Surviving the Slowdown.
Monetary Policies in Euroland

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Introduction:

- Topics to be discussed
  - ECB versus FED during recent recession
  - The monetary policy strategy of the ECB
  - The challenges from enlargement:
The ECB versus the FED during the recession
• The ECB has done reasonably good job at maintaining price stability.
• Yet the perception is that the ECB has a lousy performance,
• ....and is very conservative
• We show that the ECB has pretty much reacted in the same way to economic shocks as the US Fed
• This may not seem obvious during the recession that started in 2001
The Fed reduced the interest rates faster and more strongly than ECB during recent recession.
• Is this evidence that the ECB is more conservative than the FED?
• Or was the downturn more intense in the US than in Euroland?
• We checked this by simulating Taylor rules of the FED and the ECB.
• We then asked the question of how the Fed would have set its policies in Frankfurt, using its own Taylor rule.
• Or put differently
• Would the FED in Frankfurt have acted differently from the ECB?
• We first show the simulation of different Taylor rules in the US
Taylor rule

- Central banks set short term interest rate depending on
  - Rate of inflation
  - Output gap
- Typically they increase the short-term interest rate more than proportionately to the rise in inflation
- Different versions: e.g. observed or forecasted inflation
CORE-US: Taylor rule with core inflation

Yrule-US: only output counts
The FED in Washington

- This shows that the dramatic decline of US interest rates can be predicted by the Taylor rule.
- The rule that gives all the weight to output gap fits best.
- Note: output gap good predictor of inflation.
- The policies of the FED in 2001 are a continuation of past behaviour.
- The FED reacted dramatically because the decline in economic activity was dramatic.
Would the FED in Frankfurt have acted differently from the ECB during 2001?

- Next we do a similar analysis for the ECB
- Then we apply the US FED Taylor rule using Euroland data
Hybrid rule:
Only inflation (core + forecast) get a weight

New rule: inflation and output have a weight

US rule: best fitting Taylor rule, i.e. only output counts
• The ECB’s policies during recession are in line with its priorities set earlier.
• given what the FED did at home, it would have done pretty much the same as the ECB, if it had been faced with the economic conditions prevailing in Euroland.
• The “pretty much” relates to the fact that it would have reacted a little faster than the ECB.
The monetary policy strategy of the ECB
• Despite the relative success of the ECB there are problems with its monetary policy strategy
• two problems with this strategy.
  - the objectives pursued by the ECB,
  - the instruments used by the ECB
The objectives

• The mandate of the ECB as formulated by the Treaty is double
  - Primary objective: price stability
  - If price stability is not endangered the ECB should pursue other objectives, including stabilisation of output and employment.
• ECB has given its own interpretation to this mandate
• First, it has given its double mandate a new twist: “Maintaining price stability in itself contributes to the achievement of output and employment goals”, (Monthly Report, Jan 1999, p. 40).
• Thus ECB now claims that by pursuing just one objective (price stability) it also pursues the second objective mandated by the Treaty.
• In other words the ECB claims it can catch two birds with one stone.
• It has narrowed down its responsibility
Second, ECB has interpreted the objective of price stability to mean that inflation should be held within a band of 0% to 2%, over the medium run. Presumably this means that the ECB is targeting an inflation rate close to 1%

- This is lower than the target of any other major central bank
- I will argue that this band is too low and too narrow.
- What do we know about optimal rate of inflation?
Cost of inflation

Terra incognita
Benefits of inflation

Benefits

inflation

L + C effect

Lubricant effect

Credibility effect
Cost and benefits of inflation

Costs and benefits

Terra incognita

0 \pi^*

inflation

costs

benefits
Costs and benefits of inflation: The ECB view

Costs and benefits

Terra incognita

\[ \pi^* = 0 \]

Benefits

Costs

Inflation
What do we know about optimal level of inflation?

• Very high inflation is very bad, for economic growth and for social and political stability.
• Deflation is very bad, although we understand the deflationary dynamics less well. Horror stories of the 1930s are strong enough to make us fear deflation,
• We know very little about the intermediate zone of low inflation.
  - There are conflicting theories about the shape of the benefit curve, and the empirical evidence is not very reliable.
- although we are sure that with high inflation the costs become substantial, we know very little about the question of when these costs start to matter.

- Do these costs become visible when inflation exceeds 2%, or 5% or 7%? Nobody knows for sure, because the empirical evidence for this low inflation range is simply not available.
implications for monetary policies

- When knowledge is imprecise one should not pursue too much precision in setting the target for the inflation rate.
- The ECB target range of 0 – 2% implies that the target is about 1%
- This is almost certainly too low;
  - Given our previous discussion
  - Given the existence of quality bias
• Target range of 0 -2% is also too narrow
  - Many shocks occur driving the inflation outside target range
  - Inflation rate will be observed outside the range too often
  - This creates a credibility problem
  - This has already happened (next figure)
Inflation rate in euro area (HICP)

Graph showing inflation rate over the years 1999 to 2002 with a target inflation rate line.

- **Inflation rate**
- **Target inflation rate**
• Finally, target range is too close to zero for our comfort
• This calls for new target
• Example:
  - 2% as the midpoint of a band of 3%, i.e. 1.5% below and above the midpoint.
• My prediction is that the ECB will redefine its target soon.
The instruments

- Two-pillar approach to monetary policy
  - First pillar gives prominent role to money growth (M3)
  - Second pillar is eclectic
- ECB is now only central bank in the industrial world giving such a prominence to money
- Most central banks have abandoned this policy.
• For good reason:
  - There is a great deal of evidence that in a low inflation environment and in a world of frequent financial innovations the money supply numbers are very unreliable as signals of future inflation.
  - Giving prominence to money can lead the central bank to make the wrong move.
• The problem is illustrated by cross-section evidence concerning the link between money growth and inflation.
When very high inflation countries are included there is a tight fit between money growth and inflation in the long run.

![Graph showing the relationship between inflation and money growth (1970-1999) with average yearly changes.]
In a subsample of low inflation countries (< 10% per year) there is almost no relation between money growth and inflation in the long run.
Figure 1: Slope coefficient of M1 growth across time aggregation and inflation groups.
• It is not difficult to understand this result.
  - In a low inflation environment observed differences in the money supply growth numbers contain mostly noise,
  - Money growth numbers say little about differences in monetary policies (the signal).
• The ECB wants to keep the rate of inflation below 2%.
• Success on the inflation front will make the money growth numbers even less informative about inflationary potential because the noise to signal ratio will be even higher.
• The ECB is aware of this problem.
  - Since 1999, the growth rate of money (M3) has been above the target (4.5%) most of the time.
  - The ECB has had to ignore the money supply numbers most of the time.
• This leads to a credibility problem.
  - The ECB announces a target for the money growth but in fact does not take this target into account in its policy decisions.
  - In doing so, it gives signals about its intentions, which it then fails to follow. This harms the credibility of the ECB.
• To avoid this credibility problem,
  - the ECB will have to amend its “two-pillar” strategy
  - The ECB will have to drop the prominence given to the money stock in its monetary policies.
• It will not be put in uncomfortable situation in which it has to explain all too often why it does not want to take the latest money growth numbers seriously.
The challenge of enlargement
- Enlargement is the most important challenge
- Enlargement creates two problems that have to be tackled.
  - the effectiveness of monetary policies in the enlarged EMU;
  - institutional reforms
The effectiveness of monetary policies in an enlarged euro zone

• In enlarged eurozone the probability of occurrence of “asymmetric shocks” will increase significantly
• This will make unified monetary policy less attractive for individual members
Basic framework

- In OCA-zone:
  - benefits of EMU exceed costs
  - countries find the cost of not being able to use their national monetary policies to deal with asymmetric shocks small compared to the benefits of the union.
  - ECB is not perceived to neglect national monetary conditions when setting unique interest rate.
  - Monetary policy that fits one size is not perceived to be costly.

Outside OCA-zone
- Reverse holds

- OCA
- EU-12
- divergence
- trade integration
Enlargement means that the new eurozone is more distant from optimal currency area

- EU-25 less integrated and more subject to asymmetric shocks than EU-12
- original members of Euroland (who are also part of EU-25) have to wait longer to reach OCA-zone
- Some original members will perceive policies of the ECB to be less receptive to shocks than before the enlargement
- this could create tensions and conflicts
Analysis is not much affected in pessimistic scenario
today most members of Euroland find that the interest rate decisions of the ECB are consistent with their national economic conditions most of the time,

this may no longer be the case in an enlarged EMU.

In enlarged EMU it will happen more frequently that some countries consider the monetary stance taken by the ECB to be inappropriate to deal with the economic situation of the moment.
• perceived costs of the union will increase relative to the perceived benefits of the single currency.
• tensions inside the Eurosystenm increase when some countries feel that their economic interests are not served well by the ECB.
• ECB can do very little about this
• Nevertheless it is likely to get part of the blame
• Greater acceptance that the ECB cannot deal with national problems
Enlargement and institutional reform

• present system is characterised by equal representation of each member country in the Governing Council
• When the number of countries is limited to twelve such a system can work satisfactorily.
• In future system where twenty seven countries could be sending a representative to the Governing Council the difficulties to achieve a consensus about monetary policy will be much greater than today
Present situation: symmetric distribution of desired interest rates

distribution of desired interest rates and country size (Euro-12) (symmetric case)
Present situation: asymmetric distribution of desired interest rates using Taylor rule

![Graph showing distribution of desired interest rates and country size (Euro-12)](Taylor rule, 2002)
Conclusion of previous analysis

• Today the ECB-Board has a strategic position within the Governing Council. (By averaging its interest rate proposal is close to median)
• This is maintained even when distribution of desired interest rates is very different among large and small countries.
• This decision making process ensures that the interest rate that is decided is the optimal one from the point of view of the Eurosystem as a whole.
• This is so even if national governors are guided by economic conditions prevailing in their own countries.
• This decision making model also ensures that large countries’ (France, Germany, Italy) interests are relatively well served, despite the overrepresentation of the small countries in the Governing Council.
• Consensus is easy to reach and formal voting usually unnecessary.
After enlargement: symmetric distribution of desired interest rates

distribution of desired interest rates and country size (Euro-27) (symmetric case)
After enlargement: asymmetric distribution of desired interest rates
• In enlarged Eurosystem the ECB-Board will lose its strategic position.
• It will be confronted by the possibility that its interest rate proposals will be overruled by coalitions of small countries who experience different economic conditions than the average (which is dominated by the large countries).
• This will create the possibility that interest rate decisions will be made on the basis of economic conditions that prevail in a relatively small part of Euroland.
• This will lead to grave conflicts within the Eurosystem.
• Consensus model is likely to break down.
• The essence of the problem: small countries are over-represented in the Governing Council.
• In enlarged Eurosystem this will have fatal effect that interest rate decisions may not always be made on the basis of the average economic conditions that prevail in the union.
How to solve this problem?

- The importance of small countries in the Governing Council must be reduced.
- so that the strategic position of the Board can be maintained.
- Several possible formulas
• Possible formulas

- US Fed formula: all governors participate in deliberations of Governing Council but voting rights are restricted to a limited number of governors (e.g. ten) on a rotating basis.

- The IMF formula: small countries group together in constituencies and are represented by one governor.

- The centralisation formula: the decision making is centralised in the Executive Board of the ECB. In this formula there is scope for expanding the size of the Board.

• Combination of 1 and 2 most likely
Conclusion

- The success of the launch of the euro should not blind us for the problems of the future
- Once the ECB has been freed from its fixation with the Bundesbank it will redefine its objectives and its strategies
- Some will require institutional reform and greater acceptance that ECB cannot deal with national problems