

# Enhancing the ECB's monetary analysis: what have we learnt?

**Jürgen Stark**

**Member of the Executive Board and the Governing Council of the  
European Central Bank**

**The ECB and its Watchers**

**Frankfurt/Main**

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# The “enhancing monetary analysis” agenda

1. **Improving money demand models**
2. **Improving money-based indicator models**
3. **Further work on structural models**
- 4A. **Developing cross checking and risk analysis**
- 4B. **Using money / credit as indicators for asset prices**

# Selected ECB working papers available from the enhancement agenda

## 1. Improving money demand

- ❑ “Euro area money demand and international portfolio allocation” [ECB WP No. 926 08/08](#)
- ❑ “A stable model for euro area money demand: the role of wealth revisited” [ECB WP No. 1111 11/09](#)
- ❑ “Explaining the money demand of non-financial corporations in the euro area” [forthcoming](#)
- ❑ “Household money demand in the euro area” [forthcoming](#)

## 2. Improving money-based indicator models

- ❑ “Do monetary indicators lead euro area inflation?” [ECB WP No. 867 02/08](#)
- ❑ “Money growth and inflation: a regime switching approach” [ECB WP No. 1207 06/10](#)
- ❑ “Money, credit, monetary policy and the business cycle in the euro area” [forthcoming](#)

## 3. Further work on structural models

- ❑ “Monetary Policy and Stock Market Boom-Bust Cycles” [ECB WP No 955 10/08](#)
- ❑ “Financial Factors in Economic Fluctuations” [ECB WP No 1192 05/10](#)

- ❑ “Securitisation and the bank lending channel” [ECB WP No. 838 12/07](#)
- ❑ “Do bank loans have an effect on output? A panel data approach for the euro area” [ECB WP No. 1150 11/10](#)

## 4A. Developing cross checking

- ❑ “The effects of monetary policy in the euro area: results from the flow of funds” [draft paper](#)
- ❑ “Wealth effects on consumption: evidence from the euro area” [ECB WP 1050 05/09](#)
- ❑ “Modelling loans to non-financial corporations in the euro area” [ECB WP 989 01/09](#)

## 4B. Money/credit and asset prices

- ❑ “Real Time’ Early Warning Indicators for Costly Asset Price Boom/Bust Cycles: A Role for Global Liquidity” [ECB WP No 1039 03/09](#)
- ❑ “Asset price misalignments and the role of money and credit” [ECB WP No 1068 07/09](#)
- ❑ “Booms and busts in housing markets: determinants and implications” [ECB WP No 1071 07/09](#)

# Example – Stability of money demand

- Stability has been re-established (*De Santis et al; Beyer; Hall et al; Greiber and Setzer; etc*)
- Achieved through explicit modelling of “portfolio shifts” in the MD framework (*representing continuity with real time analysis*)
  - Inclusion of wealth variables
  - Broader set of opportunity cost variables / asset prices (*incl. foreign yields / returns*)
  - Adoption of a system (rather than “single equation”) approach

# Technical refinement of tools to define historical regularities in the monetary data

- Comprehensive set of models using new techniques and exploring much richer data sets (e.g. *interactions with more real variables, richer representation of MFI balance sheet, interaction with broader set of financial spreads and yields*) used to define empirical benchmarks ...  
e.g. *B-VAR (Giannone et al.); augmented money demand (Beyer, De Santis et al.); DSGE (CMR)*

# Technical refinement of tools: inflation risk indicators

- Application of 'state-of-the-art' tools to construct money-based inflation risk indicators.
- In past: Reliance on set of simple bivariate models (with results that proved relatively robust, but hard to interpret and communicate) ...
- Now: New models based on methodologies already widely exploited in the economic analysis ...  
*e.g. regime-switching model (Amisano and Fagan)*

# Achievements: Progress, not perfection

- We have **better tools** – “enhancement” has been achieved.
  - Identifying the relationship between trends in monetary variables and prices in real time remains challenging:
    - Transmission channels are complex and evolving;
    - Such analysis is technically challenging (*cf. potential output*).
    - Structural equilibrium models describe deviation from trend rather than in levels
    - Structural equilibrium models bridge the real and nominal sphere, but cannot be construed as creating a single fat pillar.
- ⇒ **Implications**: (1) Progress has been achieved in improving the analytical toolbox for monetary analysis; but (2) experience in pursuing the agenda has demonstrated that no single model can integrate all elements of the monetary analysis simultaneously

# Conclusions

1. Improvement of tools has been evolutionary, not revolutionary
2. A high degree of continuity has been maintained:
  - Results of agenda support monetary policy strategy;
  - Agenda provides better tools to implement the strategy.
3. Progress has been achieved through pursuit of the research agenda, but open questions remain ...
4. While it may support (and be supported by) other activities, focus of monetary analysis must remain price stability over the medium term.

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