

THE EMS: TEN YEARS OF PROGRESS IN EUROPEAN MONETARY CO-OPERATION

COMMISSION
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Directorate-General Economic and Financial Affairs
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Preface



The EMS began functioning on 13 March 1979. It was set up following the Resolution of the European Council on the establishment of the EMS and related matters on 5 December 1978 in Brussels and implemented by an agreement between the central banks of the European Community. There were many at the time, in both academic and political circles, who did not foresee a long life for Europe's effort at closer monetary co-operation. But the EMS has not only survived, it has been a great success in achieving its primary goal of monetary stability. The EMS, with its exchange rate commitment, has become the focus of Community efforts to bring about convergence of economic policy and performance. It has helped pave the way for the Single European Act and the completion of the large internal market by 1992.

The EMS has proved its worth through difficult internal and external circumstances. It has given the rest of the world a concrete example of the Community's capacity to act together and create an island of stability in an ocean of monetary turbulence. The System has been flexibly managed and adapted to changing circumstances, in particular it was strengthened by the Basle/Nyborg agreement. Continued development of its mechanisms and management will provide the monetary stability which has to accompany the full liberalisation of capital movements in the Community and the creation of a common financial area as part of the large internal market. Its offspring, the ecu, has become one of the world's major international currencies, representing the Community as a whole on the international monetary scene. The EMS and the ecu have given Europe a strong monetary identity.

The Community countries explicitly recognized the important role of the EMS and the ecu in the further development of the Community by including reference to

both in the Single European Act. Upon completing the large internal market in 1992, the most visible factors separating national economies will be adjustable exchange rates. The economies of Europe will not be fully integrated until individuals and enterprises can take long-term economic decisions on matters such as investment, production and employment without having to worry about differing interest rates or changing exchange rates. Further progress towards economic and monetary union would considerably add to the benefits that will flow from the completion of the large internal market. The EMS in its ten short years, has already brought us a long way along this path, I am sure it can help us to go much further.

*Jacques DELORS
President
of the Commission
of the European Communities.*

Brussels, March 1989.

The EMS : Ten years of progress in European monetary co-operation

1. Introduction

After ten years of existence, the European Monetary System (EMS) has proved to be a convincing success. It is the cornerstone upon which European monetary co-operation is built. It promotes lower inflation and brings more stable exchange rates, thereby fostering healthy economic growth. It is a vital element in the Community's strategy to complete the large internal market by 1992. It is a step along the path towards the agreed goal of economic and monetary union.

The EMS is an evolving and flexible system in a changing monetary and financial environment. It has seen the dollar first double then halve in value. It is coping with the technological revolution in the world's financial markets and major moves of capital liberalization. It has twice been strengthened, in 1985 and again in 1987. It has remained strict enough to maintain an effective monetary constraint and bring about a more general convergence of economic policies and performances.

The ecu is intimately linked to the EMS. The ecu has in its ten years of existence grown very fast and is maturing into a true currency. The increasing credibility of the EMS, and the stability imparted by the EMS to the component currencies of the ecu, have been important factors in the extensive use made of the ecu by the world's financial sector. Its use in European commercial transactions is now beginning to take off. Although central banks keep substantial reserves in these "private" ecus, the "official" ecu created by the EMCF for the use of Community central banks in the EMS has fallen well short of its intended role.

2. The EMS in perspective

The EMS was established to pursue three main objectives :

- to attain a zone of internal and external monetary stability in Europe (involving both low inflation and stable exchange rates) ;
- to provide the framework for improved economic policy co-operation between Member States, leading to more convergence in economic performance, as well as better growth and increased employment ;
- to help to alleviate global monetary instability through common policies vis-à-vis third currencies and by spreading the impact of external monetary shocks over all participant currencies.

The European Monetary System (EMS) also has a role in the wider context of economic and monetary union, which was endorsed by the Community Heads of State or Government at The Hague in December 1969. The collapse of the Bretton Woods system, the first oil shock and sharp divergences in monetary and economic policies during the seventies, slowed the progress towards this union. The "Snake" exchange rate system, which was set up as part of a plan to reach monetary union by stages, was reduced over the years to a small block.

In 1979, the process of monetary co-operation was relaunched by the setting up of the EMS and the creation of the ecu. Thus the EMS can also be seen as a pragmatic attempt to progress along the road to economic and monetary union. The Single European Act adopted in 1986 formally establishes this link.

3. Three phases in the evolution of the EMS

Looking back at how the EMS has functioned over the last ten years, it is possible to distinguish three main phases :

1979-1983

For its first four years, the EMS required a learning process on the part of its participants. Economic divergences were still relatively substantial during those early years : inflation was high and differentials between EMS countries were large ; current account performances were varied ; budget deficits were often very sizeable and sometimes partially financed by monetary means. The dollar was strong.

Realignments were frequent during the first years of the EMS, but gradually they moved from being passive reactions to differing inflation levels to being instruments in the efforts to reduce inflation. Thus realignments came to be accompanied by domestic adjustment measures and inflation differentials were brought down. In contrast to during the nineteen-seventies, economic divergences giving rise to external disequilibria were becoming more and more matters for changes in internal economic policy as well as realignments.

During this period also, the financial use of the ecu by the private sector began to expand rapidly. Its property as a ready-made vehicle for currency diversification and the relative stability of the EMS, gave both investors and borrowers perceived advantages in using the ecu as a currency for borrowing and lending. An active interbank market for ecu credits and deposits developed.

However, the ecu was still not treated in all Member States as a foreign currency.

1984-1987

The US dollar's rapid fall from its peak in February 1985 provided a difficult international monetary background for the EMS. Financial innovation was continuing apace. In spite of this turbulence, there were only two general EMS realignments during this period – one in April 1986, the other in January 1987 – each considerably smaller than its predecessor. Inflation and inflation differentials were steadily brought down, helped by falling commodity prices.

During 1985 there was a first set of changes, albeit minor, to the EMS rules (see Annex I). These were designed to allow the role of the official ecu to grow. Although the 1985 package had little effect, it marked a first tentative consensus on the overall management of the EMS and confirmed the willingness of its participants to move forward constructively.

This was a period during which the EMS policy consensus came to be translated more and more into convergent economic performances. There was also agreement emerging in the Community on the need to fully liberalize capital movements as part of the strategy to complete the large internal market by 1992.

In the aftermath of the January 1987 realignment, which took place after EMS tensions had been exacerbated by the weakness of the dollar, these two factors of better convergence and capital liberalization gave the impetus towards agreement on a second, more substantial package of measures to strengthen the EMS. The so-called “Basle/Nyborg” agreement of September 1987

(see Annex II) took account of the improved, but by no means perfect, convergence situation by providing for a more balanced implementation of the exchange rate commitment by all participants. While the fundamental objectives and rules of the EMS remained unaltered, the measures adopted were designed to further promote the co-ordination of economic policies through the surveillance of various economic indicators and to refine the EMS intervention and credit mechanism in order to counter the potential of larger speculative flows coming in the wake of capital liberalization.

A first revision of the ecu basket was carried out in September 1984, readjusting the component currencies' weights and including the drachma, with little disturbance to the ecu markets. The ecu markets developed rapidly during the period of EMS exchange rate stability from March 1983 to April 1986. However afterwards, its use by the financial sector stagnated somewhat as EMS tensions encouraged currency speculation, and sterling depreciated sharply. By the summer of 1987, the ecu was treated throughout the Community as a foreign currency.

1987 onwards

The Basle/Nyborg agreement marked the beginning of a new phase for the EMS. It is already possible to draw the preliminary conclusion from the short experience since September 1987 that the Basle/Nyborg measures have had an extremely beneficial effect. In the first place, although inflation differentials have changed little, interest rate differentials, especially short-term, have narrowed dramatically. This is an indication of the increased confidence shown by the markets in the stability of the EMS parity grid. Secondly,

there has not been a realignment in the EMS for over two years now. Even the gyrations of the US dollar, which touched all-time lows against the DM at the end of 1987, have not triggered an EMS realignment. The EMS commitment of monetary policies have gained in credibility and markets have become more cautious.

The Community's progress towards completing the large internal market seems to have further boosted interest in the ecu. Its financial use has grown substantially once more. Also it is beginning to take off as a currency for accounting, pricing and settling international transactions within Europe.

4. Why is the EMS a success ?

The EMS has been a prime factor contributing to the improved monetary stability in Europe seen in recent years. Cost and price inflation have fallen further and converged more rapidly in EMS countries than in the rest of the Community. Exchange rate variability is much lower for EMS currencies than for other major currencies (see Annex III). Interest rate variability is no higher than elsewhere, and average levels are probably lower because of the smaller exchange rate risk associated with EMS currencies. Realignments have become less frequent and smaller in size. The misalignments which have so distorted the international monetary system over the past years have been avoided within the EMS. Monetary cooperation has advanced. Its effect on economic policy co-ordination has, however, been limited. Some doubts persist as to the beneficial influence of the EMS on growth.

The EMS and economic policy convergence

The effects of the EMS monetary constraint on policy have been substantial, but concentrated, naturally, in the monetary area. Nevertheless, important pressures have been brought to bear on other policy areas.

General policy stance

Real economic divergences as manifested in external disequilibria have come to be regarded basically as matters for domestic adjustment measures, rather than for realignments (external adjustment). This is partly because inflation rates have converged but devaluation is no longer regarded as the easy option. Exchange rates are being used to keep downward pressure on inflation, rather than accommodating inflation, and realignments have tended to lag behind inflation (see Annex IV).

It is true that non-participating countries, in particular the UK and Spain, have shown similar convergence until recently to that of Exchange Rate Mechanism (ERM) countries. One reason may be that the EMS zone has itself formed a reference point for non-participating currencies without which their performance may have been less convergent. On the other hand, these countries have recently experienced a resurgence of inflation which may have been avoided had they been participating in the ERM.

Monetary policy

As is to be expected, monetary policies have converged during the EMS period. Monetary policy has taken much of the adjustment burden. This is natural in the short term because the EMS is a monetary system. However, it would perhaps be worrying in the longer term if it persisted,

because the policy-mix would become distorted through putting excessive weight on monetary policy. Such a development may occur because the EMS constraint on fiscal policy is less direct.

Of course, given the EMS goal of monetary stability, most monetary convergence has come about because of tightening in high inflation countries, but occasionally there has been some symmetry in monetary adjustment. For example, temporary monetary loosening is seen in strong currency countries in times of EMS strain (e.g. Nov./Dec. 1987). In spite of this, there are no signs of inflation strategy being compromised. Monetary targetting has still proved possible in Germany. German inflation has in fact been lower than Swiss inflation since 1979. Bundesbank monetary policy has provided an anchor for the EMS.

Budget policies

Success in monetary convergence has made differences and inconsistencies in budgetary policy more apparent. Budgetary policy stances diverged sharply during the first years of the EMS. Differences have been reduced somewhat since then, but discrepancies between public finance situations are still very large. Looking at the evolution of public debt, the story is slightly more encouraging, but far from satisfactory.

On the other hand, the fact that monetary growth has converged more than budget deficits shows that monetary financing of budget deficits must have declined. This is one area, concerning budgets, in which the EMS does appear to have had a significant direct impact. The consequence in terms of a narrowing of long term interest rate differentials, particularly during the last few years, is evidence of this phenomenon.

Current account imbalances and their financing

The EMS has, during most of its existence, operated against the background of widely divergent current account situations. This has been associated with the rising real exchange rates experienced in those countries with relatively high inflation as they use the EMS constraint to bear down on price levels. This phenomenon is reflected in falling real exchange rates in low inflation countries. It seems more likely, however, that the major factors behind the differing current account situations of EMS countries are more structural in nature.

Capital inflows to finance current account deficits have generally taken place through the market rather than by way of EMS credit mechanisms. The EMS has not led to extensive use of official Community financing and hence borrowing subject to conditionality, the notable exception being France in 1983, where the EMS played its part. The rare use of financing with conditionality could be interpreted as an opportunity lost in the EMS context for bringing more disciplinary pressure to bear. In fact, the external imbalances have tended to appear more on the surplus side in recent years.

The Very Short-Term Financing (VSTF) facility in the framework of the EMS exchange rate mechanism intervention obligations has been used as intended in a reasonable manner to finance necessary interventions, without deteriorating into a balance of payments financing facility.

Growth strategy

The EMS is sometimes criticized for having a low growth bias. Certainly the growth records of ERM countries have tended to be behind those of Community non-ERM countries as well as of the US

and Japan. Their inflation performance has, however, been better, apart from Japan. One reason for this is that many ERM countries started in the EMS in a poor position requiring substantial adjustment.

Unless one believes that there is a trade-off between inflation and growth, it is difficult to argue that it is the EMS itself which has restricted growth. The EMS certainly shows up clearly the interdependence between Community economies, which exists anyway. The absence of the EMS would have been unlikely to have significantly increased the growth of domestic demand in Germany, indeed the opposite may well have occurred. On the other hand, the EMS adjustment rules have not pushed Germany to test if stronger growth would have been compatible with its inflation target. Only a system such as the EMS however can form the basis for macro-economic cooperation which will permit both more growth and greater stability.

EMS rules and procedures

It is important to analyse how the EMS has helped achieve its goals. The EMS is founded on an agreement between central banks and has a set of rules and procedures. These are essential elements in its performance. They involve a compromise between the needs to be stability oriented but flexible.

The EMS is a formal an public commitment (in contrast to the present G-7 framework). This serves to make exchange rates highly conspicuous. It provides for realignments which have become media events. Exchange rate changes are effectively condensed into one weekend. This contrasts with floating currencies where movements do not take place by realignment and are less

noticed. EMS fluctuation limits are visible and known. The level of commitment embodied in the agreement to keep to fixed margins strengthens the credibility of the EMS by acting as a constraint on subsequent policy choices.

Basically, the EMS contains only two principal rules (respect of the fluctuation margins and realignments by common accord). These rules set a framework involving a minimum but effective constraint.

- **The 2.25 % fluctuation margin rule** provides for relatively narrow and absolute limits to currencies movements between realignments. It is a strict rule, both as compared to target zones and in respect of the width of the margins. This has the drawback of perhaps causing realignment speculation when or even before the margins are attained, whereas a soft margin may not. But it has the advantage of forcing adjustment measures usually well before exchange rate tensions become serious. Fixed margins are credible in the markets. The divergence indicator was meant to have elements of a soft margin (early warning, adjustment expected), but it has not had its intended effect, mainly because of its symmetric construction which contrasts with the EMS objective of low inflation.

At $\pm 2.25\%$, the margins were extremely narrow and constraining in the short term while inflation differentials were substantial during the first years of the EMS. Recent progress on convergence to low levels of inflation has widened the margins in terms of inflation differentials. The emphasis has now moved to allowing currencies to fluctuate within the ERM margins in order to discour-

age speculation and thereby reduce the number of realignments. Until Italy, the UK and Spain join the present 2.25 % band, the question of narrowing the margins is not likely to come to the fore. The Italian use of 6 % margins has permitted a lesser degree of convergence in both the monetary and budgetary areas, but it may be argued that a more forceful convergence process would have been unsustainable.

- **EMS realignments take place by common accord.** They are not unilateral decisions. This contrasts with the practice in previous exchange rate systems, such as Bretton Woods and the Snake, where realignments were effectively decided by the country changing its parity with little multilateral discussion. The joint nature of EMS realignment decisions is helped by the visibility of ecu central rates which show that in fact all rates change when one currency moves vis-à-vis the others. Unanimity at realignments reinforces credibility in that all participants are committed to the new parity grid. Unanimity is also an important safeguard against competitive devaluations, therefore helping to maintain the predictability of exchange rates in the EMS. The fact that the EMS functions in the Community framework has reinforced its multilateral nature compared to previous exchange rate systems.

In spite of these rules, the EMS remains flexible in the face of the ever-changing monetary environment. An example of the flexibility of EMS rules is the use of intramarginal interventions. Moreover, EMS procedures can also be changed, e.g. Very Short-Term Financing

mechanism, use of the dollar for EMS intervention instead of participating currencies, the introduction of monitoring and surveillance, the 1985 and 1987 reinforcement packages.

The EMS does not include any procedure requiring explicit co-ordination of exchange rate policies vis-à-vis third currencies. Such co-ordination does take place outside Community fora between some Member States. This may be considered a shortcoming given the tensions that can be caused by dollar movements. Had the ecu been placed truly at the centre of the System, an external dimension to the EMS may have been easier to accomplish. In fact the official ecu has not played more than a minor role in the functioning of the EMS. It has not developed into a reserve asset as was originally intended, although it has played a certain role concerning the credit mechanisms. Nevertheless, its circuit has been enlarged to include "Other Holders" apart from Community central banks, such as the Bank for International Settlement and the Swiss National Bank.

5. The EMS: challenge for the future

The EMS is a monetary system with principally monetary, but also broader, economic conse-

quences. In its ten years of existence, the EMS has come to be a major success in promoting closer monetary co-operation. Internal adjustment tends now to take precedence over external adjustment when economies diverge. But the lesser success on convergence in budget policies has led to tensions in the policy-mix.

The rules and procedures of the EMS have been important in its success. They have been strict enough to prevent short-term pressures from diverting the attention of governments from the medium-term goal of an area of monetary stability. Yet they have been flexible enough to allow changes in emphasis and strategy in the face of a varying monetary environment.

The EMS, by stabilizing exchange rates, has contributed to general economic integration. Business does not have to worry so much about exchange rate misalignments. Exchange rates have become more predictable, allowing more trade and production on an international basis rather than on a national basis. The very existence of the EMS has paved the way for the Single European Act and is a cornerstone for the development of the large internal market. Its success is important in moving towards the long-term goal of economic and monetary union, but it has to face successfully the challenge of the full liberalization of capital movements, which will take effect for ERM countries by 1 July 1990. It must be ensured that the EMS is well equipped to cope with this.

The 1985 package of measures designed to strengthen the EMS

During its meeting of 12 March 1985, the Committee of Central Bank Governors of the EEC approved a set of measures to strengthen the EMS.

The new measures, which are designed to improve the usability of the official ecu, are as follows :

1. A new mobilisation mechanism has been introduced to enable EEC central banks with a need for intervention currencies to mobilise a certain part of their official ecu holdings. The EEC central banks have committed themselves to cover such mobilisation operations by providing dollars.
2. The payments ratio which limits settlements in official ecus of obligations arising out of the use of very short-term financing will remain at 50 % as a general rule but this limit will be waived if and to the extent that the recipient central bank is itself a net debtor in ecus.
3. Remuneration of net positions in ecus and of ecu-denominated claims under the very short-term financing facility will be improved ; the interest rate (currently the weighted average of the official discount rate of the Member States) will henceforth be based on a weighted average of representative money-market rates in member countries.
4. Central banks of non-member countries and international monetary institutions such as the Bank for International Settlements which are accorded the Status of "Other Holder" by the EMCF Board will be enabled to obtain official ecus from EEC central banks by means of sale and repurchase agreements or reversible swap transactions.

Basle/Nyborg package of September 1987 strengthening the EMS

At their informal meeting in Nyborg, Denmark, on 12 September, the Ministers of Economics and Finance agreed on a series of moves to strengthen the EMS and fully concurred with the measures agreed earlier by the central bank Governors in Basle.

The strengthening of the EMS should be seen in the light of the much improved, but by no means perfect, convergence of economic policies and performances in the Community, as well as of the risks posed to the cohesion of the System by the Community's move towards full capital liberalization.

The set of measures agreed by Ministers and Governors to strengthen the EMS fall into two main categories :

A. Measures designed to increase convergence and avoid conflicting policies which would threaten the cohesion of the System :

- A six-monthly Monetary Committee surveillance procedure using economic indicators and projections (in line with the G-7 framework) will be carried out, designed to highlight any policy inconsistencies between EMS countries and incompatible approaches to third currencies.
- A Monetary Committee monthly examination of the latest exchange and interest rate developments has been set up to consider what conclusions can be drawn.
- A Committee of Governors monthly monitoring procedure will take place, focussing on simultaneous consideration of intervention, exchange rate and interest rate policies to discuss appropriate policy

responses regarding not only EMS currencies but also third currencies and the ecu.

These procedural improvements are backed by a consensus to lay emphasis on the use of interest rate differentials to defend the stability of the EMS parity grid, to use the permitted fluctuation margins flexibly in order to deter speculation and to avoid prolonged bouts of intra-marginal intervention ; also realignments should be infrequent and as small as possible. With respect to third currencies, since their movements can cause disturbances in the EMS, any potential incompatible approaches involving major third currencies will be kept under close review.

B. Measures to improve the intervention mechanism of the EMS :

- In the future, there will be a presumption that the Very Short-Term Financing (VSTF) facility shall be available within specified limits ⁽¹⁾ for intramarginal interventions. Up to now VSTF use via the European Monetary Cooperation Fund (EMCF), under which the intervening central bank borrows a strong currency from the issuing central bank for intervention purposes, has only been available when the currencies are at their margins and intervention is obligatory, at which point VSTF financing is automatic. In the past, intramarginal intervention has normally been funded by the weak currency central bank from its reserves, usually of DM, subject to the accord of the other central bank concerned which was generally forthcoming. Under the new formula the permission of the central bank issuing

the intervention currency will still be required for intramarginal intervention, but there will be a presumption that intramarginal intervention agreed to will qualify for the VSTF facility within the abovementioned limits and subject, when appropriate, to certain conditions (concurrent use of own reserves, reimbursement in the creditor's currency).

- The duration of the VSTF facility will be extended by one month, taking the maximum duration from two and a half to three and a half months. The initial financing operation will still be automatically renewable for a further three months, but the ceiling on automatic renewal will be doubled to twice the debtor quota in the STMS mechanism.
- The acceptance limit for settlement in official ecus of VSTF debts has been raised from 50 % to 100 % for a trial period of two years.

The presumption of VSTF availability for intramarginal interventions is potentially by far the most important of the above category of measures, but its impact will have to be seen in the light of experience since it is not automatic. The availability of the VSTF facility will "officialize" intramarginal intervention, which was not explicitly foreseen in the original EMS texts, but which has become standard practice. It will become more symmetric in its monetary effect in the strong and weak currency countries and it will add to the central banks' defences against speculative capital movements. Extending the duration for the VSTF and raising the ceiling on its renewal takes account of the larger capital

flows and the tendency for these flows to take longer to reverse in the context of small realignments. The raising of the official ecu acceptance limit will add to the usability of the official ecu which at present effectively provides a way of using dollar and gold reserves for credit against Community currencies; it will thus in practice enlarge the potential funds available for intervention purposes.

This agreement marks a substantial step forward for monetary cooperation in the Community. It constitutes the beginning of a new phase for the EMS, creating in a flexible way a better-balanced System while maintaining the primary objective of establishing a greater degree of internal (prices) and external (exchange rates) stability in Europe. The agreement incorporates the G-7 indicator exercise, adapting it to EMS circumstances by laying more emphasis on the maintenance of exchange rate stability, and thereby takes account of international discussions.

⁽¹⁾ The limits are double the debtor quota of the Short-Term Monetary Support (STMS) mechanism (Germany, France: ECU 3,480m; Italy: ECU 2,320m; Belgium, The Netherlands: ECU 1,160m; Denmark: ECU 520m; Ireland: ECU 200m).

Monthly variability of nominal effective exchange rates against the currencies of the exchange rate mechanism

(averages of absolute values of monthly variations, in %)

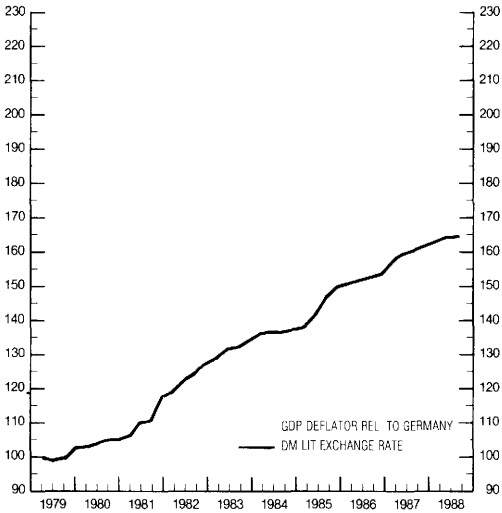
	B/LFR	DKR	DM	FF	IRL	LIT	HFL	UKL	DRA	PTA	ESC	USD	YEN	SFR
1974	0.83	0.64	1.37	1.53	0.78	1.69	0.48	0.71	1.93	1.66	0.49	1.93	1.42	1.70
1975	0.38	0.32	0.54	0.79	1.10	0.80	0.36	1.05	1.81	1.13	0.56	1.89	1.47	0.77
1976	0.85	0.68	1.57	1.23	2.21	3.34	0.77	2.10	0.73	1.08	1.17	0.68	1.11	1.14
1977	0.44	0.81	0.76	0.47	0.96	0.95	0.42	0.90	0.40	2.06	2.41	0.85	1.61	1.51
1978	0.69	0.57	0.77	1.40	1.38	1.03	0.58	1.32	1.82	0.79	2.08	1.84	2.50	2.87
1974-78	0.64	0.60	1.00	1.08	1.29	1.56	0.52	1.22	1.34	1.34	1.34	1.44	1.62	1.60
1979	0.30	0.93	0.37	0.23	0.50	0.64	0.32	1.72	0.96	1.51	1.07	1.13	2.20	0.64
1980	0.19	0.24	0.21	0.26	0.29	0.44	0.20	1.61	1.85	1.17	1.28	2.27	2.89	0.90
1981	0.34	0.30	0.67	0.65	0.29	0.86	0.46	2.39	0.36	0.67	0.98	3.14	2.93	1.57
1982	0.98	0.49	0.73	0.76	0.46	0.46	0.61	1.44	0.91	1.48	1.79	2.49	1.22	1.00
1983	0.24	0.37	0.51	0.50	0.38	0.48	0.18	1.99	2.55	0.98	2.16	1.89	1.64	1.18
1979-83	0.41	0.47	0.50	0.48	0.38	0.58	0.35	1.83	1.33	1.16	1.46	2.18	2.18	1.06
1984	0.22	0.30	0.24	0.08	0.22	0.46	0.10	1.06	1.31	0.77	1.25	2.70	1.62	0.83
1985	0.16	0.15	0.32	0.24	0.20	0.88	0.24	2.04	2.91	0.84	1.29	3.06	1.84	0.93
1986	0.21	0.37	0.31	0.54	1.08	0.15	0.21	2.39	1.22	0.62	1.12	2.07	1.92	1.01
1987	0.18	0.38	0.27	0.27	0.24	0.46	0.21	0.94	0.81	1.05	0.71	2.20	1.64	0.70
1988	0.10	0.26	0.15	0.24	0.16	0.29	0.16	1.18	0.43	0.67	0.23	2.03	1.18	0.44
1984-88	0.17	0.29	0.26	0.27	0.38	0.45	0.18	1.52	1.34	0.79	0.92	2.41	1.64	0.78

Source : Commission staff.

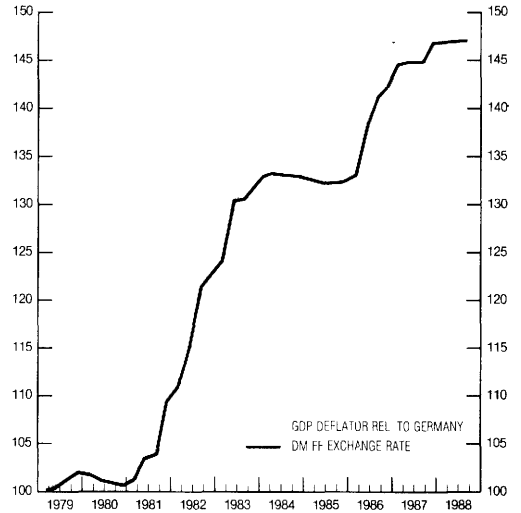
GRAPH I

Exchange rate and price level relative to Germany (by country – base 79(I) = 100)

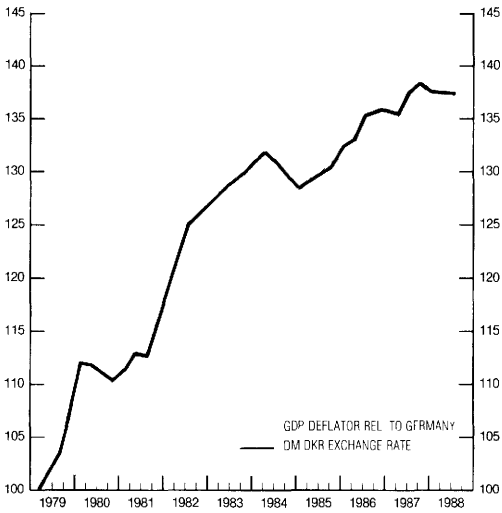
ITALY



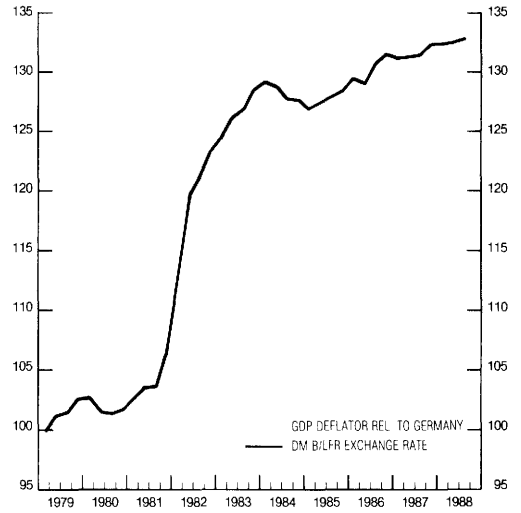
FRANCE



DENMARK



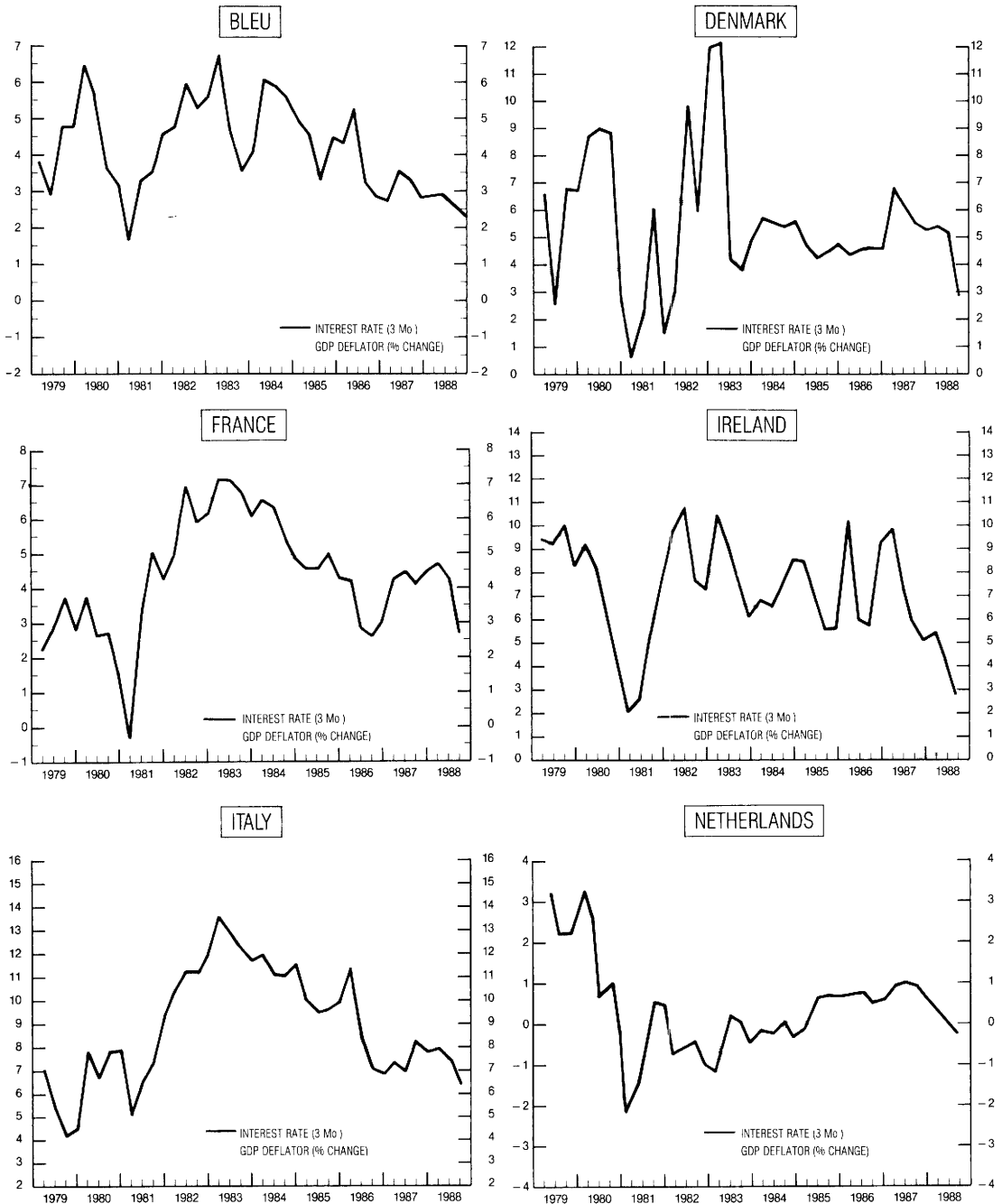
BLEU



Source: Commission staff.

GRAPH II

Interest rate and inflation differential with Germany (by country)



General Government net lending (% GDP)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988*
B	-7.1	-9.0	-12.7	-10.9	-11.2	-9.3	-8.3	-8.9	-7.2	-7.1
DK	-1.7	-3.3	-6.9	-9.1	-7.2	-4.1	-2.0	+3.1	+2.1	+0.9
D	-2.6	-2.9	-3.7	-3.3	-2.5	-1.9	-1.1	-1.3	-1.8	-2.3
F	-0.8	0.0	+1.9	-2.8	-3.2	-2.8	-2.8	-2.9	-2.5	-1.9
IRL	-11.4	-12.7	-13.4	-13.7	-11.6	-9.6	-11.1	-11.0	-9.1	-6.5
I	-8.3	-8.5	-11.3	-11.3	-10.6	-11.5	-12.5	-11.4	-10.5	-10.0
NL	-3.7	-3.9	-5.4	-7.0	-6.3	-6.2	-4.7	-6.0	-6.3	-5.2

* Commission forecast.

Source : Commission staff.

Evolution of General Government gross debt situation (% GDP)

(+ improvement, - deterioration)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988*
B	-3.3	-5.7	-12.0	-7.6	-9.7	-5.7	-6.5	-2.9	-4.9	-2.4
DK	-5.1	-6.5	-10.2	-9.4	-9.6	-4.4	+1.7	+5.5	+1.4	+0.6
D	-0.7	-1.9	-3.7	-3.0	-1.6	-0.8	-0.8	-0.1	-1.2	-1.2
F	-1.0	-0.3	+0.7	-4.0	-1.6	-2.2	-2.0	-1.3	-1.6	-0.6
IRL	-5.6	-1.6	-4.9	-5.5	-10.1	-4.7	-3.0	-11.5	-3.3	-3.5
I	+0.5	+2.8	-2.0	-5.8	-5.6	-5.2	-6.6	-4.2	-4.7	-4.0
NL	-1.8	-3.2	-4.4	-5.2	-6.4	-4.2	-3.5	-1.5	-3.8	-4.4

* Commission forecast.

Source : Commission staff.

US DOLLAR (1979 to 1988)

USD EXCHANGE RATE AGAINST THE ECU



Source : Commission staff.

EMS : Bilateral central rates and intervention points *

(in use since 12.01.1987)

		Amsterdam in HFL	Bruxelles Brussel in B/LFR	Frankfurt in DM	Kobenhavn in DKR	Dublin in IRL	Paris in FF	Roma in LIT
100 HFL	+ 2.25 % central rate - 2.25 %	100	1872.15 1830.54 1789.85	90.770 88.7526 86.780	346.24 338.537 331.02	33.8868 33.1293 32.3939	304.44 297.661 291.04	67912.0 63963.1 60241.0
100 B/LFR	+ 2.25 % central rate - 2.25 %	5.5870 5.46286 5.3415	100	4.959 4.84837 4.740	18.9143 18.4938 18.0831	1.8510 1.80981 1.7695	16.6310 16.2608 15.8990	3710.2 3494.21 3290.9
100 DM	+ 2.25 % central rate - 2.25 %	115.235 112.673 110.1675	2109.50 2062.55 2016.55	100	390.16 381.443 373.00	38.1825 37.3281 36.4964	343.05 335.386 327.92	76540.0 72069.9 67865.0
100 DKR	+ 2.25 % central rate - 2.25 %	30.21 29.5389 28.8825	553.0 540.723 528.70	26.810 26.2162 25.630	100	10.0087 9.78604 9.56830	89.925 87.9257 85.97	20062.0 18894.0 17794.0
1 IRL	+ 2.25 % central rate - 2.25 %	3.0870 3.01848 2.9510	56.5115 55.2545 54.0250	2.740 2.67894 2.619	10.4511 10.2186 9.9913	1	9.1890 8.98480 8.7850	2050.03 1930.71 1818.34
100 FF	+ 2.25 % central rate - 2.25 %	34.36 33.5953 32.8475	628.97 614.977 601.295	30.495 29.8164 29.150	116.32 113.732 111.20	11.3830 11.1299 10.8825	100	22817.0 21488.6 20238.0
1000 LIT	+ 6 % central rate - 6 %	1.660 1.56340 1.4725	30.387 28.6187 26.953	1.4735 1.38754 1.3065	5.620 5.29268 4.985	0.549952 0.517943 0.487799	4.9410 4.65362 4.3830	1000
1 ECU	central rate	2.31943	42.4582	2.05853	7.85212	0.768411	6.90403	1483.58

(*) The UKL and the DRA do not participate in the exchange rate mechanism of the EMS.
Their theoretical central rates are respectively: 0.739615 UKL and 150.792 DRA.

Source: Commission staff.

EMS realignments : Successive ecu central rates and percentage changes

Currencies	13.03.1979 *	24.09.1979	30.11.1979	23.03.1981	05.10.1981	22.02.1982	14.06.1982	21.03.1983	%
HFL	2.72077	2.74748	2.74362	2.81318	-2.47	2.66382	2.57971	2.49587	+3.61
B/LFR	39.4582	39.8456	39.7897	40.7985	-2.47	40.7572	44.9704	44.3662	-0.61
DM	2.51064	2.48557	2.48208	2.54502	-2.47	2.40989	2.33379	2.21515	+3.61
DKR	7.08592	7.36594	7.72336	7.91917	-2.47	7.91117	8.234	8.04412	-0.61
UKL **	0.663247	0.649821	0.64891	0.542122	+19.70	0.601048	0.560453	0.629848	-0.61
IRL	0.662638	0.669141	0.668201	0.685145	-2.47	0.684452	0.691011	0.71705	-0.61
FF	5.79831	5.85522	5.847	5.99526	-2.47	6.17443	6.61387	6.79271	-6.32
LIT	1148.18	1159.42	1157.79	1262.92	-8.32	1300.67	1350.27	1386.78	-3.34

Currencies	18.05.1983	17.09.1984 ***	07.04.1986	04.08.1986	12.01.1987	Percentage change vis-à-vis 13.03.1979
HFL	2.52595	2.52595	2.40935	2.37833	2.31943	+17.30
B/LFR	44.9008	44.9008	43.6761	43.1139	42.4582	-7.07
DM	2.24184	2.24184	2.13834	2.11083	2.05853	+21.96
DKR	8.14104	8.14104	7.91896	7.81701	7.85212	-9.76
UKL **	0.587087	0.585992	0.630317	0.679256	0.739615	-10.33
IRL	0.725690	0.725690	0.712956	0.764976	0.768411	-13.77
FF	6.87456	6.87456	6.9628	6.87316	6.90403	-16.02
LIT	1403.49	1403.49	1496.21	1476.95	1483.58	-22.61
DRA **		87.4813	135.659	137.049	150.792	-59.56

* Initial ecu parities at the start of the EMS.

** Theoretical central rate.

*** Revised composition of the ecu and inclusion of the Drachma.

Source : Commission of the European Communities.

ECU: Changes in composition, central rates and weights

Currencies	Composition	13.03.1979 *		24.09.1979		30.11.1979		23.03.1981		05.10.1981	
		ECU central rates	Weights	ECU central rates	Weights	ECU central rates	Weights	ECU central rates	Weights	ECU central rates	Weights
DM	0.828	2.51064	33.0	2.48557	33.3	2.48208	33.4	2.54502	32.5	2.40989	34.4
FF	1.15	5.79831	19.8	5.85522	19.7	5.847	19.7	5.99526	19.2	6.17443	18.6
UKL **	0.0885	0.663247	13.6	0.649821	13.6	0.64891	13.6	0.542122	16.3	0.601048	14.7
HFL	0.286	2.72077	10.5	2.74748	10.5	2.74362	10.4	2.81318	10.2	2.66382	10.7
B/LFR	3.66/0.14	39.4582	9.5	39.8456	9.5	39.7897	9.6	40.7985	9.3	40.7572	9.3
LIT	109	1148.15	9.5	1159.42	9.4	1157.79	9.4	1262.92	8.6	1300.67	8.4
DKR	0.217	7.0892	3.0	7.36594	3.0	7.72336	2.8	7.91917	2.8	7.91117	2.8
IRL	0.00759	0.662638	1.1	0.669141	1.1	0.668201	1.1	0.685145	1.1	0.684452	1.1

Currencies	Composition	22.02.1982		14.06.1982		21.03.1983		18.05.1983	
		ECU central rates	Weights	ECU central rates	Weights	ECU central rates	Weights	ECU central rates	Weights
DM	0.828	2.41815	34.2	2.33379	35.5	2.21515	37.38	2.24184	36.93
FF	1.15	6.19564	18.6	6.61387	17.4	6.79271	16.93	6.87456	16.73
UKL **	0.0885	0.557037	15.9	0.560453	15.8	0.629848	14.05	0.587087	15.07
HFL	0.286	2.67296	10.7	2.57971	11.1	2.49587	11.46	2.52595	11.32
B/LFR	3.66/0.14	44.6963	8.5	44.9704	8.5	44.3662	8.57	44.9008	8.46
LIT	109	1305.13	8.1	1350.27	8.1	1386.78	7.86	1403.49	7.77
DKR	0.217	8.18382	2.7	8.234	2.6	8.04412	2.7	8.14104	2.67
IRL	0.00759	0.686799	1.1	0.691011	1.1	0.71705	1.06	0.725690	1.05

Currencies	Revised Composition	17.09.1984 ***		22.07.1985		07.04.1986		04.08.1986		12.01.1987	
		ECU central rates	Weights	ECU central rates	Weights	ECU central rates	Weights	ECU central rates	Weights	ECU central rates	Weights
DM	0.719	2.24184	32.7	2.2384	32.12	2.13834	33.62	2.11083	34.06	2.05853	34.93
FF	1.31	6.87456	19.06	6.86402	19.09	6.9628	18.81	6.87316	19.06	6.90403	18.97
UKL **	0.0878	0.585992	14.98	0.555312	15.81	0.630317	13.93	0.679256	12.93	0.739615	11.87
HFL	0.256	2.52595	10.13	2.52208	10.15	2.40935	10.63	2.37833	10.76	2.31943	11.04
B/LFR	3.71/0.14	44.9008	8.57	44.832	8.59	43.6761	8.81	43.1139	8.93	42.4582	9.07
LIT	140	1403.49	9.98	1520.6	9.21	1496.21	9.36	1476.95	9.48	1483.58	9.44
DKR	0.219	8.14104	2.69	8.12857	2.69	7.91896	2.77	7.81701	2.80	7.85212	2.79
IRL	0.00871	0.725690	1.20	0.724578	1.2	0.712956	1.22	0.764976	1.14	0.768411	1.13
DRA **	1.15	87.4813	1.31	100.719	1.14	135.659	0.85	137.049	0.84	150.792	0.76

* Initial ECU parities at the start of the EMS.

** Theoretical central rate.

*** Revised composition of the ECU and inclusion of the Drachma.

Source : Commission of the European Communities.