A Comparison of the ERM Crisis in the Early 1990s with Recent Years' Financial and Sovereign Debt Crisis in Europe

Kim Abildgren and Sune Malthe-Thagaard, Economics

INTRODUCTION AND SUMMARY

In the early 1990s, the European foreign-exchange market was exposed to strong speculative pressures, during which one currency after the next came under attack. The pound sterling, the Italian lira, the Portuguese escudo, the Spanish peseta, the Irish pound, the Swedish krona, the Norwegian krone as well as the Finnish mark fell sharply. The crisis culminated in 1993 with speculation against the entire ERM system.

About 20 years later, the financial and sovereign debt crisis in certain European countries has once again put the European economic cooperation under pressure. This article compares the crisis in the European Exchange Rate Mechanism, ERM, in the early 1990s with recent years' financial and sovereign debt crisis. The role of fiscal policy and macroeconomic imbalances in the years ahead of the crises are analysed. Furthermore, the significance of the launch of the euro and the single monetary policy to the crises in recent years compared with the situation with national currencies in the early 1990s is discussed.

The currency crisis in the early 1990s should be viewed against the backdrop of the German Reunification combined with macroeconomic imbalances in a number of the countries participating in the ERM. The Reunification was accompanied by several years of strong economic growth, government budget deficits and elevated inflation in Germany, which led to relatively high German interest rates. This did not fit in with the cyclical positions of the other ERM members, especially the countries that had built up serious macroeconomic imbalances. This instigated a feeling in the market that existing central rates were unsustainable and gave rise to massive speculative pressures against certain currencies and eventually the entire ERM.

The financial and sovereign debt crisis in recent years came in the wake of a deep global economic and financial crisis that erupted in 2008. Most countries implemented considerable fiscal expansionary measures to mitigate the negative effects of the crisis on output and employment. However, several countries soon realised that they did not have sufficient fiscal scope for such expansion, and for a number of euro area member states facing macroeconomic imbalances, the financial crisis developed into an outright sovereign debt crisis.

A common feature of the two crises is that several European countries failed to address the macroeconomic imbalances during the years of strong economic growth ahead of the crisis. Another common feature is that the imbalances built up over a number of years before the crisis erupted. Therefore, the lesson learnt from both crises is that it is important to monitor and correct macroeconomic imbalances in time to prevent systemic risks.

The launch of the euro largely eliminated yield spreads between the euro area member states. At first, this gave the countries facing macro-economic imbalances more time to address the problems before the imbalances were reflected in long-term interest rates and without an increase in short-term interest rates, which were now determined by monetary policy for the euro area overall. However, the improved framework for correcting imbalances was not used, and the euro area systems for overseeing and preventing government budget deficits and other macroeconomic imbalances turned out to be inadequate. This was part of the reason why the imbalances were allowed to accumulate to a much higher level than had been the case before the crisis in the early 1990s.

The financial and sovereign debt crisis disclosed a clear need to strengthen the political cooperation between the euro area member states, which is reflected in recent years' initiatives concerning better surveillance of macroeconomic imbalances, the fiscal compact and a banking union.

MACROECONOMIC BACKGROUND

The currency crisis in the early 1990s should be viewed against the back-drop of the unusual situation following German Reunification combined with macroeconomic imbalances in a number of the countries partici-pating in the European Exchange Rate Mechanism, cf. Buiter et al. (1998). The Reunification was accompanied by several years of strong economic growth and government budget deficits in Germany, but also relatively high inflation by German standards, partly because public expenditure relating to the Reunification was not fully tax-funded. The high German interest rates did not fit in with the cyclical positions of other ERM members, especially the countries that had built up serious macroeconomic imbalances. The German central bank, Deutsche Bundesbank, maintained that its interest-rate decisions would be based on German and not European needs. This instigated a feeling in the market that existing central rates were unsustainable, which led to massive speculative pressures against certain currencies and eventually the entire European Exchange Rate Mechanism.

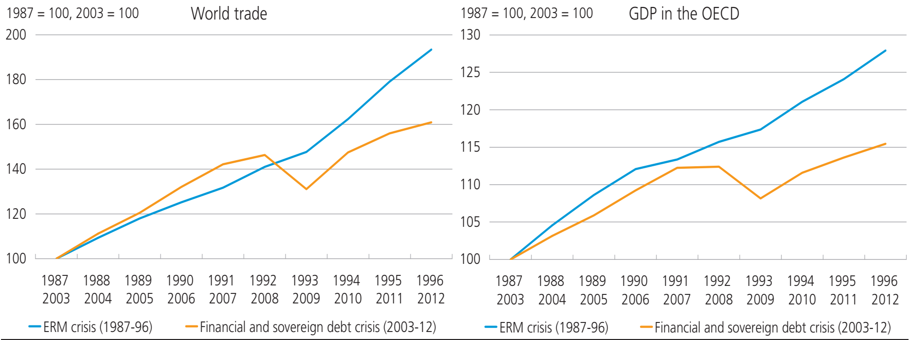
Despite the focus on banking crises and bank closures in the European countries in the late 1980s and the early 1990s, the period was not generally dominated by systemic banking crises in Europe. However the late 1980s and the early 1990s in particular, Norway, Sweden and Finland experienced outright systemic crises during which large parts of the banking sector, including several major nationwide banks, became distressed, cf. the Ministry of Economic Affairs (1994).

In contrast, the financial and sovereign debt crisis in recent years came in the wake of the global economic and financial crisis that erupted in 2008. This was a very serious worldwide real-economic crisis compared with the ERM crisis, cf. Chart 1.

The financial and sovereign debt crisis broke out after a period of strong growth in most European countries and affected all EU member states to a greater or lesser degree. Most countries introduced massive fiscal expansion to mitigate the negative effect of the crisis on output and employment, but several countries soon realised that their fiscal scope was not sufficient to pursue such active fiscal policy. This meant that financial markets began to focus more intensely on government budget deficits and government debt, and for a number of euro area member states facing macroeconomic imbalances, the financial crisis developed into an actual sovereign debt crisis. This again contributed to escalation of the financial crisis, as uncertainty over the resilience of the

DEVELOPMENT IN REAL WORLD TRADE AND REAL GDP IN THE OECD COUNTRIES

Chart 1



Note: World trade comprises both goods and services. Adjustment has been sought for data breaks. 2012 is a forecast.
Source: IMF, *World Economic Outlook*, OECD, *Economic Outlook* and OECD, *Main Economic indicators*.

banking sector arose, particularly in the countries that were directly affected by the sovereign debt crisis.

SPECULATIVE ATTACKS AND CONTAGION EFFECTS

Though this article points out a number of fundamental economic causes of both the ERM crisis in the early 1990s and recent years' financial and sovereign debt crisis, it cannot be ruled out that factors of a more speculative nature have also played a role. This applies not least to the timing of events during the crises.

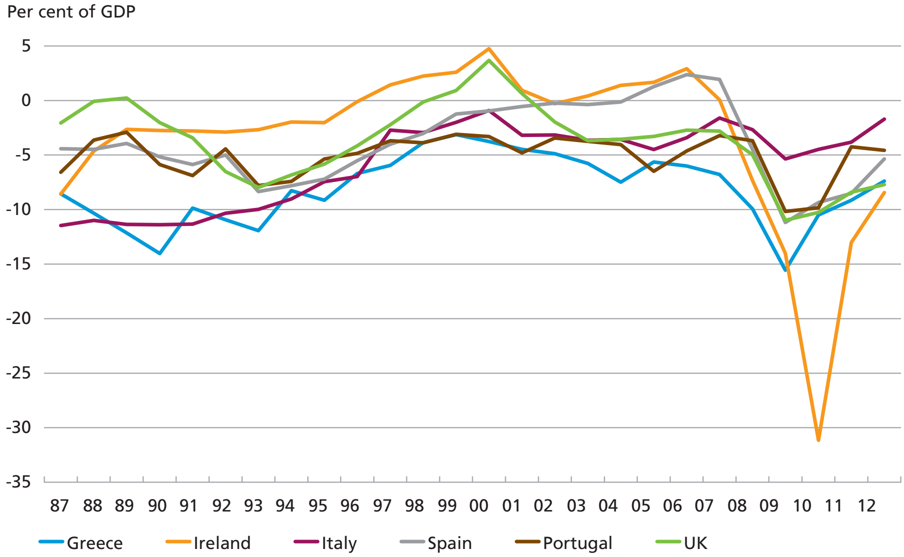
Eichengreen et al. (1993) report the results of a questionnaire survey of 132 European currency dealers in February 1993. Almost half of the respondents stated that they did not consider the need for an imminent change of ERM central rates until immediately after Danish voters' rejection of the Maastricht Treaty in the June 1992 referendum. After the referendum, the future of the EMU was suddenly more uncertain. The belief in a fast and smooth path towards a single currency was further shaken when opinion polls suggested uncertainty about the outcome of the French referendum in September 1992. The Yes camp in France only won by a narrow majority, which did not strengthen the confidence in fast realisation of the EMU plans. It is possible that this could have contributed to the pressure against the currencies in the ERM in 1992-93.

Likewise, the financial and sovereign debt crisis in recent years can hardly be explained entirely by economic fundamentals. Metiu (2012) finds that there have been considerable contagion effects in the government bond markets from Greece to Belgium, France, Portugal and Spain, from Spain to Italy and from Ireland and Portugal to Greece. Furthermore, Di Cesare et al. (2012) estimate that 250 basis points of the Italian yield spread at end-August 2012 could not be explained by economic fundamentals. Part of the excess yield spread is, according to the analysis, attributable to investors discounting the risk of discontinuation of the euro in the Italian interest rate level. Likewise, IMF (2012) concludes that around 200 basis points of Italian and Spanish yield spreads to Germany in the 1st half-year of 2012 could not be explained by economic fundamentals. The corresponding figure for Portugal was more than 500 basis points.

FISCAL POLICY

A common feature of the two crises is that during the boom years before of the crisis, a number of European countries ran substantial gov-

GOVERNMENT BUDGET BALANCE Chart 2



Note: 2012 is a forecast.
Source: OECD, *Economic Outlook*.

ernment budget deficits and failed to consolidate public finances sufficiently, cf. Chart 2. Though Spain and Ireland showed government surpluses in the years up to the most recent crisis, both countries underestimated the strength of the upswing, so their structural budget balances were generally assessed to be better than was actually the case.

In step with increasing uncertainty over whether the EMU plans would be realised, the foreign-exchange markets focused attention on economic fundamentals in the early 1990s. Only a few EU member states met the criteria for participation in Stage Three set out in the Maastricht Treaty as regards government budget balance and government debt, cf. Table 1, and the slowdown in economic activity in several countries caused by the crisis made fiscal tightening more difficult.

Differences in the individual European countries' budget and debt situations were reflected in considerable differences in long–term government bond yields. However, the long-term yield spreads also reflected that the exchange-rate stability characterising the ERM from 1987 to the outbreak of the currency crisis was largely obtained through wide short-term yield spreads to Germany for certain countries, cf. Table 2.

During the most recent financial and sovereign debt crisis, it has also been evident that developments in public finances leading up to the crisis were unsustainable in a number of countries, cf. Agerholm et al. (2012). These countries had not taken advantage of the favourable eco-

CONVERGENCE SITUATION IN THE ERM COUNTRIES 1991 Table 1

	Date of ERM participation	Fluctuation band Per cent	Inflation	Govern-ment budget balance	Govern-ment debt	Bond yield
			Per cent	Per cent of GDP		Per cent
Belgium	13 March 1979	+/- 2.25	3.2	-6.4	129.4	9.3
Denmark	13 March 1979	+/- 2.25	2.4	-1.7	66.7	9.3
France	13 March 1979	+/- 2.25	3.1	-1.5	47.2	9.0
Netherlands	13 March 1979	+/- 2.25	3.9	-4.4	78.4	8.8
Ireland	13 March 1979	+/- 2.25	3.2	-4.1	102.8	9.4
Luxembourg	13 March 1979	+/- 2.25	3.1	2.0	6.9	9.3
Germany	13 March 1979	+/- 2.25	3.5	-3.6	45.6	8.4
		+/- 6				
Italy	13 march 1979	+/- 2.25	6.4	-9.9	101.2	11.3
Spain	19 June 1989	+/- 6	6.0	-3.9	45.6	12.5
UK	8 October 1990	+/- 6	5.9	-1.9	43.8	10.3
Portugal	6 April 1992	+/- 6	11.4	-5.4	64.7	14.6
Convergence criteria			4.4	-3.0	60.0	11.2

Note: The fluctuation band for Italy was reduced from +/- 6 per cent to +/- 2.25 per cent from 8 January 1990.
According to the Maastricht Treaty, the convergence criteria for the transition to stage three are: 1. A maximum budget deficit of 3 per cent of GDP, and the government debt ratio may not exceed 60 per cent of GDP. 2. Inflation measured by growth in consumer prices on the year-earlier month may, over a period of one year ahead of the survey, not exceed the – maximum three – best performing member states by more than 1.5 percentage points in terms of price stability. 3. Long-term government bond yields or interest rate on similar securities may, on average for a period of one year before the survey, not exceed the – maximum three – best performing member states in terms of price stability by more than 2 percentage points. 4. The member state must have complied with the normal ERM fluctuation bands for at least two years without serious tensions, including unilateral devaluation.

Source: European Commission and OECD.

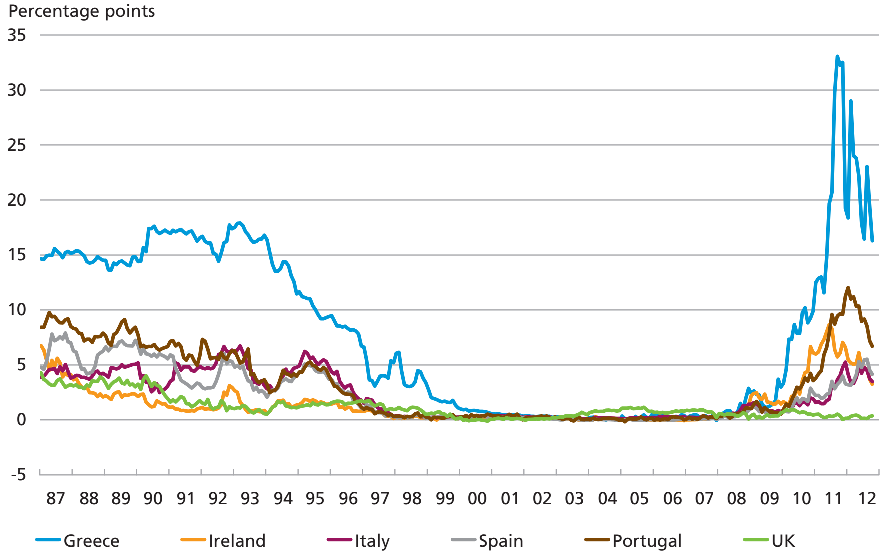
SHORT-TERM YIELD SPREADS TO GERMANY Table 2

Percentage points	1987	1988	1989	1990	1991
Denmark	6.1	4.2	2.5	2.4	0.4
Belgium	2.9	2.3	1.4	1.2	0.0
Luxembourg	2.7	2.8	2.9	1.2	-0.2
Netherlands	1.2	0.4	0.2	0.0	-0.1
France	4.4	3.6	2.2	1.7	0.2
Ireland	6.8	3.5	2.5	2.6	1.1
Italy	6.8	6.5	4.9	3.0	2.2
Spain	10.4	6.4	6.3	5.9	3.3
UK	5.2	5.5	6.2	5.6	1.5
Portugal	9.6	8.0	5.6	4.6	6.2

Note: Annual averages.

Source: Danmarks Nationalbank and IMF, *International Financial Statistics*.

LONG-TERM YIELD SPREADS TO GERMANY Chart 3



Note: Month-end data for 10-year government bonds. Regarding Greece, the yield on Treasury bills is applied before September 1992.
Source: Reuters EcoWin, IMF, *International Financial Statistics* and Danmarks Nationalbank.

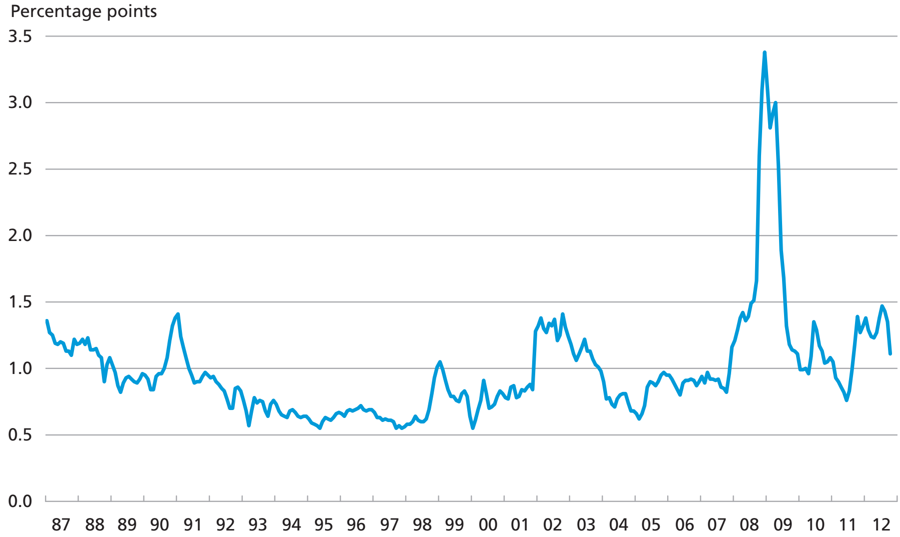
nomic conditions ahead of the crisis to consolidate public finances and were therefore caught in an unfavourable position when the crisis broke out. Still, most countries eased fiscal policy in 2009 as part of coordinated efforts in the EU to offset the negative impact of the financial crisis on growth and unemployment. This caused further deterioration of public finances, and for a number of euro area member states, it led to an outright sovereign debt crisis. In many countries, fiscal expansion during the boom immediately before the crisis was replaced by extensive consolidation. Thus, fiscal policy contributed to reinforcing the cyclical fluctuations rather than allaying them.

It has been characteristic of the years before the most recent financial and sovereign debt crisis that the differences in fiscal sustainability between the individual member states were not reflected markedly in long-term government yield spreads, not even in the countries most severely hit by the sovereign debt crisis, cf. Chart 3.

This should be viewed in light of the launch of the euro, which apparently removed the exchange-rate uncertainty in the euro area, cf. Sinn (2010). This led to substantial capital flows from the surplus member states to Greece, Ireland, Italy, Spain and Portugal, which – viewed in isolation – exerted downward pressure on interest rates in these countries. However, it is worth noting that the late 1990s were characterised by a global reduction in risk premia in the financial markets, cf. Chart 4.

CREDIT SPREAD BETWEEN US BAA-RATED CORPORATE BONDS AND US TREASURIES

Chart 4



Source: Federal Reserve Bank of St. Louis, *FRED Database*.

MACROECONOMIC IMBALANCES

In the early 1990s, unemployment was high in countries such as Ireland, Italy, Spain and the UK compared with Germany, cf. Table 3, and during the currency crisis, the foreign-exchange markets questioned the competitiveness of several ERM countries in the long term and thus the credibility of the central rates. Since 1987, unit labour costs had risen relatively steeply in the UK, Italy, Portugal and Spain compared with Germany, cf. Chart 5, and the currencies of these countries were also among those exposed to strong devaluation pressures during the currency crisis. In relation to Chart 5, it should be mentioned that the UK, Portugal and Greece did not join the ERM until 1990, 1992 and 1998, respectively.

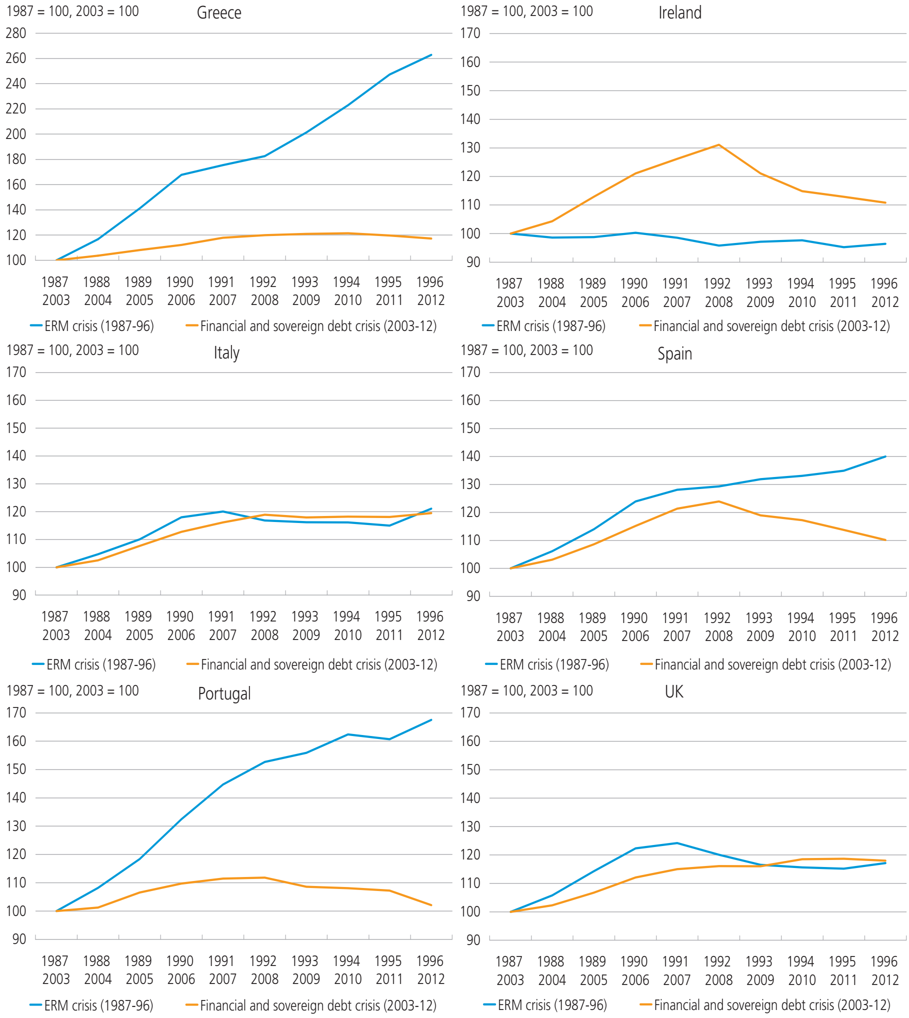
UNEMPLOYMENT

Table 3

Per cent of labour force	1987	1988	1989	1990	1991	1992	1993
Greece	7.8	8.1	7.9	7.4	8.1	9.0	10.0
Ireland	16.9	16.5	15.2	13.0	14.7	15.3	15.9
Italy	10.3	10.5	10.2	9.1	8.6	8.7	9.7
Portugal	7.3	5.9	5.2	4.8	4.3	4.1	5.5
Spain	16.4	14.5	12.6	12.1	12.2	13.5	17.2
UK	10.4	8.6	7.2	7.1	8.8	9.9	10.4
Germany	5.8	5.8	5.2	4.5	5.3	6.2	7.5

Source: OECD, *Economic Outlook*.

UNIT LABOUR COSTS RELATIVE TO GERMANY Chart 5



Note: Unit labour costs in national currencies. Adjustment has been sought for data breaks. 2012 is a forecast.
Source: OECD, *Economic Outlook*.

Norway, Sweden and Finland were neither members of the EC nor the ERM in the early 1990s, but during 1990 and 1991, all three countries had pegged their currencies unilaterally to the ecu.[1] During the currency crisis, all three currencies were exposed to pressure, and the unilateral peg to the ecu had to be abandoned. The recession in Finland was reinforced by the collapse of trade with the former Soviet Union and erosion of competitiveness as a consequence of steeply rising costs in the preceding years. Sweden was also ex-

[1] Ecu was a currency basket composed of fixed amounts of each EC currency.

periencing an economic crisis following a period of rising wage costs. Add to this that Sweden ran large and to some extent structural budget deficits.

In an analysis of the currency crisis in the early 1990s, Eichengreen (2000) presented a model of a country's vulnerability to pressure against the currency based on developments in export market growth, real exchange rate and current account deficit as percentages of the gross domestic product, GDP. According to the model, Finland, Spain, Sweden, the UK and Italy were the five countries most likely to be subject to pressure against their currencies, and all these currencies did actually come under pressure during the crisis. The pressure against pound sterling intensified as the foreign-exchange market clearly expected that – in light of the weak domestic economic performance and widespread use of variable-rate home loans – the UK was not prepared to raise interest rates notably to defend its exchange rate.

However, the model in Eichengreen (2000) did not indicate that the currencies of Portugal, Ireland and Norway were in great danger of coming under pressure, which was actually what happened. The pressure against the Portuguese escudo may be considered a "contagion effect" from the pressure against the Spanish peseta, cf. Lopes and Nunes (2012), and for Ireland, the pressure against the currency should be viewed in light of Ireland's considerable trade with the UK, which decided to leave the ERM and allow sterling to depreciate. The pressure against the Norwegian krone could possibly be considered a contagion effect from the pressure against the Swedish krona. Note, however, that in the late 1980s and early 1990s in particular, Norway, like Sweden and Finland, saw an outright systemic crisis during which large parts of the banking sector faced difficulties in the wake of explosive lending in the mid-1980s.

Prior to the financial and sovereign debt crisis, structural unemployment was high in a number of countries, particularly in Spain, but also in Greece, Italy and Portugal, cf. Guichard and Rusticelli (2011). Moreover, systemic risks built up in the economy in general and the financial sector in particular during the years ahead of the financial crisis amid a strong upswing, high lending growth and private indebtedness as well as rising house and equity prices, cf. Charts 6 and 7.

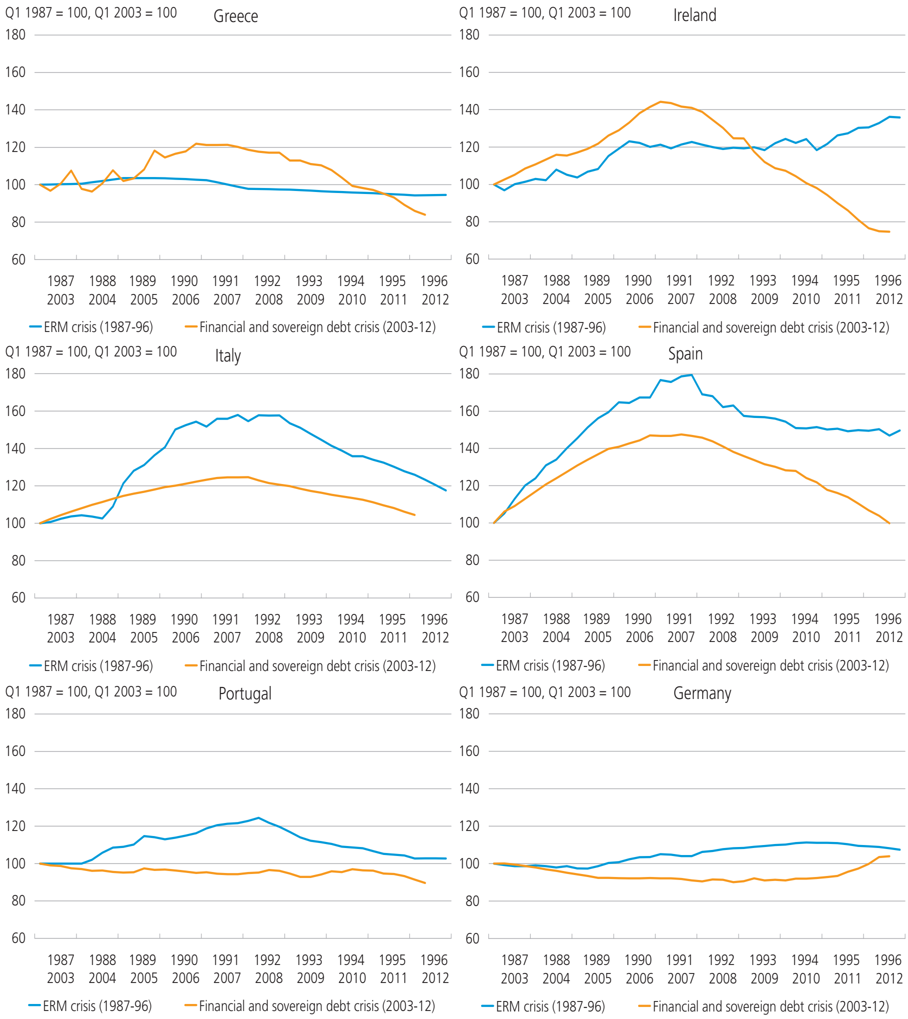
Moreover, before the financial and sovereign debt crisis several euro area member states, particularly Greece, Portugal and Spain, built up very large and unsustainable current account deficits, financed by capital inflows from surplus countries such as Germany, the Netherlands, Finland and Austria, cf. Chart 8.

BANK LENDING AS A RATIO OF GDP Chart 6

Source: World Bank.

The current account deficits reflected a sharp increase in domestic demand, which was to some extent driven by excessively complacent fiscal policy, and the capital inflows did not spur sufficient productivity-promoting investment in the deficit countries. Combined with inflexible labour markets, this development led to substantial wage increases that were out of keeping with the underlying productivity growth. This eroded competitiveness, which – viewed in isolation – worsened the current account deficit. Ultimately, the deficit member states' ability to honour future public and private debt obligations was questioned, cf. Blomquist and Christensen (2010).

REAL HOUSE PRICES Chart 7

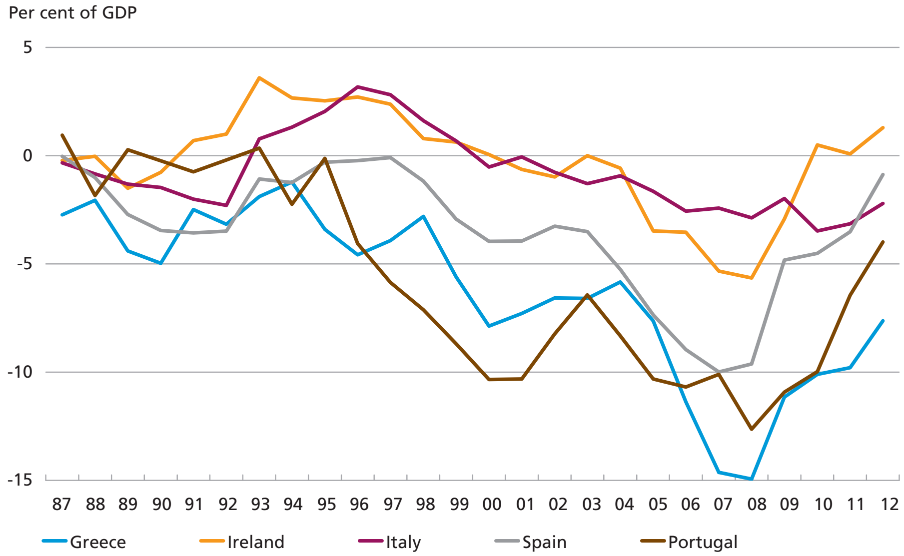


Note: House prices are deflated by the consumption deflator.
Source: OECD, ECB, IMF and Takáts (2010).

PAN-EUROPEAN CRISIS MANAGEMENT

During the currency crisis in the early 1990s, intervention in the foreign-exchange market took place according to the ERM rules through purchase of weak currencies and sale of strong currencies with a view to keeping the currencies within the agreed fluctuation bands. In some cases, concerted intervention took place, implying that several member states intervened simultaneously. The ERM, moreover, included an agreement on mutual provision of unlimited intervention credit in case of intervention at the fluctuation limits, cf. Abildgren et al. (2010).

CURRENT ACCOUNT Chart 8



Note: 2012 is a forecast.
Source: OECD, *Economic Outlook*.

However, intervention is a tool that can only be applied to address temporary pressures against a currency in a fixed exchange-rate system. In case of more sustained pressures, there is a need for interest-rate changes and possibly other economic policy measures. Among the "weak" ERM currencies, there was general dissatisfaction in the 1980s and the early 1990s that it was always the "weak" currencies that were required to meet currency pressures by raising interest rates, while it was never the "strong" currencies (such as the Deutschemark) that were to be aligned to the other currencies via interest-rate cuts. On the other hand, the member states with "strong" currencies found that the member states with "weak" currencies lacked political commitment to adjust their general economic policies to the stability-oriented line required by a fixed-exchange-rate system.

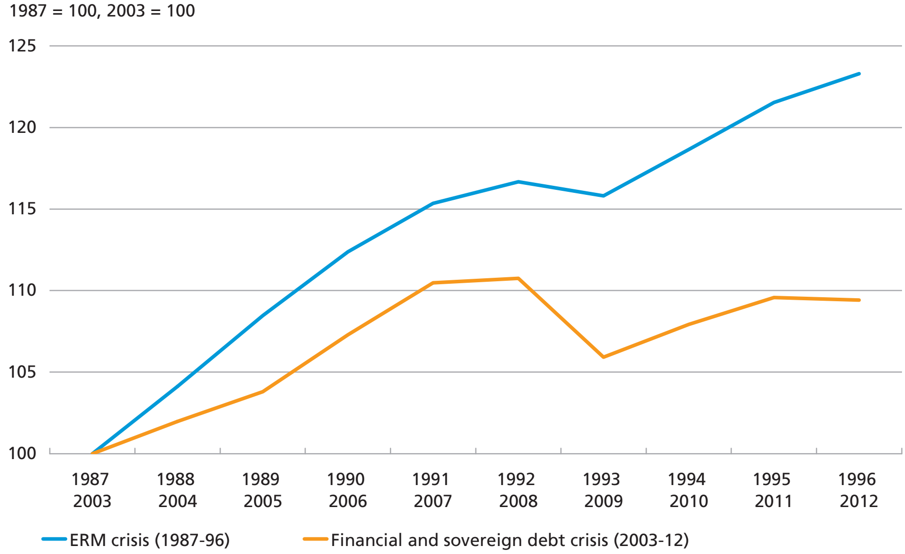
The currency crisis in the early 1990s culminated by a widening of the ERM fluctuation bands to +/- 15 per cent in August 1993. In reality, this meant immediate suspension of the fixed-exchange-rate system in force during the previous couple of decades, a system that had been the cornerstone of EC cooperation since the establishment of the currency snake in 1972. Though the participants agreed that central rates among the core member states in the early 1990s matched the economic fundamentals, several countries were unwilling to defend the previous fluctuation bands and counter the crisis applying the existing rules. It was also evident that a number of member states had not succeeded in pursuing economic policies that prevented the build-up of serious macroeconomic imbalances and labour cost developments that were incompatible with the participation in a fixed-exchange-rate system.

Developments in the years following August 1993 when the exchange rates of the core member states again approached the central rates showed that the right economic conditions for these countries had been in place. This relatively soon restored confidence in a smooth movement towards the launch of a single European currency (EMU), which had already been planned before the crisis. As late as in 1996, it was not expected that 11 member states would be able to meet the convergence criteria for government budgets already at the time of selection in 1998. It should be noted that confidence in the EMU process contributed to sharp interest rate declines in countries with wide yield spreads to Germany, which per se contributed to consolidation of government budgets until 1997. The consolidation was sufficient for all member states that met the exchange-rate criterion and wanted to participate from the start in 1999 to be able to meet the convergence criteria. However, the requirement for gross government debt was interpreted loosely, as Belgium and Italy had gross government debt of more than 100 per cent of GDP, and several other countries had a debt exceeding 60 per cent of GDP.

Though the currency crisis in the early 1990s presented a serious challenge to the European exchange-rate system, the real-economic consequences of the crisis for Europe do not at all compare to the real-economic implications of the most recent global economic and financial crisis, cf. Chart 9. The most recent crisis has therefore, so it seems, required much more in terms of pan-European crisis management and new initiatives than the crisis in the early 1990s.

During the financial crisis the European Central Bank, ECB, has implemented a variety of extraordinary measures to enhance certainty of access to liquidity among euro area banks. Thus, the ECB began making full allotment of the bids received at a fixed rate at the weekly open market operations. Moreover, the ECB allowed euro area banks to raise loans with a significantly longer maturity than at the weekly main refinancing operations. At an early stage of the financial crisis, the ECB cut interest rates as part of a coordinated action with the US Federal Reserve and the Bank of England, among others, and during the financial crisis, the ECB's monetary-policy interest rates have been cut to historically low levels. The ECB and the Federal Reserve moreover agreed to ensure dollar liquidity for euro area banks and established recommendations for the structure and pricing of government guarantees and capital injections into the banking sector in the euro area.

DEVELOPMENT IN REAL GDP IN EU15 Chart 9



Note: Adjustment has been sought for data breaks. 2012 is a forecast.
Source: OECD, *Economic Outlook*.

In response to the financial crisis, the European Systemic Risk Board, ESRB, was set up in early 2011. The purpose of the ESRB is to help prevent and reduce systemic risks in the financial system in the EU, and ESRB can issue warnings or recommendations, cf. Madsen and Mogensen (2009). The ECB was one of the driving forces behind the establishment of the ESRB, and the ECB provides analytical, statistical, administrative and logistic support for the ESRB. Moreover, the ECB will chair the ESRB during the first five years. Finally, the ECB (and the European Commission) participates in international fora, such as G20, for the discussion of the regulatory follow-up on the financial crisis.

The sovereign debt crisis in certain euro area member states has also given rise to pan-European initiatives. In 2010, a major temporary loan facility was set up (European Financial Stability Facility, EFSF, which was gradually replaced by the permanent facility, European Stability Mechanism, ESM) for euro area member states facing financing difficulties due to necessary government guarantees from the euro area member states.

The more general economic-political cooperation among euro area member states and other EU member states has also been reinforced as a consequence of the sovereign debt crisis. Against this backdrop, a new procedure for the prevention and correction of macroeconomic imbalances in the EU member states was introduced at end-2011, cf. Box 1. Furthermore, euro area member states and the other EU member states

PROCEDURE FOR SURVEILLANCE OF MACROECONOMIC IMBALANCES Box 1

The period ahead of the financial crisis was dominated by the build-up of macroeconomic imbalances in many euro area member states. As a consequence, the European Council set up a working group in March 2010, intended to identify the need for strengthening the economic cooperation, cf. Gade and Thuesen (2010). In December 2011, this led to a new surveillance procedure of macroeconomic imbalances, comprising a preventive and a corrective arm.

The early warning system should identify countries with a risk of imbalances. It comprises a scoreboard based on surveillance of ten indicators: Current account, foreign debt, export market share, unit labour costs, real effective exchange rate, house prices, private sector borrowing, private sector debt, government debt and unemployment rate. Trends in the indicators are compared with the stated threshold values as well as other relevant information and overall, this provides the basis for an annual report to be discussed in the European Council. On the basis of this report, the European Commission decides whether further investigation of the individual euro area member states is necessary to disclose any imbalances.

If, on the basis of these investigations, the Commission finds the situation problematic, the Commission will present policy proposals for the relevant member states under the corrective arm. If the imbalances are considered to be unusually serious, the Commission will recommend that the European Council implement the correction mechanism. The member states in question are therefore committed to present detailed plans for correcting the imbalances. If the countries do not present plans that are sufficiently comprehensive or do not subsequently realise the plans, the Economic Council will impose sanctions unless a qualified majority opposes. The member states will be measured on the implementation of the programme items and not on whether the indicators are within the threshold values.

(except for the UK and the Czech Republic) entered into an intergovernmental agreement on strengthening fiscal cooperation through a fiscal compact. The fiscal compact implies that the member states are committed to incorporating a fiscal rule in their national legislation to ensure that the general government budgets should be balanced or in surplus. The rule entails a cap on the countries' annual structural deficit of 0.5 per cent of GDP, and the rule must include a correction mechanism that is automatically triggered in the event of deviation from this cap. Also, a higher degree of automatic sanctions are introduced in the EU excessive deficit procedure.[1] Finally, at the summit at end-June 2012, the euro area member states reached agreement on the establishment of a single banking supervisory mechanism and the scope for direct recapitalisation of crisis-ridden banks in the euro area via the ESM.

Table 4 summarises the differences and similarities between the ERM crisis in the early 1990s and the fiscal and sovereign debt crisis in recent years.

[1] As set out in the Stability and Growth Pact from 1997, only the euro area member states can be sanctioned if they fail to correct an excessive budget deficit.

COMPARISON OF THE ERM CRISIS WITH THE FINANCIAL AND SOVEREIGN DEBT CRISIS

Table 4

	ERM crisis in the early 1990s	Recent years' financial and sovereign debt crisis
Systemic banking crisis	Only in Norway, Sweden and Finland.	In many European countries.
Real-economic crisis	Moderate economic setback in Europe.	Deep global economic and financial crisis.
Fiscal policy	Lack of consolidation of public finances in certain countries during the booming years ahead of the crisis.	Lack of consolidation of public finances in certain countries during the booming years ahead of the crisis.
Macro-economic imbalances	Built up over a number of years ahead of the crisis, particularly regarding developments in unit labour costs, real house prices and the current account.	Built up over many years ahead of the crisis, particularly regarding developments in unit labour costs, credit relative to GDP, real house prices and especially the current account.
Pan-European crisis management	Coordinated intervention in the foreign-exchange market, intervention credits and widening of the ERM fluctuation bands to +/- 15 per cent in August 1993.	The ECB has implemented extraordinary measures to increase certainty among euro area banks as to access to liquidity, the ESRB has been established with a view to preventing and reducing systemic risks in the financial system, loan facilities have been set up for euro area member states facing difficulties with financing (EFSF/ESM), a new procedure for the prevention and correcting macroeconomic imbalances has been introduced, the fiscal cooperation has been strengthened via a fiscal compact, and it has been agreed to work towards establishing a new single supervisory mechanism for banks.

HAS THE LAUNCH OF THE EURO AFFECTED THE CRISIS DYNAMICS COMPARED WITH THE EARLY 1990S?

It is always difficult to perform counter-factual analyses and e.g. assess the potential development of recent years' crisis, had the euro not been launched. The imbalances that built up in the European economies ahead of the financial and sovereign debt crisis were not addressed in time. As appears from this article, the crisis in the early 1990s was also a result of imbalances that had built up over many years before the crisis.

The launch of the euro largely eliminated yield spreads between the euro area member states. At first, this gave the countries facing macro-economic imbalances more time to address the problems before the imbalances were reflected in long-term interest rates and without an increase in short-term interest rates, which were determined by monetary policy for the euro area overall. However, the improved framework for correcting imbalances was not utilised, and the euro area systems for monitoring and preventing government budget deficits and other macroeconomic imbalances turned out to be inadequate. This was part of the reason why the imbalances were allowed to become much more serious that had been the case ahead of the crisis in the early 1990s.

If national currencies had not been replaced by the euro in 1999, the financial and sovereign debt crisis could very well have been followed by a currency crisis. It is also possible that the sovereign debt crisis would have taken a far more dramatic path, leading to disorderly sovereign defaults, without the variety of pan-European initiatives to solve the sovereign debt crisis that were the result of the economic-political co-operation between the euro area member states.

Conversely, the establishment of the euro area may have contributed to increasing the financial integration between the member states and hence heightened the risk of contagion effects of banking crises across national borders, cf. ECB (2012).

Therefore, the lesson learnt from the ERM crisis in the early 1990s and recent years' financial and sovereign debt crisis is that it is important to redress macroeconomic imbalances in time to prevent the emergence of systemic risks. Also, the financial and sovereign debt crisis disclosed an obvious need to strengthen the political cooperation between the euro area member states, which is reflected in the initiatives in recent years concerning surveillance of macroeconomic imbalances, the fiscal compact and a banking union.

LITERATURE

Abildgren, Kim, Bodil Nyboe Andersen and Jens Thomsen (2010), *Monetary history of Denmark 1990-2005*, Danmarks Nationalbank.

Agerholm, Jens Bech, Uffe Mikkelsen and Karoline Garm Nissen (2012), Fiscal policy in the EU – what have we learned from the crisis?, Danmarks Nationalbank, *Monetary Review,* 2nd Quarter, Part 1.

Blomquist, Niels and Jakob Ekholdt Christensen (2010), Economic imbalances in the euro area, Danmarks Nationalbank, *Monetary Review*, 4th Quarter.

Buiter, Willem, Giancarlo Corsetti and Paolo Pesenti (1998), Interpreting the ERM crisis: country-specific and systemic issues, *Princeton Studies in International Finance*, No. 84, March.

Di Cesare, Antonio, Giuseppe Grande, Michele Manna and Marco Taboga (2012), Recent estimates of sovereign risk premia for euro-area countries, *Banca d'Italia Occasional papers*, No. 128.

ECB (2012), *Financial integration in Europe*, April.

Eichengreen, Barry (2000), The EMS crisis in retrospect, *NBER Working Paper*, No. 8035, December.

Eichengreen, Barry, Charles Wyplosz, William H. Branson and Rudiger Dornbusch (1993), The unstable EMS, *Brookings Papers on Economic Activity*, No. 1993(1).

Gade, Thomas Pihl and Jesper Ulriksen Thuesen (2010), Strengthened economic governance in the EU, Danmarks Nationalbank, *Monetary Review*, 4th Quarter.

Guichard, Stéphanie and Elena Rusticelli (2011), Reassessing the NAIRUs after the crisis, OECD Economics Department, *Working Paper*, No. 918.

IMF(2012), *Fiscal Monitor Update*, July.

Lopes, José Mário and Luis C. Nunes (2012), A Markov regime switching model of crises and contagion: the case of the Iberian countries in the EMS, *Journal of Macroeconomics*, No. 34.

Madsen, Birgitte Bundgaard and Louise Caroline Mogensen (2009), A new European supervisory architecture, Danmarks Nationalbank, *Monetary Review*, 4th Quarter.

Metiu, Norbert (2012), Sovereign risk contagion in the Eurozone, *Economics Letters*, No. 117.

Sinn, Hans-Werner (2010), Rescuing Europe, *CESifo Forum*, No. 11.

Takáts, Elód (2010), Ageing and asset prices, *BIS Working Paper*, No. 318.

Ministry of Economic Affairs (1994), *Den danske pengeinstitutsektor (The Danish banking sector, in Danish only)*, Schultz.