

Are Monetary Policies and Performances Converging? *

The present paper proceeds from a tentative assessment in section 1 of the EMS in terms of the main internal and external motives which emerged from the discussions in 1978, and a commentary in section 2 on the main criticisms made by economists of a monetarist orientation to a survey in section 3 of policy objectives and performance in 1979-80 in the individual countries. Section 4 attempts to draw some preliminary conclusions.

I. A Preliminary Assessment of the EMS with Reference to the two Main Motives for Launching It.

As one looks back upon the discussions of 1978 which led to the launching of the EMS two years ago, two sets of considerations appear to have been decisive in making the initiative seem desirable and feasible.¹ On the one hand there were around 1977-78 *signs of reversal of the divergence of economic performance* which had been observable during the 1973-76 period. It appeared desirable to consolidate this reversal and to aim for further convergence of policies and performance. On the other hand *the instability and rapid depreciation of the dollar in 1977-78* called for some defensive action; if no effective steps could be agreed upon with the United States — and the failure of German-US measures in the early months of 1978 to stem the decline of the dollar

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¹ For a fuller account of motives and national viewpoints see LUDLOW (1981), DE VRIES (1980) and THYGESEN (1979a).

suggested that was unlikely — some regional initiative was seen as a necessary second-best.

In stressing these two sets of considerations I am not overlooking the basically political motivations to further the development of the European Economic Community. But to the extent that the political motivations had survived the disappointments and frustrations of the 1973-1976 period, which had put an effective end to the potentially far-reaching, though ill-conceived efforts of monetary integration of the early 1970s, they clearly needed propitious European and international circumstances to regain momentum. It may be useful as an introduction to examine whether, in retrospect, the circumstances of 1978 were indeed propitious in the sense of being representative of longer-run factors favourable to closer monetary integration in the EEC.

It has long been recognised that, inside Europe at least, inflation differentials between countries have tended to give a rough indication of the need for exchange-rate changes. There are obvious difficulties in choosing an appropriate index for measuring inflation and a suitable base period of approximate equilibrium from where to start. There is substantial scope for short-run deviations from parallelism between inflation differentials and nominal exchange-rate changes, and possibly some limited scope for more permanent departures to accommodate differences in non-price determinants of foreign trade,² but by and large it can be argued that sustained intra-EEC inflation differentials would make changes in nominal exchange rates unavoidable.

There is here, as pointed out by i.a. Korteweg (1980), a difference in degree if not in kind relative to the role of the exchange-rate mechanism between the major trading areas — the United States, Japan and Europe. The scope for bringing about substantial and sustained changes in real exchange rates is considerably larger, as experiences since 1971 have demonstrated, when one looks at the relationship between the US dollar (or the yen) and the individual European

² Some authors, notably VAUBEL (1978a), have argued — with reference to experiences from the late 1950s onwards — that the need for more sustained real exchange-rate changes, i.e. departures from PPP, on a bilateral basis inside the EEC has been substantial. Thus, by 1976 — the final year of Vaubel's observations — it appeared that there was a trend-wise real appreciation of e.g. the Dutch guilder and a real depreciation of sterling and the lira, suggesting that adjustments of the nominal exchange rate of the order of 3-5 per cent per annum would be required, *even after inflation rates had been completely harmonised in the EEC*. It would, however, be a mistake to regard such trends as permanent, as subsequent events have demonstrated; they are the result of temporary factors which may require adjustments in intra-EEC exchange rates, but hardly any steady rate of accommodation.

currencies or their average as expressed by the ECU or some other weighted average. This is, of course, another way of stating that Purchasing Power Parity (PPP) has "collapsed" in the 1970s between the dollar and the European currencies, see i.a. Frenkel (1980). But — abstracting from sterling — it is my contention that such a collapse has not occurred inside the EMS and some evidence to that effect will be reviewed in the following section. A corollary is that the absence of inflation differentials, appropriately measured, continues to be the main criterion for assessing the viability of stable nominal exchange rates. A central question remains accordingly whether national inflation rates have converged in the EEC in recent years.

Table 1 updates an analysis of Vaubel (1980b) bearing on this issue. It reports national inflation rates as measured by the consumer price index (CPI) in the eight EEC-member countries, Belgium and Luxembourg being treated here and elsewhere in the paper as one economic area. The table records some possible measures of cohesion in the inflationary performance inside the EEC, notably the weighted standard deviation in the distribution of annual inflation rates around the community average and the range from highest to lowest; both measures are shown also for various sub-groups of EEC-countries.

In this perspective there was indeed some progress in cohesion after 1975. Inflation peaked everywhere in 1974-75 and the indicators of divergence reached their maximum within the first two years after the first oil price explosion of late 1973. From 1976 some improvement became visible; consumer prices decelerated everywhere, and generally more so in the high-inflation countries. The gradual lowering of the average inflation rate for the EEC and of the dispersion around it — the two have typically been closely related throughout the 1970s — continued through 1978, but convergence was far less pronounced than in the years prior to 1974, not to speak of the tranquil 1960-68 period. From 1979 the differentials have again widened, indeed nearly back to the levels observed in the mid-1970s. The optimism of 1978, understandable as it appears in retrospect, seems unfounded. This is clearly a serious challenge to those, including the present author, who had argued in 1978 that inflation rates, when appropriately measured, were about to converge sufficiently for the remaining differentials to be accommodated by the kind of relatively small central rate changes which had been practised in the "snake" in the final two years of its existence.

There is little consolation to be found in the qualification that inflation rates have to be "appropriately measured". It was indeed arguable in 1978 that calculations of the type presented in Table 1

TABLE 1
INFLATION RATES (CONSUMER PRICES), PER CENT P.A. 1960-81

	1960-68	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1970-79	1980 ^e	1981 ^p
Belgium	2.9	3.9	3.9	4.3	5.4	6.9	12.7	12.7	9.2	7.1	4.5	4.4	7.1	6.6	6.0
Denmark	5.5	3.6	6.5	5.8	6.6	9.4	15.2	9.6	9.0	11.1	10.1	9.6	9.3	12.5	9.5
W. Germany	2.5	1.8	3.3	5.4	5.5	6.9	7.0	5.9	4.5	3.9	2.6	4.1	4.9	5.0	4.0
France	3.6	6.2	5.8	5.5	6.2	7.4	13.7	11.7	9.2	9.5	9.2	10.7	8.9	13.3	10.5
Ireland	3.6	7.4	8.3	8.8	8.7	11.3	17.0	20.9	18.0	13.6	7.6	13.2	12.7	18.5	12.8
Italy	3.8	2.6	4.8	5.0	5.7	10.8	19.1	17.0	16.8	17.0	12.2	14.7	12.2	20.0	15.3
Netherlands	3.5	7.3	3.8	7.4	7.9	8.0	9.6	10.5	8.8	6.4	4.1	4.2	7.0	6.6	6.5
United Kingdom	3.2	5.4	6.3	9.4	7.3	9.1	16.0	24.2	16.5	15.9	8.3	13.4	12.5	19.5	14.0
Weighted average	3.3	4.3	4.8	5.8	6.3	8.1	12.6	12.9	10.2	9.6	6.8	8.7	8.6	11.8	9.2
Weighted standard deviation															
all	0.52	0.79	0.52	0.63	0.37	0.57	1.65	2.39	1.86	1.90	1.31	1.65	1.29	2.29	1.61
excl. £	0.51	0.91	0.57	0.41	0.40	0.67	1.86	1.83	1.87	1.91	1.52	1.74	1.28	2.47	1.65
excl. £, Lit	0.65	1.05	0.68	0.48	0.47	0.55	1.68	1.80	1.58	1.45	1.39	1.51	1.16	1.76	1.30
"snake core" ¹	0.82	1.30	0.59	0.56	0.59	0.51	1.97	1.81	1.53	1.53	1.42	0.98	1.15	1.05	1.33
Range															
all	3.0	5.6	5.0	5.1	3.3	4.4	12.1	18.3	13.5	13.1	9.6	10.6	7.8	15.0	11.3
excl. £	3.0	5.6	5.0	4.5	3.3	4.4	12.1	15.0	13.5	13.1	9.6	10.6	7.8	15.0	11.3
excl. £, Lit	3.0	5.6	5.0	4.5	3.3	4.4	10.0	15.0	13.5	9.7	7.5	9.1	7.8	13.5	8.8
"snake core" ¹	3.0	5.5	3.2	3.1	2.5	2.5	8.2	6.8	4.7	7.2	7.5	5.5	4.4	7.5	5.5

¹ Germany, Benelux, Denmark.

^e estimate, ^p projection

Source: For 1960-68 and 1969-79, VAUBEL (1980b), Table 1; for 1980-81, OECD Economic Outlook 28, December 1980.

overstated the recently observed differentials by 1) relying on consumer prices, and 2) incorporating the effects of past exchange-rate changes. It is well-known from numerous empirical studies, that PPP tends to be most loosely observed when using consumer prices; use of an index more heavily weighted with tradables would have shown more convergence by 1978, see Thygesen (1979a). By shifting to such potentially more immediately significant indicators of the need for exchange-rate changes one would at the same time avoid the irrelevant impact of changes in indirect taxes which impair the usefulness of national CPIs in international comparisons. There is, however, no indication that the basic trend towards renewed divergence in 1979-80 would be affected by shifting the basis for comparison to some other index. Nor is there any reason to suspect any upward bias in the measurement of divergence from the use of a comprehensive index, rather the contrary. Whereas in 1978 the very slow rate of price increase observed in Germany and in smaller degree in other low-inflation countries was to some extent a product of the prior and ongoing appreciation of the stronger European currencies, and hence tended to overstate the inflation differentials likely to persist after the introduction of more stable exchange rates in an EMS, the bias by 1980 or 1981 is in the opposite direction. The lowest inflation country, Germany, has experienced depreciation in nominal, and more clearly so, in real terms, while countries with a much higher inflation rate such as France and Italy have improved their inflation performance by not adjusting their exchange rates to fully accommodate higher inflation. Above all the United Kingdom has appreciated strongly in nominal terms. There are therefore reasons for believing that Table 1 *understates* the 1980-81 differentials in national inflation rates. The initial impression is clearly that in terms of the first of the two main motives for setting up the EMS, viz. the consolidation of progress made in checking divergence between national inflation rates and reducing their average rate of inflation, the EMS has not been successful.

This initial impression is, however, seriously in need of qualification. To compare the period since the beginning of 1979 (and of the EMS) with the immediately preceding years would hardly be fair in view of the strong inflationary impulse of the second wave of oil-price increases, the start of which roughly coincided with the launching of the EMS. A fairer basis of comparison would be the two or three years following the first wave of oil-price increases originating in late 1973. As has been well documented, the impact of these two external shocks were of a comparable magnitude; in either case the impact on broad

price indices in Western Europe was in the order of 3 per cent, see Commission (1980). The surge in both the average inflation rate and the dispersion around it inside the EEC has been smaller over the past two years than in 1973-75. One would obviously have to take the projections of inflation in 1981 shown in Table 1 with a grain of salt, given the tendency for official forecasts of price trends towards a downward bias. Yet there is already some evidence that inflation is receding in several countries as will be discussed in more detail in the following section.

A preliminary verdict is therefore that the second oil-price increase has generated less violent and less persistent inflation in the EEC countries than the first. This is all the more remarkable when account is taken of the fact that most EEC-currencies appreciated during 1973-75, whereas — with the exception of sterling — they have remained stable in effective-rate terms since the start of the EMS. Thus, despite the dampening impact on domestic inflation of appreciation during the early period of floating, consumer prices (and other broadly based indices) rose less in the later period. Though it would be naive to attribute this difference to the reinforcement of European monetary cooperation between the 1973-75 period of the snake/mini-snake and the EMS of 1979-80 — the higher priority given in most countries to anti-inflationary policies being no doubt the basic explanatory factor — the relative improvement in inflationary performance is too often overlooked by critics of the EMS.

Despite this important qualification inflation rates have diverged to an extent which is not compatible with the preservation of stable nominal exchange rates or even with the kind of small and relatively infrequent adjustments envisaged *a priori* by proponents of the EMS. Indeed, as will be discussed in the comments on individual countries in section 3, it is only a specially favourable set of circumstances which has permitted the high degree of intra-EMS exchange-rate stability in 1979-80.

While the record with respect to convergence of national inflation rates falls well short of expectations, there can be little doubt that the EMS has been more successful, surprisingly so to many observers, as a device for increasing the cohesiveness of European currencies in the face of dollar instability — the second main motive for the 1978-initiative. The dollar had been subjected to sharp instability and a prolonged decline since the autumn of 1977. The prospect of a continuing large deficit on the current account — due both to faster economic growth in the United States than in Europe and to the apparent inability of the United States to effectively check the growth

of imports of energy — caused a major reassessment of the prospects for the dollar. In these circumstances, capital flows could not be relied upon to finance the US deficit; on the contrary, they added to the deficit on official settlements. In both 1977 and 1978 there was a current account deficit of around \$ 14 billion, but official claims on the United States increased by \$ 35 and 32 billion, respectively. The private sector abroad not only failed to absorb the new claims generated by the current US deficit; it reduced existing dollar holdings in preference for assets denominated in other currencies. A main contender was the DM (and the Swiss franc); Germany had an inflow of capital on top of a current surplus. The shift out of the dollar was tending to push the major EEC-currency away from the others. This process could not easily be managed by active use of traditional national monetary instruments, but appeared from the viewpoint of both Germany and other EEC-countries to require a change of exchange-rate régime.

There were three main options available to Germany to prevent an appreciation of the DM from running well ahead of what Germany's superior inflation performance justified and the consequent recessionary impact on profits, investment and growth.

The first was to supply, notably through government debt-financed deficits, DM-denominated assets in a volume sufficient to meet non-resident demand at a stable \$/DM-exchange rate. The government debt in Germany did rise more rapidly than US government debt throughout the 1970s, see i.a. Dornbusch (1980), but to proceed decisively in this direction was considered undesirable for domestic reasons and dangerous for monetary autonomy in a longer-run perspective. German policy-makers were anxious to limit the role of the DM as an international reserve asset as much as possible.

In the absence of any attractive steps to rectify the balance from the supply side of the market for DM-assets, attention had to concentrate on the possibilities for reducing the demand for such assets. The supposed persistence of the attractiveness of the DM could be modified in either of two ways: by arriving at some understanding with the US authorities on a target range for the \$/DM-rate, thereby limiting the process of substitution more directly, or by Europeanising the emerging reserve currency status of the DM. The difficulties of the former course of action were both of an economic and a political nature. Making a target range for the exchange rate credible was thought to require massive interventions; and, given the relatively poor state of US-German political relations in 1978, the prospects of a joint understanding were seen as slim.

By a process of elimination one arrives at the course of action adopted: to anchor the DM more firmly to other EEC-currencies. The mini-snake of 1976-78 consisting only of the Benelux currencies, the Danish (and Norwegian) kroner and the DM had proved an inadequate drag on the trend of the latter towards appreciation in real terms. By linking up also the currencies of the other major EEC-countries in an EMS, the French franc, the lira and sterling would become closer substitutes for the DM. The erosion of the relative attractiveness of the DM would tend in turn to spread inflows of funds more widely over Europe than had happened in 1977-78.

The alarming scenario of a long-run decline in the dollar, unchecked by the US authorities, had already begun to lose credibility at the time of the active measures taken by the Carter administration in November 1978. What had appeared up to 1978 as a DM-shortage in the face of an oversupply of dollars was accordingly modified by *two* decisions taken at nearly the same time: the move to a much more active dollar policy, through interventions and otherwise, by the US authorities and the launching of the EMS. Yet it was not until the autumn of 1979 that it became clear that the past pattern had been broken, i.e. the tendency so often observed in 1973-78 for DM strength vis-à-vis other European currencies to coincide with dollar weakness and vice versa. During the violent cycles in US interest rates since late 1979 this past pattern has no longer been as evident.

A preliminary conclusion is that the EMS appears to have reinforced the cohesion of the European currencies by strengthening the weaker ones with above-average inflation rates relative to the DM. In this respect it appears that the EMS has lived up to expectations. But the circumstances of 1980-81 with a large and widening deficit in Germany's current account have made it easier for other EMS-currencies to move with the DM, or, indeed, less than the DM relative to other major currencies.

II. Criticisms of the EMS by Economists of a Monetarist Orientation

It is primarily in terms of these two main motives for setting up the EMS — fostering greater internal convergence and external robustness — that the performance of the EMS must be assessed. But it is useful to look also at some critical views expressed by academic economists at the time the EMS was set up and repeatedly since, because these views

focus more sharply on verifiable aspects of the experiences of the past two years.

Generally the EMS has been seen by a large number of monetarist economists as an at best superfluous and at worst dangerous initiative. By these terms I am not referring to economists of a Keynesian persuasion who continue to see substantial scope for sustained real effects of national management of the exchange rate, and who remain deeply concerned about making a central instrument of economic policy subject to some form of international, i.e. intra-European, decision-making. Such views were of importance, e.g. in shaping British attitudes to the EMS in 1978, but would appear to be eroding, both because the scope for achieving substantial real effects of nominal exchange-rate changes is diminished by accumulating evidence of real-wage rigidity in many countries, and because it is recognised that the EMS does after all permit some exchange-rate adjustments, if countries can present a plausible case that they will rectify their external imbalance.

The criticism with which EMS officials and advocates should concern themselves is that coming from economists of a more monetarist persuasion, since this latter group tends to accept fully that much closer integration in the EEC would bring major welfare gains and also that the effort to lower inflation is a first priority of economic policy in the late 1970s and early 1980s. One may refer i.a. to the views of Brittan (1979), Fratianni (1980), Giersch (1979), Salin (1979) and Vaubel (1978a), (1978b), (1980a), (1980b). It is remarkable that many economists, whose anti-inflationary and European credentials are not in any doubt, have found so much to criticise in the EMS. Basically, their view is that an adjustable-peg system is an undesirable half-way house; either of the "pure" systems — permanently fixed rates (currency union) or floating — would be preferable. They are able to point to the unfortunate experiences in the late stages of the Bretton Woods system, and many of the counter arguments consist in showing to what extent the EMS is and can be different. But it is possible to be more specific and to summarise the typical monetarist criticism in four points:

1) *Undermining of national monetary targets.* Since the mid-1970s many European countries have — like the United States, Canada and Japan — adopted quantitative targets for one or more monetary aggregates as an essential element in their anti-inflationary policy. They have typically done so at a time when their obligations to intervene in exchange markets in defence of particular margins were at a minimum. It is certainly legitimate to ask what the implications are for the

controllability of monetary targets of the widening exchange-rate commitments which have happened in the EMS and might happen if the system were to accommodate more members and even aim for a joint policy vis-à-vis third currencies. In principle, as any macroeconomic textbook will show, there is a loss of controllability: in a fixed-rate system the domestic money stock can no longer be regarded as a useful intermediate objective of policy; it has become too endogenous. But the practical issue is whether EMS-member countries have found it more difficult to set themselves monetary objectives and comply with them. The evidence to be commented upon in the country notes of section 3 suggests that the EMS has not prevented either a general deceleration in the monetary aggregates, or better compliance with targets.

2) *Real-exchange rate distortions.* If a group of countries succeed in maintaining stable exchange rates amongst themselves, but not, at least initially, in harmonising their national inflation rates, the real exchange rates, i.e. measures of relative national prices or costs expressed in a common numéraire, will move. It appears plausible *a priori* that real rates could get more out of line and for longer periods in a system which emphasises nominal exchange-rate stability than under alternative arrangements where exchange-rate changes occur regularly because of either political decisions or market forces. The evidence on real exchange-rate distortions in the EMS, while certainly not conclusive, does not suggest that this has as yet become as serious a problem as it has been made out to be. But the limited movement in the real *effective* exchange rates of most EMS-countries despite the sizeable inflation differentials between them are to an important extent a fluke due to a constellation of exchange-rate movements outside the EMS which is unlikely to be repeated.

3) *Symmetry of adjustment.* A third criticism of the EMS is that the basic question of who should take the initiative to adjust has not been resolved. This issue, also familiar from the Bretton Woods system, emerged in fairly explicit form in the discussion of the divergence indicator, intellectually the most novel and interesting feature in the EMS. This appeared to introduce an objective indicator as a trigger for policy coordination in addition to the mechanical intervention obligations which arise as currencies reach a bilateral limit in the parity grid. And it did so by using the average performance of the participating currencies as a norm.

In practice the divergence indicator has played a more modest role than one was led to believe by the considerable attention paid to it during the negotiating stage. No currency has as yet been divergently strong, and only two — the Belgian franc and the Danish krone — have crossed the lower threshold. In any case the coexistence of the parity grid and the threshold of divergence is an uneasy one; as Spaventa (1980) has recently shown, the parity grid constrains the movements of exchange rates in such a way as to make the combined system somewhat arbitrary and inconsistent. In the end, the divergence indicator has been given no precise operational functions, which suggested that convergence of national policies to some average norm was *not* the intended consequence of the set-up of the EMS. That some EMS average performance could be regarded as a norm has been denied in statements by officials from the two lowest-inflation countries, Germany and the Netherlands; faced with a choice between fixed rates with higher inflation and revaluation, these countries would opt for the latter. So would a monetarist — to whom the whole thought of adjusting some countries' inflation rates upwards to an average EMS-level would clearly be anathema.

But if symmetrical adjustment is excluded, the question remains: who should adjust to whom? In fixed-rate (or adjustable-peg) systems with a dominant or hegemonial country, such as the United States in the earlier part of the Bretton Woods system or Germany in the mini-snake of 1976-78, the pattern was fairly clear. The smaller currencies pegged to the hegemonial currency as best they could and adjusted domestic policies to make that aim credible. Monetarist critics of the EMS argue, more based on general distrust of the ability of governments to act constructively without rules than on purely economic logic, that the problems of policy coordination in such a discretionary system could only be resolved with enormous difficulties; minimal results with maximal friction, see notably Vaubel (1978a), Ch. IB and Salin (1979). Whether this is a fair characterisation of the EMS can best be resolved by looking at a couple of 'typical' examples of conflict and this will be taken up in section 3 below.

4) *The moral hazard of generous credit facilities.* This final point, traditionally found in monetarist criticism of the EMS, can be dealt with rather briefly. It is argued that, by extending credit generously among themselves, EEC-governments and central banks have contributed to making economic divergence more durable. One pertinent observation

is that the only credit facility in the EMS which has been used really actively is the ultra-short one, where repayment falls due 45 days after the end of the month. No use at all has been made of the medium-term facility which is conditional lending like that in the higher IMF-tranches, though the conditionality might in practice be rather lighter.

The enlarged facilities set up in the EMS would appear to be of minor importance when compared to two other factors which influence the assessment by participating countries of their international liquidity: the availability of loans in private international markets and the increase in the market value of the gold component of their reserves. Both have little directly to do with the EMS, though the enlarged official credit facilities might have improved the credit-worthiness of some weaker EMS-members and the so-called depositing of 20 per cent of gold (and dollar) reserves may have provided a particularly convenient form for revaluing gold. Other methods could have been used by countries individually in the absence of this particular device. The basic fact is the high level of reserve assets and easy access to unconditional loans, rather than the EMS facilities themselves. The suggestion (Cf. Vaubel (1978b), pp. 14-15) that the small subsidy element involved in EMS credits in such a climate constitutes any significant weakening of the incentive to avoid inflationary monetary policies in the potential borrowing countries can hardly be taken seriously.

The two general motives for launching the EMS, sharpened by the question marks put by its monetarist critics, provide a possible basis for reviewing the experience of the seven EMS-participants since the beginning of 1979 in section 3.

III. Individual Country Experiences 1979-81

For most of the seven participants in the EMS, but particularly for the United Kingdom, 1979-80 were years of disappointing economic performance. Table 2 provides a systematic comparison of forecasts or objectives for the two calendar years for four major ultimate targets of economic policy: (1) the growth rate of real GDP, (2) the rate of inflation (as measured by the private

consumption deflator), (3) the percentage of unemployed, and (4) the current account balance as a percentage of GDP, all as submitted to the EEC Com-

TABLE 2
FORECASTS/OBJECTIVES AND OUTCOMES 1979-81 FOR GROWTH,
INFLATION, EMPLOYMENT AND CURRENT ACCOUNT

	B	DK	D	F	IRL	I	NL	UK	EEC
1979									
Growth rate of real GDP									
F/O	2.5	1.5	4.0	3.7	4.0	4.1	2.5	2.4	3.5
outcome	3.0	3.1	4.4	3.4	3.2	4.9	2.3	0.2	3.3
Rate of increase of private consumption deflator									
F/O	4.1	7.0	3.0	8.5	14.5	11.5	4.8	9.5	7.0
outcome	4.5	9.5	4.1	10.5	13.2	15.0	4.7	13.2	9.0
Unemployment, per cent of active labour force									
F/O	8.6	7.6	3.7	5.6	8.0	7.0	4.5	5.7	5.6
outcome	8.7	6.2	3.4	6.1	7.9	7.6	4.3	5.3	5.6
Current account, per cent of GDP									
F/O	-0.2	-1.8	0.9	0.4	-2.7	1.6	-0.4	—	0.7
outcome	-2.1	-5.3	-0.3	0.5	-10.2	1.9	-0.6	-1.3	-0.3
1980									
Growth rate of real GDP									
F/O	2.5	0.8	2.9	2.5	3.0	2.2	2.2	-1.0	1.9
outcome	1.2	-0.9	1.9	1.8	0.8	3.8	0.8	-0.2	1.3
Rate of increase of private consumption deflator									
F/O	7.1	9.8	4.5	9.6	13.0	14.5	6.8	12.7	9.1
outcome	6.3	11.0	5.2	13.5	18.2	21.4	6.5	16.1	12.1
Unemployment, per cent of active labour force									
F/O	8.8	6.1	3.4	6.8	7.8	8.4	4.3	6.6	6.2
outcome	9.3	6.2	3.4	6.5	8.9	7.5	5.8	6.9	6.0
Current account, per cent of GDP									
F/O	-2.2	-3.8	-0.5	-0.2	-7.3	1.0	—	-0.1	-0.3
outcome	-5.6	-4.1	-1.7	-1.3	-8.3	-2.6	-1.6	1.0	-1.5

Source: Commission of the European Communities; forecasts/objectives are from October of previous year, outcome latest figure or — for 1980 — estimate.

mission in the month of October preceding the year in question, with actual outcomes. In view of the rapidly changing external environment, it is desirable to assess policies alternatively in terms of what was thought to be the outlook and what actually happened.

It has seemed convenient to arrange these notes by grouping the seven EMS-participants into three groups: (1) Belgium and Denmark, small countries which showed signs of structural external deficits and currency overvaluation from the start of the EMS, (2) the three new entrants, France, Ireland and Italy, all with above-average inflation rates, but showing readiness to use the new exchange-rate target in an anti-inflationary policy, and (3) the two countries with the lowest inflation in the EEC and the strongest currencies in the period prior to the EMS, viz. Germany and the Netherlands.

As regards *Belgium*, the main unpleasant surprise in 1979 was the weakness of the current account and of the currency; real growth was respectable and inflation down in the 4-5 per cent range, nearly the German level. Total domestic credit expansion proceeded almost on course, with monetary financing of the public sector deficit largely offsetting the drain of liquidity through the growing current external deficit. The Belgian franc remained weak throughout 1979. In contrast to the experiences of other currencies which had lived through exchange-market pressures in the pre-EMS period, the Belgian franc was not strengthened by the set-up of the EMS; indeed it remained at or near the floor of the band over most of the year with periods of pronounced pressure in April-May — during which period the BF also crossed its threshold of divergence for several weeks — and again in the late summer prior to the realignment of 24 September. Belgian interest rates were increased significantly, particularly in the early summer, with explicit reference to the defence of the BF. In 1980 the growth of the monetary aggregates decelerated further and interest rates remained high relative to other EEC-countries after allowance of inflation differentials. Competitiveness improved, regardless of the indicator used though this has not yet shown up in the financial position of the company sector. But the current account balance continued to worsen; as a percentage of GDP the deficit is expected to drift up further from 5½ in 1980 towards 6½ in 1981.

Belgium is an example of a dilemma where an external constraint prevents the attainment of domestic growth and employment objectives; the unemployment rate is presently the highest in the EEC. But the external constraint is unlikely to be eased by an exchange-rate policy different from that pursued inside the EMS. A high degree of wage indexation tends to make real wages highly resistant to devaluation; independent observers (see particularly Drèze and Modigliani (1981) and de Grauwe (1980)) appear to agree with the official view that the causes of the rising external deficit are a combination of the structurally unfavourable composition of the Belgian tradables sector and

the lagged effects of earlier real appreciation of the currency; between 1975 and the start of the EMS the BF appreciated in nominal terms by app. 10 per cent, thereby squeezing profits in the already weakened tradables sector. As things have turned out, the EMS has proved a convenient mechanism for beginning to adjust out of these difficulties with minimal inflation costs. Membership has enabled the nominal effective rate to stabilise and the real effective rate to decline. Comparing cost and price indices for tradables since the start of the EMS, there must have been some shift of the income distribution in favour of profits and in favour of the tradables sector. The distortions which had tended to build up during the period of real appreciation are slowly beginning to be unwound.

It may be argued that the pre-EMS policy-mix was wrong and that more emphasis on influencing directly the inflation of prices for non-tradables, and of labour costs generally, would have been preferable. The Belgian authorities are presently trying to supplement the disciplining effects of the exchange rate and the external deficit by measures of incomes policy. Until these measures succeed in improving the current account, a relatively expansionary fiscal policy may continue to carry the responsibility for preventing the already high unemployment rate from rising further. The exchange markets persist in reacting to a strengthening of the DM inside the EMS by pushing the Belgian franc to the floor of the band and across its threshold of divergence. This is an uncomfortable short-run constraint on monetary policy; but it may be a cost justified by the longer-run assistance from EMS-membership to an anti-inflationary, structurally-oriented policy.

There are some similarities between Belgium and *Denmark* with respect to external imbalance. Denmark entered the EMS with a long record of large external deficits and real appreciation behind it. Despite an inflation rate above the international average, the Danish krone through its membership in the snake/minisnake appreciated in effective-rate terms by app. 10 per cent in the 1973-76 period. Starting in late 1976, the krone was adjusted four times by a total of 18 per cent vis-à-vis the DM (and 14 per cent vis-à-vis the Benelux currencies) prior to the start of the EMS. This was approximately what was required to preserve a stable effective rate over the final 2-2½ years up to the beginning of 1979. But there was every sign that the competitiveness of the Danish tradables sector remained seriously impaired. Yet the official view was, much like that of Belgium, that the "strong-currency option" offered by EMS-membership was both feasible and desirable in making possible smoother financing of the current deficit during the long period while inflation was to be reduced and competitiveness improved. But there was understandable concern that the option would prove too strong, particularly after it became clear that neither the United Kingdom nor any of the Scandinavian countries — all major trading partners of Denmark — would join the EMS (see Thygesen (1979b)).

Initially the effect of EMS membership was to boost non-resident purchases of high-yielding Danish bonds, thereby generating a temporary easing of monetary conditions unwarranted by the domestic situation. When

this adjustment was partly checked by administrative action, partly completed in the spring of 1979, a more familiar pattern emerged. The current deficit, widening both because of worsened terms-of-trade and faster growth of domestic demand, began to contract the money supply; when an outflow of capital was superimposed thereon, following the sudden strengthening of the DM in the EMS, the krone was pushed to the floor where it remained, alternating with the Belgian franc for most of the period up to the September realignment. A relatively strong domestic credit expansion to both the public and the private sector accentuated the exchange-market imbalance. In little more than two months the central rate of the krone was devalued twice against the DM by 5 per cent and by a total of 8 per cent against the other EMS-currencies. While the first of these adjustments was part of a general realignment, the second was a surprise move decided upon with a minimum of formality, i.e. without convening a meeting of the Council of Ministers.

In 1980 both real growth and the current deficit came down; apart from the United Kingdom, Denmark was the only EEC country to experience negative real growth. The inflation rate increased, but by no more than the EEC-average, so that the substantial real depreciation of 1979 was preserved. The main reason for this outcome was the *ad hoc* removal of several cost-of-living allowances triggered just after the devaluation. In effective-rate terms the krone depreciated further in the course of 1980 as a result of the upward drift of the dollar, sterling and the Scandinavian currencies which were pegged to baskets in which the two major non-EMS currencies had a substantial weight. Far from being trapped in a strong-currency option, Denmark found itself having completed a real downward adjustment of its exchange rate in the order of 12-15 per cent since the start of the EMS, depending upon which of the cost or price indicators one looks at. Since a sizeable adjustment in this direction was manifestly necessary to make the longer-run adjustment of the current account manageable, one may say that EMS-membership, far from introducing real exchange-rate distortions, considerably eased real adjustment in the Danish case.

Since the summer of 1979 there have been no serious problems of monetary control. No targets for the money supply are announced, the Danish authorities considering, as do their Belgian counterparts, that the openness of the economy makes it necessary to focus on domestic credit expansion; DCE — and more so M2 — has decelerated gradually in 1980 to historically slow rates, notably because of weak private demand for credit. It became possible in the autumn of 1980 to permit lower interest rates and to remove ceilings on the loan commitments of individual banks. At no time was there any severe pressure in the exchange markets. On the whole it would appear that participation in the EMS made the external constraint on monetary policy less operative than would have been likely under conceivable alternative exchange-rate arrangements.

No country can have been more surprised by its EMS-experiences than *Ireland*, which joined the system with grave apprehensions that its high inflation rate and the strength of partner currencies might impose on it an unbearable discipline. Moving from the link of the past 150 years with sterling to the EMS parity grid — although it was initially thought that sterling too would join rather shortly — was seen as a major step towards lowering inflationary expectations and inflation itself. As it turned out, Ireland did not choose a strong currency option by joining the EMS. The nominal effective exchange rate has depreciated moderately, while competitiveness has improved in step, despite persistently high and even accelerating inflation. The explanation is the massive revaluation of sterling and the high, though decelerating, UK inflation. Ireland has found itself on a fixed exchange rate with its EMS-partners which account for less than one third of its trade, while floating against its main trading partner which is nearly twice as important — rather the opposite of the traditional prescription.

In these circumstances continued high inflation and rapid monetary growth in Ireland have been accommodated in the EMS without any strain on the exchange markets. Indeed, at no time has there been any exchange-market pressure; the punt never came close to its threshold of divergence, but stayed on average closer to the centre of gravity than any other EMS-currency.

During 1979 domestic credit expansion to both the public and the private sectors ran well ahead of target, though it gradually tapered off as real growth slackened. The weakness of the Irish economy showed up in the current account deficit which reached over 10 per cent of GDP, or more than twice that of any other EEC country. In 1980 the deceleration in domestic credit, particularly to the private sector, and in M3 continued, while real GDP stagnated and the external deficit was reduced to app. 8 per cent of GDP. Interest rates peaked early in the year; by the second half of the year they had dropped below the current inflation rate. Though the outlook for 1981 is for some improvement in inflation and external balance, it is obvious that Ireland has hardly begun the real adjustment of its economy. Once the EMS-currencies firm up in any major way vis-à-vis the dollar and sterling, Ireland will be doubly hit by more rapid effective appreciation than other EMS-members and an inflation rate still several percentage points above the EMS-average. To rectify this imbalance is hardly a task for monetary policy alone, but will require use of other instruments as well.

Italy joined the EMS with at least as much apprehension as Ireland and with a wider band within which to contain the lira. Its experience in both years has been highly mixed; Italy has had at the same time the fastest real growth and the highest inflation rate in the EMS. The wider band was used to achieve some depreciation — by early 1981 the lira had fallen by 7-8 per cent in effective-rate terms — but still the competitiveness of Italy had deteriorated by close to 10 per cent. The 6 per cent devaluation of the lira in late March 1981 barely made up for this.

Initially, the effect on the lira of the EMS-membership was, not surprisingly, to strengthen the attractiveness of lira-denominated assets and thereby the currency. The lira would no doubt have risen all the way to the upper intervention point, if the authorities had not intervened in the spring of 1979. The strength of the currency created a policy dilemma: because of the worsening inflationary performance it seemed desirable to increase interest rates to at least make them positive in real terms. But any such move would be likely to trigger further capital inflows and to push the lira still higher. The authorities chose to keep short-term rates stable throughout most of 1979 while pushing longer-term rates up a bit — an “Operation Twist” in reverse. As interest rates rose abroad, the dilemma disappeared and short term rates in Italy moved up again from October. By the end of the year monetary base creation had decelerated sharply and a moderately tight monetary stance was resumed.

The tendency for the Italian economy to grow significantly faster than its EMS-partners came to an end in the spring of 1980. The worsening of the terms-of-trade, severe structural problems in some sectors, and the impact of restrictive monetary policy appear to be the main causes. Money and credit aggregates — the main policy objective being total domestic credit expansion — decelerated very visibly.

As the lira weakened in the EMS, a policy dilemma opposite that of 1979 arose. To cushion the recessionary tendencies the authorities would have liked to let interest rates drop; but that would have weakened the lira further and entailed interventions to maintain it in the band. The conflict was resolved in favour of the external considerations, as the authorities pushed interest rates in all maturities higher. The Italian experiences remain the clearest example of the potency of monetary policy measures to defend even an obviously weak currency without massive interventions. Monetary policy has been complicated by EMS-membership, but it has also become more effective as an anti-inflationary instrument than it could have been, if the lira had continued to be managed independently.

The third new entrant into the EMS, *France*, did so with fewer hesitations than Ireland and Italy, not only because she entered with an inflation rate that was much closer to that prevailing in Germany and the other countries of the mini-snake, but because she saw a strong-currency option as a desirable complement to the longer-run anti-inflationary strategy. After the stop-go policies of 1974-76 had been abandoned with the adoption of the Plan Barre in the autumn of 1976,³ and the prospect for early reversal of the latter stabilisation policy had been removed by the parliamentary elections of March 1978, the outlook for longer-run stability in the DM/FF-exchange rate had brightened considerably. There have, indeed, been few apparent problems in

³ For an account of French economy policy since 1973-74, see BALASSA (1980).

managing the franc inside the EMS. French monetary targets — mainly M2 — have continued to be met rather more accurately than in other European countries; contributing to this is no doubt the modest size of the public sector deficit — 1-2 per cent of GDP in recent years, the narrowest in any EEC-country — and the aim to finance most of it in non-monetary form.

In 1979 the growth rate of real GDP, though nearly 3½ per cent, was insufficient to prevent some increase in unemployment, while the inflation rate rose to above 10 per cent. With nominal incomes rising faster than expected in formulating the monetary target, it is not surprising that several indicators point to increasing monetary tightness in the course of 1979. In 1980 the monetary aggregates decelerated further and dropped well below the rate of growth of nominal income; the inflation rate rose by about 3 percentage points, while real growth tapered off slightly. The short-term interest differential vis-à-vis Germany widened a bit in the early part of the year, but it never got close to matching the inflation differential of 7-8 per cent. Indeed, real interest rates in France remained very close to zero, while those in Germany typically moved in the 4-6 per cent range. In the second half of 1980 this constellation of interest rates created pressures inside the EMS. Despite a non-negligible current account deficit — app. 2 per cent of GDP in 1980 — there was such an inflow of capital that *Banque de France* intervened to the tune of about FF 2 billion a month in the first nine months of the year. The FF which had been the strongest currency throughout most of the period since December 1979, reached its upper intervention point vis-à-vis the DM in October — it had done so briefly already six months earlier — which prompted a slight reduction in French short-term interest rates, and tighter regulation of inflows. The FF remained very strong into 1981 and even reached its upper threshold of divergence in late January.

The tension between the FF and the DM in the winter 1980/81 has often been referred to as the main example of the absurdities into which exchange markets may be led by official arrangements which divert the attention of market participants from so-called “fundamentals”, i.e. real exchange rates and the cyclically-adjusted current account balances.

The strength of the FF over more than a year surprising in view of the deterioration in France's competitiveness and the improvement in Germany's. Yet this deterioration should not be overstated. The nominal effective rate for the FF is very close to where it was at the start of the EMS; but in real terms there is some appreciation. In any case it would be difficult to argue that the EMS has as yet seriously distorted the real exchange rate for the FF. On the other hand, France has apparently so far had limited success in reaping the fruits of having exercised what to her has clearly been a strong-currency option.

The EMS never looked like such an option to its two least-inflationary members. It is well known that in *Germany* the fears voiced in 1978 were of the opposite kind, viz. that the *Bundesbank* would see its efforts undermined by the import of inflation directly through import prices and indirectly through an

enforced relaxation of its monetary policy. The EMS also looked like a recipe for real devaluation of the DM, assuming that German inflation would not fully catch up with that abroad, thus strengthening the tendency to surplus in Germany's current account, unpopular with its partners and possibly harmful in the long run to Germany herself by perpetuating the overindustrialisation of the country. (See Giersch 1979, p. 36). For the better part of 1979 events seemed to confirm some of these views. Once the initial strengthening of some of the weaker currencies had subsided, the DM rose strongly, the German economy appeared to perform well above the EEC-average with respect to real growth — nearly 4½ per cent in 1979 — while inflation only accelerated moderately from the extremely low rate recorded in 1978. The delayed effects of stimulatory fiscal policies adopted in 1977-78 were being felt, at first with limited apparent costs. The monetary authorities were able, as announced, to keep the growth rate of the chosen monetary target, central bank money, on its course in the lower part of the 6-9 per cent range.

On two occasions German policy actions gave rise to considerable international debate. The first was in May when the *Bundesbank* persisted in selling dollars — because it considered that the appreciation of the dollar had gone far enough, particularly at a time of rapidly rising dollar-invoiced oil prices — well after the DM had begun to move up fast through the EMS-band. This made it more difficult for the weak EMS-currencies, and the Belgian franc in particular, to stay away from the floor. It was a case of Germany giving priority to domestic considerations, or arguably to its responsibilities in the global monetary system, over those arising out of EMS-membership; the latter would have made consultations desirable, so that interventions to check the strength of the dollar might have been undertaken initially by the weaker EMS-countries rather than by Germany.

The second and possibly more significant event was an increase in the discount and Lombard rates on 12 July 1979. This came at a time when the DM was already the strongest currency in the EMS (apart from the lira), and it no doubt contributed to the tension over the next two months. After Germany had been intervening regularly both in support of the dollar and of weak EMS-currencies, the German authorities convened a meeting in Frankfurt on 23 September to consider a realignment, involving above all a revaluation of the DM of 2 per cent (5 per cent against the Danish krone). Although the exchange markets were then relative quiet in the rest of the year, the DM showing no particular strength, there was little to suggest the major changes in currency relationships which were then building up.

The German current account moved into deficit in the course of 1979. The main reason was the relatively faster growth of demand in Germany than elsewhere. In addition, the lagged effects of the real appreciation of the DM in 1977-78 became observable; significant import penetration began to attract attention.

In 1980 the performance of the German economy worsened, relative to both the previous year and forecasts. Real growth slowed down and German exports even declined in value terms during the early part of the year. The widening current account deficit with capital outflows on top more than offset the effects of a larger public sector deficit and a rising credit demand from the private sector, and the growth rate of the central bank money stock gradually drifted down and out of the prescribed 5 to 8 per cent range. It was the second year running that the *Bundesbank* had undershot its target range, though this was rationalised in the Bank's words by saying that

...“the monetary authorities probably succeeded in gradually cutting the “monetary cloak” of the economy, which had been too large in the years when the DM was appreciating strongly, down to more non-inflationary size” (Monthly Report of the *Deutsche Bundesbank*, December 1980, p. 5).

Despite this expression of satisfaction the *Bundesbank* was under some pressure in the public debate to lower interest rates and bring the growth of central bank money back within the targeted range. But contrary to its actions in the opposite dilemma situation in the summer of 1979, the *Bundesbank* did not give priority to domestic objectives.

The lowering of interest rates in France, the Netherlands and some other EMS-countries did not permanently relieve the tension in the EMS. As the dollar continued to rise in January 1981 despite substantial interventions by the US authorities, particularly purchases of DM, the French and German currencies once more reached their intervention points and both got very close to their threshold of divergence. In February the *Bundesbank* took swift action to strengthen the DM by suspending the Lombard credit facilities to the German banks. It is still very early for assessing the longer-run implications for Germany monetary control and the functioning of the EMS; here just two points deserve to be noted.

The first is that it proved possible by determined action to push the DM comfortably above the middle of the EMS-band (and into significant positive divergence). The second, and more fundamental, point is that it has become highly doubtful whether the recent action can be interpreted as having resolved a genuine dilemma between external and domestic objectives in favour of the former. Given the strategic importance of the exchange rate in the transmission of inflationary impulses, and the failure to reduce the inflation rate during the present recession, a strengthening of the DM had become as much a contribution to domestic objectives as to the smooth functioning of the EMS; the dilemma had ceased to exist. In this perspective it is doubtful whether the German authorities have as yet been genuinely constrained from pursuing domestic objectives.

In terms of exchange rate movements the EMS has tended to operate during its first two years much in the way envisaged by Giersch. While the nominal effective exchange rate is close to its level at the start of 1979, the real

effective rate had depreciated by 4.9 per cent by the third quarter of 1980, depending on the indicator chosen, because of the superior inflation performance of Germany. This should, if sustained, more than undo the real appreciation 1977-78, and give a major boost to the current account.

Nowhere in the EEC are German monetary actions watched more closely than in *the Netherlands*. Over most of the 1970s the guilder was regarded, with good reason, as a close substitute for the DM. Therefore, the Dutch attitude to the EMS was closely parallel to the German, and official statements emphasised a desire not to make the new system too soft an option. Yet the underlying position was a bit different.

Like Germany, the Netherlands joined the EMS after a period of substantial appreciation in nominal terms. Although the inflation performance was second only to Germany's in the EEC, the real effective rate of the guilder had edged upwards, squeezing profits and causing historically low investment rates and real growth. The latter had in turn been pushed up by a rapidly expanding public sector. The balance of payments gave no immediate cause for concern, since the availability of North Sea gas kept the current account in rough, though not sustainable, equilibrium. This particular constellation with an economy gradually losing dynamism through overvaluation and a major shift of resources into the public sector, has been labelled "the Dutch disease" and classifies the Netherlands as an intermediate case between Germany and the two weaker countries in the mini-snake, Belgium and Denmark. It explains why the guilder, more than the DM, needed some real depreciation (see i. a. Buiter and Purvis, 1980).

This has been achieved in 1979-80. While the effective nominal rate remained stable, the real rate depreciated whether measured by cost indicators, wholesale prices or the value added deflator. The apparent small real appreciation in the export unit values suggests that profitability has been somewhat restored. Real growth has continued to be slow and unemployment has edged up. The inflation rate and the current account deficit have both moved up, though not dramatically.

Possibly the most interesting development in the Dutch economic environment has been the gradual loosening in the course of 1980-81 of the past tight links between Dutch and German interest-rate and exchange-market experiences. As the DM started to weaken inside the EMS band in the early months of 1980, the guilder gradually seemed to divorce itself; from May onwards the two currencies drifted more and more apart, as the guilder rose to compete with the FF for the top position in the band. Dutch interventions to stem this rise became regular and substantial. This new constellation widened the scope for an interest-rate policy more independent of Germany's, which appeared desirable on both domestic and external grounds. By late 1980 Dutch money market rates and bank lending rates had dropped below comparable German rates. On the whole, it would appear that Dutch monetary autonomy has, if

anything, been increased in the EMS. The growth rate of the monetary aggregates has been relatively low and stable and the liquidity ratio — the main monetary objective expressing the broad money supply in per cent of nominal GNP — declined significantly in 1979 and remained constant in 1980.

IV. Some Tentative Conclusions.

The present paper sets out in section 1 to discuss what was expected of the EMS during the negotiating phase of 1978. In addition to broader political aims, two main economic purposes were listed: to consolidate an incipient reversal of a long process of divergent intra-EEC performance, particularly with respect to inflation rates, and to set up a European currency structure more robust than during 1973-78 in the face of dollar instability.

Although these two criteria are too vague to permit any quantitative evaluation, a tentative conclusion is that the EMS has performed reasonably well with respect to the second objective, and not too badly with respect to the first. Inflation rates have once more tended to diverge, but less so than during 1974-76, the years following the first oil price shock which constitutes a fairer basis for comparison than the years immediately preceding the launching of the EMS.

Section 2 examined the arguments of some monetarist critics of the EMS. Such a confrontation was seen as interesting, because these critics tend to endorse the proclaimed aims of the EMS while disagreeing with the approach. They have argued that the EMS would have undesirable effects because it was likely (1) to undermine promising national efforts to pursue target-constrained monetary policies, (2) to introduce unacceptably large distortions of real exchange rates (competitiveness) and (3) to lead to inconsistencies, because the rules of the game did not specify who would adjust to whom.

None of these three fears seem justified by the experiences of the first two years. Monetary targets have not been undermined, but have, if anything, been met more accurately than in the 1975-78 period. Real exchange rates have moved, but not all that much, when measured on an effective-rate basis. And more important, the changes observed have been in the direction required for proper adjustment. As section 3 points out, three countries which had overvalued currencies two years ago, Belgium, Denmark and the Netherlands, have, by different combi-

nations of below average inflation and nominal devaluation achieved real adjustment. Two others, France and Italy, have experienced real appreciation because of their above-average inflation; these countries have deliberately chosen a strong-currency option as part of their anti-inflationary strategy and the distorting effects of their real appreciation have so far remained modest and sustainable in terms of the prospects for their current account positions.⁴

In short, this line of reasoning leads to the tentative conclusion that the System has at least not been harmful in the way envisaged by its critics, but most likely a convenient framework for both collective and national adjustment.

The review of national experiences in the seven EMS member countries in section 3 brings out the striking difference between the expected and actual international environment. The EMS was seen prior to its start in early 1979 by most members — all but the two lowest-inflation countries, Germany and the Netherlands — as a framework for domestic monetary discipline. The strengthening of the major non-EMS currencies, particularly the dollar and sterling, and the temporary weakening — due to both a large current account deficit and an interruption to an increasing reserve currency role — of the inherently strongest EMS-currency, the DM, has changed the expected strong-currency option of membership into a framework which has been helpful in achieving substantial improvements in competitiveness for most participants, easing real adjustment, but adding to inflation. To Germany, the EMS has provided a brake on depreciation rather than on appreciation as was anticipated in the light of experiences in 1977-78.

On the whole these developments have been helpful, but they imply that the EMS has not yet met its most difficult task: to provide a joint framework for adjusting to the remaining sizeable differences in performance between the EMS members. Divergence has not been

⁴ It should be pointed out that my assessment is a bit more positive than that of some other observers or of the main official chronicle, cf. Commission (1980), particularly pp. 3.6-10. This is partly due to the fact that the present analysis of real exchange-rate changes has been based on effective exchange rates rather than on bilateral relationships inside the Community. The former procedure would seem to be the most appropriate for assessing the overall external adjustment of an economy. But from the narrower viewpoint of the analysis of intra-EEC trade and competitiveness, bilateral comparisons of the type made by the Commission obviously add relevant information: to the extent that changes in bilateral competitiveness have tended to be larger inside the EMS than those measured more globally, trade patterns will be effected in ways that will create more imbalances *between* EMS partners than in total trade flows.

effectively constrained and differences in inflation rates remain wide. With the pressure of mounting unemployment and very slow growth of output working to bring about more expansionary fiscal policies, and particularly in some of the higher-inflation member countries — Ireland, Italy, France and Denmark — it would be overly optimistic to predict any continuation of the past intra-EMS stability of exchange rates. Rather the task in the coming year or two will be to design the necessary adjustments of central rates inside the EMS in a smooth and coordinated way rather than to wait until expectations of change force them upon the authorities. Even more important in the long run is the need for national authorities in the weaker economies to perceive more clearly the dangers to their currencies in getting their fiscal policies as far out of line as present trends suggest.

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