

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Fels, Joachim

Article — Digitized Version The european monetary system 1979–1987: Why has it worked?

Intereconomics

Suggested Citation: Fels, Joachim (1987) : The european monetary system 1979–1987: Why has it worked?, Intereconomics, ISSN 0020-5346, Verlag Weltarchiv, Hamburg, Vol. 22, Iss. 5, pp. 216-222, https://doi.org/10.1007/BF02933531

This Version is available at: https://hdl.handle.net/10419/140093

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



WWW.ECONSTOR.EU

The European Monetary System 1979-1987: Why Has It Worked?

by Joachim Fels, Kiel*

The European Monetary System has remained relatively stable in the eight years of its existence. The following article analyses the factors that have contributed to this stability and assesses the prospects for the system in the years to come.

When the European Monetary System (EMS) was established in March 1979 with the objective of creating a zone of monetary stability in Europe by closer monetary policy coordination, it was greeted with widespread scepticism by its commentators.¹ To many it seemed unlikely that a system of fixed but adjustable exchange rates could survive in an environment of strongly diverging monetary and fiscal policies in the participating countries without transforming into a crawling peg system. In addition to that, the bad experience with the previous "snake" arrangement seemed to burden the European Monetary System from its very beginning. In the last eight years, however, the system has demonstrated its resilience and has worked relatively smoothly.

Table 1 sets out the realignments of central rates in the EMS since 1979. It can be seen that, in the eight years of its existence, the EMS has experienced eleven realignments. Of these, three concerned only one currency, two more involved only two currencies. It is also interesting to note that no realignments were necessary between March 1983 and July 1985. This period of more than two years has been by far the quietest in the EMS. Since 1985, the need for central rate changes has increased again.² The evidence from the eleven realignments suggests that the central banks of the participating currencies have shown a considerable degree of flexibility in managing the EMS. This view seems to be more realistic than that of ascribing the smooth operation of the EMS to a "built-in stability" provided by the divergence indicator. Viewed in perspective the divergence indicator has proved ineffective. It is designed to show movements of the exchange rate of each participating country's currency against the weighted average movement of the other participating currencies. The purpose is to introduce a supplementary device, an early warning system, signalling a currency's movement towards its intervention limit. By inviting consultations between monetary authorities and creating a "presumption" for corrective action if a divergence threshold is passed, the indicator was supposed to become a factor in promoting policy coordination. The underlying idea of this construction is that the divergence indicator would induce changes in economic policy at an early stage and thus would reduce the probability that a currency reaches its intervention points. There are, however, some severe drawbacks of the indicator which prevent it from being an important factor in promoting policy coordination.

Firstly, the divergence indicator has a tendency to promote convergence not necessarily towards the declared goal of monetary stability, i.e. a low level of inflation, but rather towards some average level of monetary and price developments as it does not differentiate between high-inflation and low-inflation averages.

^{*} Institut für Weltwirtschaft.

¹ One of the many critics, R. Vaubel, started the Ninth Wincott Memorial Lecture in late 1978 "with a discussion of the New Monetary System – before it is abolished again". Cf. R. Vaubel: Choice in European Monetary Union, Ninth Wincott Memorial Lecture, Institute of Economic Affairs Occasional Papers No. 55, Institute of International Affairs, London 1979, p. 11.

² For a detailed account of the circumstances leading to the realignments cf. H. Ungerer et al.: The EMS: The Experience, 1979-82, IMF Occasional Paper No. 19, Washington, D. C., 1983, pp 5-7; H. Ungerer et al.: The European Monetary System: Recent Developments, IMF Occasional Paper No. 48, Washington, D.C., 1986, pp. 11-16; and Bank for International Settlements: Annual Report, vanous years.

Secondly, the divergence indicator has not always worked as an early warning system. It is possible for one or more currencies to reach their intervention points without having passed the divergence threshold. This is due to the construction of the indicator, according to which the threshold is calculated for a situation in which a currency has reached its intervention points with all other currencies. It is, however, more likely that two currencies range in the middle between these two. It can be shown that in such a setting the two currencies can reach their intervention points without passing the divergence threshold.³

Thirdly, the system comprises a discriminatory element in the case described above, where two currencies move in opposite directions. Then the divergence indicator will "ring" earlier for the currency with the smaller weight, thus triggering the presumption to act only for the small currency.⁴

Fourthly, the passing of the divergence threshold only results in a presumption that the respective central banks take measures; it does not involve any obligation. There might be an incentive for a central bank not to act in order to let its currency reach the obligatory intervention points which would then lead to a burdensharing of the respective central banks. Such a situation arose in January 1987, when the French franc was under pressure and the French central bank let the FF/ DM exchange rate reach its intervention point in order to oblige the Bundesbank to intervene directly.

Finally, it should be noted that even if central banks react to a ringing of the divergence indicator, the system creates some problems. These are mainly due to the indeterminacy of reaction which creates uncertainty on the foreign exchange markets. It is not clear from the rules of the game which measures will be taken; this might lead to speculation on central rate changes or interest rate changes. Such a situation of uncertainty runs counter to the declared goal of monetary stability.

Summing up, the divergence indicator has some inherent technical weaknesses which have prevented it from becoming an effective device for more symmetrical and less biased policy coordination.

Another important feature of the EMS has been central banks' intervention behaviour. The most outstanding development in the past years has been the increasing share of intramarginal interventions in total EMS central banks' interventions.⁵ While in the first few years obligatory interventions at the margins accounted for a great part of total interventions, in the last few years most interventions have taken place within the margins. Ungerer et al.⁶ attribute the increased use of intramarginal interventions to a change of philosophy of monetary authorities regarding the relative merits of exchange rate flexibility and stability within the margins. According to the authors, "authorities hope to influence

 $^{\rm 6}\,$ Cf. H. U n g e r e r $\,$ et al.: The European Monetary System: Recent Developments, op. cit , p. 5 $\,$

		DM	bfr	dkr	FF	lr£	Lit	hfl
1979	9/24	+2		-2 86				
	11/30			-4.76				
1981	3/23						-6	
	10/5	+5.5			-3		-3	+5.5
1982	2/22		-8.5	-3				
	6/14	+4.25			-5.75		-2.75	+4.25
1983	3/21	+5.5	+1.5	+2.5	-2.5	-3.5	-2.5	+3.5
1985	7/22	+2	+2	+2	+2	+2	-6	+2
1986	4/7	+3	+1	+1	-3			+3
	8/4					-8		
1987	1/12	+3	+2					+2

Table 1
EMS Realignments: Percentage Changes in Bilateral Central Rates

Source: Deutsche Bundesbank.

³ Cf. R. V a u b e I: Logische Implikationen und Anreizwirkungen des Europäischen Wahrungssystems, in: Zeitschrift für Wirtschafts- und Sozialwissenschaften, Vol. 101, 1981, pp. 1-23, especially pp. 19-22.

⁴ Ibid.; and J. S a I o p : The Divergence Indicator: A Technical Note, in: IMF Staff Papers, Vol. 28, 1981, pp. 682-697.

⁵ Cf. H. Ungerer et al.: The European Monetary System: Recent Developments, op. cit., p. 5; and S. Micossi: The Intervention and Financing Mechanisms of the EMS and the Role of the ECU, in Banca Nazionale del Lavoro Quarterly Review, No. 155, December 1985, pp. 327-345, pp. 331 ff.

market sentiments and exchange rate expectations by showing determination and by preventing the building up of a momentum for exchange rate movements". The corresponding decline in obligatory interventions has led to a decreasing recourse to the very short-term financing facility which can only be used in the case of obligatory interventions.

Another important development, closely connected with the previous one, is the high share of intervention in US dollar in total intervention. A substantial share of intervention was undertaken to stabilise currencies within the EMS band. As intramarginal interventions in partner currencies are subject to approval by the issuing central banks, intervention in dollar has proved a convenient way to circumvent this requirement and at the same time influence the exchange rate vis-à-vis the dollar.

Finally it should be stressed that the creation of the EMS has contributed to a greater stability of exchange rates between the participating currencies. Various studies⁷ show that intra-EMS effective exchange rates, both nominal and real, have become less variable after 1979. In contrast, the exchange rate variability of the major currencies outside the EMS appears to have increased significantly. The EMS thus seems to have reached its goal of increasing external monetary stability. The factors which have contributed to this development will be analysed below.

Higher Economic Policy Convergence?

It was argued above that the EMS has been successful in limiting exchange rate variability and thus contributed to the declared goal of external stability. One important prerequisite for the maintainance of stable exchange rates is the convergence of economic policies among the members of the exchange rate union.⁸ The participating countries of the EMS have accepted the obligation to strive for a greater convergence of their basic stances of internal economic policy, the emphasis lying on domestic monetary stability. This means that there seems to be a consensus not only to converge towards an EC average of inflation but rather to move towards (relative) price stability.⁹ Whether the EMS was really "born out of fascination with Germany's successful stabilisation policy in the second half of the seventies"¹⁰ is difficult to judge. However, price stability, which has always enjoyed high priority among German policymakers, has gained weight in the objective functions of other European policymakers.

The question is, to what extent has the creation of the EMS really led to convergence of monetary and fiscal policies among the participating countries? Table 2 shows average inflation rates and standard deviations from 1974 to 1985 for the EMS countries (i.e. those participating in the exchange rate mechanism) and a control group of selected industrialised countries. Obviously, EMS countries managed to reduce inflation rates from an average of 10.7 per cent in the period 1974-1978 to 8.9 per cent in the period 1979-1985. However, it would not be correct to ascribe this disinflation to the working of the EMS since non-ERM countries were even more successful in reducing inflation after 1979. From 1981 onwards disinflation has been a general phenomenon in industrialised countries after the bad experience of stagflation in the late 1970's and early 1980's.

Convergence of inflation rates in the EMS has increased since 1980. The standard deviation, after

Table 2 Inflation Rates 1974-1985 (Consumer Prices)

	Arithmotic Average		Standard Deviation		
	(in %)		Standard Deviation		
	ERM ¹	Non-ERM ²	ERM ¹	Non-ERM ²	
974	13.5	12.6	3.9	4.9	
975	12.6	11.6	4.6	5.1	
976	10.8	8.5	4.5	4.0	
977	9.8	8.2	4.2	4.0	
978	7.2	6.4	3.2	2.9	
Average 1974-78	10.7	9.5	3.8	4.2	
1979	8.7	7.1	4.2	3.6	
980	12.0	10.6	5.7	4.2	
981	12.0	9.8	5.2	3.1	
982	10.8	7.4	4.3	2.8	
983	7.9	4.9	3.9	2.4	
984	6.4	4.9	2.7	1.7	
985	4.9	4.4	2.2	1.7	
Verage 1979-85	8.9	7.0	3.9	2.8	

 ¹ Countries participating in the exchange rate mechanism (Belgium, Denmark, France, Germany, Ireland, Italy, Netherlands).
² Austria, Canada, Japan, Sweden, Switzerland, United Kingdom, United States.

⁷ Cf. K. Rogoff: Can Exchange Rate Predictability be Achieved without Monetary Convergence? Evidence from the EMS, in: European Economic Review, Vol. 28, 1985, pp. 93-115; H. Ungerer et al.: The European Monetary System: Recent Developments, op. cit., pp. 17-21; and P. de Grauwe and G. Verfaille: The European Monetary System: An evaluation, mimeo, January 1986.

⁸ For a more detailled discussion of the topic cf. A. Steinherr: Convergence and Cooperation of Macroeconomic Policies: Some basic Issues, in. European Economy, No. 20, July 1984, pp. 71-110.

⁹ Cf. K O Pöhl: Are We Moving towards a More Stable International Monetary Order?, Lecture at the American Institute for Contemporary German Studies, Washington, on 7th April 1987, in: Deutsche Bundesbank: Auszuge aus Presseartikeln, No. 28, 15th April 1987, pp. 1-4, here p. 1.

¹⁰ O. Stevert: Is there an Alternative to Floating Exchange Rates? In: INTERECONOMICS, Vol. 21, 1986, pp. 215-223, here p. 222.

Sources: IMF: International Financial Statistics, Yearbook 1986; own calculations.

having peaked in 1980, has been reduced significantly to 2.2 per cent in 1985. However, the average standard deviation of the pre-EMS period was slightly lower than that of the post-EMS period. It is interesting to note that non-ERM countries' inflation rates converged more than those of ERM member countries. This evidence suggests that there has been no particular influence of the EMS on inflation convergence.

Given this lack of influence of the EMS on monetary convergence (as reflected by inflation rate differentials), has there been an increased convergence of fiscal policies which could be accounted for by better coordination in the EMS?

Table 3 shows that ERM member countries' budget deficits as a percentage of GDP increased from a pre-EMS average of 5.0 per cent to a post-EMS average of 7.8 per cent. Deficits in non-ERM countries remained at a lower level and expanded less rapidly. The high EMS average is mainly due to high Italian. Irish and Belgian budget deficits. The differences between these high deficit/GDP ratios and the low French and German ratios are mirrored in the standard deviation figures which show a slight increase from 4.4 to 4.7 per cent after the establishment of the EMS. Non-ERM members' fiscal deficits are far less diverging and also have slightly increased in the 1980's. Thus, like in the monetary field, the EMS seems not to have contributed to a higher degree of convergence of fiscal policies.

Table 3
Central Government Budget Deficits
as Ratio of GDP

	Arithme	Arithmetic Average		Standard Deviation		
	ERM ¹	Non-ERM ²	ERM ¹	Non-ERM ²		
1974	3.2	1.7	4.4	1.6		
1975	6.0	5.0	4.6	2.5		
1976	4.7	3.2	3.7	1.7		
1977	5.0	3.3	4.0	1.6		
1978	5.9	4.0	5.5	2.3		
Average 1974-78	5.0	3.4	4.4	1.7		
1979	5.6	3.6	4.6	1.5		
1980	6.0	3.4	4.7	1.9		
1981	8.4	3.7	5.1	2.6		
1982	9.3	4.0	5.2	2.5		
1983	9.1	5.5	4.9	2.4		
1984	8.0	4.7	4.8	2.6		
Average 1979-84	7.8	4.1	4.7	2.0		

¹ Countries participating in the exchange rate mechanism (Belgium, Denmark, France, Germany, Ireland, Italy, Netherlands). ² Australia, Austria, Canada, Finland, Greece, Japan, New Zealand,

Switzerland, United Kingdom, United States.

Source: H. Ungerer et al.: The European Monetary System: Recent Developments, IMF Occasional Paper No 48, Washington, D.C., 1986, p. 69.

These rough measures of monetary and fiscal developments have illustrated that although there has been a move towards lower inflation in EMS countries there is no evidence for an ERM-induced narrowing of policy divergences. The thesis that the relative exchange rate stability in the EMS has been the result of convergence of fiscal and monetary policies must therefore be dismissed.11

The EMS and the US Dollar

In today's highly integrated international monetary system international interdepencies are of great importance for regional monetary arrangements like the EMS. One can interprete European efforts to cooperate in the monetary field, beginning with the "snake" in 1972, as a search for an appropriate response to the demise of the Bretton Woods system, which was in essence a dollar standard system. Consequently, the weakness of the dollar in 1977/1978 acted as a driving force for the creation of the EMS, especially on the German side.12

A logical implication of a commitment to keep exchange rates fixed between a group of currencies is that countries joining such an exchange rate union, besides losing the capability of pursuing an independent domestic monetary policy, will no longer be able to keep up independent exchange rate targets vis-à-vis third currencies. This does not imply, however, that the members of the EMS cannot pursue a coordinated policy vis-à-vis the dollar. An extreme option for the EMS member countries would be to peg their currencies to the dollar in a way consistent with the desired intra-European exchange rates. Intervention to defend these parities would then be carried out exclusively in dollars. In fact, such a procedure would come close to a return to the dollar standard of the Bretton Woods system and would thus imply a total subordination of European monetary policy to the US policy stance.

In contrast, the other extreme option for a regional exchange rate union like the EMS would be to keep intra-EMS exchange rates fixed and float freely against the dollar. To keep up such a system of block-floating, interventions would have to be effected solely in EMS currencies. The purpose and operation of the EMS comes closer to the latter extreme although it comprises some elements of the former. This is partly due to the fact that the fluctuation of plus or minus 2.25 per cent

¹¹ Similar results have been obtained by P. de Grauwe and G. Verfaille, op.cit., pp. 29-35; H. Ungerer et al.: The European Monetary System. Recent Developments, op cit., pp. 22-27, and K. Rogoff, op. cit., pp. 95-96.

¹² Cf. P. Ludlow: The Making of the European Monetary System, London 1982, pp. 71-73.

leaves some space for relative movements of EMS currencies vis-à-vis the dollar. As mentioned above, a significant share of total intervention takes place in dollars which avoids consultations with partner central banks and at the same time manipulates the respective currency's dollar exchange rate.

There is, however, an additional way to keep bilateral rates fixed in the EMS and influence the common exchange rate niveau against the dollar. This option arises from the asymmetry in a fixed exchange rate system, the redundancy problem (nth currency problem). In our context it would be more appropriate to call it the redundancy option. It arises from the tautology that among n countries in a fixed exchange rate system there are only n-1 independent exchange rates. In other words, if n-1 countries employ a policy instrument (e.g. monetary policy) to keep their exchange rates fixed, the nth country has no influence on its exchange rate. Thus, if the participating countries jointly agree on their exchange rates they gain a degree of freedom in the system, which is the nth country's policy instrument. The redundant instrument can then be employed to pursue an objective commonly agreed upon, for example an exchange rate target vis-à-vis a third currency, or an inflation target. The EMS is widely viewed as a system of managed exchange rates in which the Deutsche Mark (DM) effectively plays the role of the nth currency.¹³ The role of German monetary policy in the system is to provide price stability for Europe but it could also be used - and has indeed been used at times - to follow an exchange rate target vis-à-vis the dollar.

The Role of the Deutsche Mark

In fact, a specific problem arises from the DM's position as an international reserve currency. More than other EMS currencies it is affected by international

portfolio shifts because it is seen by investors as an alternative reserve currency to the dollar. Thus, if there is a significant degree of currency substitution between the dollar and the DM, pressure arises in the EMS because the DM fluctuates more strongly against the dollar than the other EMS currencies. If there is a shift into the dollar and the dollar thus appreciates, the DM will tend to be weak against the other EMS currencies. Whenever, on the other hand, investors substitute DM assets for assets denominated in dollar, the DM will tend to appreciate against other EMS currencies and might reach its upper intervention margin. This asymmetry in the EMS - some authors talk about a pyramidal structure¹⁴ – has an important impact on the functioning of the system. As the DM tends to appreciate against other EMS currencies anyway because of the low German inflation rate, a portfolio shift away from dollar assets puts enormous pressure on the exchange rate mechanism. Thus periods of a weak dollar will be periods of strain for the EMS. In contrast, when the dollar appreciates, the exchange rate system can be expected to be relatively stable because there is less need for EMS countries to converge towards the restrictive German monetary policy.

Figure 1 shows the development of the DM's value in terms of dollar (monthly averages) from 1979 to the beginning of this year; the dates of EMS realignments are indicated by vertical lines (see also Table 1 above).

 14 Cf. P. P a d o a n : The European Monetary System: Pyramid or ECU?, <code>in: International Spectator</code>, Vol. 20, 1985, No. 1, pp. 51-61.



¹³ Cf. F. Gaivazzi and A. Giovannini: The EMS and the Dollar, in: Economic Policy, Vol. 1, 1986, pp. 456-485; H. M. Kaufmann The Deutsche Mark Between the Dollar and the European Monetary System, in: Kredit und Kapital, Vol. 18, 1985, pp. 29-60; M. Sarcinelli: The EMS and the International Monetary System: Towards Greater Stability, in: Banca Nazionale del Lavoro Quarterly Review, No. 156, March 1986, pp. 57-83; G. D. Baer: Some Reflections on a Coordinated Dollar Policy. The Pivotal Role of Germany in the EMS, in Außenwirtschaft, Vol. 37, 1982, pp. 177-196.

Obviously, realignments normally take place when the mark appreciates against the dollar, whereas times of a depreciation of the DM have been guiet times in terms of realignments. In the first phase after the establishment of the EMS in March 1979 the DM was rising against the dollar and also became the strongest currency in the 2.25 per cent band allowed for by the margin requirements.¹⁵ After the realignment in September 1979 the DM weakened for the next fifteen months. which coincided with the appreciation of the dollar. In February 1981 a period of strain began, characterised by substantial interventions and several realignments. lasting until June 1982. The realignment in March 1983, after the German elections, initiated a phase of silence in the EMS, again accompanied by a steadily depreciating DM. After the dollar reached its peak against the DM in late February 1985 the DM began to appreciate rapidly, setting the stage for increasing tension in the EMS. The DM became the strongest currency in the EMS again and four realignments were necessary between July 1985 and January 1987.

In conclusion, the long-lasting weakness of the DM vis-à-vis the dollar in the first half of the 1980's reduced the pressure on weaker EMS currencies to adjust more strongly to the German low-inflation policy. The asymmetry between the EMS currencies with respect to the dollar thus helps to explain the observed combination of relatively stable exchange rates and diverging monetary and fiscal policies in the EMS.

Capital Controls in the EMS

Some EMS member countries still employ capital controls to a considerable degree. By hindering capital from flowing freely to the market which offers the highest yield capital controls are an obstacle to the optimal allocation of resources. Furthermore, movements of capital imply sanctions which signal countries, regions or sectors in what way they have to adapt. If capital is not allowed to flow freely, the operation of market forces leading back to equilibrium is disturbed.

To explain some countries' reluctance to liberalise capital movements it is sufficient to realise that the benefits from free movements of capital are distributed unequally; these countries seem to fear that they would be faced with a large outflow of capital. In addition to that, in a system of fixed exchange rates countries have to face a special problem in the case of large capital movements: the burden of adjustment to capital movements lies solely on interest rates, whereas in a floating rate system exchange rate movements help to cushion the effects. A country facing a large outlow of capital due to an external event might experience a sharp increase in its domestic interest rates in a fixed exchange rate system. In other words, international disturbances have direct repercussions on domestic interest rates. The only possibility for a country trying to avoid large fluctuations in its interest rates in the absence of capital controls would be to de- and revalue repeatedly its currency, which again runs counter to the purpose of a fixed exchange-rate system.

Thus capital controls are used to drive a wedge between domestic and foreign asset markets and thereby prevent domestic interest rates from fluctuating too strongly. In the EMS, France and Italy are still relying on capital controls to a great degree, but also Belgium with its two-tier foreign exchange market, Ireland and Denmark still employ restrictions.¹⁶ These measures were authorised by the Commission under recourse to the safeguard clauses laid down in the Treaty of Rome, whereby member states may be authorised to take protective measures in the case of "disturbances in the functioning of the capital market" (Article 73) or "when a Member State is in difficulties or is seriously threatened with difficulties as regards its balance of payments" (Article 108).

France since 1981 has prohibited residents from investing abroad by establishing a quota. Italy, despite some liberalisations this year, still employs measures like restrictions on foreign banks' borrowing in Italy and



S o u r c e : Deutsche Bundesbank: Monthly Report, various issues.

¹⁵ For detailed descriptions of the DM's movements in the EMS band cf. Bank for International Settlements: Annual Report, various years.

¹⁶ Details on capital controls can be found in: International Monetary Fund: Annual Report on Exchange Rate Arrangements and Exchange Restrictions 1986, Washington, D.C, 1986.

prohibitive taxation (30 per cent) of yields on foreign assets.¹⁷

The effect of capital controls in France and Italy on the interest rate differential between onshore and offshore interest rates is illustrated in Figure 2. These countries have been successful in reducing fluctuations of domestic (onshore) interest rates by imposing restrictions on the free flow of capital. Offshore interest rates went up sharply especially before realignments, due to speculative capital flows.¹⁸

It can be argued that the existence of capital controls has helped to stabilise exchange rates in the EMS. In the absence of capital controls speculative movements of capital would have provoked realignments more often because it seems unlikely that French or Italian authorities would have accepted sharp fluctuations in their interest rates. This establishes another factor contributing to relative exchange rate stability in the absence of monetary and fiscal policy convergence in the EMS.

Conclusions and Outlook

This analysis has provided evidence that the smooth operation of the European Monetary System can neither be attributed to the working of the divergence indicator nor to closer coordination of fiscal and monetary policies between the participating countries. In fact, monetary and fiscal policies have become more divergent rather than less, despite the success in reducing inflation rates. The relative stability of exchange rates in the EMS can be explained by the existence of capital controls in countries with weak currencies and by the weakness of the German mark against the US dollar in the first half of the 1980's. The German mark's weakness against the US dollar cushioned its tendency to appreciate against other EMS currencies.

These observations lead to some interesting conclusions for the future development of the EMS. Both conditions which have enabled relative exchange rate stability to date cannot be expected to be met in the future. Indeed, the US dollar has been depreciating steadily against the German mark since early 1985, which has already caused tensions in the EMS. The gloomy prospects for a significant reduction of the US twin deficits leave little hope for a recovery of the dollar



Figure 2

Source F. Giavazzı and A. Giovanninı: The EMS and the Dollar, in Economic Policy, Vol. 1, 1986, p. 468.

in the near future. On the other hand the EC has given top priority to the liberalisation of capital movements. As envisaged in the "Single European Act" all remaining capital restrictions would be liberalised by 1992, creating a truely common market.¹⁹ Given the divergent inflation performance in EMS member countries this would enable large speculative capital movements increasing the need for more frequent realignments.

These prospects lead to the conclusion that further stabilisation of exchange rates in Europe can only be achieved by much closer coordination of monetary and fiscal policies between EC member states. Convergence of policies seems to be the only way to avoid a continuing crisis of the EMS exchange rate mechanism. However, if higher convergence implied an increasing Community inflation rate and higher budget deficits the costs of keeping exchange rates stable might well exceed the benefits from the EMS.

¹⁷ On the prospects for liberalisation in Italy cf. C. A. C i a m p i Address to the 29th National Congress of the Italian Forex Club, held at Sorrento, 25th October 1986, mimeo.

 $^{^{18}\,}$ Similar observations are presented in K. R o g o f f , $\,$ op. cit., pp. 107-111.

¹⁹ Cf. Commission of the European Communities: Communication to the Council: Programme for Liberalisation of Capital Movements in the Community, Brussels 1986.