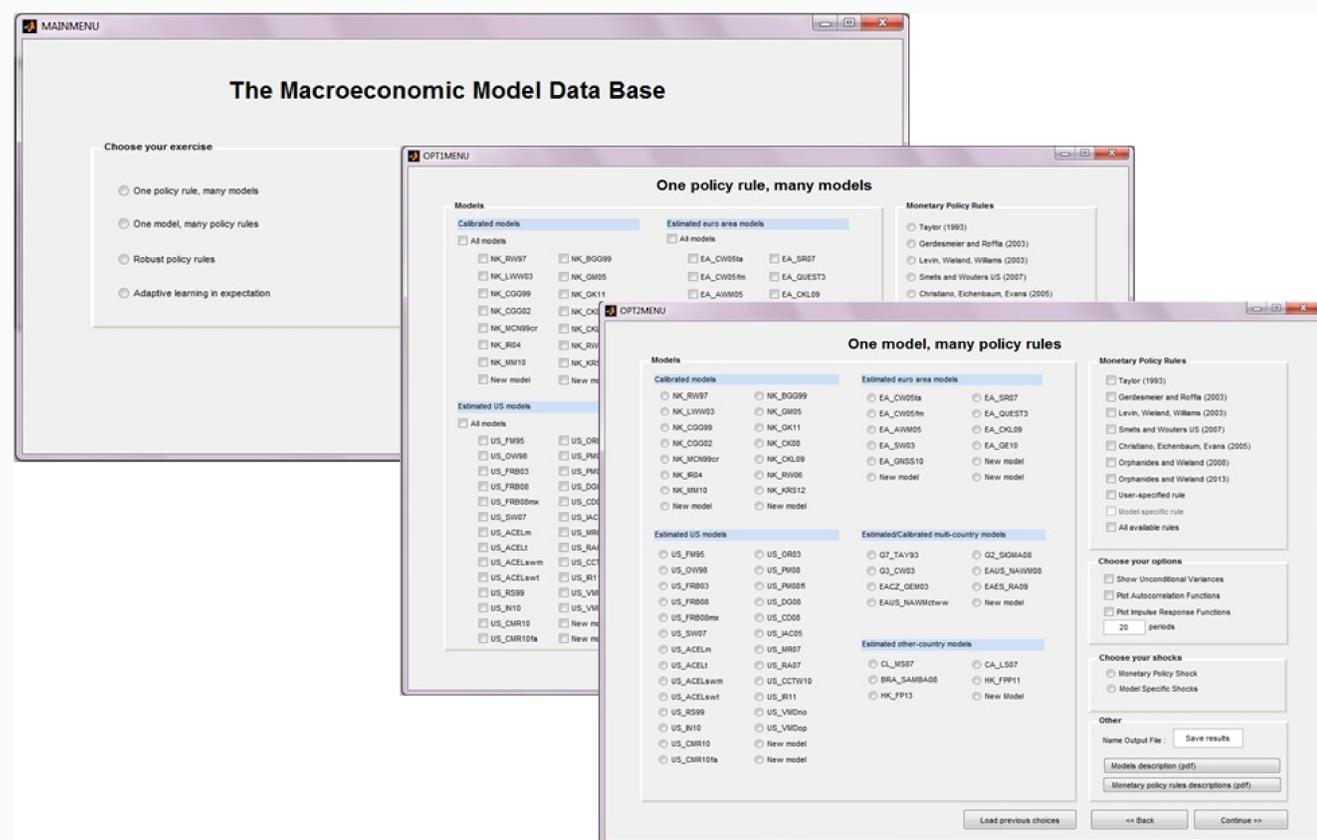
The Macroeconomic Model Data Base (MMB) is a publicly available model archive, based on a common computational platform, that enables individual researchers to conduct model comparisons easily and on a large scale. The MMB 2.0 extends the range of exercises and services offered to users in earlier versions. In addition to model comparisons, the MMB user can conduct model analysis under alternative monetary policy rules using a professional and user-friendly front end. The MMB 2.0 includes 61 well-known macroeconomic models. The new additions include models developed in the aftermath of the financial crisis that comprise a detailed modeling of the financial sector. The menu of common monetary policy rules has been extended. Now it offers to MMB users the option to specify their desired rule or to use the original model-specific rule. The MMB can also be expanded by users with new policy rules and models.



Volker Wieland

## A user-friendly interface

The interface for MMB 2.0 is easy and efficient to operate. The user can set key simulation parameters to compute and compare important model and policy characteristics. The new interface is also flexible (allows the user to go back or to load previous choices) and informative (backed up with easily accessed model and policy rules descriptions and guides).



## Policy analysis and comparison with MMB 2.0

Under the *One policy rule, many models* feature, one can conduct model comparison and analysis for a particular monetary policy rule. An example is given in the figure on the right, depicting the responses of the output gap and annual inflation to a monetary policy shock in several estimated US models, under the Smets and Wouters (2007) monetary policy rule.

With *One model, many policy rules*, one can conduct analysis for a particular model under several monetary policy rules. The second figure depicts the responses of the output gap and annual inflation to a monetary policy shock in the Iacoviello and Neri (2010) model. This model features a multi-sector structure with housing and non-housing goods and financial frictions in the household sector, introduced through a collateral constraint imposed on a fraction of households.

