ECB strategy: 3 years of pretence and reality

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Main message of my talk

- While the ECB's interest rate policy was quite successful,
- .... its announced strategy did not improve the understanding of its policy decisions.

The main target of the ECB

- Price stability over the medium-term
- Target range: „below 2 %“
- Outcomes for the Harmonised Index of Consumer Prices (HICP):
  - 1999: 1.1
  - 2000: 2.3
  - 2001: 2.6
  - 2002: 1.8

Secondary target: Support of the overall economic policy (Article 105)

- Growth rate of potential output as an implicit target: ≈ 2.5 %
- Outcomes for real GDP growth
  - 1999: 2.5
  - 2000: 3.4
  - 2001: 1.8; OECD: 1.5
  - 2002: 2.2; OECD: 1.5

Comparison with the Fed

- Loss function type I:

  $L = 0.5\ (\text{Output-Gap})^2 + 0.5\ (\text{Inflation rate}-2)^2$

- Average annual loss 1999-2001
  - EZB: 0.45
  - Fed: 1.50

Comparison with Fed II

- Loss function type II („inflation nutter“):

  $L=(\text{Inflation rate}-2)^2$

- Average loss 1999-2001
  - EZB: 0.27
  - Fed: 1.15

Assessment

- Policy outcomes are in line with the mandate of EC Treaty
- Slight deviations are compatible with theoretical recommendations for the situation of a supply shock
- Memorandum item: Germany during the the oil price shock 1982
  - Inflation: 5.2 %
  - Real GDP: -0.9 %

Which strategy stands behind this performance?

- Rationale of a strategy
- The „Two Pillar“ strategy of the ECB
- Alternative explanations

The rationale of a strategy

- The problem of monetary policy: Complex transmission process with long and variable lags
- The policy challenge: Setting the operating target (short-term interest rates) under uncertainty
- What is needed: a set of “simple rules”

Advantages of a strategy

- Facilitates the internal decision process of a large decision-making body
- Facilitates the dialogue with the public and increases the transparency and credibility of monetary policy

The “stability-oriented monetary policy strategy”

- Pillar 1: Reference value for the growth rate of M3
- Pillar 2: “Broadly based assessment of the outlook for future price developments”
- Non-Pillar: Flexible exchange rates with interventions in the case of large misalignments

The first pillar

- Theoretical basis: Quantity theory:

  $M\,V = P\,Y \Rightarrow dM = dY + \pi - dV$

- ECB derivation:
  - dY= growth rate of potential output (2% to 2.25 %)
  - π = target inflation rate (1.5 %)
  - dV = trend of velocity (-0.5% to -1 %)

The reference value for M3

- M3 growth target: +4.5 %
- No corridor
- Annual target: comparison of yoy rates with the reference value

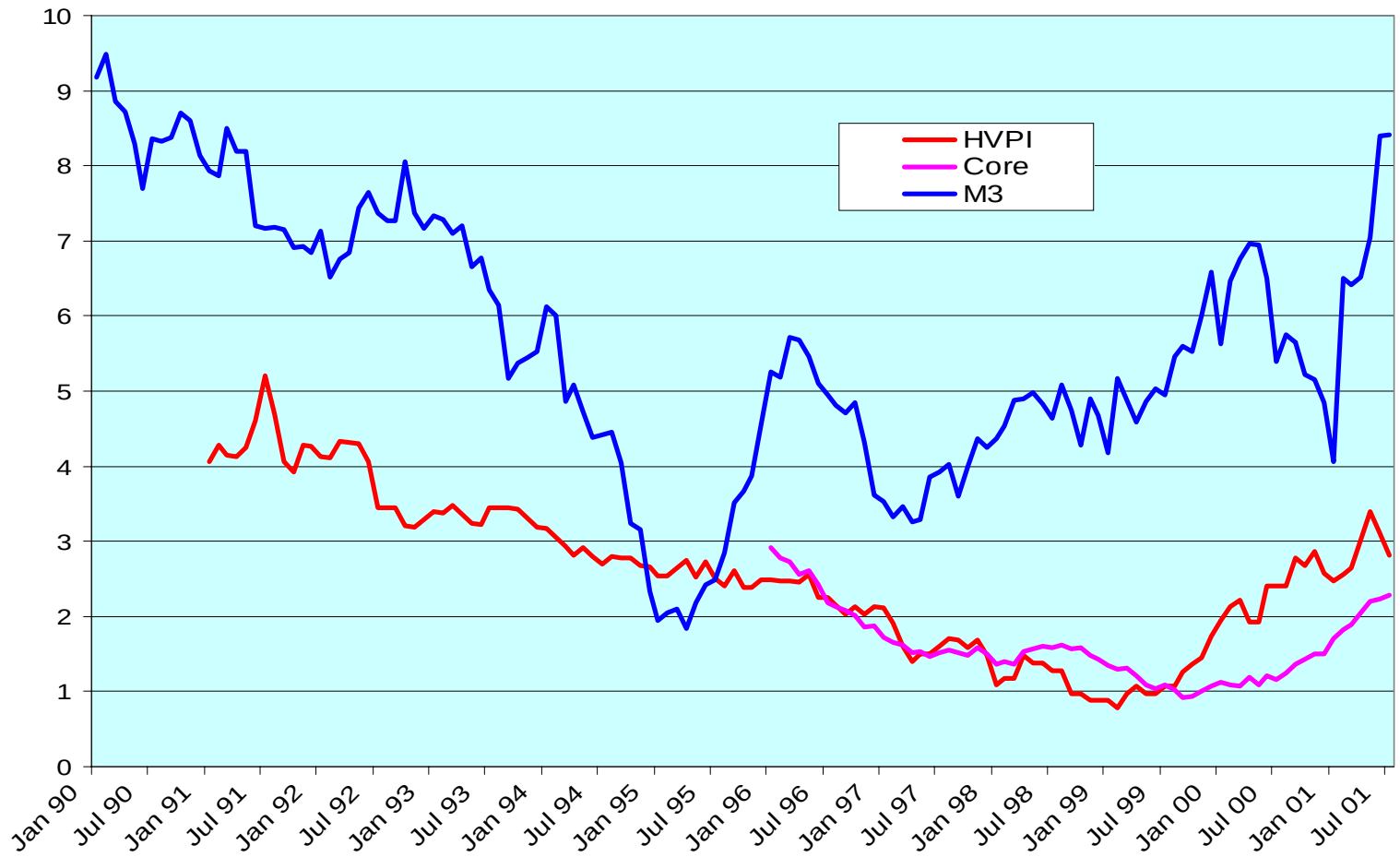
The simple rule

- Monetary growth rate is the most important indicator of future inflation
- If the actual monetary growth *exceeds* the target: *increase* interest rates
- If the actual monetary growth *falls short of* the target: *reduce* interest rates

Its limitations

- Money demand is very unstable in the short-run

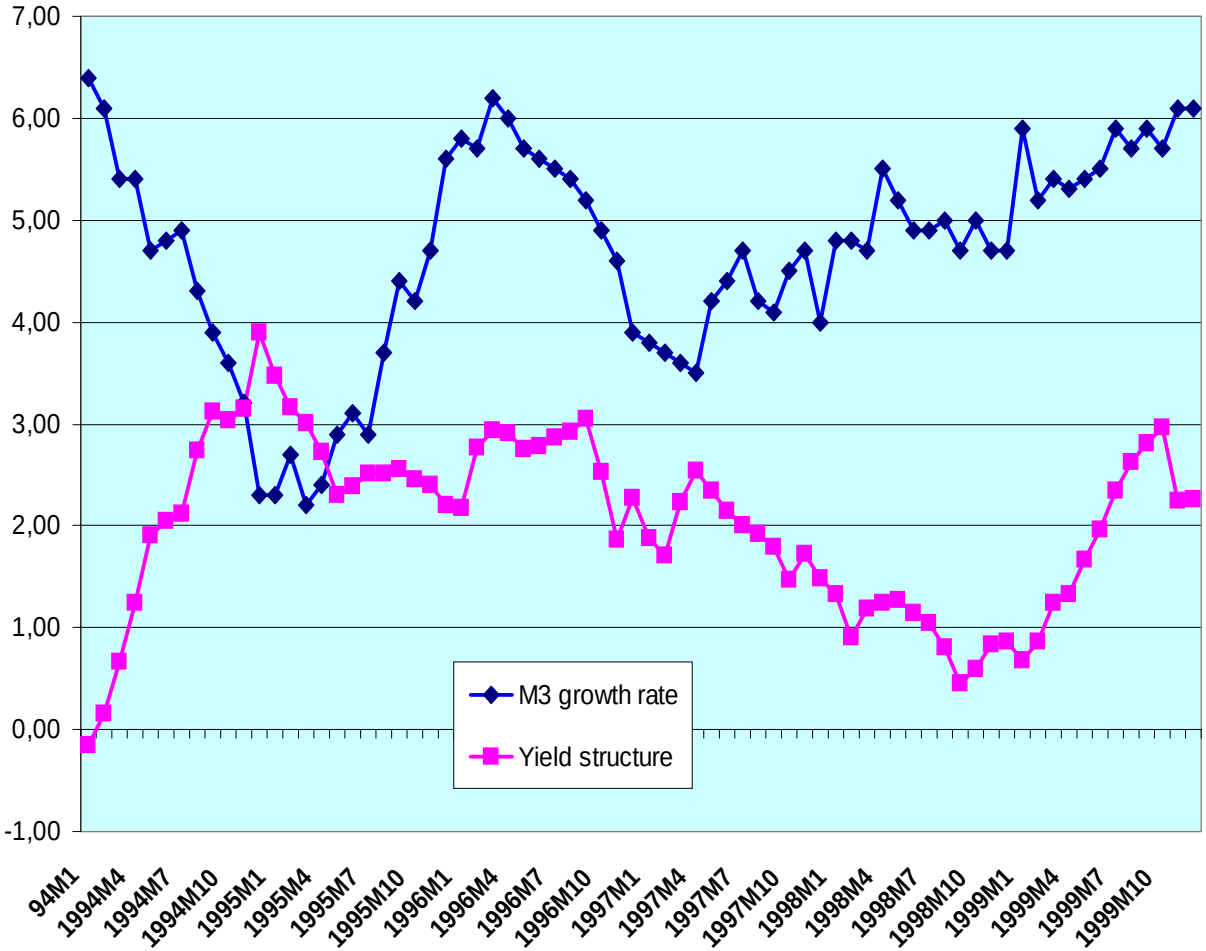
Money stock M3 and inflation



Its limitations

- Money demand is very unstable in the short-run
- Demand for euro M3 depends negatively on the difference between long-term and short-term rates

M3 growth and yield structure



The experience with the first pillar

- Monetary growth has exceeded the target from the beginning ...
- ... has become stronger *after* interest rate increases...
- ... but in spite of the oil price shock, inflation will be below 2 % in 2002.
- Ad-hoc re-definitions of M3 (excluding assets held by foreigners) did not increase transparency
- Interest rate policy cannot be consistently explained with the first pillar

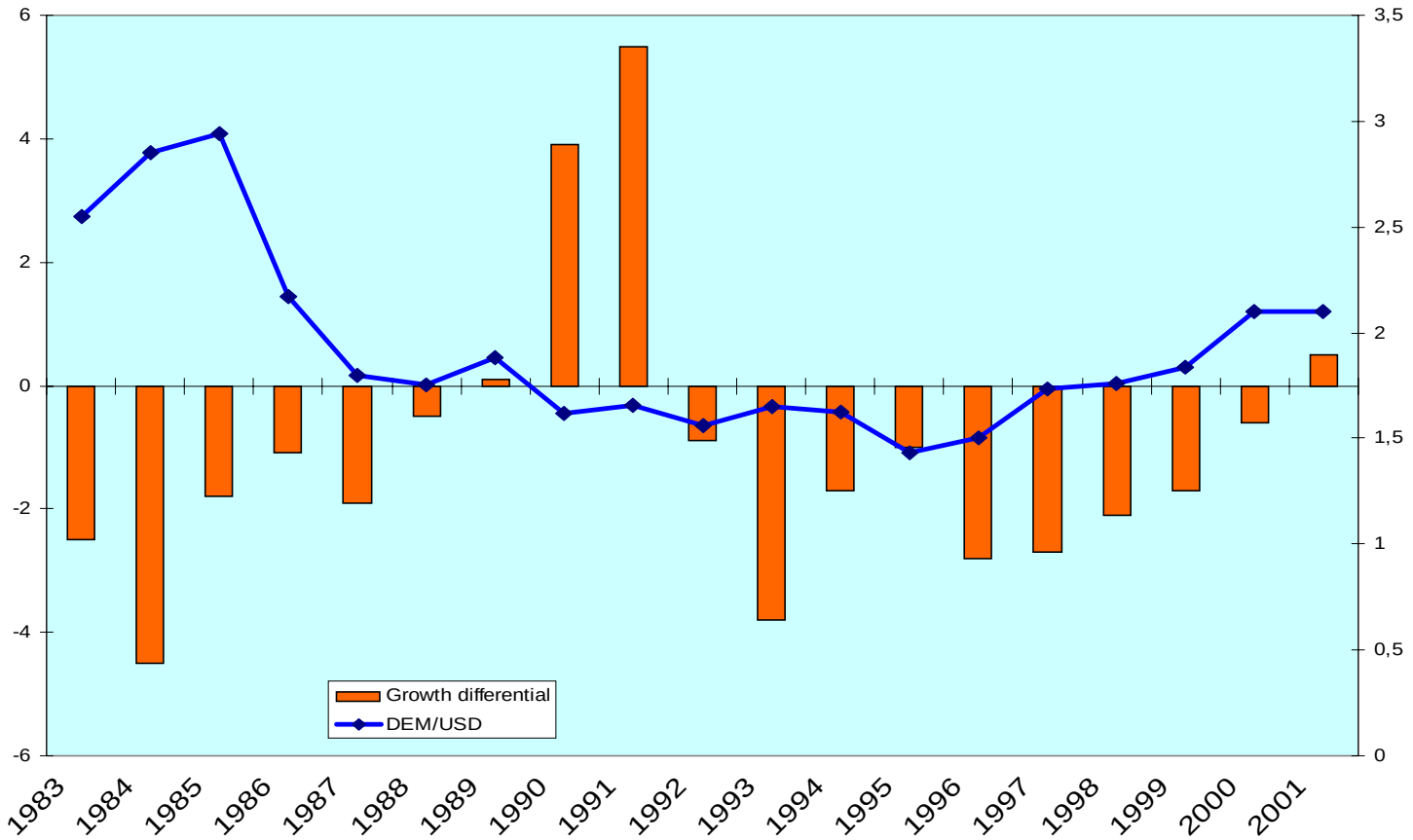
Pillar 2: “Broadly based assessment”

- ” ... includes inter alia: wages, the exchange rate, bond prices and the yield curve, various measures of real activity, fiscal policy indicators, price and cost indices and business and consumer surveys”.
- Thus: not a true strategy in the sense of a heuristic, ie a device for reducing the complexity of a decision process

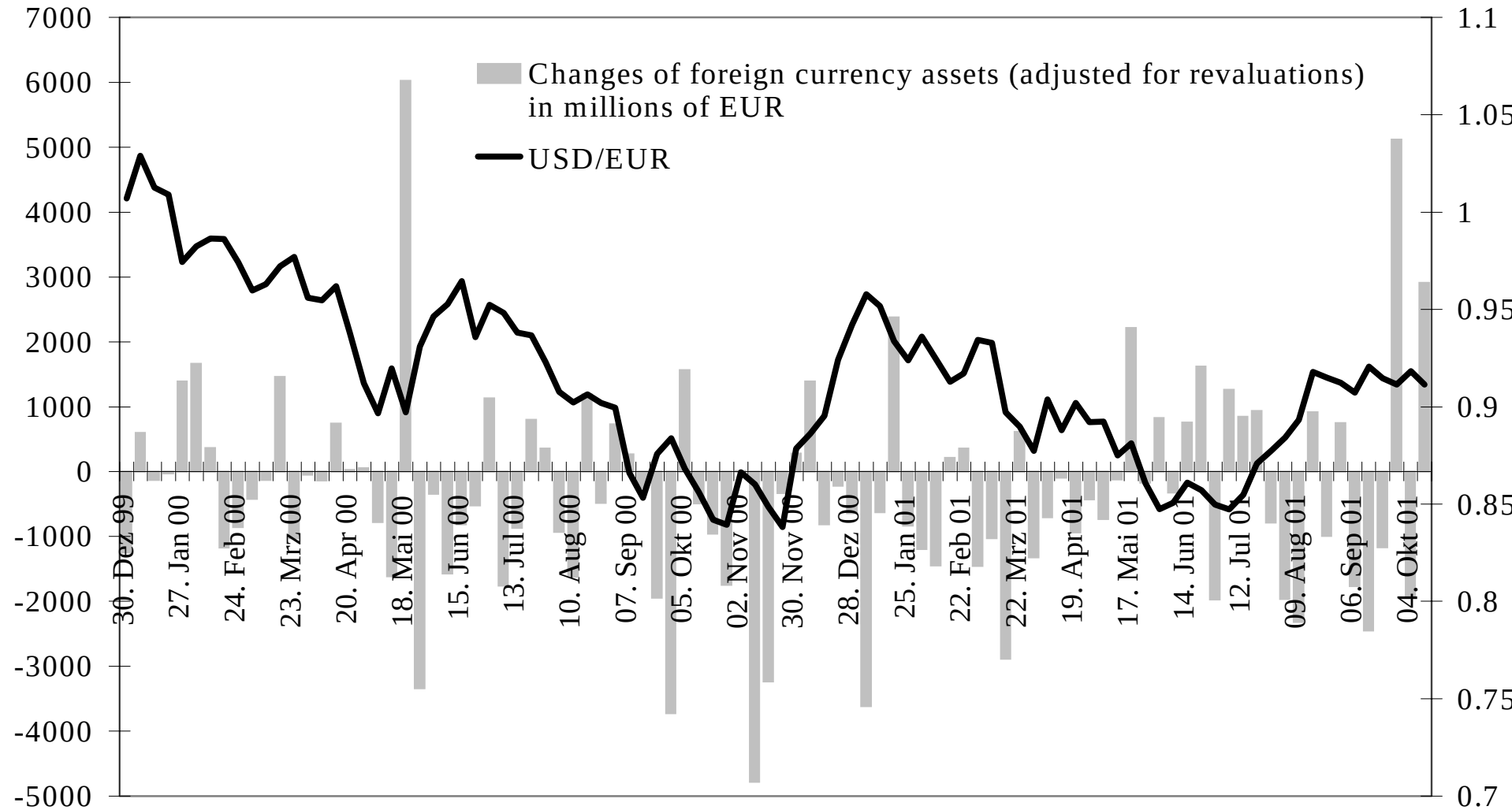
Exchange rate policy

- Original ECB philosophy: stable macroeconomic policies lead to stable exchange rates
- The reality is difficult to reconcile with this approach

Growth differential and DM/dollar exchange rate



ECB interventions on FX market



Interim assessment

- All three pillars of the ECB strategy do not contribute to a better understanding of the ECB's interest rate decisions
- Is inflation targeting an alternative?

The rule of IT

- Compare inflation forecast with inflation target
  - If forecast>target: increase interest rates
  - If forecast<target: reduce interest rates
- The problem: There is no simple rule for producing an inflation forecast
- Thus: IT is also not a heuristic, but mainly a marketing device for central banks

The inflation projections of the ECB staff

- Not an integral part of the strategy
- Published only two times a year
- Long lag between production and publication
- Not endorsed by the ECB Board

Information content of ECB projection (EP) and outside forecasts (OF)

- Availability of data, models, qualified researchers: EP≅OF

  ECB knows future interest path, but forecast is based on a constant rate

- Objectivity: EP<OF
- Risk of misinterpretation: EP>OF
- ➡ Projection has so far not played a major role in the debate on the ECB's policy

Useful elements of inflation targeting

- Private inflation forecasts as an indicator of future inflation
  - Surveys of professional forecasters and of households, managers etc
  - Information content of long-term bond yields
  - Information content of wage negotiations

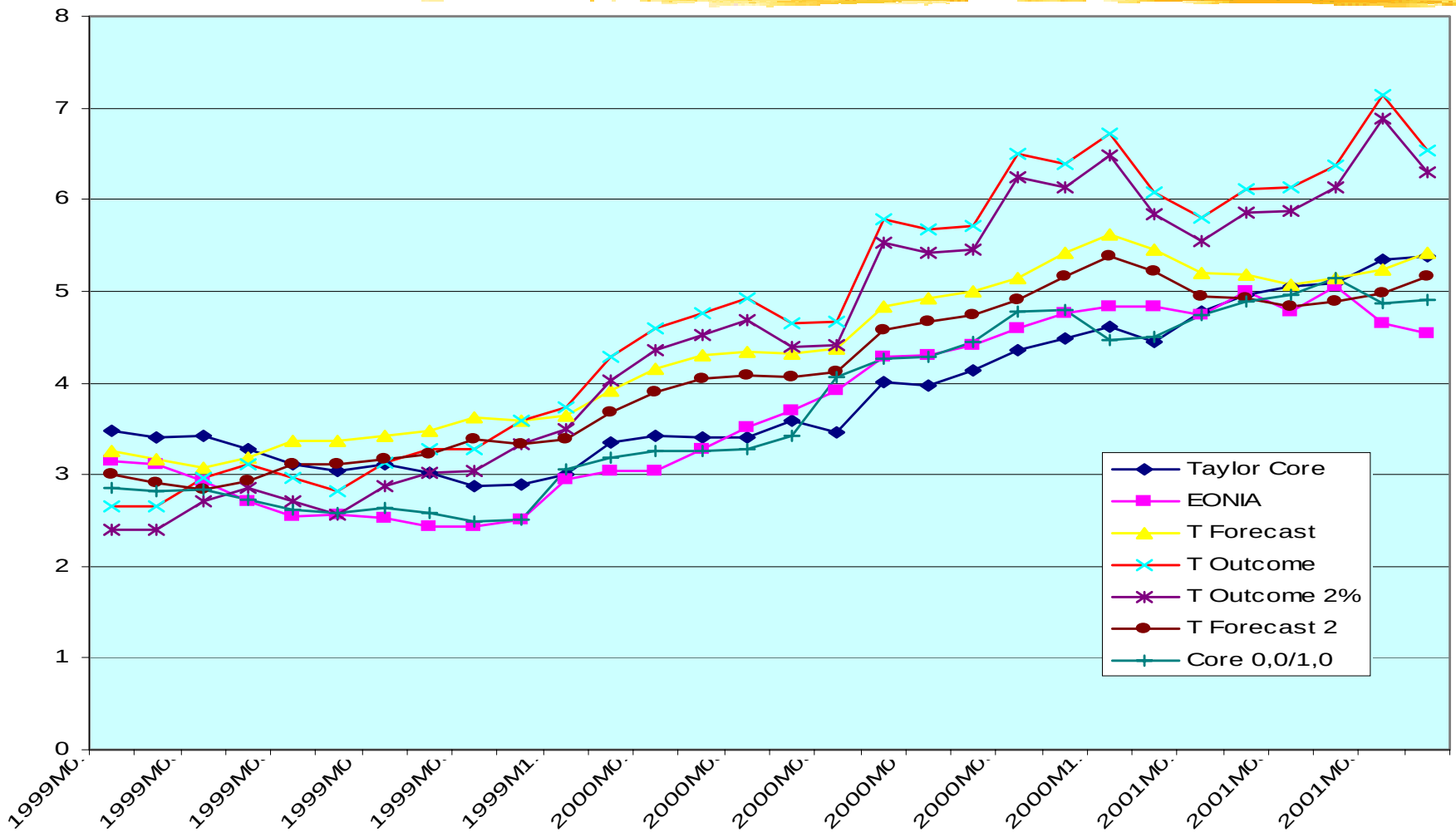
A simple rule: Taylor rule

- Original Taylor rule

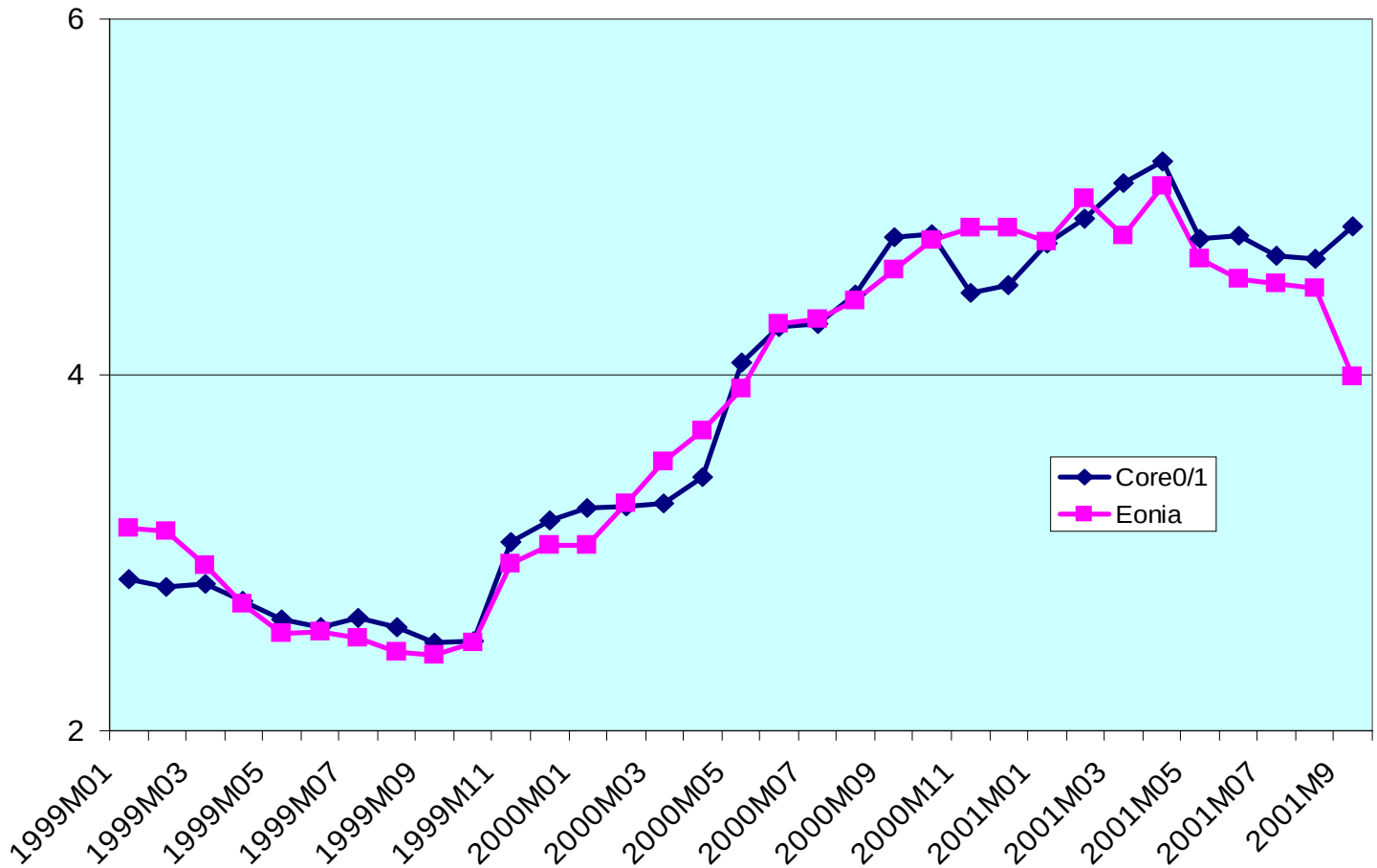
  $i = r + \pi + 0.5(\pi - 2) + 0.5(\text{gap})$

  - i: nominal short-term interest rate
  - r: average real short-term interest rate
  - π: inflation rate
- Benchmark for a neutral policy stance
- Deviations in case of demand shocks

Taylor rules for the euro area



The rule with the best explanatory power
i=2.7+ Core inflation + Output gap forecast



Result

- Neutral real interest rate: 2,7 %
- Core inflation rate for inflation term
- Forward looking data for OECD output gap
- Weighting factor for „inflation gap“ is 0, for output gap 1

Assessment

- Taylor rule is simple and robust
- Bundesbank has also followed a Taylor rule
- ECB approach relatively activist
  - Adequate for demand shocks
  - Problematic for supply shocks
  - But so far, the ECB has been quite right

Conclusion

- Overall policy was successful under a very difficult environment
- Strategy did not help to make the ECB's policy sufficiently transparent
- Two pillar approach needs a revamping
  - Monetary pillar is overrated and misleading
  - Broadly based assessment needs a clear focus on private inflation expectations
  - Taylor rule should be made more explicit