Briefing Paper

THE EUROPEAN MONETARY SYSTEM: PROGRESS AND PROSPECTS

by Bill Stewart, Department of Economics

The European Monetary System (EMS) came into existence in March 1979. It was only when the exchange rate stability of the Bretton Woods system began to disintegrate in the late 1960's and early 1970's that the need for a separate Community monetary arrangement became a pressing issue. Existing and future economic integration in the EEC achieved through tariff reduction and agricultural policy were apparently under threat as a result of exchange rate instability and uncertainty. The "snake" arrangement of the 1970's which represented an earlier attempt to limit exchange rate variations and secure greater monetary co-operation, did not prove to be entirely satisfactory if only because it contained non-EEC members and perhaps more important did not have in its membership, at least continuously, certain major EEC countries, France, Italy and the UK.

The continuing uncertainties of the floating exchange rate system and in particular the volatility of the US dollar encouraged a further attempt at monetary co-operation, which bore fruit in the EMS system which began to operate officially on March 13, 1979. The intention was to secure a zone of monetary stability in the EEC to further the economic and political integration of the Community.

Operational Features

1. The European Currency Unit

Each currency has a central rate determined in terms of European Currency Units (ECU). The ECU is a weighted basket of EMS currencies consisting of a fixed amount of each participating currency. Although the amounts of each currency have remained fixed agreed changes in the central rates have brought about significant changes in the valuation of each currency and therefore in the weight of each currency in the basket. (Table 1)

The ECU also features as denominator for operations in both the intervention and credit mechanisms, as a means of determining the need for intervention under the divergence indicator (see below), as a means of settlements for EMS obligations and as a reserve asset of EMS central banks. Recently the ECU has also acquired a role in private capital markets.

2. The Parity Grid

The ECU central rates are used to establish a grid of bilateral central rates in terms of national currencies around which fluctuations of plus or minus 2.25% are permitted (plus or minus 6% in the case of Italy). It is these belateral exchange rate margins which countries are required to support in the foreign exchange markets by unlimited intervention. The agreed bilateral exchange rates are not irrevocably fixed but can be changed by mutual agreement, as they have been on seven occasions now, the most recent being on 21 March 1983.

TABLE 1 COMPOSITION OF THE ECU IN NATIONAL CURRENCIES, ECU CENTRAL RATESINNATIONAL CURRENCIES AND CHANGING WEIGHTS OF PARTICIPATING CURRENCIES, MARCH 1979 AND MARCH 1983

	National Currency Compositi of the ECU (1)	Central Rate on 13/3/79 2 per ECU (2)	Central Rate 1/3/83 per ECU (3)	% W Change (4)	% eights* 13/3/79 (5)=1-2	%eights* 21/3/83 (6)=1-3
Deutchmark Pound Sterling French Francs Italian Lira Dutch Guilder	0.828 0.0885 1.15 109.00 0.286	2.51064 0.663247 5.79831 1148.15 2.72077	2.21515 0.629650 6.79271 1386.78 2.49587	+11.77 + 5.06 -17.15 -20.78 + 8.27	33.0 13.3 19.8 9.5 10.5	37.4 14.1 16.9 7.9 11.5
Belgian/Luxembourg Francs Danish Krone Irish Pound	3.80 0.217 0.00759	39.4582 7.08592 0.662638	44.3662 8.04412 0.71705	-12.44 -13.52 - 8.21	9.6 3.1 1.1	8.6 2.7 1.1

⁺ appreciation - depreciation

The Divergence Indicator

As well as the parity grid with a central rate and intervention limits established in national currencies there is also a divergence indicator calculated in terms of ECU designed to detect Community currencies that happen to deviate upwards or downwards from the Community average as represented by the ECU. If a currency moves by more than 75% of the maximum divergence permitted in terms of its ECU rate there is a presumption that that country will take unilateral action to prevent or restrict further movement. The divergence limit established for each currency is not the crude plus or minus 2.5%, but is calculated to take account of the varying weights which currencies have in the composition of the ECU. The introduction of a divergence indicator is an attempt to limit the tendency for any one currency to depart from the system as a whole and to put the onus on that currency to reverse that development. The divergence indicator has not been very successful in promoting symmetry in adjustment since on the occasions when it has been triggered the pressure has fallen overwhelmingly on the weak currencies.

^{*} on the basis of central rates

4. The Credit Mechanism

Because of the obligation to undertake unlimited intervention when the bilateral exchange rate margin limits are reached by using the appropriate participating currency a credit mechanism is an essential feature of the system. Under the Very Short Term Financing Facility unlimited credit is available for a restricted period. Up to 50% of any outstanding obligation in this Facility may be settled in ECUs, but little use has been made of this opportunity to settle in ECUs. The Very Short Term facility has been extensively used but no use has been made of the short and medium term facilities which are available on a conditionable basis for longer-term balance of payments support.

5. Creation of ECU

ECUs are provided to central banks against 20% of their gold holdings and U S dollar reserves. These transfers are arranged on the basis of revolving three monthly swaps with the European Monetary Co-operation Fund, with adjustments at the roll-over date to maintain contributions at the required 20% level. Since gold is valued at a market-related price this system has had the effect of activating the gold reserves of participating currencies. As the price of gold and the price of dollars have fluctuated considerably it has also had the effect of producing significant variations in the value of ECU created. (See Table 2)

TABLE 2 THE CREATION OF ECU'S BY SWAP OPERATIONS

Swap Operations starting in	Gold Transfers m. ounces	Gold Price ECUs per ounce	US Dollar Transfers billions	\$/ECU Exchange Rate	Counterpart in ECUs billions
April 1979 July 1979 Oct 1979 Jan 1980 April 1980 July 1980 Oct 1980 Jan 1981 April 1981 July 1981 Oct 1981 Jan 1982 April 1982 July 1982 Oct 1982 Dec 1982	855.66667777777788555.7	165 185 211 259 370 419 425 447 440 406 402 368 327 324 367	13.4 15.9 16.0 15.5 14.4 13.7 13.9 14.5 14.2 12.7 11.7	0.75 0.73 0.70 0.69 0.77 0.70 0.71 0.75 0.84 0.97 0.91 0.92 1.00 1.04 0.92 0.92	23.3 27.4 29.3 32.8 45.5 46.3 49.7 47.1 45.3 49.7 47.1 45.3 49.7

Source: Commission of the European Communities

EMS in Retrospect

EMS was introduced in 1979 amidst high hopes that it would achieve its objective of providing a zone of monetary stability in Europe, although one of the EEC members, the UK, whilst formally a member of EMS does not participate in its most important element, the exchange rate mechanism.

Policy Convergence

There is widespread acceptance that to meet EMS objectives progress would have to be made with respect to convergence of economic policies between members. Whilst convergence is a central long-term aim in the EEC with regard to raising and equalising living standards convergence in the the EMS is more concerned with exchange rate stability and domestic price and cost developments consistent with that stability. Whilst growth and productivity are important determinants of real exchange rates in the long run there was an acceptance that in the short run convergence in such nomimal magnitudes as price levels, money supply and wages would be of more importance. Without such convergence changes in exchange rates within EMS would become so frequent as to cast doubts on the viability of the system. If a fixed exchange rate system is to operate for any long period participating countries lose independent control over monetary and fiscal policies, i.e. over interest rates, money supply, budgetary policy etc.

The EMS is not, nor was it intended to be a fixed exchange rate system, but the intention was undoubtedly through policy convergence to secure greater stability than had existed previously.

How has the EMS fared?

Exchange Rate Stability

Short-run exchange-rate variability between members of the EMS has undoubtedly exhibited greater stability than previously, whilst exchange rate variability against non-EMS currencies has increased (see Table 3).

Although short-run variability has been reduced the central exchange rates themselves have not remained fixed (see Table 1). There have now been seven changes in ECU central rates, the latest change in March 1983 involving adjustment in all central rates. In the last three changes the largest bilateral changes have all been over 9%. In terms of the ECU central rate there have been cumulative changes from the initial rate varying from a devaluation of over 20% for the Italian lira to an appreciation of over 11% for the Deutschemark. With the increasing frequency and size of central rate adjustment fears have been expressed for the smooth operation of the system and in particular that speculative capital movements encouraged by these sizeable changes in central rates will come to play a disruptive role in the system, similar to the role they played in the break-up of the Bretton Woods system.

However, the changes in exchange rates have been less than for many currencies outside the system, Further, the change in rates have all been agreed by the participating members and have been supported by appropriate

domestic policies. The changes have all been in the appropriate direction to achieve adjustment and have never had to be reversed once introduced. The changes have not fully compensated for relative price level changes which suggests that participating countries are prepared to place some emphasis on domestic adjustment policies and not rely wholly on exchange rate changes to offset price level developments. What is not clear however, is whether membership of the EMS caused the adjustments or whether they would have taken place in any case.

Price Level Changes

The need for change in exchange rates is indicated by the lack of convergence as far as price level changes are concerned. Compared to earlier periods recent experience has not been satisfactory although the 1982 figures show an improvement (Table 4). Not surprisingly the money supply figures show a similar dispersion of results (Table 5). These are disappointing results in a period when the reduction in inflation apparently enjoyed a high priority in all participating countries. Should such a consensus break down the prospects for long-run exchange rate stability would be further reduced. Similar disparities exist with regard to money cost changes, particularly wages, and rates of interest.

TABLE 3 VARIABILITY OF NOMINAL EFFECTIVE EXCHANGE RATES

1

AGAINST EMS CURRENCIES 1974-82

	Average 1974–78	1979	1980	1981	Av erage 1979-81	19822
Belgium Denmark France Germany Ireland Italy Netherlands	20.3 25.0 31.7 29.3 36.0 36.0	8.1 26.3 9.2 12.2 12.1 14.1 9.3	6.2 7.8 7.3 6.5 6.9 11.5 7.5	17.0 17.7 21.8 28.0 15.5 27.9 22.8	10.4 17.3 12.8 15.6 11.5 17.8	37.8 18.4 34.1 29.4 22.0 18.6 22.9
3 Average EMS	28.5	13.0	7.7	21.5	14.1	26.2
Japan United Kindom United States	44.5 32.6 34.7	78.9 35.3 23.0	88.2 52.3 40.9	32.5 44.6 71.2	66.6 44.1 45.0	19.9 21.3 47.9
Average Non-EM	3 37.3	45.7	60.5	49.4	51.9	29.7

Weighted average (IMF Multilateral Exchange Rate Model weights) of variability of bilateral nominal exchange rates against EMS currencies, with variability measured by co-efficient of variation (multiplied by 1,000) of bilateral exchange rates, monthly data.

Source: IMF Occasional Paper No 19 Table 8

^{2.} First nine months only

^{3.} Unweighted average.

TABLE 4 CONSUMER PRICE CHANGES WITHIN EMS COUNTRIES

			Annual	Rates of	Change \$		
	1968	1974	1978	1979	1980	1981	1982
	1960	1968	1974	1978	1979	1980	1981
Belgium Denmark Germany France Ireland Italy Netherlands	3.2 5.3 2.9 3.8 3.8 3.9	5.9 8.6 5.4 7.2 10.3 8.7 7.8	7.9 9.9 4.5 9.8 15.1 16.7 7.4	3.9 9.6 4.0 10.9 13.4 15.0 4.3	6.5 11.5 5.3 13.2 18.3 20.4 6.6	7.6 10.7 5.9 12.5 20.5 19.0 6.7	8.7 10.7 5.3 12.0 17.2 16.7 5.9
Mean Range	3.8	7.7 4.9	10.2 12.2	8.7 11.0	11.7 15.1	11.8 14.6	10.8
United Kingdom	3.5	8.7	15.6	14.3	15.5	10.7	8.6

Source: Eurostat

In the light of these continuing divergent trends it is not surprising that there have been a number of exchange rate adjustments within EMS. Such adjustments will continue to be necessary so long as important economic variables show such disparate outcomes. They will only cease when governments demonstrate the political will to take action in the field of money supply, budget deficits and wages consistent with exchange rate stability, or cede such power to some EEC agency such as a European Monetary Fund, operating as a Community central bank.

TABLE 5 MONEY STOCK - PERCENTAGE CHANGE FROM THE PRECEDING PERIOD

	Money Stock Measure	1978	1979	1980	1981	1982
Belgium	M2	9.6	6.2	2.7	5.9	5.9
Denmark	M2	8.6	10.6	7.8	9.0	11.5
France	M2	12.4	14.7	10.0	11.5	11.7
Germany	M3	11.0	6.0	6.2	4.8	7.1
Ireland	M3	28.7	19.0	17.9	17.6	12.9
Italy	M2	22.1	20.3	12.7	10.0	17.0
Wetherlands	M2	4.2	7.0	3.8	5.3	8.8
Mean	м3	13.8	12.0	8.7	9.1	10.7
Range		24.5	14.3	15.2	12.8	11.1
JK		13.3	11.9	10.9	9.7	10.9

Source: European Economy, August/September 1983, Supplement A

Has the EMS been a success?

One can argue that the continued existence of the EMS offers evidence of success and that its members feel it to be sufficiently important to keep it in existence. It has not achieved complete exchange rate stability but that was not its aim. The exchange rate performance of its members compares favourably with countries outside the EMS. However, the continuing and regular need for agreed changes in exchange rates reflecting the lack of convergence in economic policies raises doubts on its long-term prospects if current attitudes continue to prevail. Members will not find it possible to reconcile the publicly expressed desire for policy co-ordination and the freedom to act independently. The normal trials and tribulations of assimilating new members will place further strain on the system with the entry of Spain and Portugal in prospect.

TABLE 6 INTRA-COMMUNITY TRADE 1958 AND 1981 AS A PERCENTAGE OF TOTAL EXPORTS AND IMPORTS

	EXP	ORTS	IMPORTS		
	1958	1981	1958	1981	
Belgium/Luxembourg	53.5	70.0	54.7	59.5	
Denmark	58.3	47.0	59.0	48.1	
Germany France	35.9 28.6	46.9 48.2	35.2 26.7	48.2 48.2	
Ireland	83.6	69.8	68.4	74.9	
Italy	33.8	43.3	29.8	40.8	
Netherlands UK	57.5 20.3	71.3 42.8	50.1 20.3	52.0 38.6	

Source: European Economy, November 1982

In the meantime should the UK made a unilateral decision to become a full member of the EMS in the light of its increasing involvement with partner Community countries? (see Table 6) The recent comments of the Chancellor at the Lord Mayor's Banquet suggest that while the government sees a role for the exchange rate in the determination of its overall economic policy it sees no justification for accepting some published exchange rate target either inside or outside the EMS. Whilst it may be argued that an exchange rate target offers an alternative to a money supply target, of whatever variety, the Chancellor is apparently unwilling to concede the additional degree of freedom which an unconstrained exchange rate provides. judgement must be that the uncertainties surrounding such issues as the petro-currency role of the pound with the attendant risk of speculative capital flows, the dollar/DM exchange rate, the difficulty of establishing an equilibrium sterling rate within the EMS and the absence of any strong political pressure to join either from EMS members, or on the grounds of $U\bar{K}$ self-interest make the avoidance of a commitment to some published exchange rate target attractive.