



Monetary integration

Class overview

1. Gold Standard
2. Inter-wars
3. Bretton Woods
4. EMS
5. Euro



- Slides are largely based on Baldwin-Wyplosz's ones (textbook)



Back to the future: 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.



Back to the future: before paper money

- 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).



Back to the future: 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.

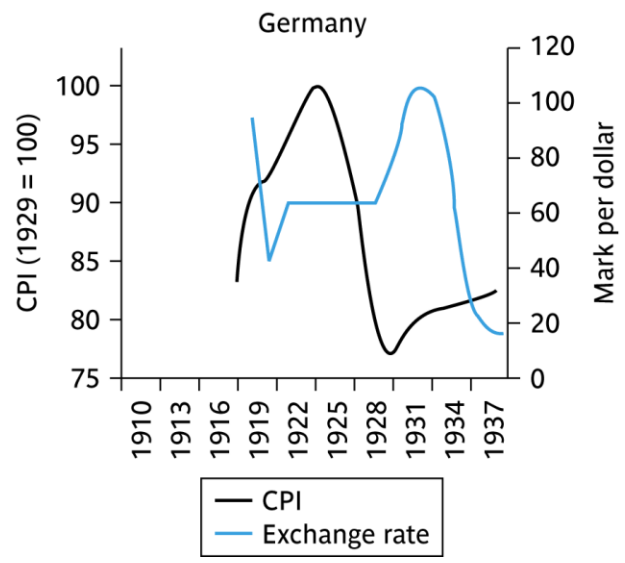
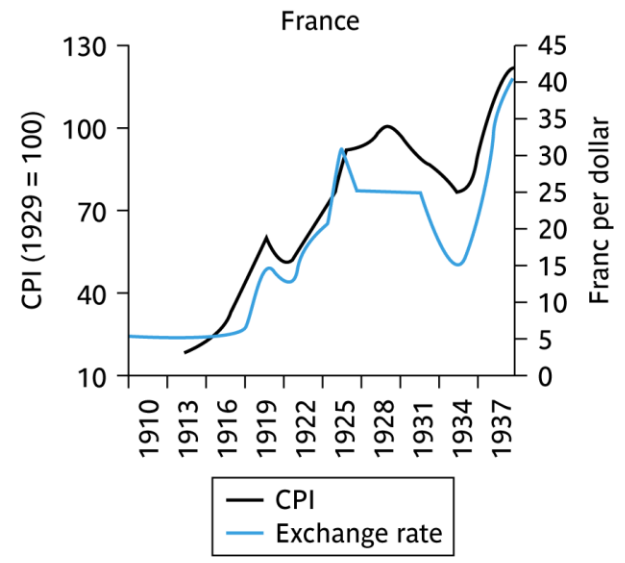
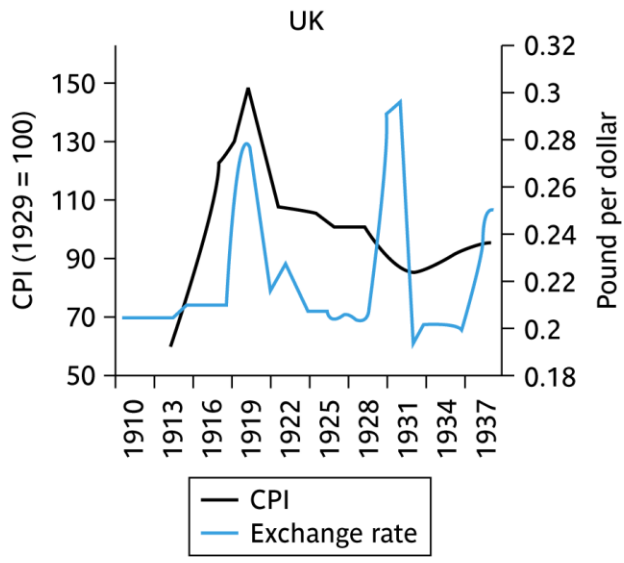


Back to the future: before paper money

- 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.



Back to the future: before paper money





Back to the future: 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.

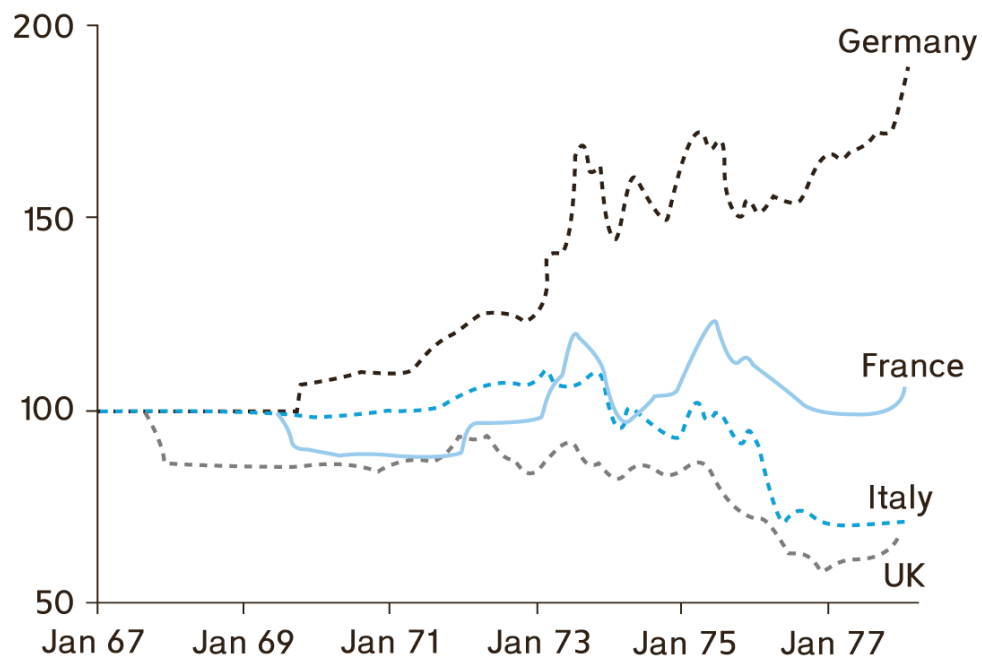


Europe's snake in the tunnel

- 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).



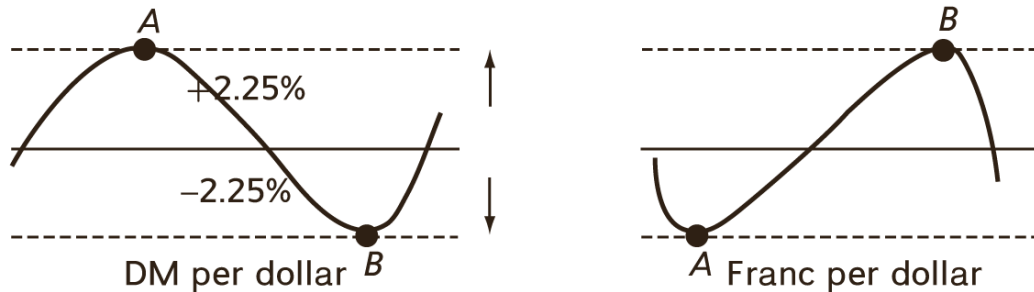
Europe's snake in the tunnel



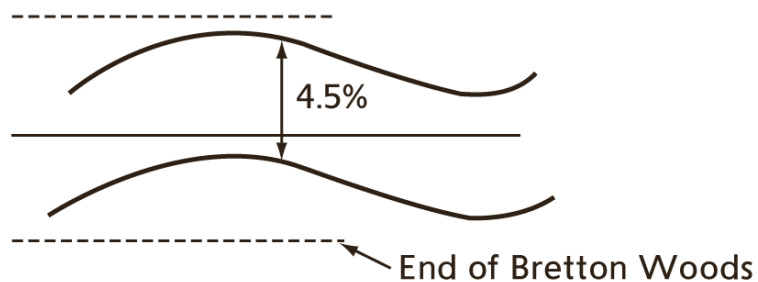


Europe's snake in the tunnel

1. Without the snake



2. The snake in the tunnel





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.

Older EU members	Joined	Left	Recent EU members	Joined	Left
Austria	1995	1999	Bulgaria		
Belgium/Luxembourg	1979	1999	Cyprus	2005	2008
Denmark	1979	Still a member	Czech Rep.		
Finland	1996	1999	Estonia	2004	2011
France	1979	1999	Hungary		
Germany	1979	1999	Latvia	2005	2014
Greece	1998	2001	Lithuania	2004	2015
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			



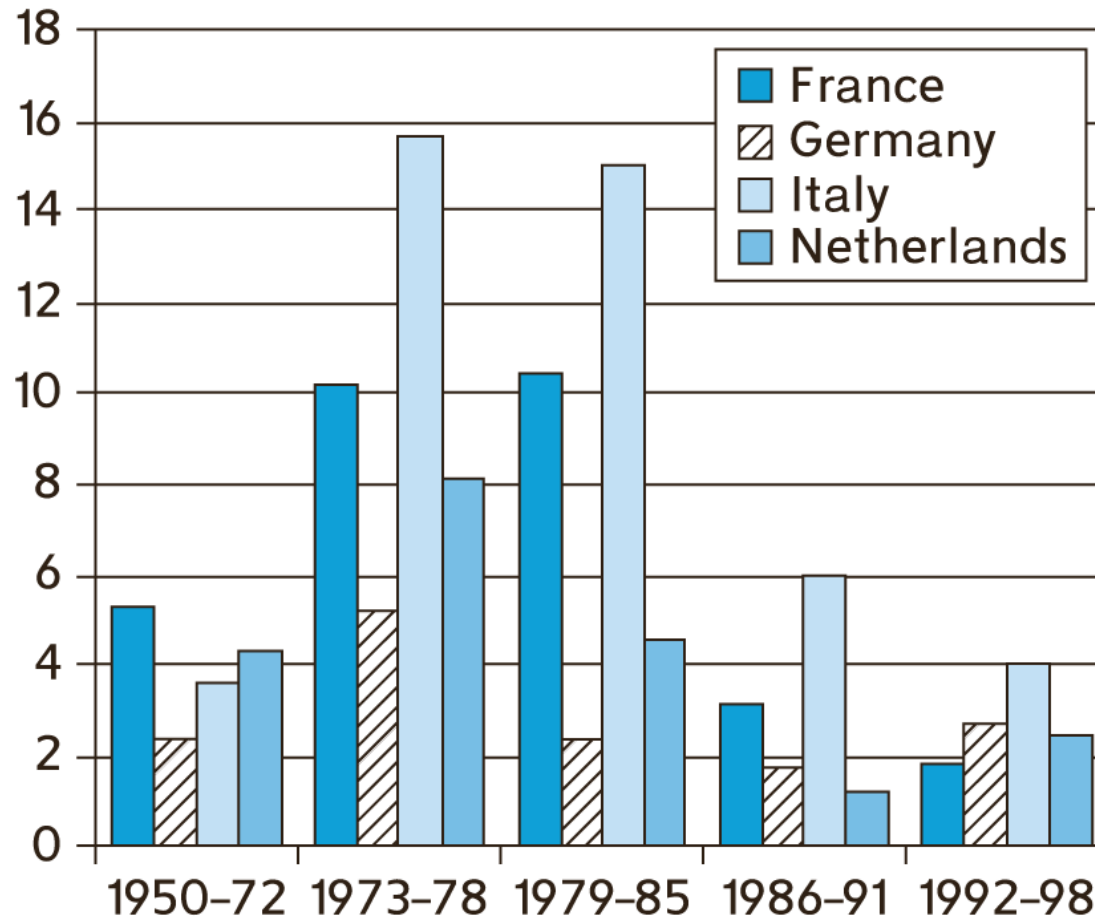
The European Monetary System

- No fewer than 12 realignments during 1979 and 1995

Dates	24.9.79	30.11.79	22.3.81	5.10.81	22.2.82	14.6.82
No. of currencies involved	2	1	1	2	2	4
Dates	21.3.83	18.5.83	22.7.85	7.4.86	4.8.86	12.1.87
No. of currencies involved	7 ^a	7 ^a	7 ^a	5	1	3
Dates	8.1.90	14.9.92	23.11.92	1.2.93	14.5.93	6.3.95
No. of currencies involved	1	3 ^b	2	1	2	2

The European Monetary System

- Realignments due to different inflation rates:





The European Monetary System

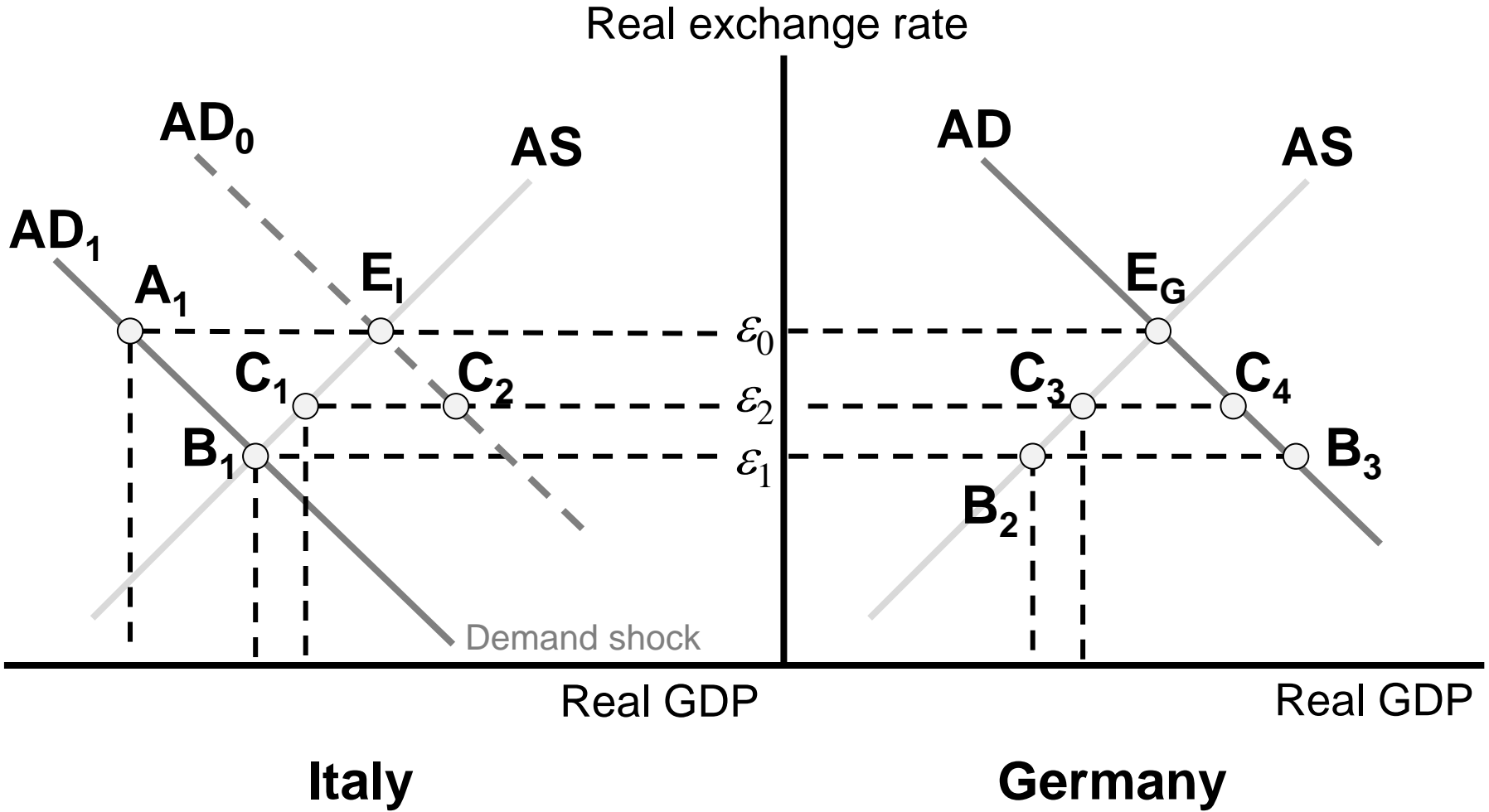
- As capital controls were lifted, realignments became increasingly destabilizing. Thus, high-inflation and depreciation-prone countries tried to reduce inflation to converge to the lowest rate: Germany became the standard to emulate (i.e., German monetary policy became the ERM standard and other countries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



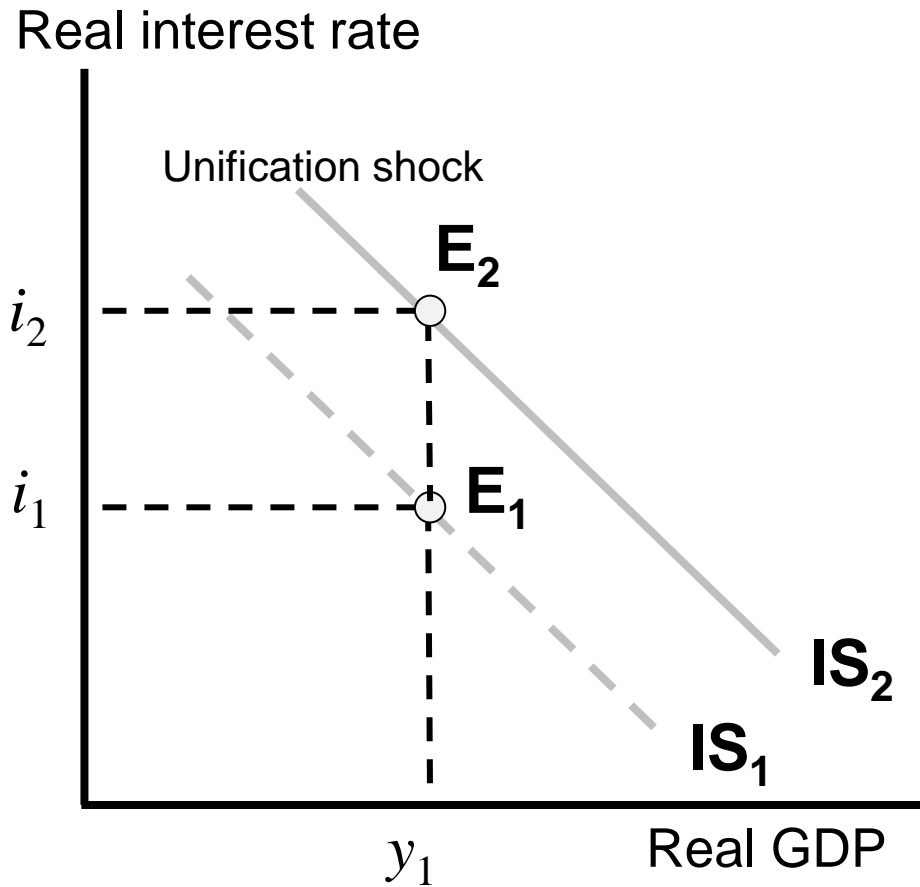
The European Monetary System

- 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 Maastricht 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.

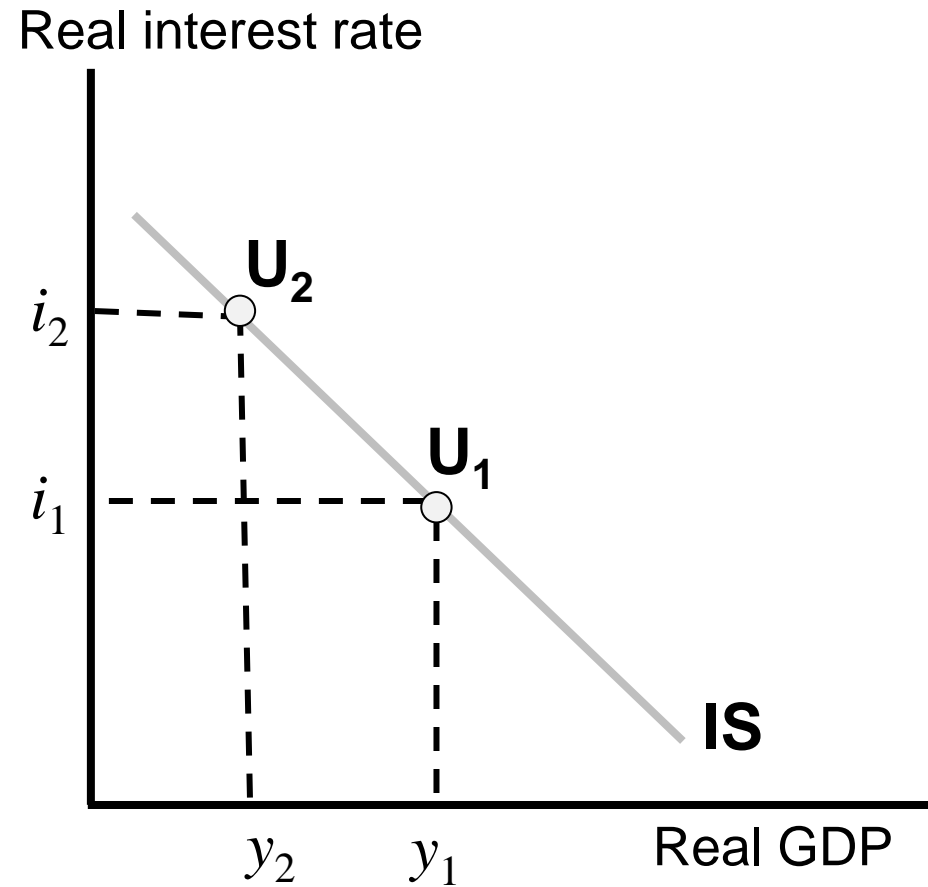
Country specific shock



The German unification shock



Germany



United Kingdom



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.



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.