

# The European Central Bank

## Two models of central banking

- Two models of central banking after WWII
- *Anglo-French model* versus *German model*
- These models differ with respect to
  - Objectives pursued
  - Relations with government

## Objectives of central bank

- In the *Anglo-French* model, the central bank pursues several objectives: price stability, stabilization of the business cycle, employment, financial stability.
- In the *German model* price stability is considered to be the primary objective of the central bank.
- Other objective may be also pursued but only if this does not undermine the primary objective

## Relations with the government

- *Anglo-French model*
  - Political dependence
  - Monetary policy decisions are subject to the government's approval
- *German model*
  - Political independence
  - Monetary policy decisions are taken by the central bank without political interference.

## Relations with the government

- The German model prevailed in the design of the European Central Bank.
- Note: Since 1997, the Bank of England has operational independence, and price stability is its primary objective; the Government sets the inflation target (2.5% since 1997)

## Statutes of the ECB

- Objectives
  - “The primary objective of the ECB is the maintenance of price stability” (article 105)
  - Without prejudice to the objective of price stability, the ECB shall support the general economic policies in the Community with a view to contributing to the achievement of the Community as laid down in article 2. (Article 105(1).)
  - Other objectives such as ‘a high level of employment’ are thus only secondary.

## Statutes of the ECB

- Political independence
  - “Neither the ECB nor a national central bank nor any member of their decision-making bodies shall seek or take instructions from Community institutions or bodies, from any Government of a Member State or from any other body.” (Article 107).

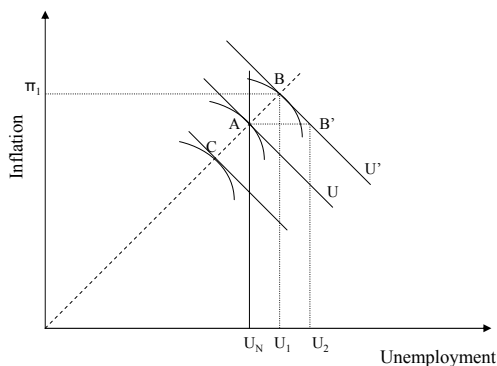
## Why has the German model prevailed?

- Intellectual development, i.e. the ‘monetarist counter-revolution’
- Growing evidence that countries with independent CBs tend to have lower inflation but not lower growth;
- Strategic position of Germany.
  - In order to accept EMU, the German monetary authorities insisted on having an ECB that gives an even higher weight to price stability than the Bundesbank did.

## The ECB: a ‘conservative’ central bank

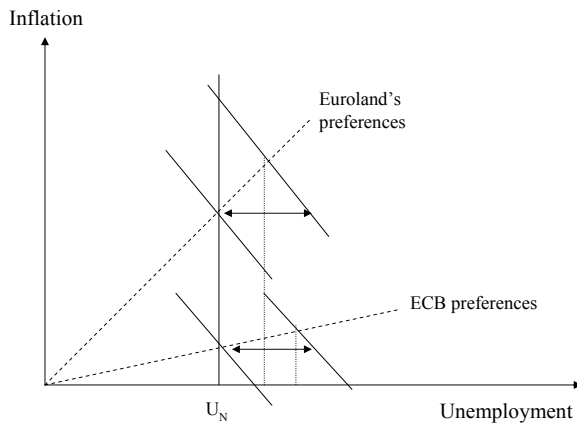
- ECB attaches greater weight to price stability and lower weight to output and employment stabilization than the rest of society.
- This corresponds to Rogoff’s (1958) notion of ‘conservative central banker’
- This conservative attitude can lead to conflicts

## The Barro-Gordon model and optimal stabilisation



- Inflation equilibrium in point A
- Unemployment is at its natural level
- No incentive to create surprise inflation.
- The upward sloping dotted line is the optimal stabilization line (optimal response to shocks to short-term Phillips curve).
- Slope of the optimal stabilization line depends on the weight the authorities attach to the stabilization of unemployment.
- With a steep stabilization line authorities stabilize a lot at the cost of a high inflation bias.
- Conservative central banker → relatively flat stabilization line.

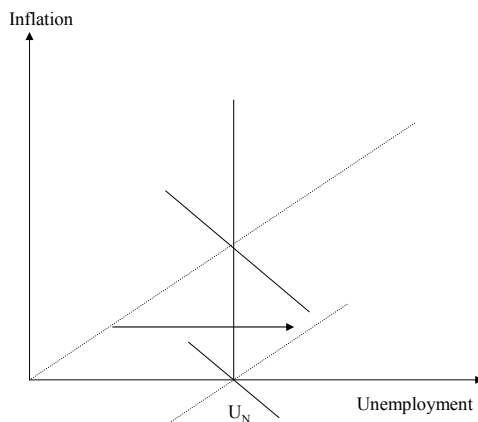
## How to eliminate the inflation bias? Appointing a conservative central bank



- The steep stabilization line represents the preferences of the society.
- The flatter stabilization line the preferences of the ECB.
- On average* Euroland will have lower inflation without any loss in employment.
- However, there will be less stabilization in the wake of shocks.
- This leads to a potential conflict between the ECB and elected politicians.

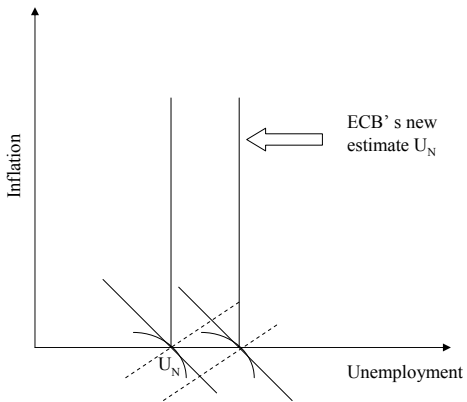
## How to solve the conflict: first best solution

### A 'target conservative' central bank



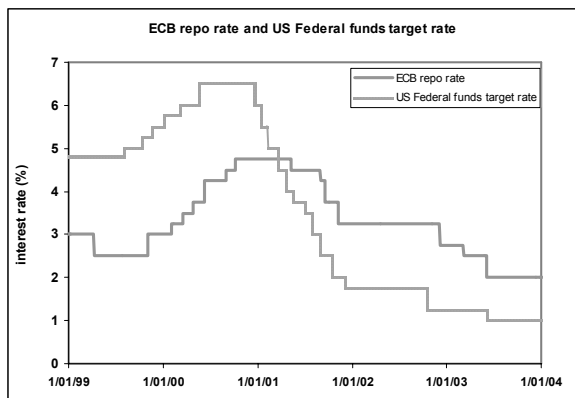
- Suppose target unemployment rate equal to the natural unemployment.
- Then the optimal stabilization line shifts to the right and intersects with the natural unemployment point on the horizontal axis.
- Inflation bias disappears.
- As a result, unemployment is stabilized in the same way for both central bank and society.
- Solution: appoint a central banker who is 'target conservative' rather than 'weight conservative'.
- Svensson (1995): inflation targeting achieves the same result

## A new problem: uncertainty about natural unemployment rate

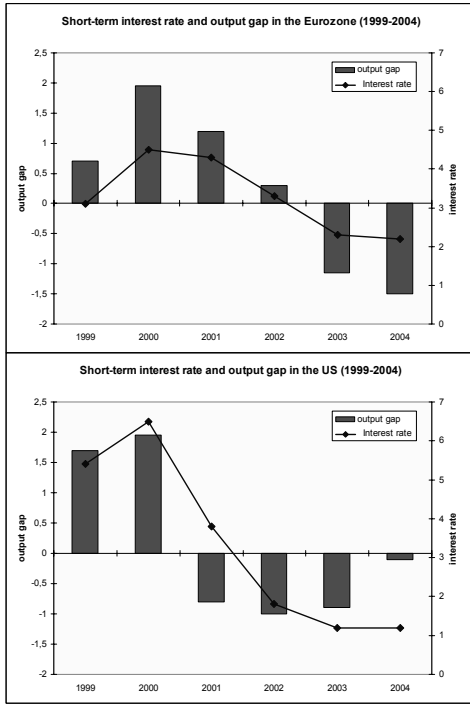


- Initially, target unemployment is at the natural level,  $U_N$ .
- Suppose a temporary increase in unemployment.
- ECB interprets this as an increase in the natural unemployment rate, and increases its target  $U_N$  rate.
- The ECB will not attempt any stabilization.
- This is the same as if the ECB attached zero weight to unemployment stabilization.
- This problem can be aggravated by hysteresis in unemployment (i.e. temporary shocks lead to permanent increases in unemployment).
- If the ECB fails to stabilize temporary shocks, they translate into permanently higher natural unemployment.

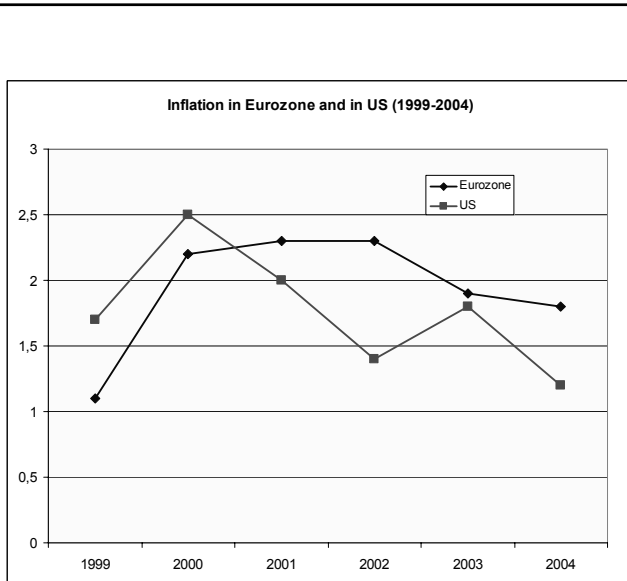
## Is there evidence that the ECB acted as a conservative central bank?



- US Fed seems to have reacted much more to the economic slowdown of 2001 than the ECB
- But were the economic conditions the same in the US and the eurozone?



- ECB does react to movements in output gap
- Thus it gives some weight to output stabilisation
- US Fed reacts more strongly to decline in output gap than ECB
- It appears that Fed attaches greater weight to output stabilisation than ECB
- In this sense ECB is more conservative than Fed
- Note: this is evidence of only 5 years
- It may change in the future

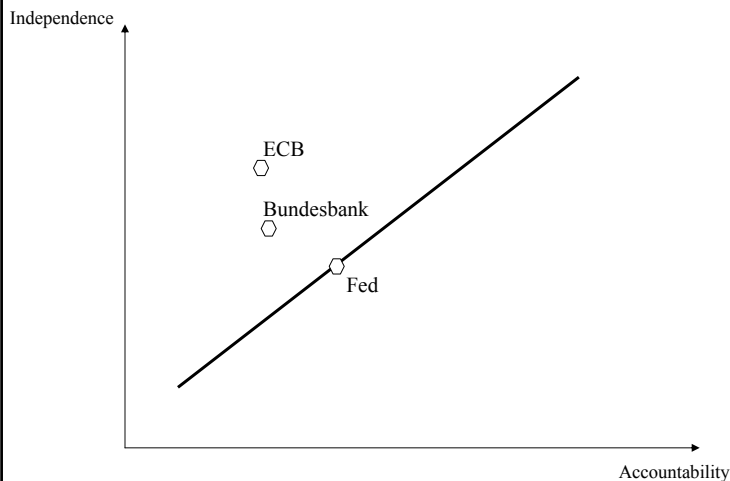


- Previous conclusion is not due to different inflation experiences
- Both US and eurozone experienced similar inflation rates

# Independence and accountability

- The ECB is politically independent.
- Whenever the government delegates power to the central bank there is a corresponding need to have accountability.
- The reason is that the government maintains its full accountability towards the voters
- Independence and accountability are part of the same process of delegation.
- The ECB is independent with little accountability for its actions.

## Optimal relation between independence and accountability



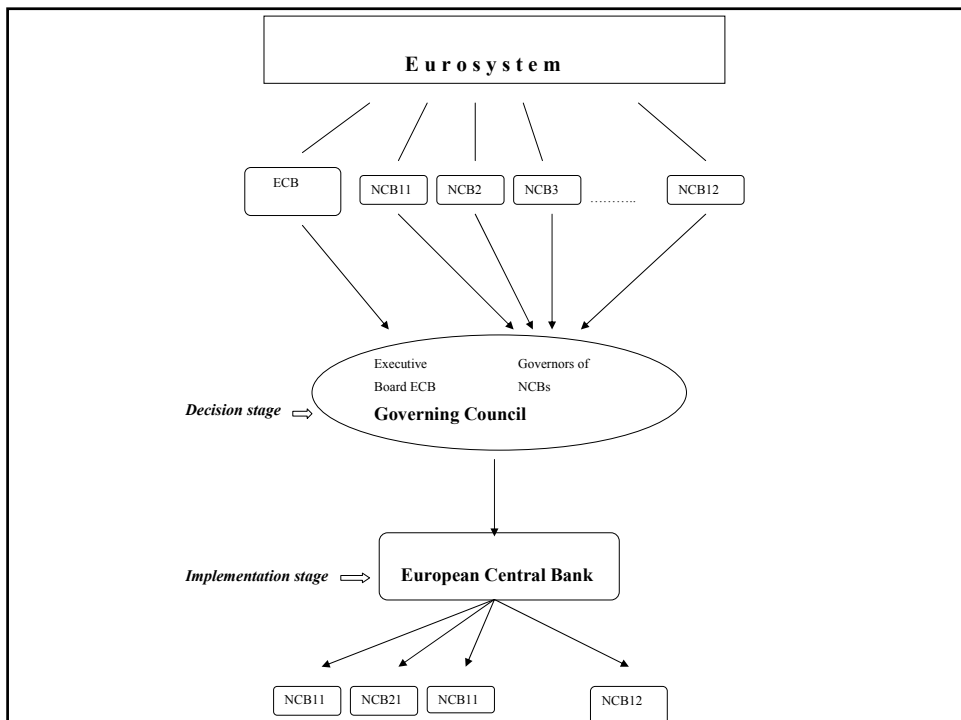
- The ECB is more independent and less accountable than any other major CBs.
- Accountability is related also to the precision with which central bank's objectives are specified.
- Most central banks have a wider responsibility than simply price stability.
- The Treaty is vague about the other objectives besides price stability.
- The ECB has interpreted this to mean that it has to pursue only price stability.
- As a result, the ECB has drastically restricted the domain of responsibilities about which it can be called to account.

## What could ECB do to avoid conflicts?

- Enhance informal accountability through greater transparency
- Larger openness in the decision-making process
- Inflation targeting promotes informal accountability.
- Having a broader area of responsibility and recognize that there are objectives other than price stability.

# The ECB: Institutional Framework

- The Eurosystem it consists of
  - European Central Bank (ECB)
  - national central banks (NCBs) of the EMU-countries
- Governing bodies:
  - Executive Board:
    - President, Vice-President and four Directors of the ECB
  - Governing Council:
    - Executive Board plus the governors of the twelve national central banks.



- Governing Council is the main decision-making body of the Eurosystem.
- It formulates monetary policies and takes decisions concerning interest rates, reserve requirements, and the provision of liquidity into the system.
- It meets every two weeks in Frankfurt.
- Each of the members has one vote (NB: this will change with EMU enlargement)
- There is no qualified voting in the Governing Council of the Eurosystem.
- The members are supposed to vote according to the interests of the Eurozone as a whole rather than according to national interests.

- The Executive Board
  - implements the monetary policy decisions taken by the Governing Council.
  - gives instructions to the NCBs.
  - sets the agenda for the meetings of the Governing Council.
- As such, it has a strategic position and can have a large influence on the decision-making process in the Governing Council.

## Is the Eurosystem too decentralized?

- Is the influence of the NCBs in the Governing Council too large so that national interests will tend to prevail?
- In order to analyze this: compute Taylor rule for each central banker
  - Taylor rule computes the interest rates that each of the national governors would desire given the economic conditions in their own country:

$$r_t = \rho + \pi^* + a(\pi_t - \pi^*) + bx_t$$

- $r_t$  is the optimal interest rate,  $\rho$  is the long-term real interest rate,  $\pi^*$  is the target inflation rate and  $x_t$  is the output gap.

**Table B12.1** Desired interest rate using the Taylor rule (2003)

Country	Relative size	Desired interest rate
Germany	0,29	1,22
Austria	0,03	2,13
Finland	0,02	2,29
Belgium	0,04	2,48
ECB Board		3,12
Netherlands	0,06	3,24
France	0,21	3,40
Portugal	0,02	4,13
Italy	0,18	4,20
Luxembourg	0,00	3,73
Spain	0,10	5,51
Greece	0,02	6,48
Ireland	0,02	7,87

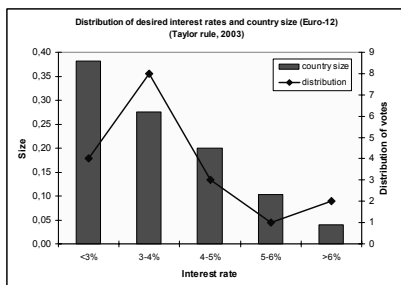
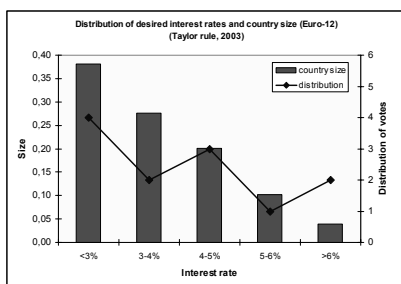
Source:

Inflation: European Commission, European Economy

Output gap: OECD Economic Outlook

Assumptions:  $\rho=2\%$ ,  $\pi^*=2\%$ ,  $a=1.5$  and  $b=0.5$ .

## Asymmetric distribution of desired interest rates using Taylor Rule (2003)



- Assumptions:
- Governors are nationalistic
- ECB-board cares about Euro-wide interests
- ECB-Board only needs three votes to find majority for its proposal
- ECB-Board has strategic position despite asymmetries in shocks
- Country size is measured as percentage of Eurozone GDP;
- Distribution of votes is the number of votes, ECB has 6 votes

- Today the ECB Board enjoys a strategic position within Governing Council: its interest rate preference is close to median
- In enlarged Eurozone, the ECB Board will lose its strategic position
- Its interest rate preference may be overruled by coalitions of small countries
- Decision-making by consensus less likely
- Interest rate may not reflect average economic conditions in the EMU

## The Challenge of Enlargement

- The over-representation of small countries can be reduced in several ways:
- The US Fed formula: all governors participate in the deliberations of the Governing Council but the voting rights are limited 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.
- Centralised formula: the decision making is restricted to the Executive Board of the ECB. In this formula there is some scope for expanding the size of the Board.

- On 20 December 2002 the Governing Council reached an agreement that combines the first and second formulas.
- The agreement has the following main features.
  - Number of governors with voting rights will be limited to 15. The members of the Executive Board will maintain their voting rights.
  - Governors will exercise their voting rights on a rotating basis. The frequency with which they can participate in the voting will reflect the relative size of their country.
- This proposal has been adopted by the Heads of State
- The reform take effect when the number of Eurozone members exceeds 15

## Bank supervision and financial stability in EMU

- Principle of *home country prudential control*
- Principle of *host country responsibility* for financial market stability
- These two principles might conflict in an increasingly integrated market.
- The problem will be compounded during crisis situations
- Centralization of the supervisory and regulatory responsibilities at the European level would be the solution.

## Conclusion

- The strong degree of independence of the ECB is not matched by an equally strong procedure to control the performance of the ECB.
- Enlargement creates the risk that the ECB-Board will lose its strategic position and that the interest rate decisions will not represent the needs of EMU as a whole. Change in voting rules is necessary.
- Centralization of bank supervision may be necessary for smooth management of financial crises.