

# **Economics of European Integration**

## **Lecture # 11**

### **Monetary Integration III**

Spring Semester 2009

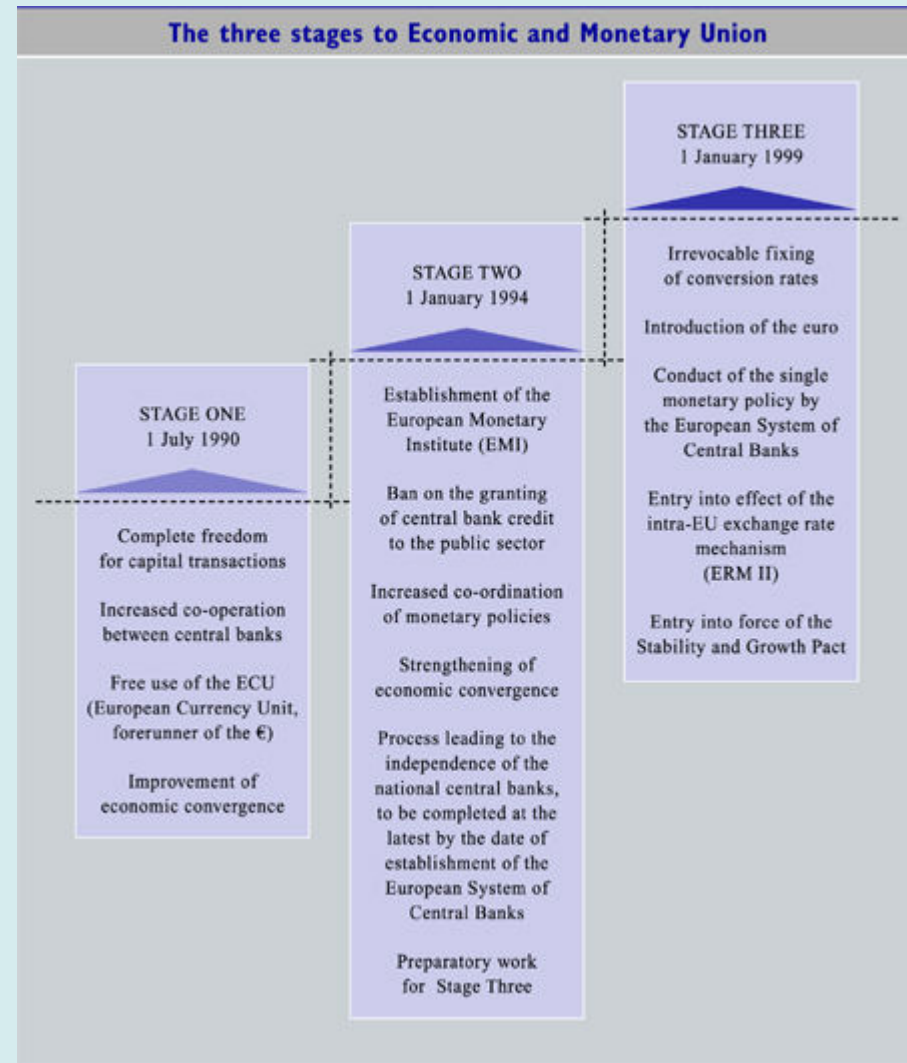
Gerald Willmann

# The Long Road to Maastricht and to the Euro

Towards Maastricht		Between Maastricht and the single currency		The single currency	
1970	Werner Plan	1994	European Monetary Institute (precursor of ECB)	1999	Monetary union starts
1979	EMS starts	1997	Stability and Growth Pact	2001	Greece joins
1989	Delors Committee	1998	Decision on membership	2002	Euro coins and notes introduced
1991	Maastricht Treaty signed	1998	Conversion rates set		
1993	Maastricht Treaty ratified	1998	Creation of ECB		

# The Maastricht Treaty

- A firm commitment to launch the single currency by January 1999 at the latest.



# The Maastricht Treaty

- A firm commitment to launch the single currency by January 1999 at the latest.
- A list of five criteria for admission to the monetary union.
- A precise specification of central banking institutions.
- Additional conditions mentioned (e.g. the excessive deficit procedure).

# The Maastricht Convergence Criteria

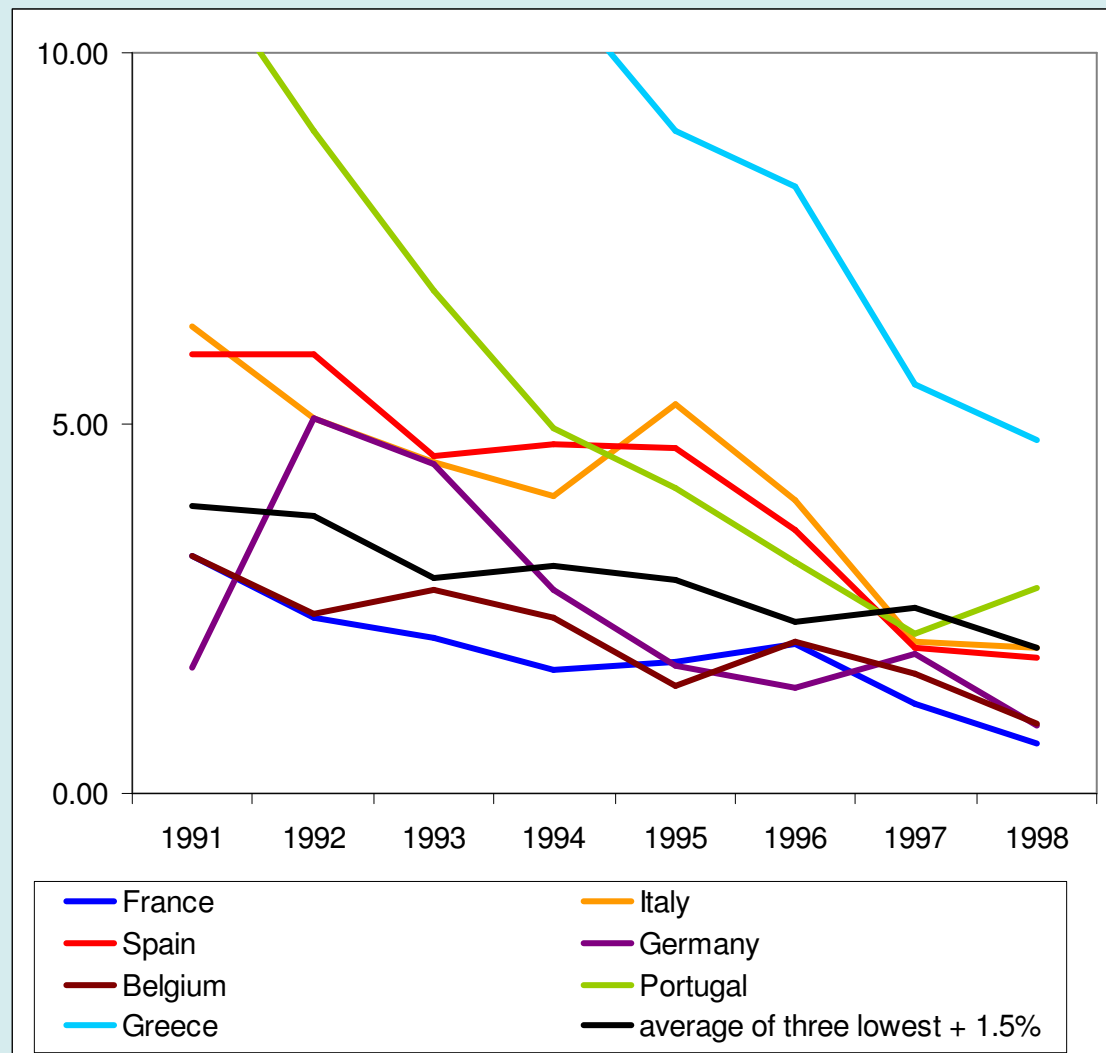
- Inflation:
  - not to exceed by more than 1.5 per cent the average of the three lowest rates among EU countries.
- Long-term interest rate:
  - not to exceed by more than 2 per cent the average interest rate in the three lowest inflation countries.
- ERM membership:
  - at least two years in ERM without being forced to devalue.

# The Maastricht Convergence Criteria

- Budget deficit:
  - deficit less than 3 per cent of GDP.
- Public debt:
  - debt less than 60 per cent of GDP:
    - *Note:* Observed on 1997 performance for decision in 1998.

# Interpretation of the Convergence Criteria: Inflation

Straightforward fear of allowing in unrepentant inflation-prone countries.



# Interpretation of the Convergence Criteria: Long- Term Interest Rate

- A little bit too easy to bring inflation down in 1997 – artificially or not – and then let go again.
- Long interest rates incorporate bond markets expectations of long term inflation.
- So criterion requires convincing markets.
- Problem: self-fulfilling prophecy:
  - if markets believe admission to euro area, they expect low inflation and long-term interest rate is low, which fulfils the admission criterion
  - conversely, if they don't, all is lost



# Interpretation of the Convergence Criteria: ERM Membership

- Same logic as the long-term interest rate: need to convince the exchange markets.
- Same aspect of self-fulfilling prophecy.

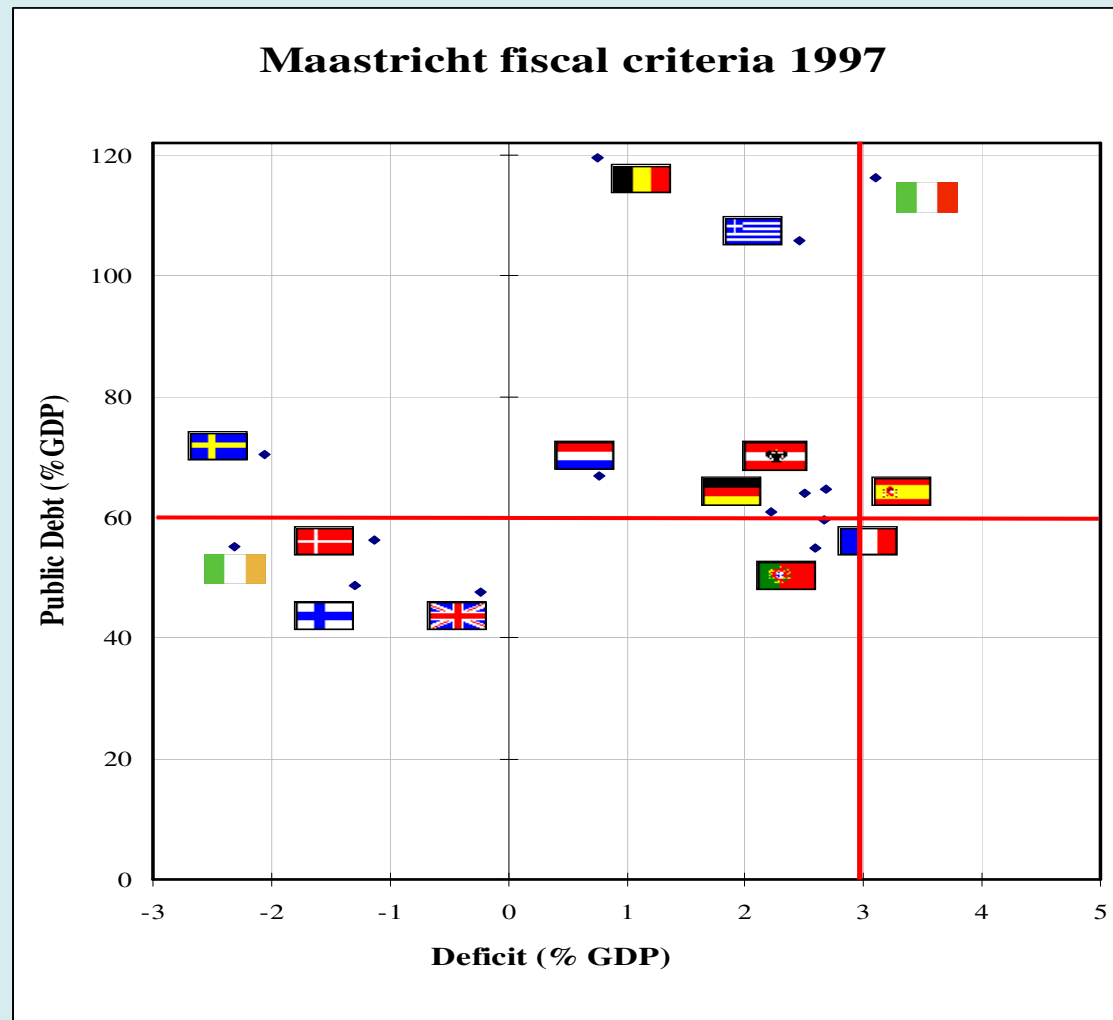
# Interpretation of the Convergence Criteria: Budget Deficit and Debt (1)

- Historically, all big inflation episodes born out of runaway public deficits and debts.
- Hence requirement that house is put in order before admission.
- How are the ceilings chosen?:
  - deficit: the German golden rule
  - debt: the 1991 EU average.

# Interpretation of the Convergence Criteria: Budget Deficit and Debt

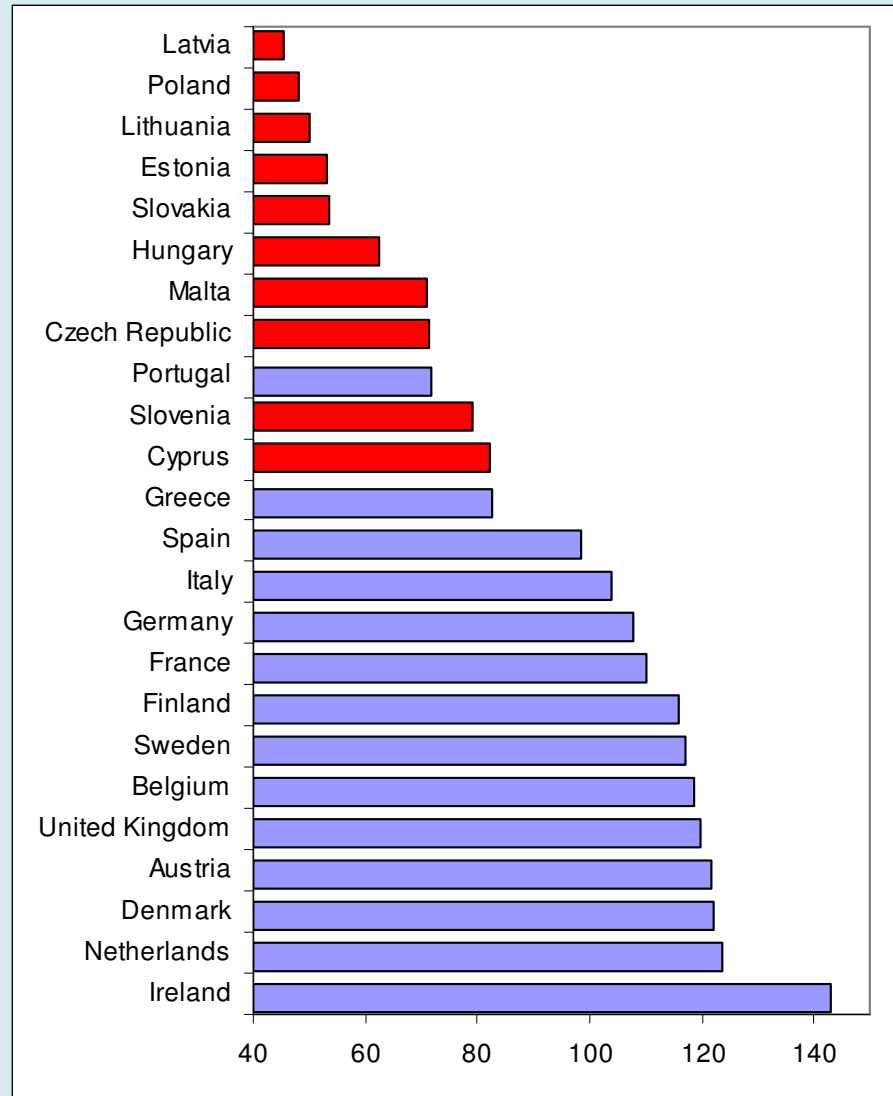
- Problem No. 1:
  - a few years of budgetary discipline do not guarantee long-term discipline
  - the excessive deficit procedure will look to that once in euro area, more later.
- Problem No. 2: artificial ceilings.

# The Debt and Deficit Criteria in 1997



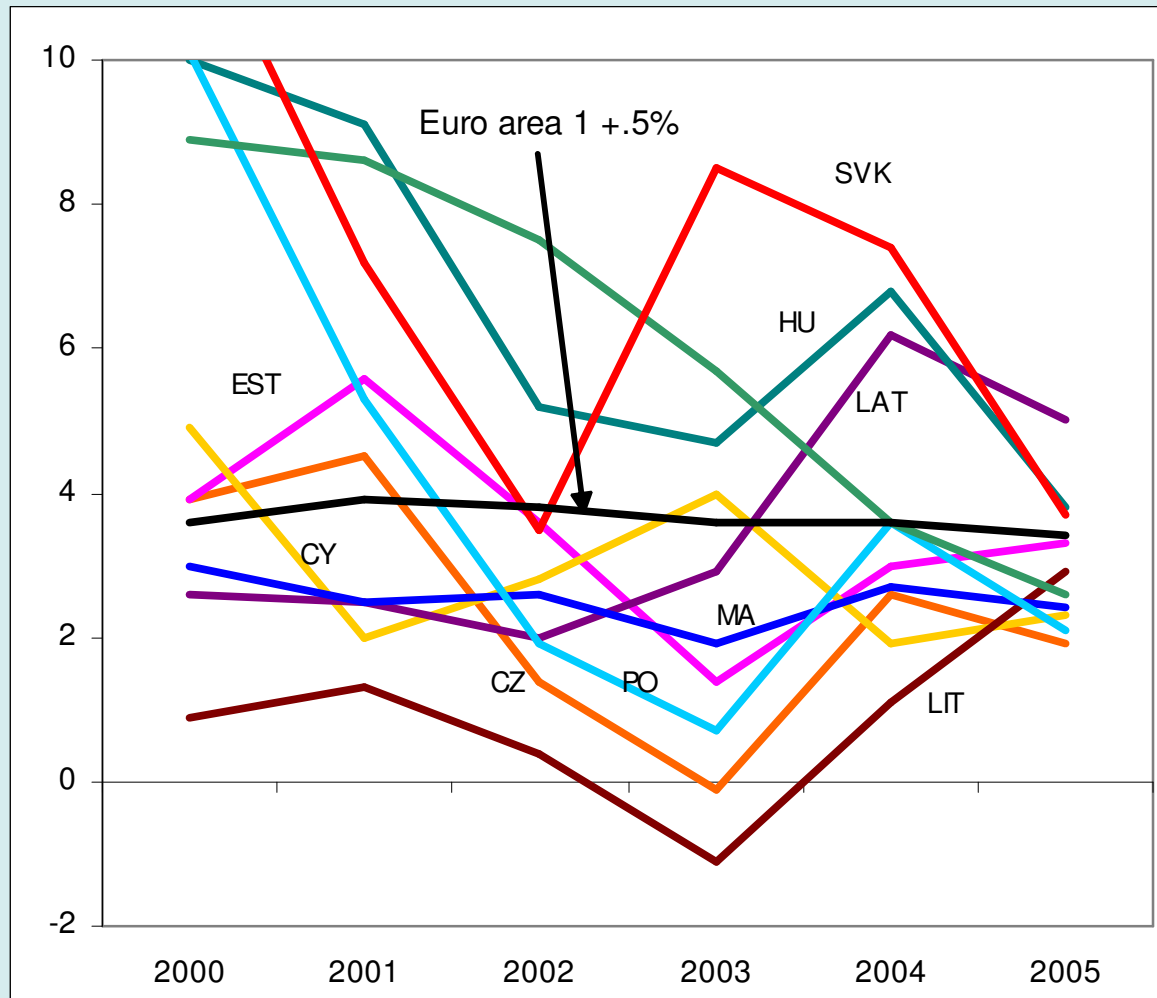
# The next wave of candidates

Quite different development levels (GDP per capita as % of EU)



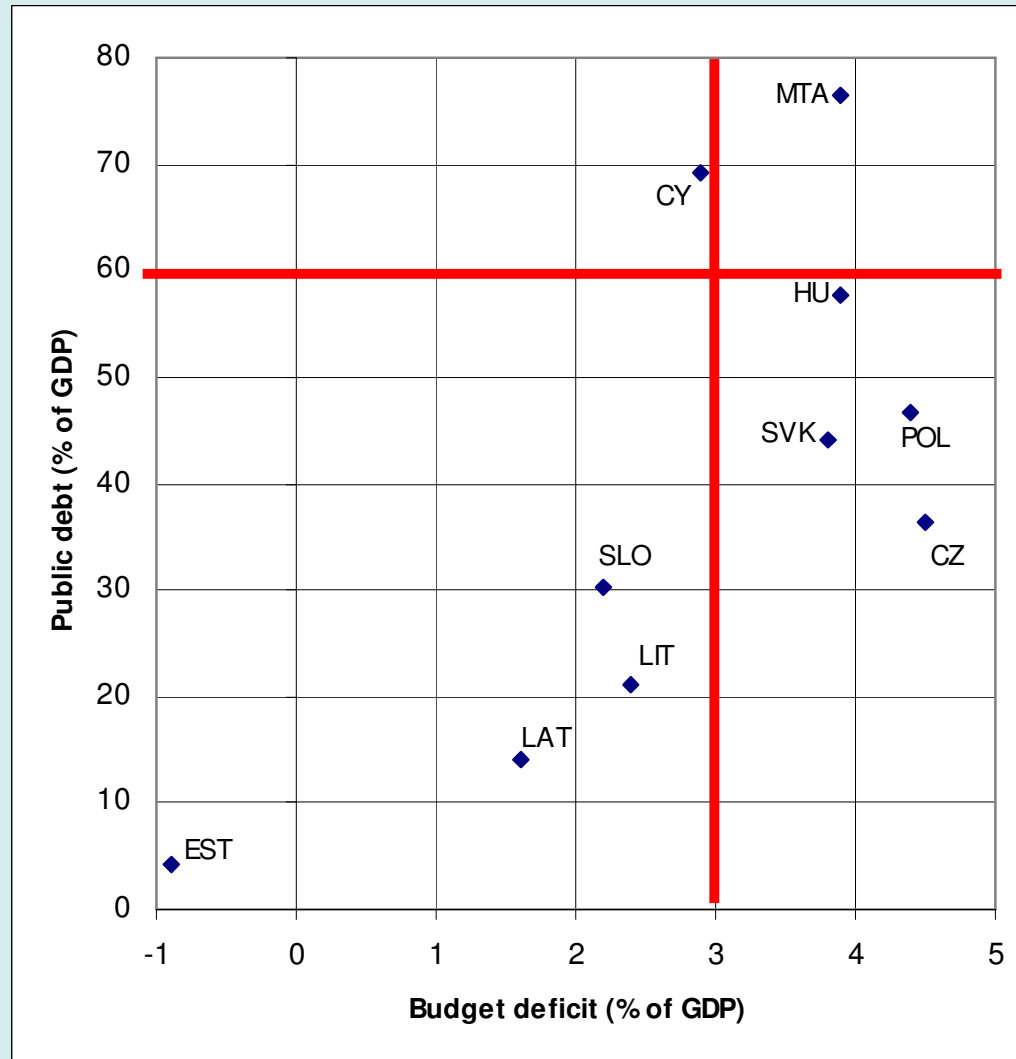
# The next wave of candidates

## The inflation criterion



# The next wave of candidates

## The budget and debt criteria



# The next wave of candidates

## A door half-open: fears in the Old Europe

- Cheap labour force

	Hourly labour costs, 2000 (€)	Labour productivity, 2002 (€ 000)	Unit labour costs EU15=100
EU15	22.2	57.6	100.0
Czech Republic	3.9	16.9	59.8
Estonia	3.0	12.0	65.5
Cyprus	10.7		
Latvia	2.4	12.0	52.3
Lithuania	2.7	10.7	65.7
Hungary	3.8	17.0	58.4
Poland	4.5	16.9	68.7
Slovenia	9.0	25.4	91.7
Slovakia	3.1	13.3	59.7



# The next wave of candidates

## A door half-open: fears in the Old Europe

- But low labour productivity

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# The next wave of candidates

## A door half-open: fears in the Old Europe

- Cheap, but all that cheap

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# Architecture of the monetary union

# A Tour of the Acronyms

- N countries with N National Central Banks (NCBs) that continue operating but with no monetary policy function.
- A new central bank at the centre: the European Central Bank (ECB).
- The European System of Central Banks (ESCB): the ECB and all EU NCBs (N=15).
- The Eurosystem: the ECB and the NCBs of euro area member countries (N=12).

# The System



# How Does the Eurosystem Operate?

- Objectives:
  - what is it trying to achieve?
- Instruments:
  - what are the means available?
- Strategy:
  - how is the system formulating its actions?

# Objectives (1)

- The Maastricht Treaty's Art. 105.1:  
'The primary objective of the ESCB shall be to maintain price stability. Without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Community with a view to contributing to the achievement of the objectives of the Community as laid down in Article 2.'

Article 2. The objectives of European Union are a high level of employment and sustainable and non-inflationary growth.

- In clear:
  - fighting inflation is the absolute priority
  - supporting growth and employment comes next.

# Objectives (2)

- Making the inflation objective operational: does the Eurosystem have a target?
- It has a definition of price stability:  
“The ECB has defined price stability as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%.”
- And it has an aim:  
“In the pursuit of price stability, the ECB aims at maintaining inflation rates below, but close to, 2% over the medium term.”



# Objectives (2)

- Leaves room for interpretation:
  - where below 2 per cent?
  - what is the medium term?

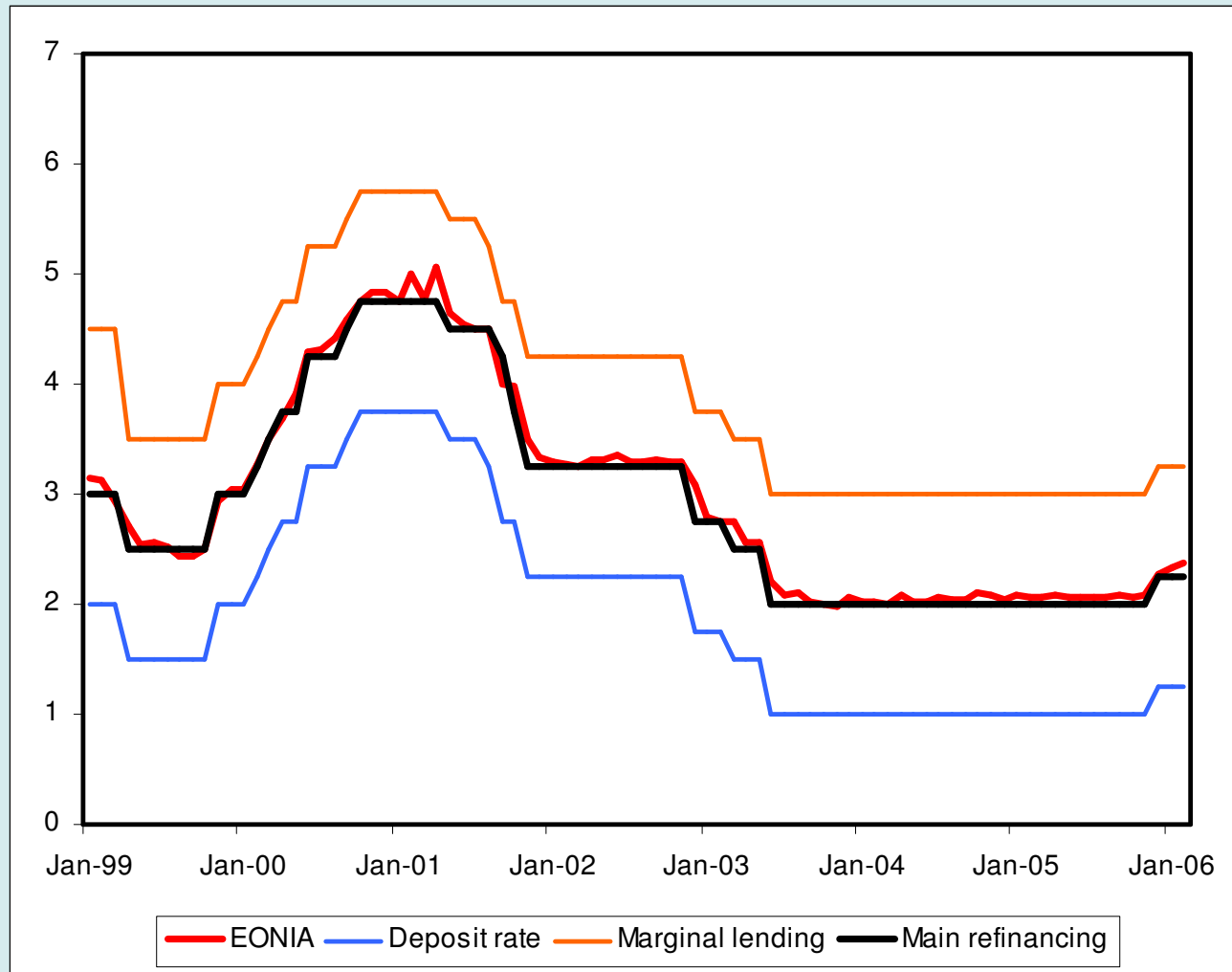
# Instruments (1)

- Remember the channels of monetary policy:
  - longer run interest rates
  - credit
  - asset prices
  - exchange rate.
- These are all beyond central bank control.
- Instead it can control the very short-term interest rate: European Over Night Index Average (EONIA).
- EONIA affects the channels through market expectations.

# Instruments (2)

- The Eurosystem controls EONIA by establishing a ceiling, a floor and steering the market in-between.
- The floor: the rate at which the Eurosystem accepts deposits (the deposit facility).
- The ceiling: the rate at which the Eurosystem stands ready to lend to banks (the marginal lending facility).
- In-between: weekly auctions (main refinancing facility).

# EONIA & Co.



# The Two-Pillar Strategy

- The monthly Eurosystem's interest rate decisions (every month) rests on two pillars.
- Economic analysis:
  - broad review of economic conditions:
    - growth, employment, exchange rates, abroad.
- Monetary analysis:
  - evolution of monetary aggregates (M3, etc.).

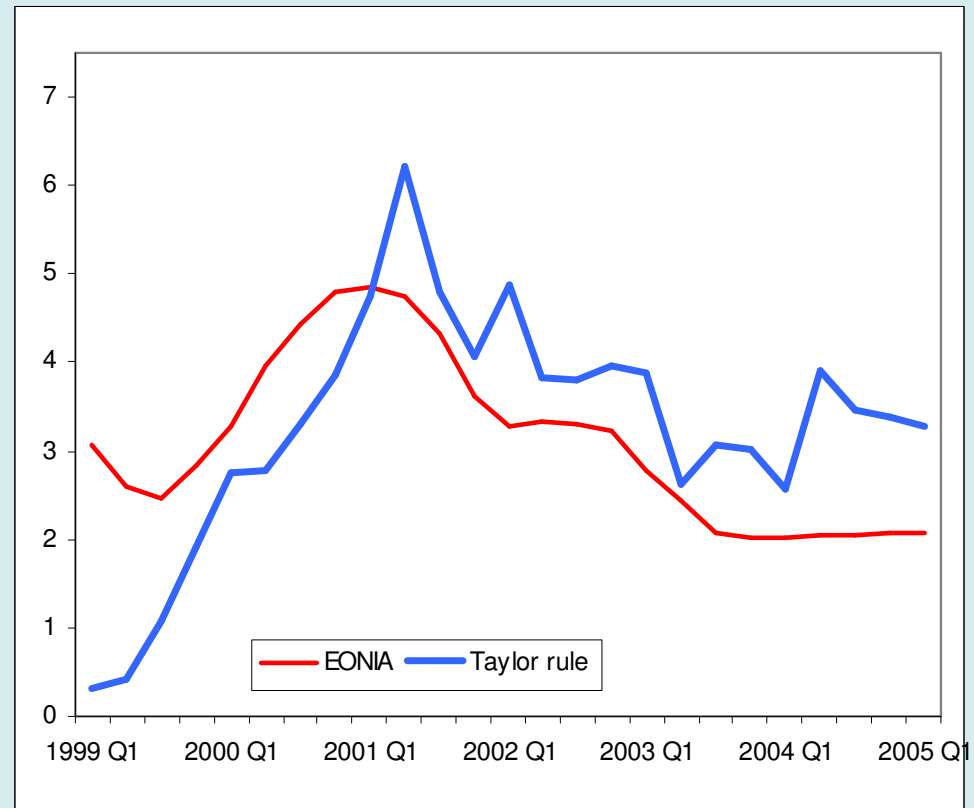
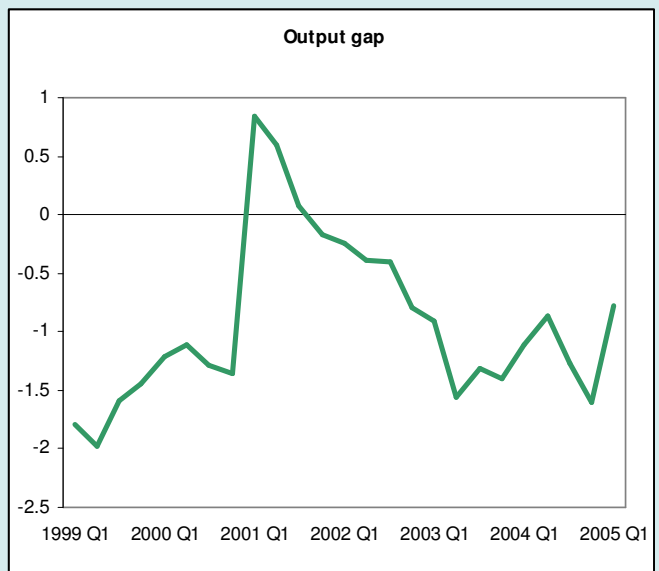
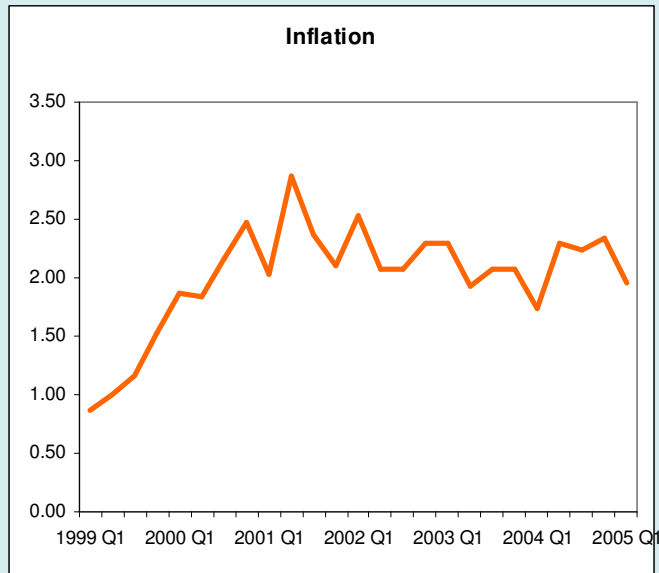
# Comparison With Other Strategies

- The US Fed:
  - legally required to achieve both price stability and a high level of employment
  - does not articulate an explicit strategy.
- Inflation-targeting central banks (Czech Republic, Poland, Sweden, UK, etc.):
  - announce a target (e.g. 2.5 per cent in the UK), a margin (e.g.  $\pm 1\%$ ) and a horizon (2–3 years)
  - compare inflation forecast and target, and act accordingly.

# Taylor Rule Interpretation

- Taylor rule
- $i = i^* + a(\pi - \pi^*) + b(y - y^*)$ 
  - Take:  $\pi = 2\%$
  - $i = 4\%$  (2% real, 2% target inflation).
- Choose  $a$  and  $b$ :
  - $a = 2.0$ ,  $b = 0.8$ .
- Compare with actual EONIA.

# A Taylor Rule Example





# Does One Size Fit All?

- With one monetary policy, particular national conditions cannot be attended to.
- This is another version of the asymmetric shock concern of the OCA theory: the cost must be borne.
- Monetary policy may also affect differently different countries.

# Independence and Accountability

- Current conventional wisdom is that central banks ought to be independent:
  - governments tend not to resist to the ‘printing press’ temptation
  - the Bundesbank has set an example.
- But misbehaving governments are eventually punished by voters.
- What about central banks? Independence removes them from such pressure.
- A democratic deficit?

# Redressing the Democratic Deficit

- In return for their independence, central banks must be held accountable:
  - to the public
  - to elected representatives.
- Examples:
  - the Bank of England is given an inflation target by the Chancellor. It is free to decide how to meet the target, but must explain its failures (the ‘letter’)
  - the US Fed must explain its policy to the Congress, which can vote to reduce the Fed’s independence.

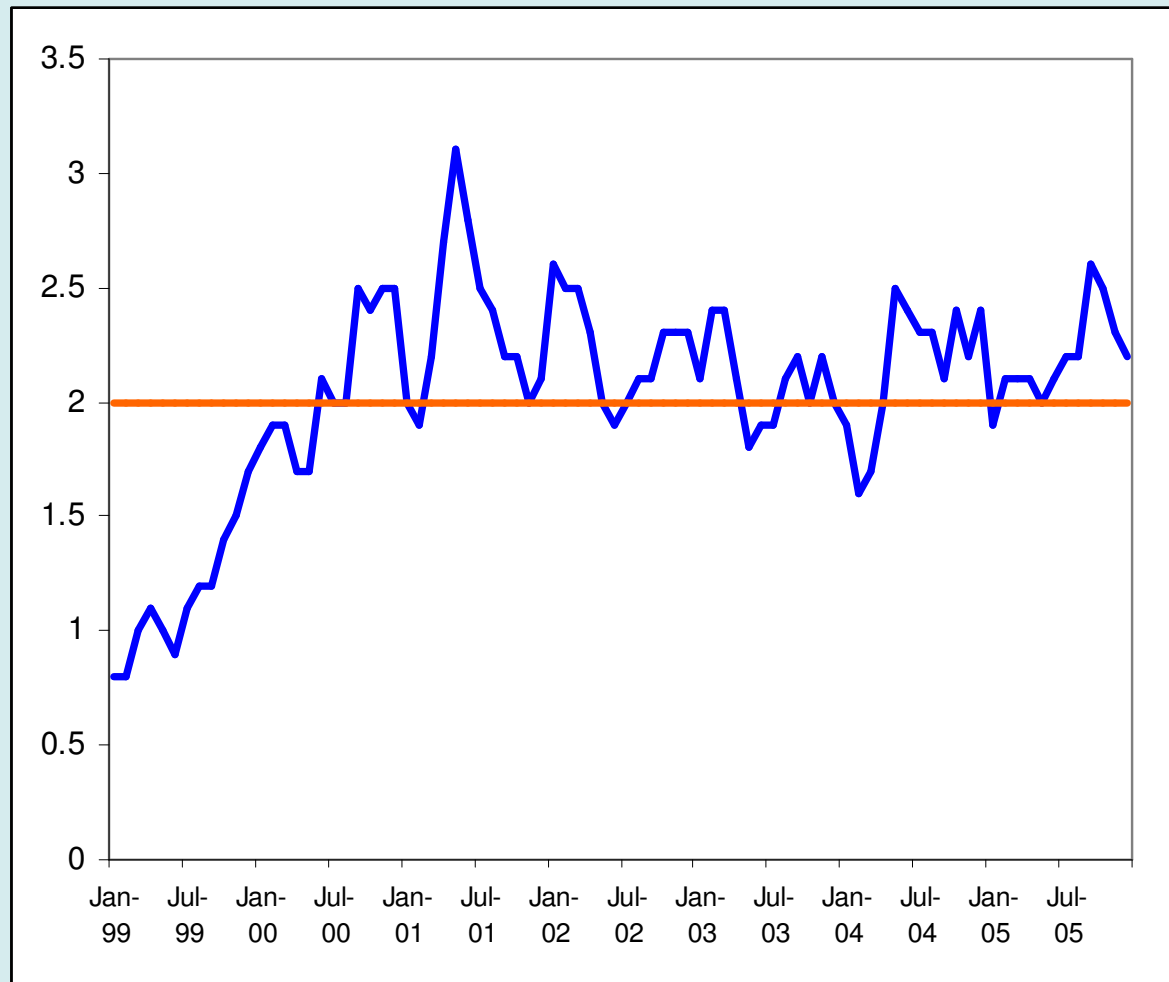
# The Eurosystem Weak Accountability

- The Eurosystem must report to the EU Parliament.
- The Eurosystem's President must appear before the EU Parliament when requested, and does so every quarter.
- But the EU Parliament cannot change the Eurosystem's independence and has limited public visibility.

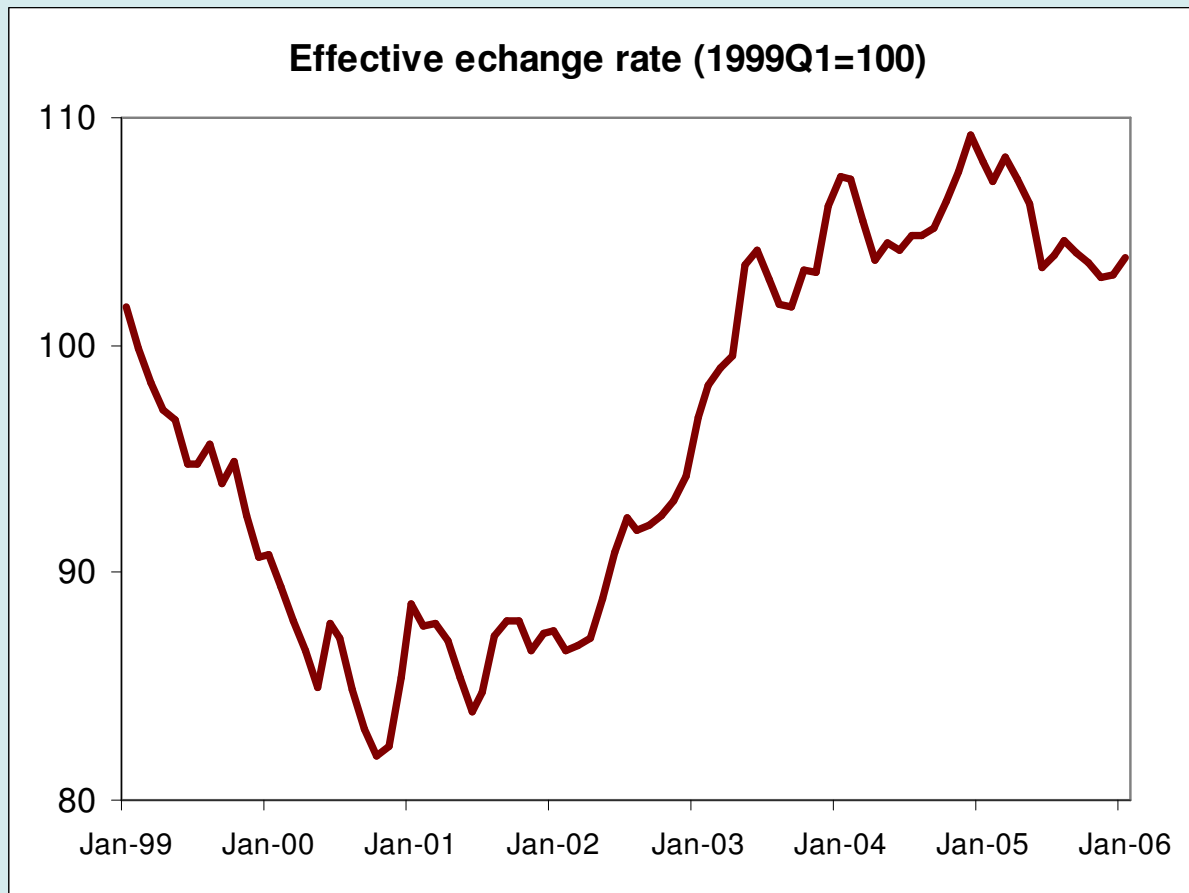
# The Record So Far

- A difficult period:
  - an oil shock in 2000
  - a worldwide slowdown
  - September 11
  - the stock market crash in 2002
  - Afghanistan, Iraq
  - The weak dollar

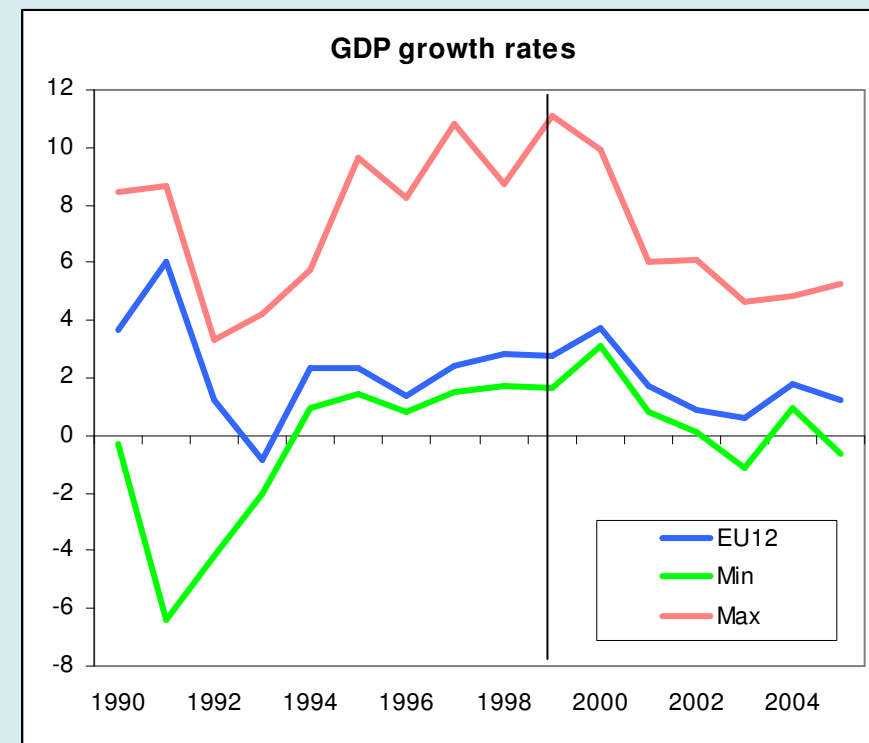
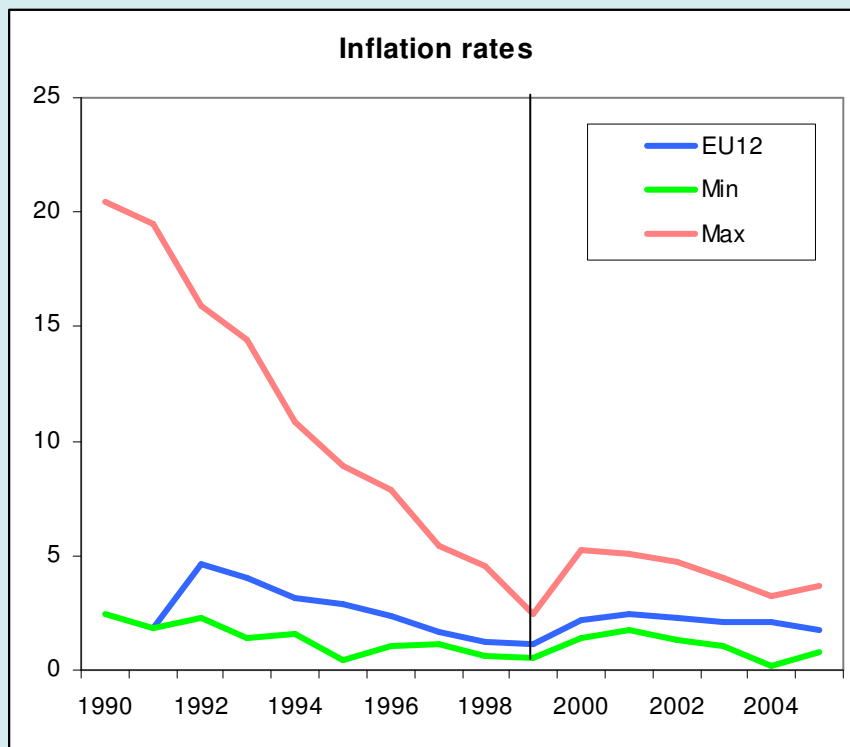
# Inflation: Missing the Objective, a Little



# The Euro: Too Weak First, Then Too Strong?

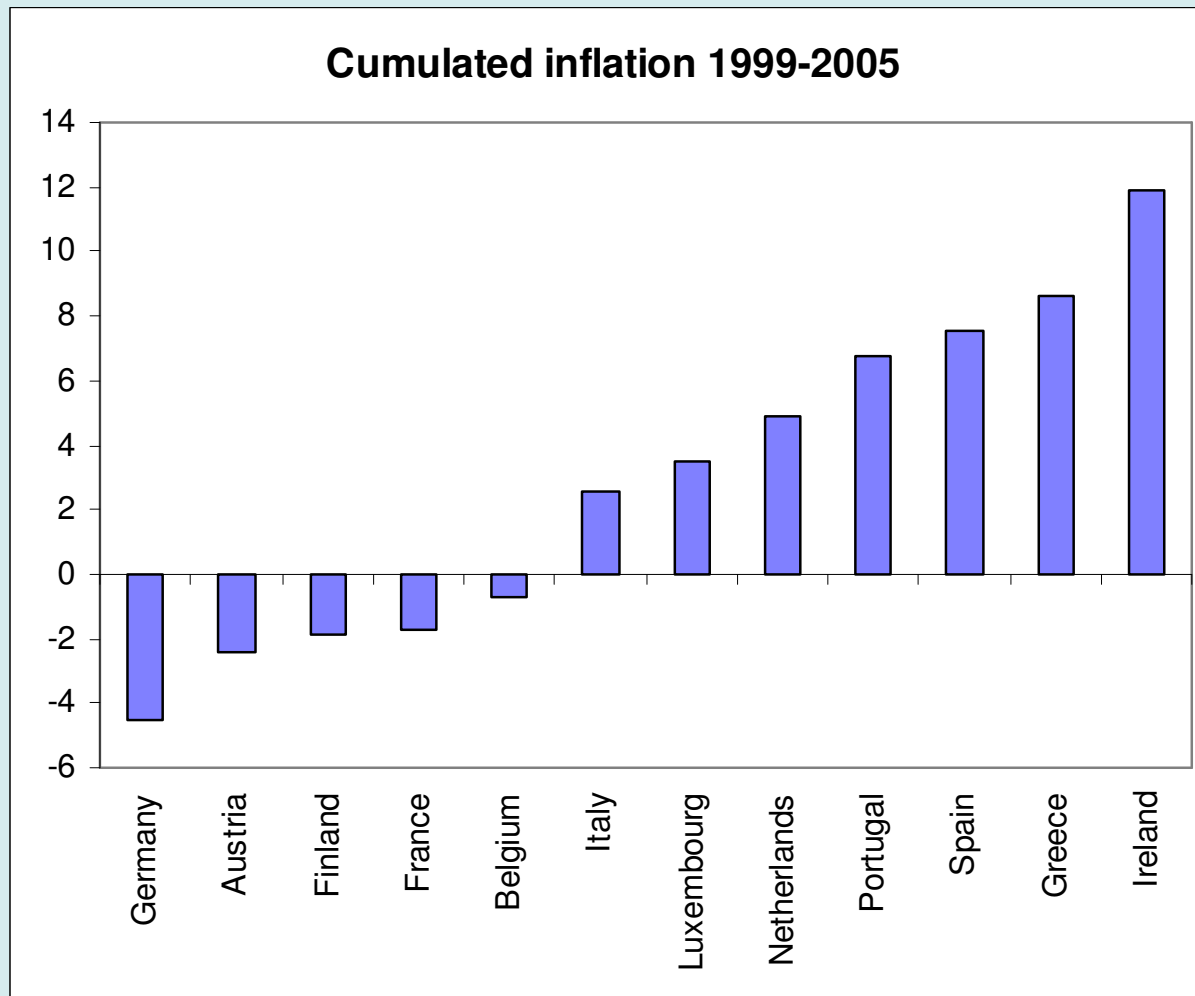


# But No Seriously Asymmetric Shocks





# Although inflation has not fully converged



# The Governing Council

