

■ EXCHANGE RATE REGIME AND ECONOMIC ACTIVITY IN THE EU

The monetary disintegration of the EU since September 1992 together with a policy of synchronous restrictive measures were the major cause of the slow-down in economic growth in the European hard-currency countries as early as in 1995, the renewed upsurge in unemployment and the failure of budget consolidation to attain its target. With the DM showing the highest gains of all the EU currencies, Germany's economy suffered the most from the destabilization of exchange rates and became less attractive as a location for business activities.

The monetary split of the EU since September 1992 into a central "hard-currency block" under the "leadership" of the Bundesbank (Germany, France, the Netherlands, Belgium, Denmark, and Austria) and the soft-currency countries had considerable real economic consequences: between 1992 and 1995 countries with depreciating currencies achieved real growth in exports of goods and services of 9 percent per year, whereas the countries with appreciating currencies registered an average growth of merely 3 percent per year. As a consequence the economies of the soft-currency countries were able to achieve growth rates more than ½ percent higher than the economies of the hard-currency block

The combined effect of monetary disintegration in the EU and a policy of synchronous restrictive measures with the aim of fulfilling the Maastricht criteria was the slow-down in economic growth which took place as early as in the second recovery year (1995), a renewed upsurge in unemployment and the failure of the budget consolidation drive to reach its targets

Against this background an increasing number of observers holds the project of monetary union *itself* responsible for the economic problems and not the specific contents of the participation criteria or the way they are realized by economic policies

This paper deals with an aspect essential to the debate on a single European currency, namely, the economic performance of the EU countries under floating exchange rates on the one hand and under stable exchange rates on the other hand.

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This study compares the economic performance of the EU in three different phases of the European Monetary System (EMS) and hence under three different exchange rate regimes (Figure 1)¹:

- From early 1982 to late 1986 the parities between the major currencies which had joined the Exchange Rate Mechanism (ERM) of the EMS were altered in several realignments ("adjustable peg").
- Between early 1987 and September 1992 a system of *stable exchange rates* was established within the ERM system
- Since September 1992 exchange rate determination has been increasingly *left to the foreign exchange markets*. As a consequence, exchange rate instability has considerably increased

This study attempts to elaborate those characteristics of economic performance in Europe which were directly influenced by the respective exchange rate regime. For this purpose the most important economic indicators were calculated for both, the hard-currency as well as the soft-currency countries

The *hard-currency block* is considered that group of countries whose currencies depreciated less than 1 percent per year vis-à-vis the DM between 1992 and 1995 (Germany, France, the Netherlands, Belgium, Denmark, and Austria). The remaining EU countries form the group of *soft-currency countries*. Since 1992 their currencies have depreciated vis-à-vis the DM by more than 8 percent per year

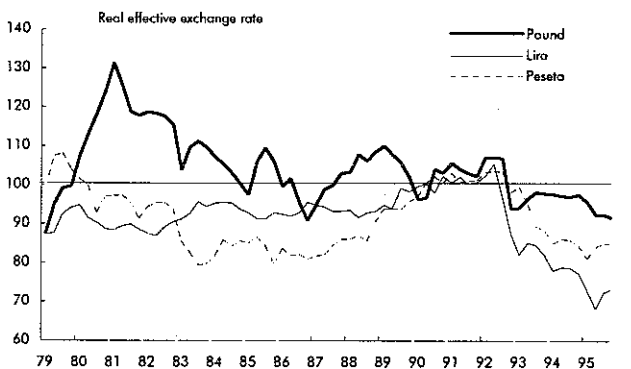
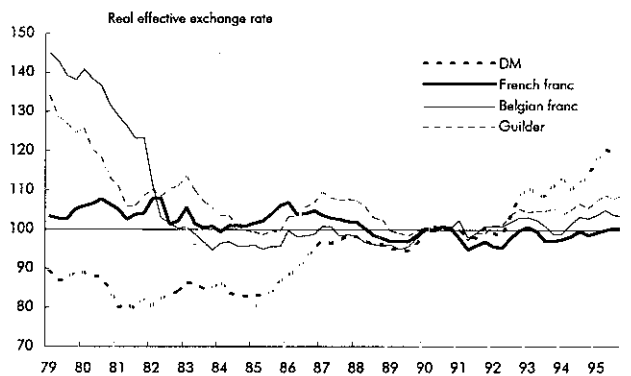
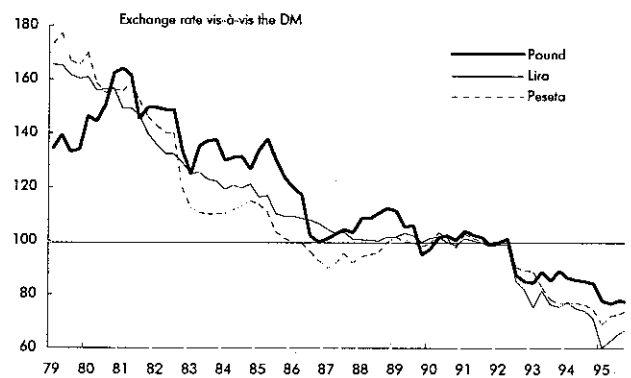
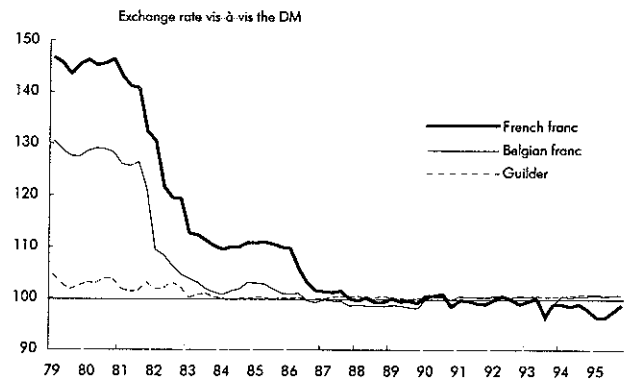
ECONOMIC PERFORMANCE UNDER THE "ADJUSTABLE PEG" SYSTEM

From 1982 to 1986 the currencies of the soft-currency countries were greatly devaluated through several *realignments*. On average the exchange rates of these countries dropped by approximately 8 percent per year vis-à-vis the DM, but the nominal effective exchange rates declined by less than 5 percent per year, the difference is mainly due to the dollar depreciation between 1985 and 1987²

¹ In the first phase of the ERM between 1979 and 1981 an attempt was made to stabilize the exchange rates of the major currencies. This attempt failed, however, because the inflation differentials between the individual ERM countries, that were already high in 1979 continued to widen after the second oil price shock and the subsequent recession. Since this relatively short period was dominated by various elements of international turbulence at the same time, it is not included in the comparison between exchange rate regimes and economic performance

² The mean values for both groups are average values weighted according to population shares in the base year of the respective period

Figure 1: Major exchange rates in Europe
1990 = 100



On the one hand, the massive devaluations were a *consequence* of high inflation, especially in relation to the Federal Republic of Germany; on the other hand, they were also a source of continuing *inflation differentials*. Thus, as was also the case in the 1970s, a reciprocity between the (relative) rate of inflation and (nominal) devaluations prevailed: therefore real effective exchange rates (based on unit labor costs) sank by only 1½ percent per year (Figure 1, Table 1)

The effective nominal and real exchange rates of those countries which were later to form the *hard-currency block* rose by 1½ percent per year in 1981-1987. In relation to the DM, however, the (bilateral) exchange rates dropped by almost 4 percent – a change primarily due to the strong devaluations of the French and Belgian francs between 1981 and 1987 (Figure 1, Table 1)

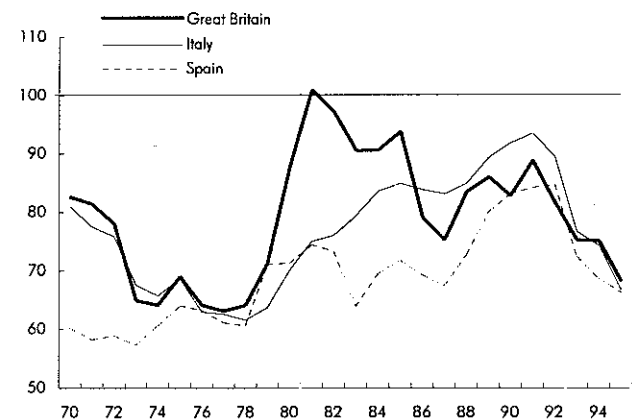
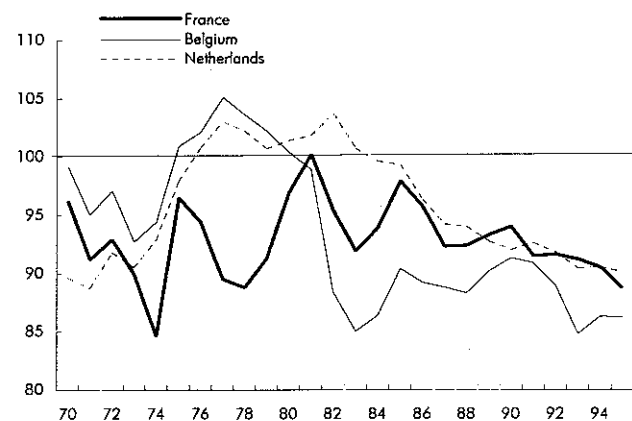
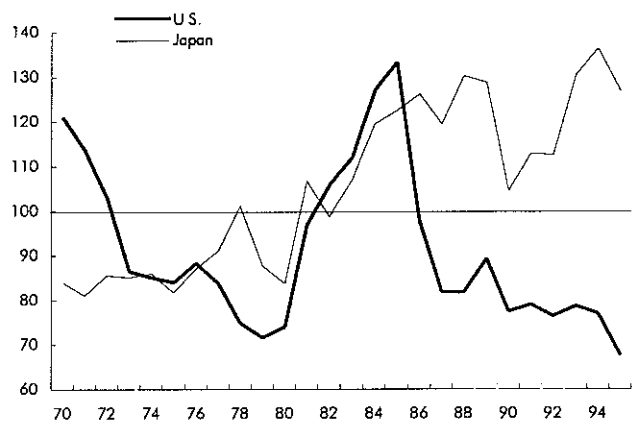
Between 1981 and 1987 the soft-currency countries strongly devaluated their currencies in several realignments. Nominal effective exchange rates dropped by an average 5 percent per year, while the decrease in real terms was a mere 1½ percent, because consumer prices and unit labor costs climbed more rapidly than in the hard-currency block.

The second oil price shock and the dollar appreciation contributed to the relatively high inflation in the soft-currency countries (including France and Belgium) in the early 1980s. Until 1986, however, inflation declined more strongly in these countries than in the hard-currency block (Figure 4). This in turn was an essential precondition for the successful stabilization of the major ERM exchange rates in the years 1987 to 1992.

Aggregate price levels in the soft-currency countries (in common currency) shifted only slightly in comparison with that of the Federal Republic of Germany, since nominal devaluations vis-à-vis the DM roughly equaled the inflation differential vis-à-vis Germany: in the years 1982-1987 and 1987 the GDP of the soft-currency countries was 18½ percent and 12½ percent "*cheaper*", respectively, than the GDP of the Federal Republic of Germany (Table 1)

The price level in certain EU countries shifted significantly in relation to Germany: the devaluation of the pound in relation to the DM (-7½ percent p.a.), for example, greatly exceeded the inflation differential (as measured by the GDP deflator), which amounted to 2½ percent p.a. (in Great Britain the GDP deflator rose by 5.2 percent in 1981-1987, in Germany by 2.8 percent p.a.)³. Correspondingly, overall prices in Great Britain relative to those in Germany fell by almost 5 percent p.a., with

Figure 2: Price level of GDP in common currency
Germany = 100



the change over the whole period amounting to approximately 25 percent (Figure 2). On the other hand, the price level in Italy relative to Germany rose by about

³ The relation of a country's price level to that of Germany (in common currency) is given by the ratio of the purchasing power parity of GDP relative to that of Germany to the exchange rate vis-à-vis the DM; it reflects the level of the bilateral real exchange rate and hence the extent of overvaluation or undervaluation (as compared to the purchasing power parity of GDP): accordingly, in 1987, e.g., the pound was undervalued by 25 percent in relation to the DM or the DM overvalued by 33 percent in relation to the pound (Figure 2)

10 percent (the inflation differential exceeded the devaluation of the lira vis-à-vis the DM).

The real devaluation of the currencies of the soft-currency countries by 1½ percent per year and the real revaluation of the currencies of the hard-currency countries by 1½ percent per year (as measured by unit labor costs) were one major reason why between 1981 and 1987 *exports and investments* in the soft-currency countries expanded by approximately 2 percentage points faster than in the hard-currency countries (Table 1). The differential for GDP growth was about 1 percentage point. Differentials of approximately the same size were observed between Germany, the epitome of a hard-currency country, and the individual major devaluation countries (Figures 4 and 5).

THE PHASE OF STABLE EXCHANGE RATES IN EUROPE

Between early 1987 and September 1992 the *exchange rates* between the major European currencies remained almost *stable* (Figure 1). At the same time, inflation differentials within the EU narrowed: in 1981-1987 consumer price inflation in the soft-currency countries had exceeded that in hard-currency countries by 5½ percentage points, during the period 1987-1992 the differential amounted to only 4 percentage points, and only 2½ percentage points in 1992 (Table 1). The annual development of consumer prices in the major EU countries illustrates this *convergence* (Figure 4).

The *inflation differentials* based on GDP deflators or on unit labor costs were lower than those based on consumer prices: on the one hand, consumer prices are influenced directly by import prices (the latter dropped more sharply in hard-currency countries than in the soft-currency countries); on the other hand, labor costs in soft-currency countries were moderated by high unemployment in these countries. As a result, *aggregate price levels* in the EU barely changed (Figure 2). At 2 percent p.a., the real appreciation (based on unit labor costs) of the soft currencies was far lower than the average inflation differential, based on consumer prices⁴.

Between 1987 and 1992, *exports, investments, and total production* in the hard-currency countries expanded more rapidly than in the soft-currency countries (Table 1). The growth differential was 1½ to 2 percentage points. A large part of these differentials result from the *asynchro-*

⁴ The most important exception was Spain, whose real effective exchange rate climbed by more than 4 percent annually; by contrast, the real effective exchange rate of the British pound and of the Italian lira rose by only 1 percent. It should be noted, however, that most of the appreciation occurred in the period prior to Spain's entry into the EMS in September 1989 (Figure 1).

nous development of economic activity in the early 1990s: while Great Britain and the Scandinavian countries were struggling with a deep recession in 1990 and 1992, the German economy experienced the "reunification boom" in 1990-1991 (Figures 4 and 5).

Between 1981 and 1987, the real exchange rates of the soft-currency countries declined by 3 percent p.a. relative to the hard-currency countries; between 1987 and 1992, however, they rose by a bare 1½ percent p.a. (Table 1). These statistics suggest that the medium-term impact of movements in real exchange rates on economic activity was less pronounced in the second period than in the first period.

The economic performance of the EU as a whole appears, however, to have been improved by the stabilization of exchange rates, i.e., the establishment of monetary conditions favorable to the expansion of trade and investment. While total production in the EU rose by less than 2 percent per year in the 1981-1987 period, it expanded by almost 3 percent in 1987-1992. *Exports and imports*, (i.e., primarily intra-EU trade) and *investment expenditures* were the major components supporting this medium-term acceleration in growth: in the phase of stable exchange rates the growth rate of these aggregates was 2 percent higher than between 1981 and 1987 (Table 1).

The favorable economic development of the EU between 1987 and 1992, in turn, facilitated the maintenance of stable exchange rates (this holds true at least until the onset of the asynchronous development within Europe in 1990).

The economic performance of the EU countries between 1987 and 1992 was considerably boosted by the stabilization of exchange rates.

Cyclical factors were not the main reason why growth in the period 1987-1992 exceeded growth in 1981-1987: the unfavorable development in 1992, the last year of the recession in the early 1980s, reduced the average growth rate over the period 1981-1987 of investment, exports, and aggregate output by less than ½ percentage point. The asynchronous development of economic activity in the early 1990s hardly influenced the medium-term growth rate of the EU as a whole between 1987 and 1992 because the recession in Great Britain and Scandinavia in 1990-1992 roughly compensated the (statistical) effect of the reunification boom in Germany 1990-91 on total EU growth.

Relatively high growth in the phase of stable exchange rates was one of the main reasons why in 1988-1992 in

the EU as a whole the *unemployment rate* and the *budget deficit* (in percent of GDP) were about 1 percentage point lower than in 1982-1987 (Table 1).

THE DE-FACTO COLLAPSE OF THE EUROPEAN MONETARY SYSTEM 1992-1993

In 1989, the "Delors Plan" on the three-stage introduction of a *monetary union* in the EU was presented:

- In stage 1 EU currencies were to fluctuate only within the narrow margin of ± 2.25 percent around the central rate against the ECU, although, realignments would remain possible
- In stage 2 real economic convergence should continue to progress, realignments being possible only in "exceptional circumstances"
- In stage 3 exchange rates would be "irrevocably" fixed in a first step and then the Monetary Union was to be completed with the introduction of a common currency⁵

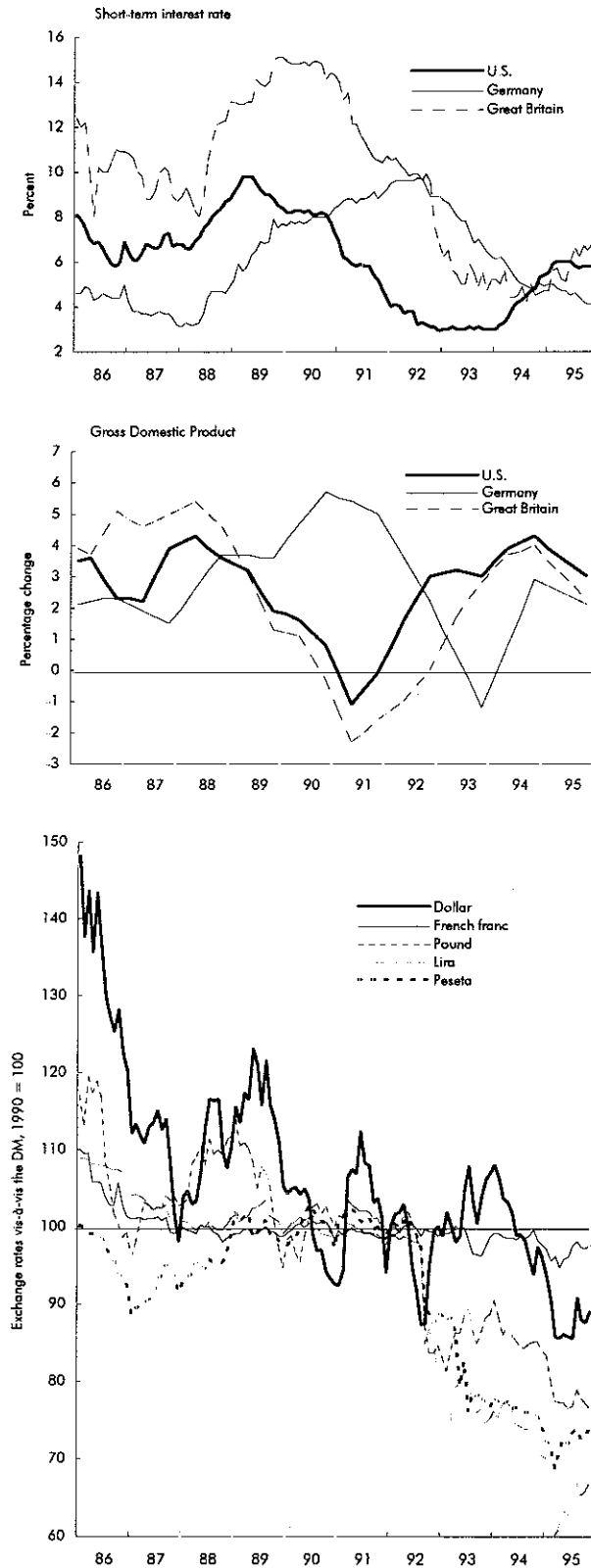
Until 1992 the development went according to plan: Spain, Great Britain, and Portugal joined the ERM. In December 1991 the EU heads of government agreed upon the "Treaty on European Union" that adopted and elaborated the most essential elements of the Delors Plan. This treaty was ceremoniously signed in *Maastricht* in February 1992

A few months later the sustained tendency towards increasing monetary and real economic integration was reversed: between September 1992 and August 1993 the ERM de facto collapsed, the pronounced exchange rate shifts splitting Europe into a hard-currency block and the soft-currency countries. This monetary disintegration not only exacerbated the recession in 1993, but also caused the hard-currency economies to perform far less favorably than the soft-currency countries ever since.

The major reason for the monetary division of Europe was an interplay of different factors:

- asynchronous economic development in the early 1990's,
- differences in the interest rate policies of Germany and the U.S. resulting thereof,
- neglect of the paneuropean dimension in the interest rate policy of the German Bundesbank,
- orientation of the interest rate policy of the Bundesbank toward the money supply M3,

Figure 3: Dollar, DM, and the collapse of the Exchange Rate Mechanism



⁵ See *Bladen-Hovell* (1994) and *Artis* (1994) on the development of the EMS and the history of the Maastricht Treaty

- "talking the dollar down" by the Clinton Administration,
- prevalence of *short-term, speculative transactions* in the currency markets, particularly as a result of the increasing use of trading systems based on "technical analysis" (Schulmeister, 1988)

In view of the *deterioration of the economic situation*, monetary policy in the U.S and Great Britain were significantly loosened at the end of 1990, while the Bundesbank, fearful of inflationary pressure caused by the reunification further tightened its restrictive policy: in 1991, interest rates in the U.S and Great Britain decreased substantially, while further increasing in Germany (Figure 3)

In late 1991, the interest rate differential between the British pound and the DM became so small that monetary policy in Great Britain could not be eased any further, since this would have meant that the value of the pound vis-à-vis the DM could not be maintained any longer. Interest rates in the U.S, however, continued to fall while further rising in Germany, thus exerting increasing *pressure on the dollar exchange rate vis-à-vis the DM*. This growing tension was vented a few weeks after the Maastricht Treaty was signed: between March and August 1992, the dollar continued to slip month after month, with a decrease of approximately 15 percent in relation to the other ERM currencies (Figure 3).

This development led to a major deterioration in the economic situation of those European countries that already were in a recession: on the one hand, they could not reduce their interest rates without abandoning the parity to the DM; and on the other hand, their currencies significantly appreciated against the U.S dollar (Great Britain and the Scandinavian countries were the countries most strongly affected since their economies are more closely linked to the U.S economy than those of the Central European countries)

The ERM crisis in September 1992 was mainly due to the contradiction between the high interest rate policy of the German Bundesbank, which was based on national considerations, and the need for lower interest rates at the European level.

In late June 1992, the *tensions within the ERM* grew further when a *referendum* in Denmark resulted in a "No" to the Maastricht Treaty. In view of the possibility that the approaching referendum in France would yield a similar outcome and given the expectation that Italy among all large member states of the EU was the one least able to fulfill the Maastricht criteria, the foreign exchange markets moved against the *lira* and the *franc*.

In this situation, the German Bundesbank was expected to set a *symbolic signal for Europe* by decreasing its *key interest rates* (see reports in the Wall Street Journal in the first two weeks of July 1992).

The Bundesbank, however, *increased the discount rate* in mid-July 1992 to the highest level since the end of World War II.

The Bundesbank believed that this move was justified by the high increase in the *money supply M3*. This increase, however, was partly brought about by the policy of the Bundesbank itself via two channels (see *Board of Governors*, 1995):

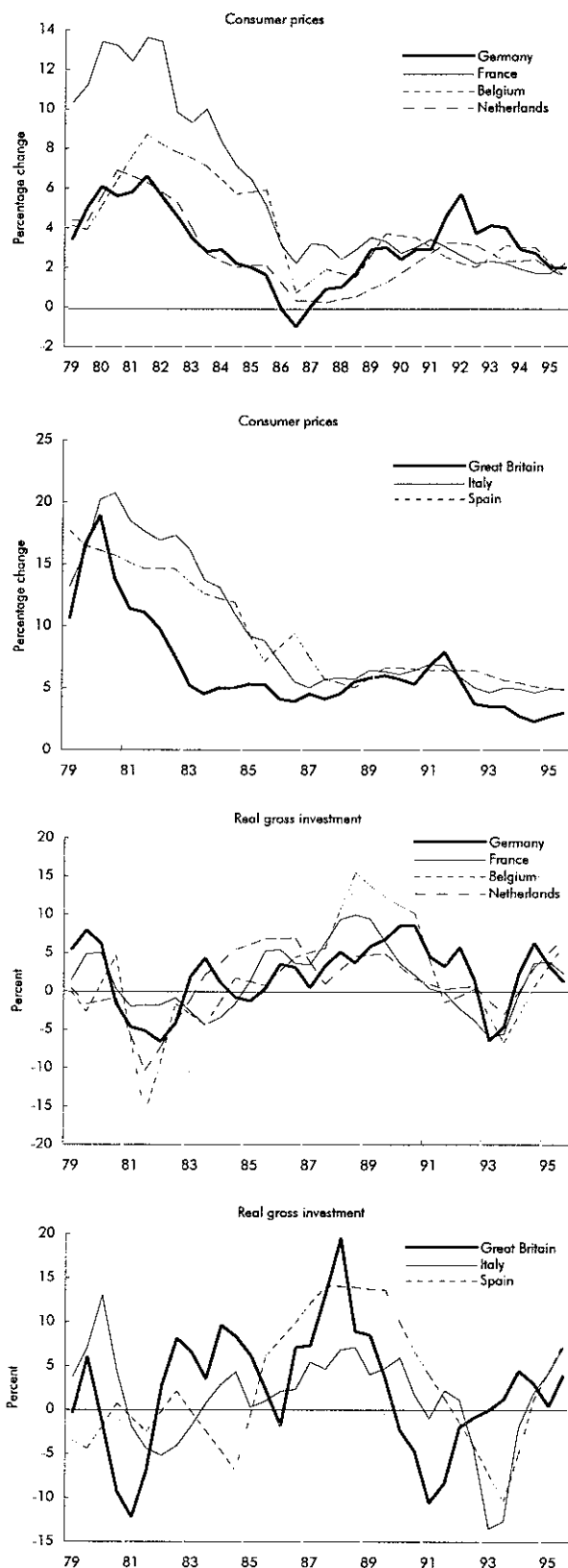
- The high interest rate policy fostered the hope for a DM appreciation and induced *capital flows* which were mainly invested in time deposits (these experienced the highest increase among all M3 components in 1992).
- Since late 1991, as a result of the high interest rate policy, the short-term (money market) rates increasingly exceeded the long-term (bond) interest rates as of late 1991. This "inverse" term-structure of interest rates triggered portfolio shifts from long-term investments to short-term deposits, inducing a further increase in the money supply M3⁶.

As a result of the *increase in German key interest rates and growing uncertainty* regarding the further course towards monetary union (especially in view of the referendum in France scheduled for September 20, 1992) the speculative pressure for revaluation of the DM and for devaluation of the British pound, the Italian lira and the French franc mounted rapidly. It was not until September 14 that the German Bundesbank slightly lowered the key rates – "in exchange" for a devaluation of the lira. At the same time Helmut Schlesinger, the president of the Bundesbank, underscored that there would be no further interest rate reductions in the foreseeable future. Furthermore, he did not want to rule out that one or the other currency could come under pressure⁷. On the next day, speculation against the British pound and the Italian lira reached such dimensions that both currencies had to withdraw from the ERM.

⁶ A third form of "M3-paradox" arises when the main contribution to the growth in M3 comes from savings deposits, as has been the case since mid-1994: if, for example, German households, fearful of becoming unemployed, add to their savings deposits ("precautionary saving") the resulting acceleration of the growth in the quantity of money would prompt the Bundesbank to raise interest rates, thus doing exactly the opposite of what is indicated by a rise in the saving rate, namely an easing of inflationary pressure and a fall in the equilibrium interest rate.

⁷ This statement was made on September 15 during an interview with the Handelsblatt and the Wall Street Journal. According to many commentators outside Germany, its publication on the following day was the main trigger for the partial collapse of the ERM on September 16, 1992 (see Financial Times, dated September 16 and 17, 1992).

Figure 4: Inflation and investment



Thus, the ERM crisis was mainly due to the contradiction between the *high interest rate policy* of the Bundesbank, which was based on *national considerations*, and the *need for lower interest rates at the European level*. The recession countries suffered primarily from a severe *weakness in investment demand*, which was largely due to the high interest level, and not so much from an unfavorable development of foreign trade. This holds true especially for Great Britain: in 1991, the aggregate *price level* was 15 percent lower than in Germany (Figure 2); the *real effective exchange rate of the British pound* had remained unchanged since 1989 (Figure 1); and there was an upsurge in *exports* during 1992 (Figure 5). The by far most important cause of unabated recession in Great Britain was a plunge in *investment demand* (Figure 4). Boosting investment would have required a sharp cut in interest rates. Given the high interest rate policy of the Bundesbank, such a move became possible only after stable exchange rates had been abandoned (Figure 3).

In the summer of 1993, tensions in the European exchange markets increased again, triggered by a *plunge in the dollar exchange rate*: immediately after president Clinton assumed office, the trade conflict with Japan intensified and the dollar continued its fall – between January and August 1993, its value vis-à-vis the yen dropped by approximately 15 percent (this development was favored by the Clinton administration's policy of "*talking the dollar down*"). In July 1993, the dollar exchange rate began to drop rapidly against the DM as well, the speculative revaluation pressure on the DM within the ERM increasing at the same time. The corresponding devaluation pressure affected not only soft currencies but also and in particular the *French franc* (Figure 3). This development culminated in the abandonment of the narrow bands for exchange fluctuations of the ERM currencies, which were extended from ± 2.25 percent to ± 15 percent⁸.

The sharp dollar devaluation between late 1993 and early 1995 (the dollar fell by more than 20 percent against the DM) deepened the *monetary rift* within the EU: The exchange rates of soft currencies, in particular of the British pound, the Italian lira and the Spanish peseta vis-à-vis the DM dropped to the lowest levels ever (Figure 3).

ECONOMIC PERFORMANCE IN THE EU UNDER FLOATING EXCHANGE RATES

From 1992 onwards, soft currencies became cheaper vis-à-vis the DM by an average of $8\frac{1}{2}$ percent a year. While

⁸ For further information on the role of the German Bundesbank in the destabilization of the ERM see Avesani – Gallo – Salmon (1994) and Bladen-Hovell (1994).

their *nominal effective exchange rate* fell by 6½ percent per year, that of the hard-currency block increased by approximately 3 percent p.a. (Table 1) As opposed to the period 1973-1986 *consumer prices* in the soft-currency countries rose only 2 percent faster than in the hard-currency block despite the enormous exchange rate changes.

The difference in the development of *unit labor costs* as opposed to earlier phases of unstable exchange rates is even more astonishing: they *did not* increase more rapidly than in the hard-currency block so that the nominal and real effective exchange rates in the various countries developed *at the same pace* (with the exception of Greece) In total, the real-effective exchange rates of the soft-currency countries dropped by 6 percent per year, whereas they increased by 3 percent p.a. in the hard-currency block (Table 1)

Moderate wage increases in the soft-currency countries can be attributed to the fact that not only *unemployment* but also *budget deficits* and *public debts* are much higher in soft-currency countries than in the hard-currency block. In order to fulfill the Maastricht criteria, soft-currency countries need to pursue a particularly restrictive fiscal policy. The hardships of an increase in unemployment

resulting therefrom can be alleviated if the soft-currency countries succeed in improving their price competitiveness through nominal *devaluations* and *moderate wage increases*, thus creating more jobs *at the expense of the hard-currency countries*

Real exchange rate fluctuations within the EU resulted in significant *shifts* in the aggregate price level (Table 1): The GDP of soft-currency countries was "cheaper" than in Germany by 15 percent in 1992 and by 31½ percent in 1995. At the same time, price levels of (other) hard-currency countries declined relative to that of Federal Republic, although only by an overall 3 percent. This means that the German price level has increased relative to all major EU partners, mainly due to the strong appreciation of the DM (Figure 2)

The changes in price competitiveness within the EU had a considerable impact on the real economy. Overall exports of the soft-currency countries increased by 9 percent p.a. between 1992 and 1995, while they rose by a mere 3 percent annually in the hard-currency countries. This development contributed to *economic growth* of the soft-currency countries which was by ½ percentage point p.a. higher than in the hard-currency block (Table 1, Figure 5)

Table 1: Economic performance of hard- and soft-currency countries

	Hard-currency countries	Soft-currency countries	Hard-currency countries	Soft-currency countries	Hard-currency countries	Soft-currency countries
	1981-1987		1987-1992		1992-1995	
	Average percentage change					
Exchange rates						
Vis-à-vis the DM	- 3.8	- 7.8	- 0.2	- 1.4	- 0.5	- 8.6
Nominal effective	+ 1.6	- 4.7	+ 0.8	- 0.7	+ 2.8	- 6.5
Real effective	+ 1.5	- 1.5	+ 0.2	+ 1.9	+ 3.1	- 5.9
Consumer prices	+ 3.9	+ 9.5	+ 2.9	+ 6.8	+ 2.5	+ 4.6
Real exports	+ 2.8	+ 4.8	+ 6.8	+ 4.5	+ 3.2	+ 9.1
Real imports	+ 3.3	+ 5.7	+ 6.3	+ 6.5	+ 2.5	+ 4.3
Real gross investment	+ 1.0	+ 2.8	+ 4.4	+ 2.7	+ 0.3	- 0.4
Real GDP	+ 1.7	+ 2.6	+ 3.4	+ 2.1	+ 1.3	+ 1.9
Real prime rate (%)	5.0	4.3	6.7	5.5	5.9	5.0
Real long-term interest rate (%)	4.7	4.1	5.3	4.8	4.3	6.2
Unemployment rate (%)	8.5	11.6	7.8	10.5	9.9	12.8
Budget deficit (% of GDP)	3.0	6.5	2.5	5.2	4.2	7.5
Gross public debt (% of GDP)	47.1	60.1	51.5	67.1	62.7	84.2
Current Account (% of GDP)	1.0	- 0.5	1.1	- 2.3	0.5	0.1
Price level (FRG = 100)	97.5	81.5	96.6	85.9	95.2	72.2
Without Germany (FRG = 100)	95.4		93.8		91.1	
	Hard-currency countries	Soft-currency countries	Hard-currency countries	Soft-currency countries	Hard-currency countries	Soft-currency countries
	1987		1992		1995	
	Percent					
Real growth of GDP	+ 1.7	+ 4.0	+ 1.8	+ 0.2	+ 2.0	+ 3.0
Rate of inflation (CPI)	+ 1.5	+ 5.5	+ 3.5	+ 6.0	+ 1.9	+ 4.2
Real prime rate	5.6	4.7	7.0	6.8	5.2	5.2
Real long-term interest rate	5.1	4.7	4.5	6.3	4.8	6.8
Unemployment rate	7.5	10.3	8.4	11.5	9.8	12.6
Budget deficit (% of GDP)	2.9	5.1	3.5	6.9	3.9	6.3
Gross public debt (% of GDP)	52.5	68.0	54.8	74.5	66.1	85.8
Current account (% of GDP)	1.3	- 0.8	0.0	- 2.1	0.7	0.4
Price level (FRG = 100)	96.2	78.6	96.2	85.7	94.6	68.4
Without Germany (FRG = 100)	94.1		93.0		90.1	

Real exchange rate fluctuations within the EU resulted in significant shifts in the overall price level. The GDP of soft-currency countries was "cheaper" than in Germany by 15 percent in 1992 and by 31½ percent in 1995. Germany's price level increased relative to all major EU partners.

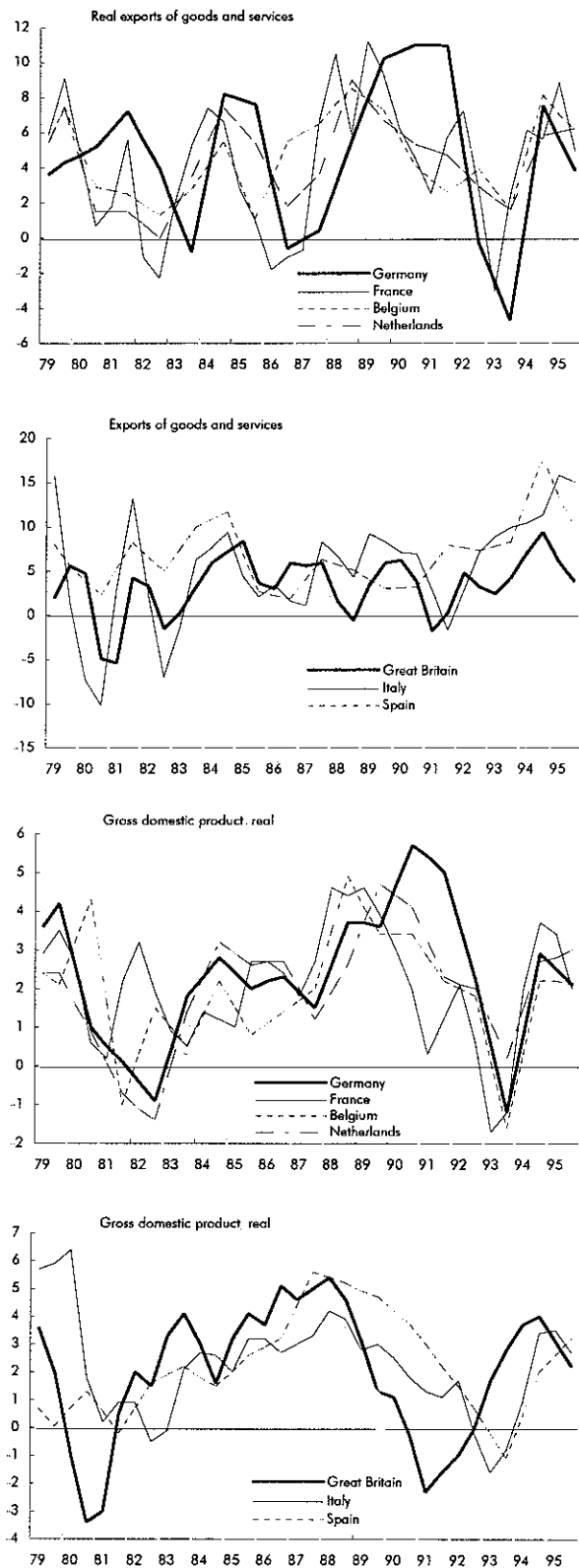
The improvement in the *current account balance* of soft-currency countries by 2½ percentage points of GDP between 1992 and 1995 facilitated budget consolidation. Public deficits in the hard-currency block increased by ½ percentage point of the GDP, whereas in the soft-currency countries it decreased by the same amount (Table 1).

The difference in the *performance* of hard and soft-currency countries between 1992 and 1995 was also the result by cyclical factors: in 1993 Great Britain and the Scandinavian countries experienced a period of economic recovery, while the recession bottomed out in most of the hard-currency countries (Table 5). A comparison between Germany and Italy however – the business cycle in these two countries was similar – shows, that exchange rate fluctuations constituted a major cause of the divergence in economic developments within the EU since 1992.

In Germany, with a real effective appreciation of the DM by 5½ percent a year, exports increased by 2 percent annually between 1992 and 1995, the deficit in current account remained unchanged, the unemployment rate rose by almost 2 percentage points and the budget deficit grew by approximately ½ percentage point of GDP. In Italy, exports increased by 12 percent annually (the real effective lira depreciation amounted to 10 percent per year), the current account balance improved by 4½ percent, and the budget deficit dropped by 2 percentage points of GDP; the unemployment rate rose by less than 1 percentage point. Since 1993, the economy has recovered at a faster pace than in Germany: in 1995, economic growth in Italy amounted to 3 percent as compared to a mere 2 percent in Germany.

Economic activity in the EU was apparently weakened by the destabilization of exchange rates⁹. Economic growth in the years 1992-1995 amounted to 1½ percent per year, half as much as in the period between 1987 and 1992. Although this difference in growth was also brought about by the cyclical factors, especially the recession in 1993, it can be argued that monetary destabilization aggravated the recession. Furthermore, the existing forecasts give reason to believe that inter-

Figure 5: Exports and Gross Domestic Product
Percentage changes from previous year



⁹ The EU Commission estimates the growth losses caused by exchange rate instability at 0.25 to 0.5 percent for 1995 (EU Commission, 1995).

European frictions caused by the destabilization of exchange rates will continue to depress economic growth at least for the next two years.

Despite the creation of the Single Market, the expansion rate of *intra-EU trade* from 1992 to 1995 may have considerably *decreased* as compared to the period 1987–1992: exports and imports of EU countries grew at almost the same pace from 1987 to 1992, whereas imports since 1992 have increased at a rate of 2½ percentage points p.a. lower than the rate recorded for exports (+6 percent p.a.). Since the current account balance of almost all EU members improved between 1992 and 1995, it can be assumed that exports to third countries have increased greatly (EU Commission, 1995)

The average *unemployment rate* in the EU during the years 1993–1995 was higher by 2 percentage points than in 1988–1992. Higher unemployment contributed to the deterioration of *budget deficit* of EU members; the average EU deficit (as a percentage of GDP) during the years since 1992 exceeded the deficit during the period of stable exchange rates by 2 percentage points (Table 1)

THE FUTURE DEVELOPMENT OF THE MONETARY SYSTEM IN EUROPE

At the moment, the conditions for the future economic development of *Germany* are quite unfavorable. *Economic growth* is diminishing, *unemployment* is on the rise, and *budget consolidation* cannot be carried out as scheduled. This development can be largely attributed to the destabilization of exchange rates since 1992: amongst all EU currencies, the DM experienced the *highest appreciation*. Measured in common currency, the aggregate price level in Germany is by 50 percent higher than in the US and the European soft-currency countries and by some 10 percent than in the other hard-currency countries of the EU (Table 1, Figure 2)

If the European Monetary Union fails, the German economy will probably suffer particularly high losses. Should the current growth deceleration in the EU develop into a full-blown recession, the budget deficit of all major countries would again increase considerably and there would be only a likelihood that the third stage of the transition to a Euro-currency would be carried out before the year 2000. Rising unemployment could lead to a sharp *rise in competition* between EU countries for investment, production, and jobs. As a result, the efforts of soft-currency countries to stabilize their currencies vis-à-vis the DM would diminish, considering that *unemployment* in these countries is especially high.

Under these circumstances, the *exchange rate of the DM* would probably rise, thus aggravating Germany's position as business location. Such a development could *jeopardize* the close cooperation between Germany and France, in particular the stability of the franc's exchange rate vis-à-vis the DM.

Even if this scenario does not reflect the most probable course of events – based on the currently available information –, the chances of it becoming a reality have increased since mid-1995 (Schulmeister, 1996). A preventive measure would be to *further reduce German key rates* for the following reasons:

- The prime rate in Germany is currently 6½ percent, that is, 3 percent above the nominal growth rate; as a result of the "*dynamic budget constraint*" – applicable to all debtor sectors –, such a constellation would render companies more reluctant to invest by borrowing additional funds (Schulmeister, 1995).
- A marked decrease in lending rates would improve the *profitability* of German business – which came under considerable pressure as a result of the overvaluation of the DM
- Since the DM is Europe's de-facto key currency, driving down Germany's interest rates would lead to a similar *interest rate decrease throughout Europe*
- Lower DM interest rates could also lead to a *correction of the disparities* between hard and soft currencies. In any case, a cut in interest rates would weaken the upward pressure on the DM

Since interest rate payments are *production costs* and a "demand pull inflation" is unlikely to arise in view of free production capacities, interest rate cuts – just as all cost reductions in general – would further suppress inflation; this is all the more true in view of the overvaluation of the DM¹⁰.

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Exchange Rate Regime and Economic Activity in the European Union – Summary

Between 1982 and 1986, the weaker European currencies were devalued substantially in a number of realignments. At the same time, consumer prices and unit labor costs in the countries concerned rose above average, making for a decline in the real effective exchange rate by only 1½ percent p.a., while the latter increased by the same amount in the hard-currency countries. Although exports and investment in the countries of weaker currency were stimulated by these devaluations, GDP of the EU as a whole expanded by hardly 2 percent p.a. over the period 1981-1987.

From 1987 to 1992 when exchange rates remained stable inflation differentials between soft- and hard-currency countries abated gradually, while trend GDP growth in the EU accelerated to almost 3 percent p.a. Stable framework conditions for intra-EU trade have been largely responsible for this outcome.

Between September 1992 and August 1993 the EMS de facto collapsed, mainly due to the fact that the policy of high interest rates pursued by the Bundesbank was oriented towards developments in Germany, while dis-

regarding the need for lower interest rates in EMS partner countries, particularly in the U.K.

Unlike in earlier phases of exchange rate instability unit labor costs since 1992 have not advanced by more than in the hard-currency block, resulting in a large shift in price competitiveness: between 1992 and 1995, the real effective exchange rate of the hard-currency area rose by an average 3 percent p.a. while that of the other EU countries fell by 6 percent p.a. Over the same period, total exports of the soft-currency area increased by an annual 9 percent, those of the hard-currency block by only 3 percent.

Growth of real economic activity in the EU as a whole has been dampened by exchange rate instability: between 1992 and 1995, real GDP advanced 1½ percent p.a., only half the amount of the 1987-1992 period. Expansion of intra-EU trade, too, has been slower in the latter period – despite the establishment of the Single Market – than during the period of stable exchange rates.