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: $\approx 2.5\%$

- 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 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:
  \[ M \cdot V = P \cdot Y \Rightarrow dM = dY + \pi - dV \]

- ECB derivation:
  - \( dY \): growth rate of potential output (2% to 2.25%)
  - \( \pi \): 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

Changes of foreign currency assets (adjusted for revaluations) in millions of EUR

USD/EUR
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
  - \( \pi \): 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
\[ i = 2.7 + \text{Core inflation} + \text{Output gap forecast} \]
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