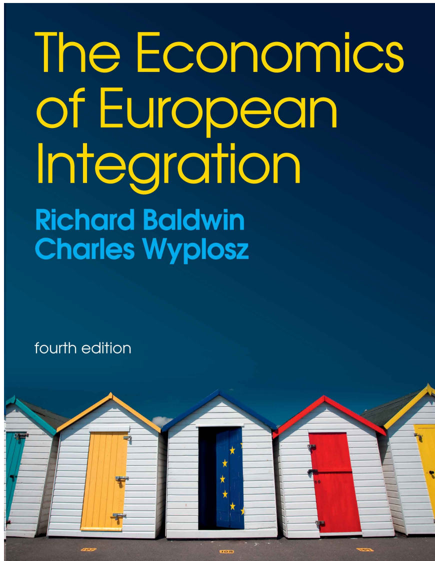
Chapter 14: Essential facts of monetary integration

It was the 1992 EMS crisis that provided the immediate impetus for monetary unification.

Barry Eichengreen (2002)



Prehistory: before paper money

Until end of 19th century, money was metallic and many currencies were circulating: exchange rates corresponded to the different contents of precious metal.

During 19th century people started to identify money and country and efforts were developed to put order: this led to the gold standard.

The gold standard automatically restored a country's external balance: Hume's price–specie mechanism, which applies to the internal working of a monetary union:

a country whose prices are too high is uncompetitive and runs a trade deficit → importers spend more gold money than importers receive from abroad → stock of money declines → long-run monetary neutrality implies that prices will decline and the process will automatically go on until competitiveness is restored.

Prehistory: before paper money

Thus, gold standard was inherently stable. Also, no monetary policy autonomy since the stock of gold money is determined by BoP.

By the late 19th century, paper money started to exist: gold exchange standard where paper money could circulate internationally, but each banknote was representing some amount of gold.

The continuing automaticity of the gold exchange standard relied on adherence to three principles, known as the 'rules of the game' (i.e., contemporaries tried to implement the impossible trinity principle):

1. full gold convertibility at fixed price of banknotes (i.e., fixed exchange rate);
2. full backing where central bank holds at least as much gold as it has issued banknotes (i.e., no monetary policy autonomy);
3. freedom in trade and capital movements (i.e., full capital mobility).

Prehistory: before paper money

Gold exchange standard was suspended in 1914.

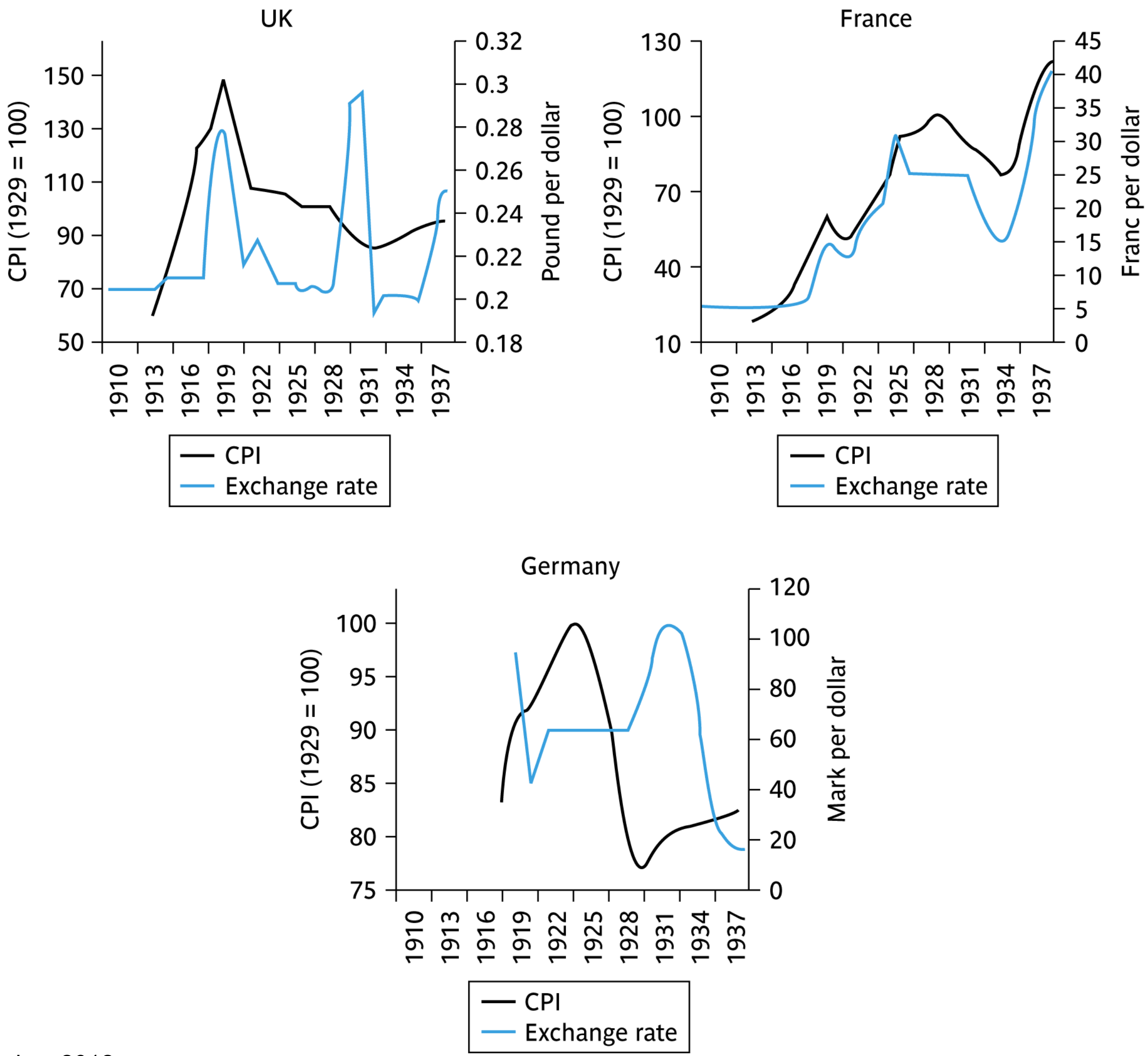
Because of war expenditures, governments issued debt and printed money. During the war, prices were kept artificially stable through rationing schemes; when war was ended and prices were freed, the accumulated inflationary pressure burst: Germany, Hungary and Greece faced monthly inflation rates of 1000% or more in the early 1920s.

Post-war policymakers committed to return to gold exchange standard as soon as practical: at which exchange rate? European countries adopted different strategies, which ended up tearing them apart, economically and politically.

Prehistory: before paper money

- UK: return to a much-depreciated sterling to its pre-war gold parity, ‘to look the dollar in the face’, which forced appreciation: a landmark policy mistake that led to overvaluation. Restoring competitiveness required deflation through a lengthy and painful process. The Bank of England withdrew from the gold standard in 1931.
- France: intended to return to its pre-war gold parity, but soon lost control of inflation for several years. It did in 1928 with an undervalued exchange rate, which led to surpluses. It had to devalue once UK and USA abandoned the gold standard.
- Germany: never considered returning to its pre-war level. It suffered one of history’s most violent hyperinflations. The German economy started to pick up just when it was hit by the Great Depression. In the end, it stopped conversion of marks into gold and foreign currencies – an extreme form of capital controls – and imposed ever-widening state controls on imports and exports.

Prehistory: before paper money



Prehistory: before paper money

When gold standard collapsed, exchange rates were left to float. Each country (except Germany) sought relief by letting its exchange rate depreciate to boost exports: tit-for-tat depreciations, which led to protectionist measures.

The result was political instability, leading to war.

Among the many lessons learnt, two are relevant for the monetary integration process:

- freely floating exchange rates result in misalignments that breed trade barriers and eventually undermine prosperity;
- management of exchange rate parities cannot be left to each country's discretion: need of a 'system'.

Bretton Woods

Bretton Woods conference established an international monetary system based on paper currencies:

- gold as ultimate source of value, but the dollar as the anchor of the system (with US government guarantying its value in terms of gold);
- all other currencies defined in terms of the dollar;
- IMF supervising compliance and providing emergency assistance;
- most countries made abundant use of capital controls.

System unravelled with lifting of capital controls in the 1960s: exchange rates had to be freed or authorities had to give up monetary policy autonomy. Most governments (except Canada) refused to make such a choice. The dollar gradually became overvalued and:

- USA ‘suspended’ the dollar’s convertibility into gold in 1971;
- ‘fixed but adjustable’ principle was officially abandoned in 1973.

Europe's snake

First European response to the collapse of Bretton Woods: 'European Snake' = regional version of the Bretton Woods system to limit intra-European exchange rate fluctuations.

It was a very loose arrangement and when inflation rose due to the first oil shock of 1973–74, divergent monetary policies led several countries to leave the Snake.

In spite of its failure, the Snake brought about two innovations:

- determination to keep intra-European rates fixed, irrespective of what happened elsewhere in the world;
- European currencies needed to be defined vis-à-vis each other. The Snake was meant to be 'an island of stability in an ocean of instability'.

The next move was the European Monetary System (EMS).

The European Monetary System

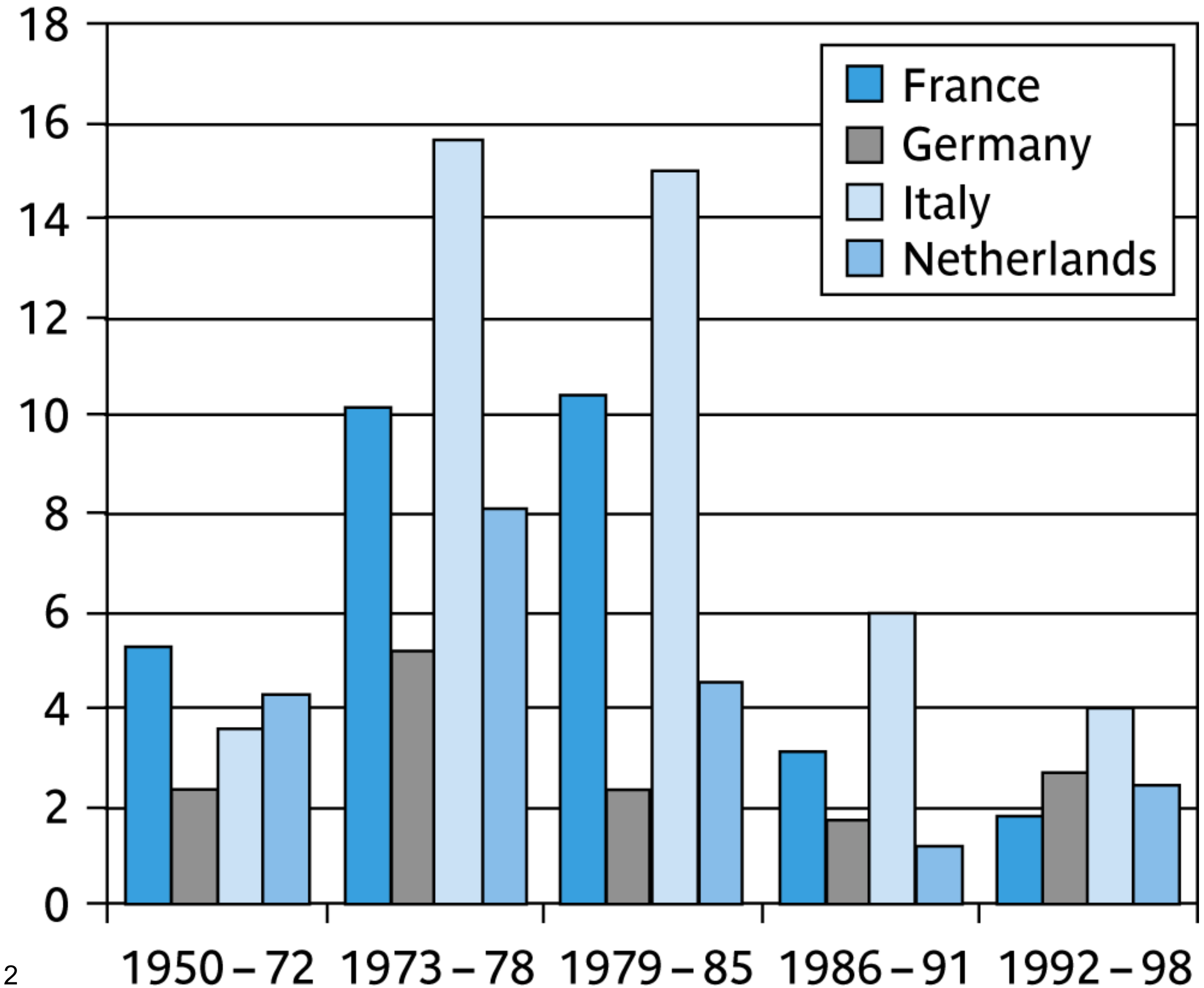
Heart of EMS is the Exchange Rate Mechanism (ERM): grid of agreed bilateral exchange rates, mutual support, joint realignment decisions, ECU.

Table 14.1 ERM membership

Older EU members	Joined	Left	Recent EU members	Joined	Left
Austria	1995	1999	Bulgaria		
Belgium-Luxembourg	1979	1999	Cyprus	2005	2008
Denmark	1979	1999	Czech Rep.		
Finland	1996	1999	Estonia	2004	2011
France	1979	1999	Hungary		
Germany	1979	1999	Latvia	2005	
Greece	1998	2001	Lithuania	2004	
Ireland	1979	1999	Malta	2005	2008
Italy	1979, 1996	1992, 1999	Poland		
Netherlands	1979	1999	Romania		
Portugal	1992	1999	Slovakia	2005	2009
Spain	1989	1999	Slovenia	2004	2007
Sweden					
UK	1990	1992			

The European Monetary System

No fewer than 12 realignments during 1979-1987 due to different inflation rates:



The European Monetary System

As capital controls were lifted, realignments became increasingly destabilizing. Thus, high-inflation and depreciation-prone countries tried to reduce inflation to converge to the lowest rate: Germany became the standard to emulate (i.e., German monetary policy became the ERM standard and other countries de facto surrendered monetary policy independence) and inflation rates started to converge.

No realignment between 1987 to September 1992; a system designed to be symmetric became perfectly asymmetric. Two implications:

- countries resented the Bundesbank leadership;
- Germany was unwilling to give up leadership but accepted a political deal in 1991: monetary union in exchange for reunification with the former East Germany.

The European Monetary System

But inflation differentials persisted. German reunification was costly and became inflationary, which led to contractionary German monetary policy. When other countries did not follow and referendum in Denmark rejected the Maastricth Treaty, speculative attacks targeted countries that were less competitive:

- Banca d’Italia and Bank of England intervened to support their currencies;
- attacks became so massive that Bundesbank stopped its support → the lira and the pound withdrew from the ERM;
- speculation shifted to the currencies of Ireland, Portugal and Spain; contagion then spread to Belgium, Denmark and France;
- monetary authorities adopted new ultra-large (±15 per cent) bands of fluctuation: → tight ERM was dead.

The European Monetary System

Post-crisis ERM agreed in 1993 differed little from a floating exchange rate regime (i.e., bilateral parities could move by 30%).

One condition in Maastricht Treaty for joining the monetary union: at least two years of ERM membership → ERM is still in use as a temporary gateway but it has been re-engineered:

- parities defined vis-à-vis the euro;
- margin of fluctuation less precisely defined;
- interventions automatic and unlimited, but ECB may stop them.

Table 14.3 ERM membership as of September 2011

Country	Date of ERM membership	Band of fluctuation (%)
Denmark	1 January 1999	± 2.25
Lithuania	27 June 2004	± 15
Latvia	2 May 2005	± 15

The Maastricht Treaty

The Maastricht Treaty (1991) established the monetary union:

- it described in great detail how the system would work, including the statutes of the ECB;
- it set the conditions under which monetary union would start;
- it specified entry conditions (mostly at German request);
- fulfillment of these criteria to be evaluated by late 1997, a full year before the euro would replace the national currencies. In the end, all the countries that wanted to adopt the euro qualified, with the exception of Greece, which had to wait for another two years.

On 4 January 1999, the exchange rates of 11 countries were 'irrevocably' frozen and the power to conduct monetary policy was transferred to the European System of Central Banks (ESCB), under the aegis of the European Central Bank (ECB). Euro banknotes and coins were introduced in January 2002.

Decades of attempts to achieve a monetary union

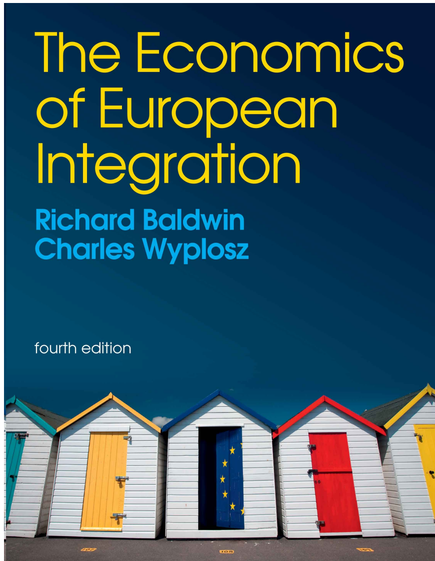
Table 14.4 Steps of monetary integration

Towards Maastricht		Between Maastricht and the single currency		After Maastricht	
1970	Werner Plan	1994	European Monetary Institute (precursor of ECB)	1999	Monetary union starts
1979	European Monetary System 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	2007	Slovenia joins
1993	Maastricht Treaty ratified	1998	Creation of ECB	2008	Cyprus and Malta join
				2009	Slovakia joins
				2011	Estonia joins

Chapter 16: The European monetary union

A normal central bank is a monopolist. Today's Eurosystem is, instead, an archipelago of monopolists.

Tommaso Padoa-Schioppa (Former Executive Board member of the ECB)



The Maastricht Treaty

Monetary union is the outcome of a deal between Germany and the other countries. As part of it, the Maastricht Treaty included:

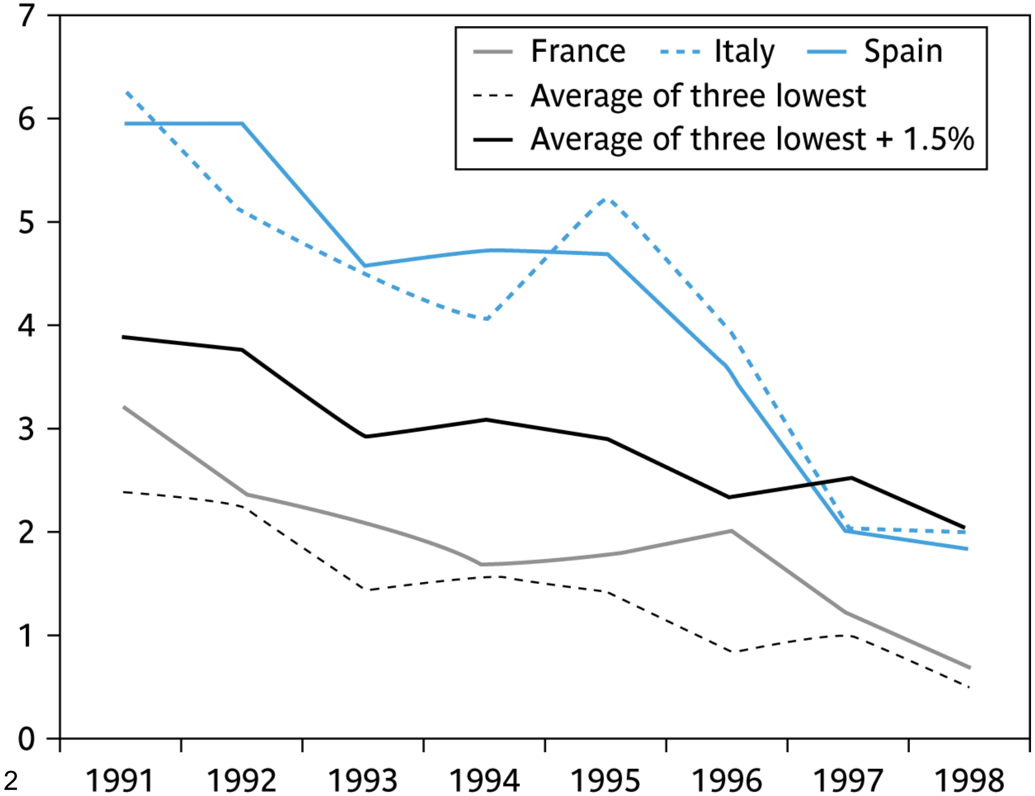
- a firm commitment to launch the single currency by January 1999 at the latest;
- a list of five criteria for admission to the monetary union;
- a precise specification of central banking institutions;
- additional conditions mentioned (e.g. the excessive deficit procedure).

Maastricht Treaty introduced, for the first time, the idea that a major integration move could leave some countries out. It specifies that all countries are expected to join as soon as practical (Denmark and UK were given an exemption; Sweden does not have an exemption but acts as if it did).

The Maastricht Treaty: five entry conditions

A selection process to certify which countries had adopted a 'culture of price stability' (i.e., German-style low inflation): countries have to fulfill five convergence criteria:

- inflation: not to exceed by more than 1.5 percentage points the average of the 3 lowest inflation rates among EU countries;



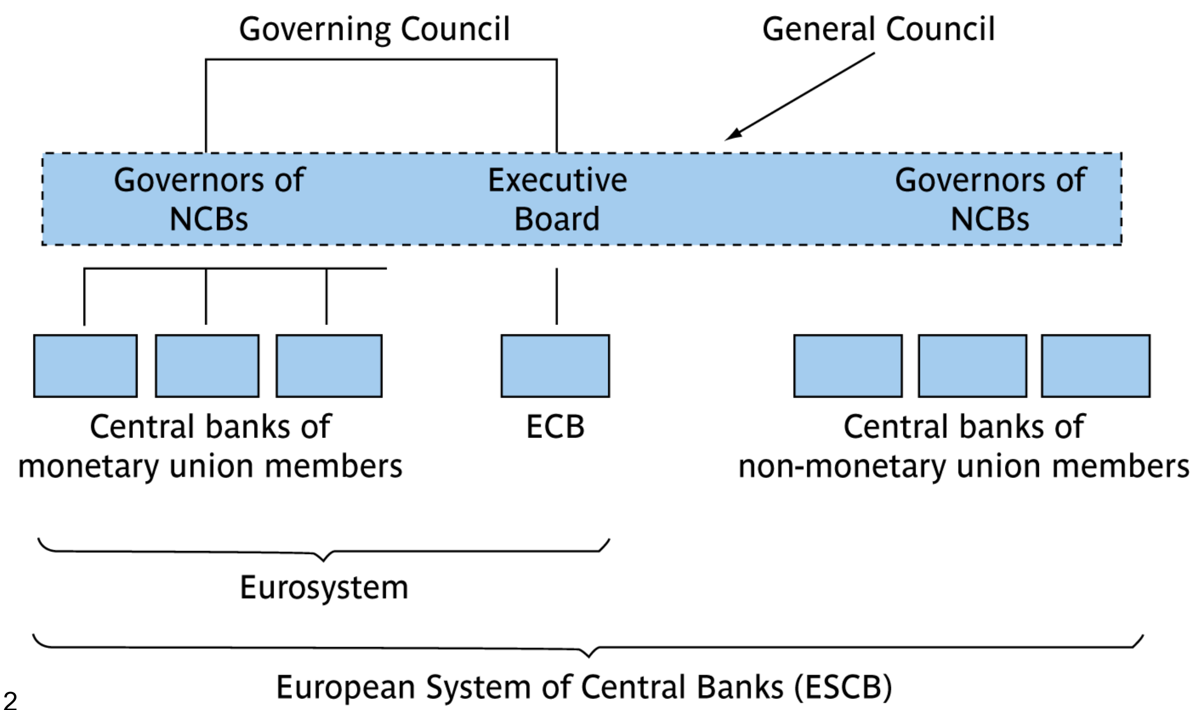
The Maastricht Treaty: five entry conditions

- long-term nominal interest rate: not to exceed by more than 2 percentage points the average interest rate in the 3 lowest inflation countries (long-term interest rates mostly reflect markets' assessment of long-term inflation);
- ERM membership: at least 2 years in ERM without being forced to devalue;
- budget deficit: deficit less than 3% of GDP. Historically, all big inflation episodes born out of runaway public deficits and debts!
- public debt: debt less than 60% of GDP (average of countries).

The Eurosystem

N countries with N National Central Banks (NCBs) and 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. The Eurosystem: the ECB and the NCBs of euro area member countries.



Objectives

"*The primary objective of the ESCB shall be to maintain price stability. Without prejudice to that objective, it shall support the general economic policies in the Union in order to contribute to the achievement of the latter's objectives.*"

(Article 282-2)

Eurosystem has chosen to interpret it as follows: 'Price stability is defined as a year-on-year increase in the Harmonized Index of Consumer Prices (HICP) for the Eurozone of below 2 per cent. Price stability is to be maintained over the medium term.'

→ commonly understood as between 1.5 and 2%;

→ commonly understood to refer to a 2–3 year horizon.

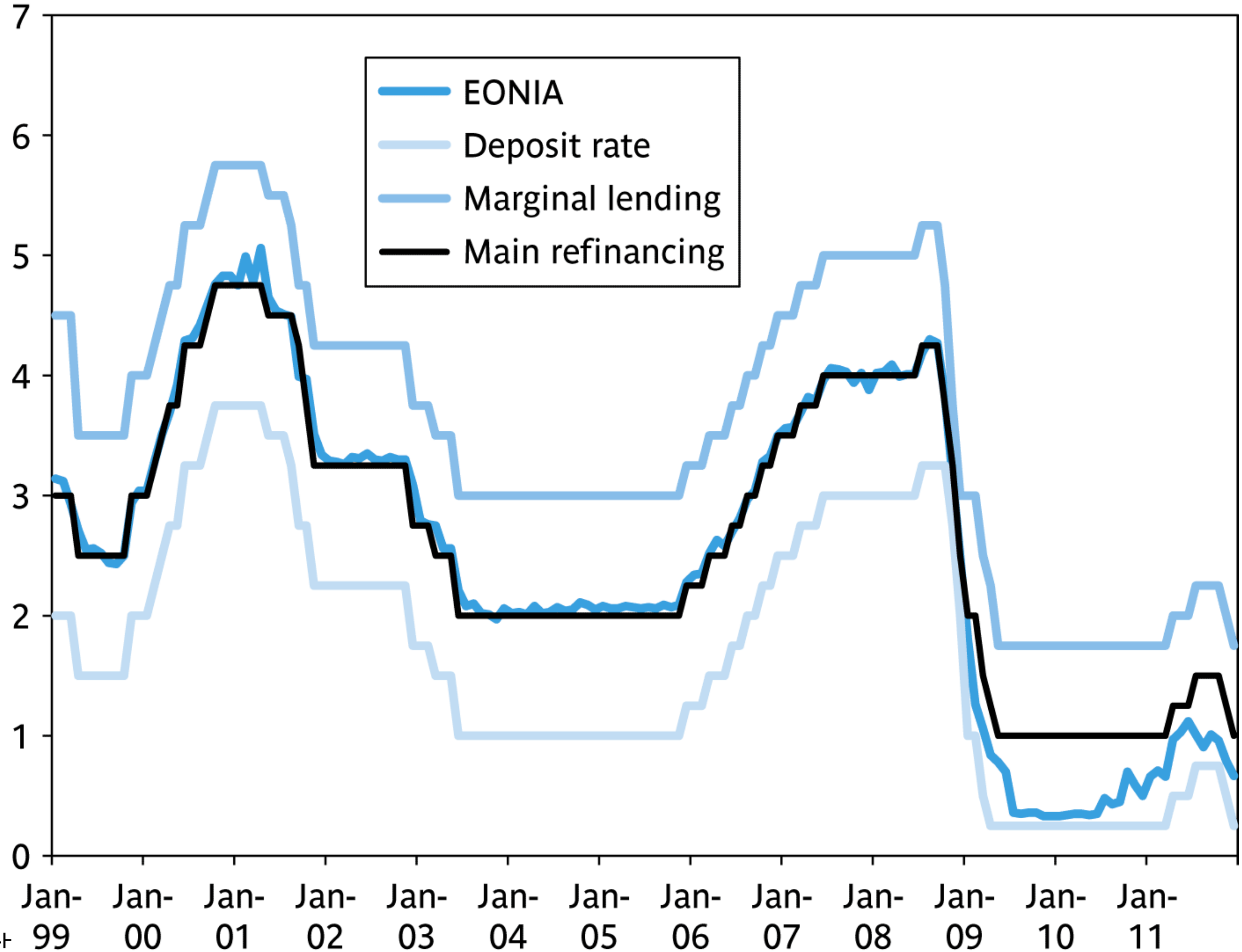
Instruments

Eurosystem uses the short-term interest rate: its changes have a knock-on effect on longer-term interest rates (and thus on the cost of credit), on asset prices (and thus on capital costs of firms) and on the exchange rate (and thus on foreign demand for domestic goods and services).

The Eurosystem focuses on the overnight rate EONIA (European Over Night Index Average, a weighted average of overnight lending transactions in the Eurozone’s interbank market):

- The Eurosystem creates a ceiling and a floor for EONIA by maintaining open lending and deposit facilities at pre-announced interest rates;
- The Eurosystem conducts, usually weekly, auctions at a rate that it chooses, thus providing liquidity to the banking system and the chosen interest rate serves as a precise guide for EONIA.

Instruments



Strategy

Strategy relies on three main elements:

1. definition of price stability;

and two ‘pillars’ to identify risks to price stability:

1. first pillar = ‘economic analysis’. It consists of a broad review of recent evolution and likely prospects of economic conditions (e.g., growth, employment, prices, exchange rates, foreign conditions);
2. second pillar = ‘monetary analysis’. It studies the evolution of monetary aggregates (M3, in particular) and credit.

Independence and accountability

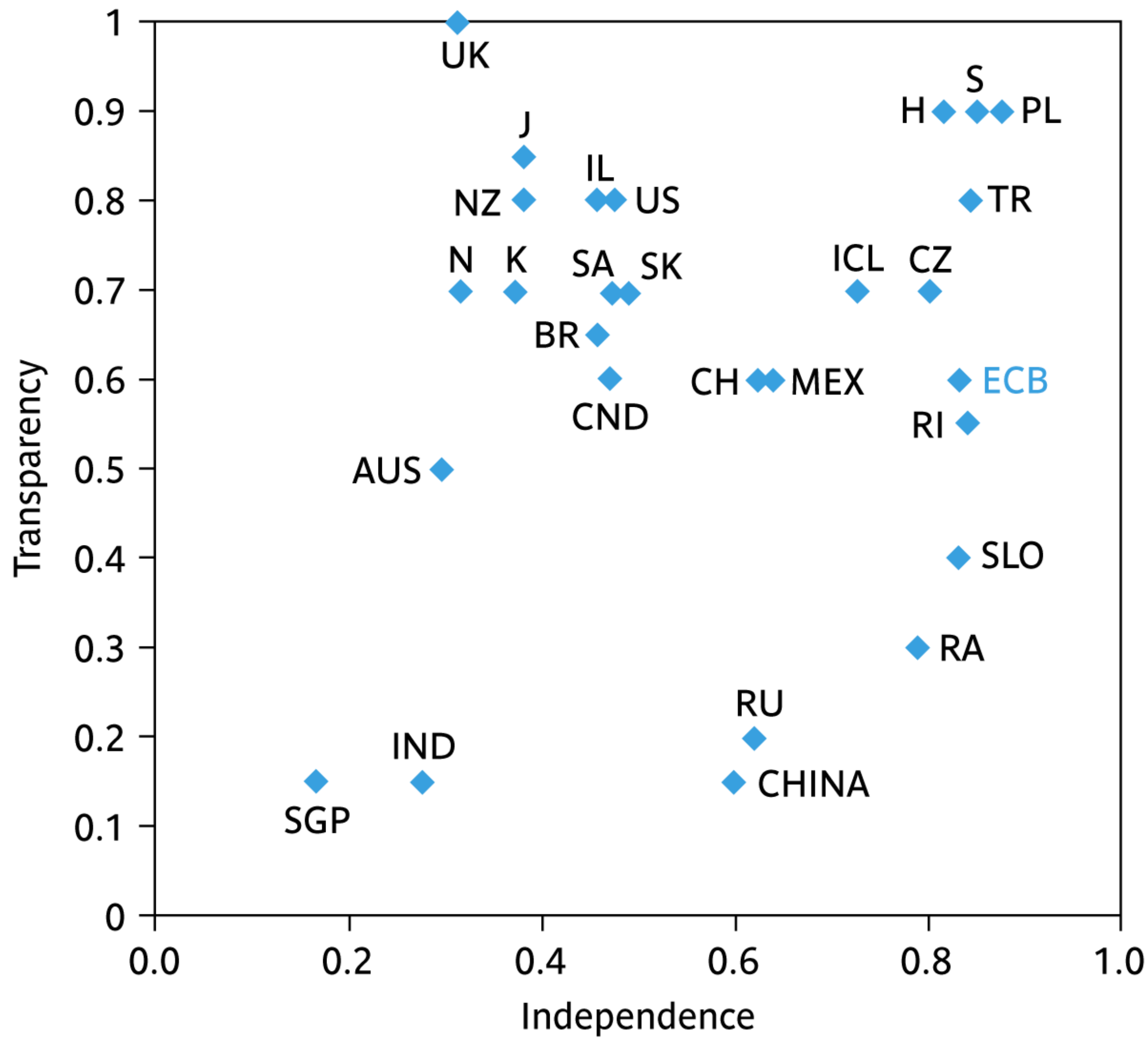
A central bank must be free to operate without outside interference but delegation to unelected officials needs to be counterbalanced by democratic accountability.

Eurosystem is characterized by a great degree of independence (probably the world's most independent central bank).

Eurosystem operates under the control of the European Parliament. Transparency contributes powerfully to accountability.

Independence and accountability

Independence and transparency indices:



The first years (until the Great Crisis)

A difficult period:

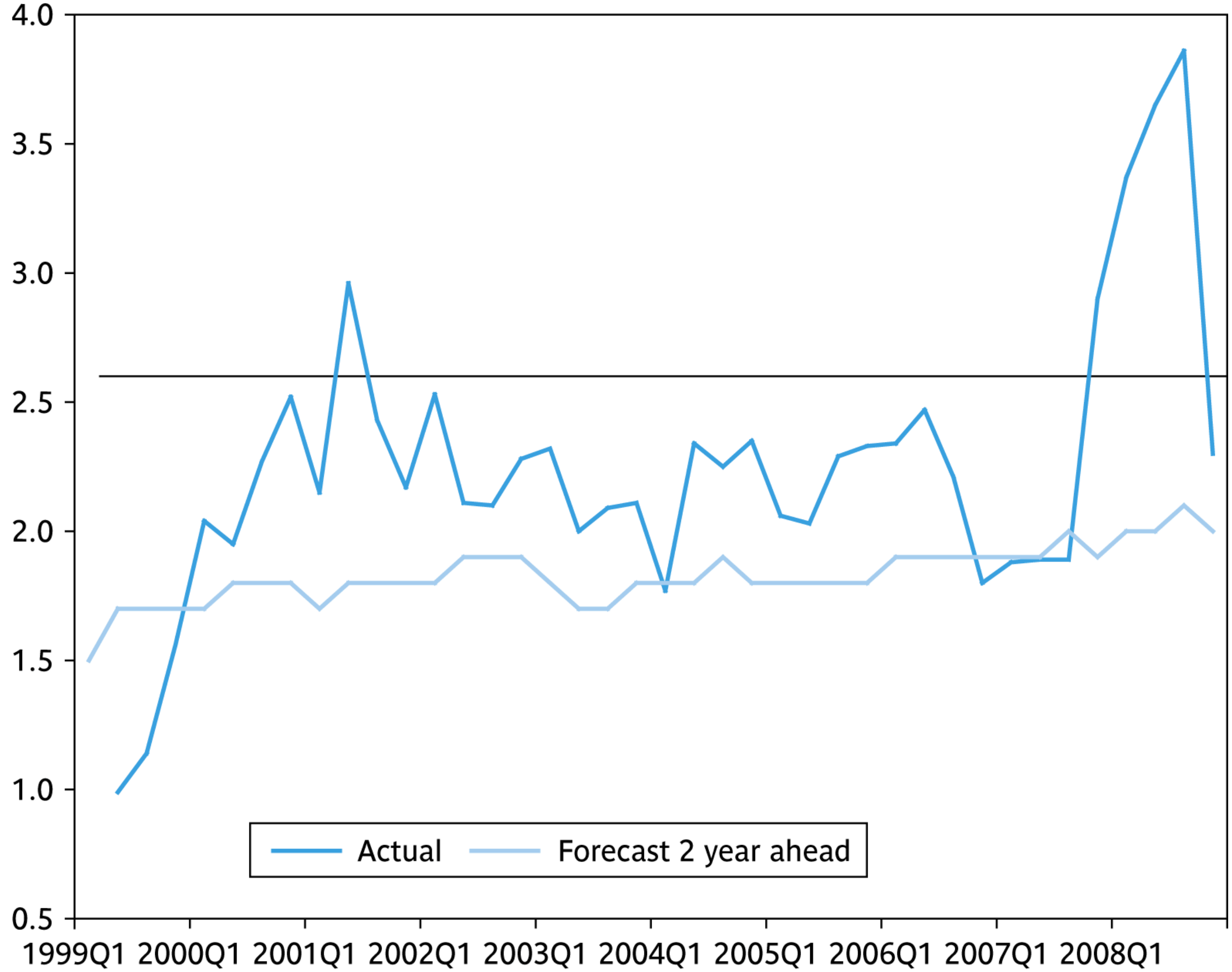
- oil shock in 2000;
- September 11 in 2001;
- oil prices to record level and US financial crisis start in mid-2007

Result: inflation almost always above 2% but close to target (until 2007) and lower than perceived.

Growth has been generally slow in the Eurozone, prompting criticism of the ECB, including by some member governments.

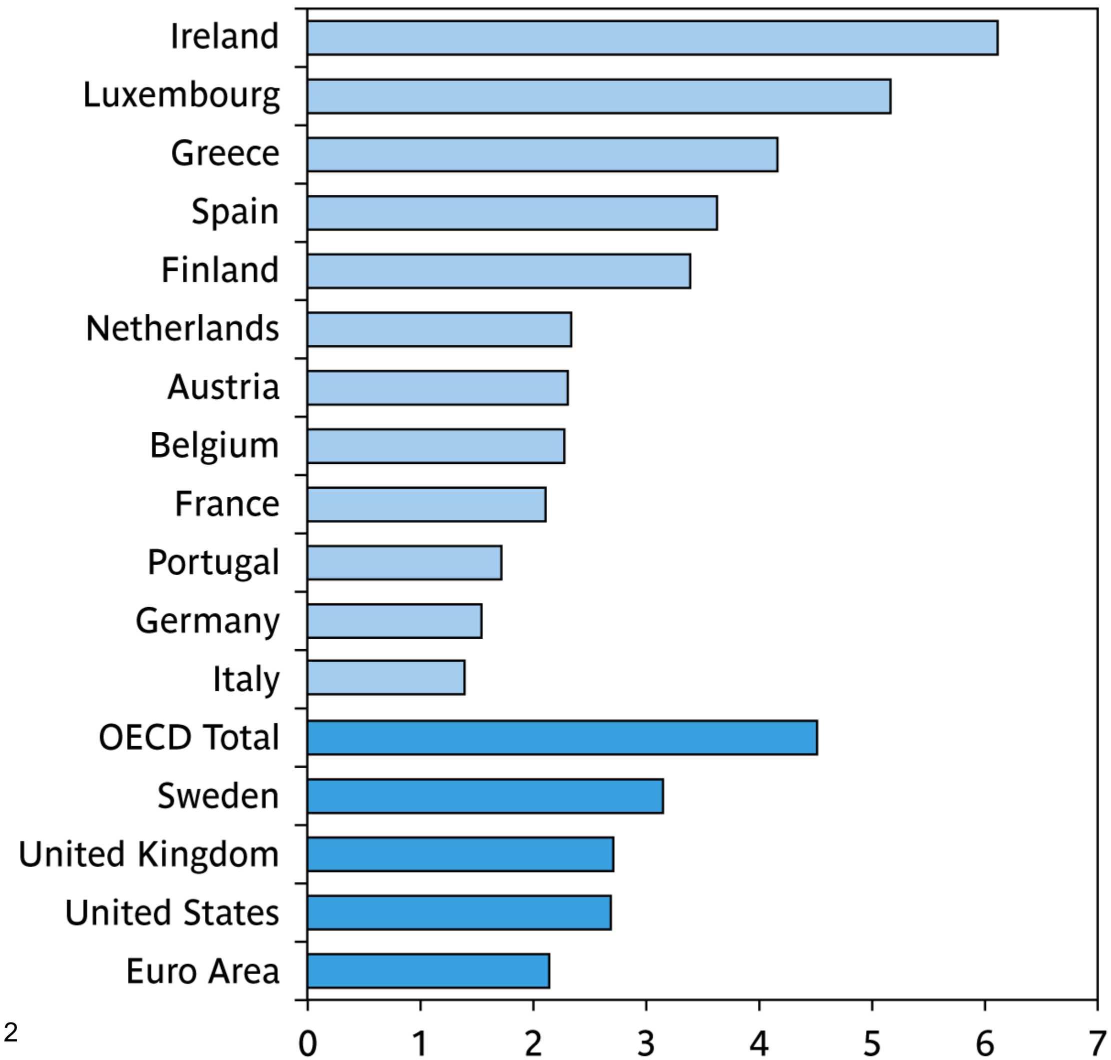
The first years (until the Great Crisis)

Inflation in the Eurozone (%), 1999Q1–2008:



The first years (until the Great Crisis)

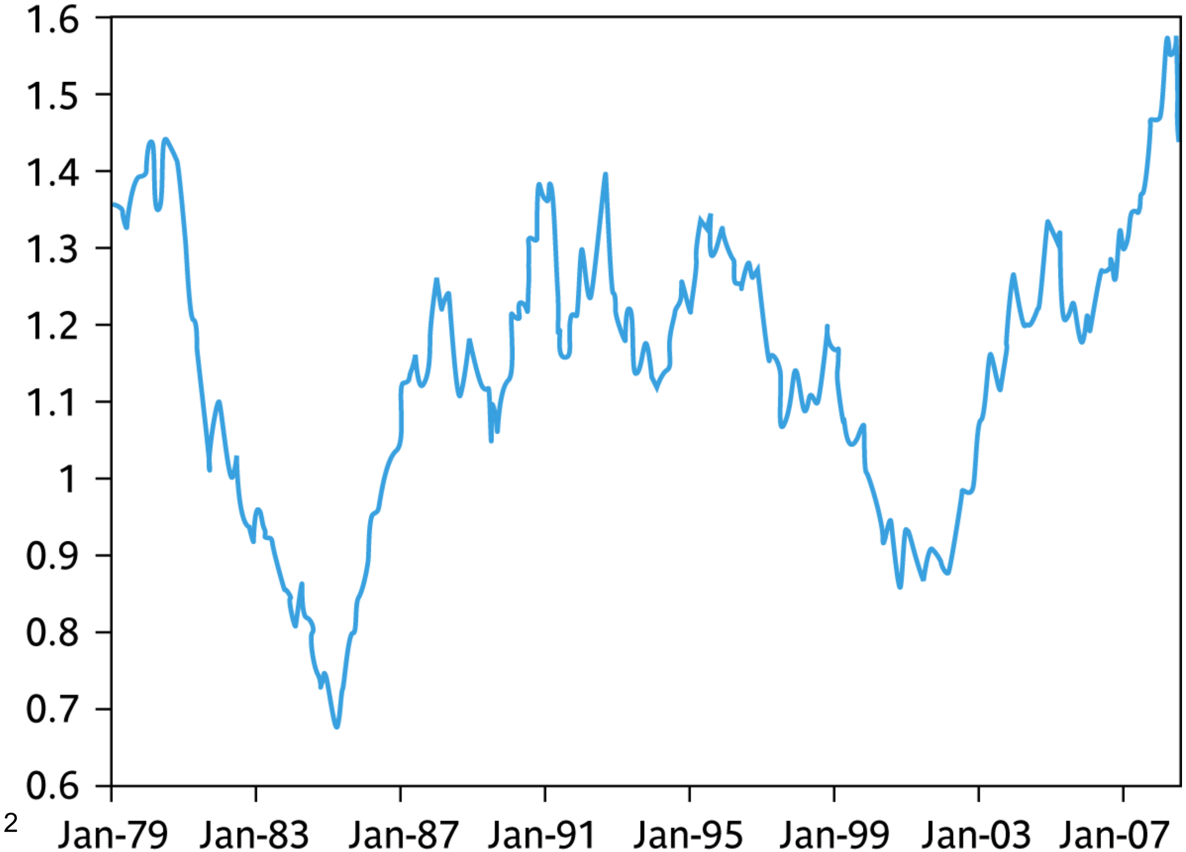
Average annual GDP growth rate (%), 1999–2008:



The first years (until the Great Crisis)

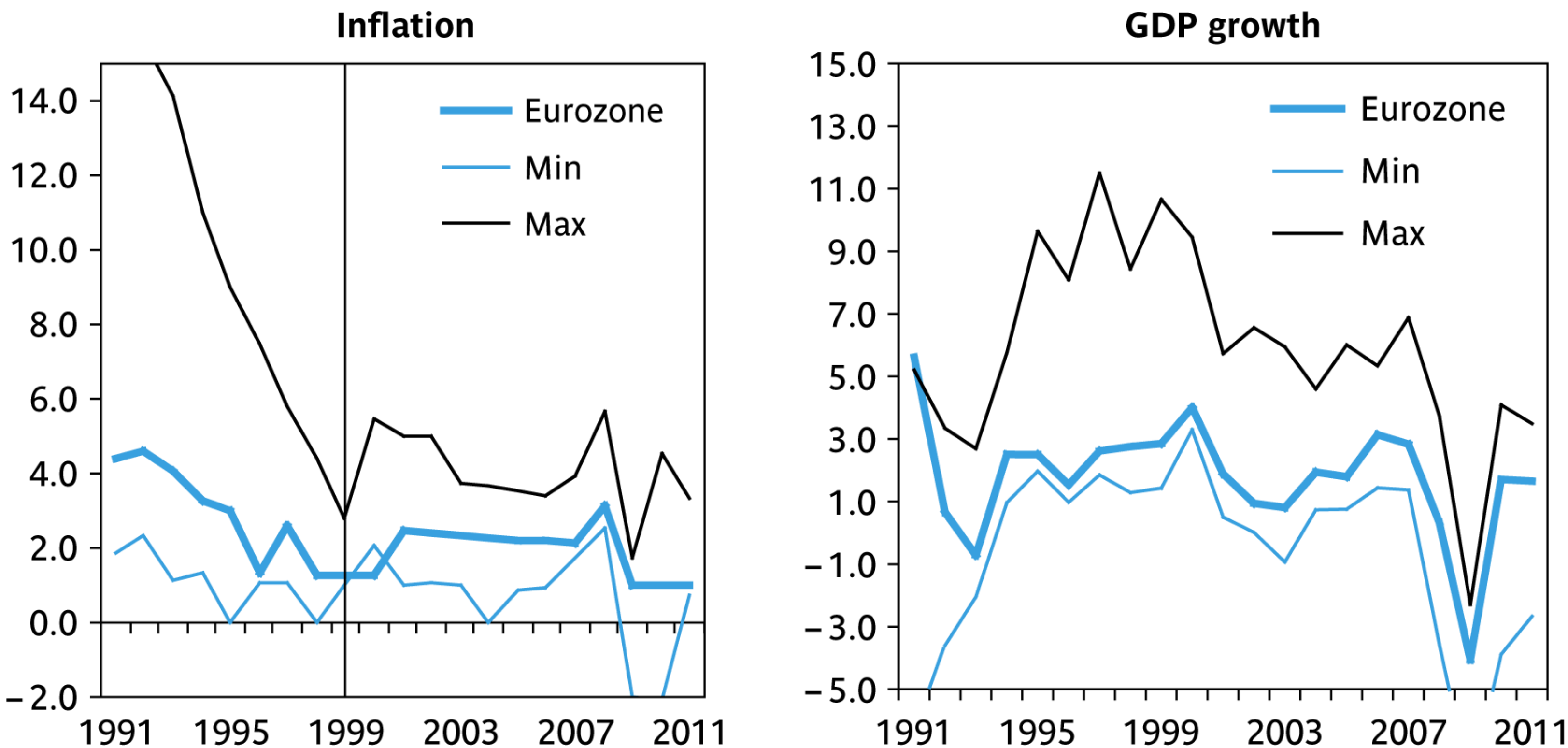
Exchange rate: from too weak to too strong? But Eurosystem does not manage exchange rate: the euro is a freely floating currency.

The dollar/euro exchange rate, January 1979–September 2008:



The first years (until the Great Crisis)

Asymmetries: some evidence of decrease:



The first years (until the Great Crisis)

Still, large inflation differentials have occurred:

- lower than average: Germany, France and Finland;
- higher than average: Ireland, Spain, Portugal, Netherlands and Italy.

Possible causes:

- catching up in productivity levels;
- wrong initial conversion rates;
- autonomous wage and price setting;
- policy mistakes, such as fiscal expansion;
- asymmetric shocks, such as oil price effects.

New EU members and EMU

New EU members do not have an opt-out so they are formally required to join the Eurozone 'as soon as possible'.

They must meet the five convergence criteria, assessed by 'Convergence Reports'.

The latest extensive report was issued in May 2008 and included the ten countries with a derogation (Bulgaria, the Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia and Sweden): only Slovakia met the conditions to join the euro area in January 2009 (for Sweden, this is intentional since it does not want to join the ERM).

In 2010, a report concerned just Estonia, which was found to meet the requirements for joining the euro area.