PROGRESS TOWARD A EUROPEAN MONETARY UNION
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INTRODUCTION

On March 13, 1991, the European Monetary System (EMS) will celebrate its twelfth birthday with a sense that the system, originally launched by French President Valéry Giscard d'Estaing and West German Chancellor Helmut Schmidt, had progressed much further toward accomplishing the Economic and Monetary Union (EMU) goals established in the Werner Report of 1970 than any institutional development of the previous decade. Indeed, the tumultuous economic events of the 1970s — the collapse of Bretton Woods international monetary system and the transition to the (managed) floating exchange rate (non)system; the two oil crises, OPEC I and OPEC II; and bouts with extraordinary inflation in the United States and in many other industrial countries. In addition, most governments of the European Community (EC) were not ready effectively to coordinate their economic policies and had left the attempt at narrowing the margins of permissible exchange rate fluctuations through the European narrow-margins-arrangement (the "snake") which became a Deutsche mark (DM) zone with few stability-oriented members (Belgium-Luxembourg and the Netherlands).

Although some may view the steps towards EMU halting compared with the level of academic and professional intellectual energy spent on the creation of a European monetary union, the conflicts and therefore the difficulty in negotiations among the practitioners in the EMS cannot be overestimated. It is therefore a small miracle that the various governments were able to agree on an inter-governmental conference for December 1990 devoted to changing the EC Treaties for the purpose of establishing an EMU. This progress toward an EMU could hardly have occurred without the successful convergence that took place since the mid-1980s.
THE EUROPEAN MONETARY SYSTEM AND ITS EXCHANGE RATE MECHANISM

The original intent of the EMS was to establish a "zone of monetary stability" in Europe and thus to reduce the damage to intra-Community trade from exchange rate fluctuations of its member currencies. This was to be achieved through a system of fixed but adjustable exchange rates between the members of the Exchange Rate Mechanism (ERM) of the EMS. In addition, the system was to reduce the significant divergences in inflation rates of the European Member-States and encourage lower inflation overall.\(^1\) A further goal of some initiators of the EMS was to render the balance of payments adjustment mechanism more symmetric so that the balance of payments adjustment burden would not fall entirely on the balance of payments deficit countries as had occurred during the reign of Bretton Woods.\(^5\)

The center of the EMS were to be the European Currency Unit (ECU), successor to the European Unit of Account (EUA), rather than a national currency. The ECU was to serve not only as the numeraire for the EC's financial transactions, but the anchor of the system, and eventually to emerge as an international currency, for use as central bank reserves and also for intervention purposes. It was defined as a weighted average, a market basket, of EMS member currencies.\(^2\) The European Monetary Cooperation Fund (EMCF), where ECUs were created against rolling short-term swaps of 20 percent of Member-States' gold and dollar reserves was to become — but did not — a European Monetary Fund (EMF) at the end of the second year of the EMS's operation. The intent was that the EMCF or EMF as an EC Central Bank would issue the ECU as the EC's common currency.

The bilateral grid, as it existed under the "snake" system was to be replaced by the ECU. With the bilateral grid a currency at the top of the band of permissible exchange rate fluctuations would have at least one counterpart at the bottom, with the adjustment burden falling on the weak currency. The ECU, on the other hand, would work symmetrically, since one currency that
is "out of line" would not necessarily have a counterpart. The "Belgian compromise" finally broke the deadlock between the "maximalists" (primarily the French) who wanted the new ECU at the center of the EMS and the "minimalists" (primarily the Germans) who insisted on preserving the bilateral grid as it existed in the "snake." Under this compromise, the bilateral grid provided for automatic central bank interventions, while the ECU would be used for determining the central rates and divergences from them.

The ERM's bilateral grid was to provide for relatively fixed exchange rates, since there are bands of +/-2.25 percent (an exception can be made where the band is +/-6 percent around the central rate) within which rates may fluctuate without obligatory action by member governments. Italy, which had availed itself of the wider margin, entered the narrow band in January 1990 and Spain, which chose the wider margin upon joining the ERM in 1989, might follow Italy in the near future. The option of a wider band was initially reserved for the countries which did not belong to the European narrow-margins-arrangement. If the margins prove to be insufficient to correct imbalances, realignments might be required, but do not have to be preceded by consultation between central banks.

To make the adjustment mechanism symmetric, the ERM contains a "divergence indicator" that was intended to provide a "warning bell:" when a currency reached the threshold of 75 percent of the permissible fluctuation, there was the "presumption" that the divergent country was to engage in adjustment policies. In the interest of symmetry, the divergent country, irrespective of the direction in which it was diverging, was expected to do the necessary adjusting; thus, a lower-than-average inflation country (say, Germany) would have had to engage in expansionary policies if its appreciating exchange rate reached the divergence indicator — unless it was willing to revalue its currency.

Finally, the EMS expanded financing facilities, beyond those already available under the
snake arrangement, to aid central banks to maintain their exchange rate commitments through foreign exchange market interventions.

EMS INSTITUTIONAL DEVELOPMENT

The EMS today is a very different institution from that originally envisioned by its founders. In the ERM the bilateral parity grid has become the preeminent feature of the system, while the divergence indicator, relating to the ECU central rates, has virtually no relevance. Two technical elements with the divergence indicator caused problems included that fact that EMS countries that had not undertaken exchange rate commitments under the ERM — prominently, the UK, until recently — nevertheless had their currencies included in the ECU determination; the second problem is an unanticipated arithmetic quirk in the calculation of the indicator whereby the upper or lower limits of the exchange rate band might actually be broken before reaching the divergence indicator. A more central problem was that the divergence indicator was related to the ECU which a weighted average of currencies, could not provide the "nominal anchor" for lowering inflation rates. This effectively emasculated the divergence indicator, and substituted for it the DM as the central, nominal anchor. It is based upon the reputation of the Deutsche Bundesbank, a credible inflation-fighting institution for Germany and, indirectly, for the EMS. The DM had already served this function under the snake, when it had become a de facto DM area.

The official ECU, stripped of a large part of its originally intended function, has been reduced to a minor role in the operation of the EMS. It serves primarily as the numeraire for EC activities. The private ECU use has been much more extensive. The EMS's various short- and medium-term financing facilities have been little used. They were designed for intervention at the margins of the exchange rate bands, while central banks have preferred to intervene in dollars before the exchange rates hit their upper or lower limits; interventions at the margins,
on the other hand, had to be conducted in EMS currencies.

An important technical innovation in the cooperation of EMS Member-States was the Basle-Nyborg agreement of 1987, which extended the very-short-term-financing facility to "intramarginal" interventions, improved the sharing of the intervention burden, increased community surveillance of the markets, and encouraged the use of more tools, including interest rate changes, in the management of exchange rates. The innovations seemed to work quite effectively in defusing the exchange rate "crisis" of autumn 1987, when the established exchange rates could be preserved even under pressure in the exchange markets.

EMS ECONOMIC RESULTS

Most studies on the impact of the EMS on exchange rates agree that the system has produced reduced exchange rate variance — using almost any measure of variance — among countries participating in the ERM. This is so using either nominal or real measures, in comparing ERM with non-ERM countries, or with ERM countries before the establishment of the EMS. In fact, the nominal and real variability of exchanges has decreased progressively over time, being halved from the pre-EMS period (1975-79) to the first years of the system (1979-85); they were halved again in the most recent period (1986-89). Thus, the system seems to have successfully contributed to the objective of creating a zone of monetary stability in Europe.

Realignments, which were frequent in the first five years, have dropped both in size and frequency, especially since 1983, when France decided to commit itself to the system. Most devaluations have not completely compensated for intervening inflation differentials. Consequently, high-inflation countries lost some international competitiveness, through a "real" appreciation of their currencies.

Reduced need to realign did not come at the expense of an elimination or reduction of capital or trade flows but was a consequence of increased convergence of macroeconomic policies.
and economic performance, especially concerning inflation rates. They have dropped among the EMS/ERM members by an even greater rate (22 percent from 1974-78 to 1979-86) than in non-EMS countries, including the United States.  

Although this trend is fairly apparent, it is not clear how much the EMS has contributed to the result, and how much has been due to what has appeared to be a global desire to disinflaite in the 1980s. Some observers have, in fact, argued that price stability has occurred despite the original intent of the EMS, as embodied in the design of its institutional structure, and has come instead from the national objectives of its members, perhaps especially France. Although the French had been insisting on a symmetrically functioning EMS, in which the role of the Bundesbank and DM were to be reduced to the level of the other EMS member currencies, the French central bank finally acknowledged that lower inflation was advantageous to economic growth and welfare. It conceded in its 1988 Annual Report that inflation is not a solution for the unemployment problem, but rather a part of it. In this scenario the emergence of the DM as the nominal anchor of the EMS was an intentional; the more inflation-prone countries willingly tied their own hands in money creation in the name of exchange rate stability, and so added credibility to their own disinflation efforts. Perhaps reinforcing this view, that the system itself has not been the engine for lower inflation, but instead a tool reflecting national preferences, is the fact that the inflation rates in all EC countries have been on the rise during the last two years.

While coordination of monetary policies among ERM members has progressed during the lifetime of the EMS, there has been little convergence of fiscal, or tax and government expenditure policy so far. In evaluating the system it seems a general notion that it has worked well. It has reduced exchange rate variance and allowed for — or forced — a level of policy coordination that countries have found useful, to an extent that was not apparent in the snake,
a less formal arrangement than the EMS/ERM.

A criticism, however, concerns the asymmetry inherent in the way the system developed, as opposed to its original design, which has had a negative impact on some states, to the benefit of others. De Larosière noted, probably too pointedly, that "countries whose currencies were near the top of the fluctuation band were practically exonerated from correction of their external imbalances, the adjustment burden placed on the deficit nations." Yet, in many an instance, the "strong" currencies, primarily the DM and the Dutch guilder, were revalued at the time "weak" currencies were devalued. Before the March 1983 realignment, with the French franc in an untenable position at the bottom of the margin, France even threatened to leave the System if there were no multilateral realignment. The EMS has been faulted for having imparted a deflationary bias to the system, by preserving the nominal anchor of the West German monetary policy. Specifically, the criticism is (1) that the adjustment burden is shifted to the weak currency countries, and (2) that output in general may decline due to this. In this way the Bundesbank was not only able to maintain, at least partially, its monetary independence, but was able to force the other countries into accepting its policies.

The counter-argument is that the weaker countries could have dropped out, as they had during the snake, although the EMS is a more formal arrangement than was the snake. Alternatively, the weaker countries could have insisted upon a different form of development for the system than in fact came to pass. Yet, we know that they had tried to do so by insisting on "symmetry." Instead, they increasingly had to appreciate the lack of any long-term output and employment benefits of inflation, and to acquiesce to Germany's anti-inflationary stance. They had to give up, or at least substantially modify their own national priorities, including the ability to control domestic wage demands with a shrug that it was a necessary part of their participation in a greater Europe. Germany's competitiveness and balance of payments surpluses
increased as the higher-inflation countries' exchange rate realignments did not fully offset inflation differentials; the higher-inflation countries, in turn, were able partially to countermand this by running surpluses vis-à-vis the United States. As the United States in 1990 began to again run net surpluses with Europe it will be important to watch events, to see if growing trade imbalances in the EMS may threaten the system. We shall later consider the shocks that emanated from eastern Europe; a sanguine view is that to the extent that West Germany's surpluses may decrease substantially as it pays for rebuilding the infrastructure of the East after reunification; this could act to defuse a potential threat from balance of payments disequilibria to the EMS.

The European Single Market

It would be difficult to talk meaningfully about progress toward monetary union without discussing the financial implications of the Single European Act (SEA) of 1987 that was to create a single European market (SEM) by January 1, 1993. As part of the movement toward the SEM, the SEA specified, reinforced by a June 24, 1988 directive, that capital flows were to be liberalized and that financial markets were to be fully integrated. Financial integration was a component of the "four freedoms" — freedom of movement of trade, capital, financial and other services, and labor — entailed in the SEA. Capital flows, especially outflows, had been subject to governmental controls in many European countries in order to lessen the negative impact of speculative pressures on the availability or costs of loanable funds.

We shall later explore the meaning of capital liberalization and financial integration for monetary union, but it is important to establish here that these innovations have contributed in no small measure to altering the conditions under which monetary policy is enacted.

The Delors Report. The Hannover summit of mid-1988, which set up a committee composed of central bankers and other respected professionals and academics under the
chairmanship of EC Commission President Jacques Delors (the Delors Committee), demonstrated the critical nature of the movements toward an EMU. It is noteworthy that Delors kept the monetary portfolio for himself in the autumn of 1988, presumably to ensure that the momentum was maintained. Delors reputedly had EMU as his prime goal in the middle of the 1980s, but sensed that it threatened member sovereignty too directly and, therefore, opted for Lord Cockfield's SEM plan as an alternative, or rather precursor, to the push for full monetary union.

The Delors Committee submitted its report in April of 1989, and it was then discussed by the heads of government in Madrid in June of that year. The report was, and continues to be, important and controversial, as it did nothing less than establish a structure and a process for moving to full economic and monetary union. It established the basis of EMU as twofold: first, the EMS has not achieved its full potential; not all EC countries are members in the ERM; there has been little convergence in the area of fiscal policy; and there has been no transition to the European Monetary Fund. Second, increased interdependence between EC members, necessitates "more intensive and effective policy coordination."9

In dealing with monetary union, the Delors Report, like the Werner Report of 1970, stresses the free movement of capital and a high degree of financial integration, leading ultimately to irrevocably fixed exchange rates. This reduces the members' room for manoeuvre, makes independent monetary policies increasingly difficult to maintain, and requires more effective coordination of policies. It is a well-established fact that it is impossible to attain simultaneously fixed exchange rates, open capital markets, and independent monetary policies.

The Delors Report does not specify a single currency as necessary for monetary union: it does, however, state that it would be a "natural and desirable further development."10 The report deals with "economic union" consisting of (1) free movement of capital, labor, goods and services; (2) competition policy; (3) common regional and structural policies; and (4)
macroeconomic policy coordination, "including binding rules for budgetary policies." The first three categories deal with establishing the single internal market; the last proposition has raised no little controversy.

Central banking in an EMU would have to be more closely centralized at the EC level through an autonomous Community institution, a European System of Central Banks (ESCB) — meanwhile named the EuroFed, since it is to be patterned after the U.S. Federal Reserve System. Upon Bundesbank insistence, the mandate for the new central bank includes a commitment to price stability which "was thought necessary in order to assure a maximum of continuity with the more successful features of the EMS." To assure price stability as monetary policy goal par excellence, the Deutsche Bundesbank demanded that the European central bank be independent of national governments and EC authorities, although this independence would be balanced by some accountability to the European Parliament and the European Council.

The Delors Report proposed a sequential approach to EMU incorporating three stages, with greater levels of coordinated decision-making at Community level at each stage. Stage I would entail closer coordination of economic policies; Stage II would see a "soft" form of union; while the last stage would result in a "hard" union. While the Report did not have a specific timetable in mind, it left little doubt that entering Stage I "should be a decision to embark on the entire process."

During Stage I, which started on July 1, 1990 and should last no longer than to the end of 1992 according to the April 28, 1990 decision by the European Council, all remaining capital controls were to be eliminated. This was intended primarily to apply to the two larger states within the ERM which had retained controls, France and Italy, and they complied to this directive ahead of time. Extensions were granted for Greece, Ireland, Portugal and Spain until the end of 1992. Free access by residents to the financial system in all other Community countries
would be achieved during Stage I. During this stage, all Community currencies were to join the ERM. Finally, still sovereign monetary policies would be more closely coordinated.

The second stage would be a "period of transition," something of a training period for centralized action through the setting up of the ESCB, although the final responsibility for policies would still rest with the national governments during this stage. Exchange rate changes would made only in "exceptional circumstances."

Some have criticized the "neither fish nor fowl" nature of this phase of the plan, for it lacks a clear definition of responsibility. It seems to them awkward to have decisions of such import actually made within an institution that does not have to bear the burden of accountability for those decisions, even in a transitional stage.

In the final stage, the ESCB would take on all monetary policy responsibilities and exchange rates between the member currencies would be irrevocably locked. Although the report does not find the introduction of a single currency indispensable, it envisages Stage III as the one in which the "change-over to the single currency would take place."14

The process by which the Delors plan, or something very similar to it, would be adopted included an intergovernmental conference that commencing on December 13, 1990 and leading to further discussions and negotiations well into 1991. The conference was considered necessary since the Delors Report did not really address the issue of the benefits of monetary union, that is, it was not a proper cost-benefit analysis. Likewise, the report is a means to an end, and its controversial nature opens the question of whether or not this is the best approach to the end of EMU.15

Finally, the EC Treaty will have to be changed before Stage III, or even Stage II, is legally feasible. It seems that the smaller ERM countries have little conceptual difficulty with the legal ramifications of subordinating their monetary policies to another authority. They have already
been doing that by following the nominal anchor of the Bundesbank's policies, including using the exchange rate rather than a monetary aggregate as policy target. Some larger countries, on the other hand, feel constrained to not sacrifice their sovereignty without first seeking national legislation and Treaty alteration. In the case of France and the U.K., for example, the central banks share authority over monetary policy with the government; that would have to be changed. Only in Germany and the Netherlands — among Community countries — does the central bank enjoy considerable legal independence, which would need to be ceded to the E.C.

Working document. In response to the expressed need to provide a more extensive rationale for the concept of EMU at the European level, and to respond to suggested alternative approaches, the Commission presented a working document in March of 1990 entitled "Economic and Monetary Union: The Economic Rationale and Design of the System." The document was to serve as background for the December intergovernmental conference. Its perhaps most intriguing aspect is that it strongly reinforces not only the basic notion but the explicit recommendations of the 1989 Delors Report. The framing of the Delors Report, and the manner in which presented to the very central bankers it would affect, had indeed become the agenda for economic and monetary union rather than a series of ideas open to further consideration and revisions.

The 1990 working paper identifies the benefits and costs of EMU under the headings of (1) price stability; (2) economic growth; (3) impacts on public finance; (4) regional balance; and (5) impacts on the international economic and monetary system. It draws the conclusion that, although "less susceptible to an aggregate quantitative estimate [than the results of the single market], overall the potential impact of EMU is probably no less important than that of 1992."  

It then addresses the question of alternatives and finds that none of the different approaches gives a "convincing alternative" to the Delors Report. It defines that conception as
a single Community monetary policy carried on within a new institutional structure, while "considerably fewer" centralized powers are needed to deal with other economic, specifically budgetary, policies. They do call for some parallelism in the development of economic union along with monetary union. This is very similar to the previous report, although the concept of binding constraints on budgetary policies has been obviously, and significantly, tempered here. In particular, the paper backs the three stage approach of the Delors Report.

Alternatives explored, and rejected, to the Delors approach included monetary union with a centralized economic union, meaning most decisions for government expenditures and taxes to be taken at the Community level. This would relinquish too much state power to the EC, and would not reflect the guiding principle of "subsidiarity," which finds efficiency in allowing for economic solutions at the lowest level of bureaucratic application. On the other hand, monetary union without any economic union would, according to the report, lead to an "excessive burdening" of monetary policy, and make the Community central bank "over-dominant" in its role, thus, implicitly, threatening its independence. Finally, monetary union with competing monetary policies, in apparent response to views expressed by the UK Treasury, would expose the EMS to instability and potential breakup in the face of exchange rate shocks. In addition, the paper finds no historical evidence that such a scheme could work. In sum, the Delors approach is found here to be best.

Lastly, the document reinforces the need, emphasized in the Delors Report, of committing monetary policy at the Community level to price stability, as well as insuring that the system maintains a "large degree" of independence from both national authorities and Community groups.

German Monetary Union

On July 1, 1990, accidentally coinciding with the start of Stage I of EMU, the monetary
system of the German Democratic Republic (GDR) was merged into West Germany's as the Ostmark (OM) ceased to exist upon its conversion into the DM — three months ahead of the GDR's political absorption into the Federal Republic of Germany (FRG) on October 3, 1990. The merger of the two Germanies does not raise the same problems for the EC and the EMS as does the evolution in the rest of the erstwhile Comecon countries and their eventual affiliation with the EC.\(^7\)

The GDR was not a third country for the FRG, nor for the other members of the EC: the FRG did not record inter-German trade as foreign trade,\(^8\) which was in accordance with a protocol annexed to the EEC Treaty. Moreover, GDR citizens had German nationality — "a formula that made the legal and economic integration of the GDR into the Community easier for the other Members-States."\(^9\)

Before the currency union took place, the DM fluctuated in the foreign exchange markets in conjunction with the changing forecasts as to the impact the unification would have on the German economy and the demand for the DM. The most important variables in this connection were the estimates as to the inflationary impact a currency union might have, especially if the Ostmark overhang were to be exchanged into the DM on a one-to-one ratio and as the pent-up demand from East Germany would spill over as effective demand into the West German economy, which was already working near capacity level. Fear of the inflationary impact of the "favorable" exchange rate for East Germany later gave way to the realization that some of the new demand will be for goods which Germany imports from abroad, and second, that East Germans, unsure of their future on the one hand, and having a currency with reliable domestic and international purchasing power, would be willing to put their new DMs into savings and investments.

The other major unknown was the magnitude of the inevitable cost of unification and its
financing. Initially, the cost was gravely underestimated and with it the difficulty of financing the rebuilding of the eastern sector. Furthermore, since one estimated that the stimulus from Eastern Europe would benefit economic activity in Germany and prolong its healthy growth rate, one concluded that the additional cost would be covered by the additional revenue from the continuation of increased economic activity.

As a generalization one can say that the choice of the exchange rate of unity created — as predicted — greater problems for the Eastern than for the Western part of Germany, particularly as unemployment drastically increased after the German economic and monetary union (GEMU); the two Germanies did not constitute an optimum currency area (OCA). According to most academic conjectures an exchange rate of 3 OM to 1 DM would have been about right. This is also the exchange rate that the Deutsche Bundesbank President Karl Otto Pöhl had envisioned with his counterpart, Kaminsky, of the East German State Bank. Economic analysis took, however, second place to political tinkering.

UK Entry into the ERM

During the summer of 1990 the speculation and debate on the merits of British entry into the ERM of the EMS was much more intense than at earlier junctions. Britain finally joined the ERM in October 1990. Mrs. Thatcher, during her tenure as Britain's Prime Minister, had been on record that Britain would join the ERM "when the time was right." The preconditions included a lower inflation rate in the UK, liberalization of capital movements in the Community, and "real progress" toward completion of the single market. Many critics to her stance had, correctly, viewed the "right-time" argument as a delaying tactic, especially since propitious moments for Britain's entry had been missed several times. The British pound's exchange rate movements seemed to depend almost daily upon the market's shifting assessment of the chances for or against entry. Britain's go-slow approach found another expression — in the "hard ECU"
proposal: the ECU was first to be introduced as a parallel currency to the other EMS currencies, producing "currency competition" until sufficient convergence would guarantee the absence of excessive adjustment burden connected with fixed exchange rates.

While Mrs. Thatcher ultimately was forced to resign over her negative attitude toward Europe, her successor, John Major, also favors a "hard ECU" as an interim solution. But Germany’s lack of enthusiasm for this proposal does not forebode well for the "hard-ECU" approach. Quite to the contrary, Germany, which at one time might have favored a slower progression toward EMU, seems lately to have condoned the French stance of accelerating the integration process.

Impetus Toward Monetary Union

During 1989 and 1990, the EC’s movement toward an EMU has gained a momentum that would have seemed all but impossible in the formative years of the EMS in the early 1980s. In addition to the strength of personality of Delors himself, three forces seem to have been instrumental in this development: (1) the generally positive experience with the EMS itself; (2) the clear need to take full advantage of the promise and implications of a single financial market; and (3) the stresses inherent in the further development of the economic structure.

EMS EXPERIENCE

Most observers would agree that the experience with the EMS has been positive. This explains the willingness to continue and to consider moving on to higher levels of monetary union.

As noted above, exchange rate variability within the ERM has been progressively reduced. This reduction has been coincidental with movement out of low growth and high unemployment into a higher pace of intra-EC trade, production and employment. Few people speak of "Eurosclerosis" or "Europessimism" any longer. It is, however, theoretically and empirically difficult to draw a direct link between lower exchange rate variance and higher trade
and growth. Only recently, has any empirical work been able even tentatively to establish any negative impact of exchange rate floating on trade and growth. The jury is still out in this line of academic research.

Theoretically, reduced volatility reduces the uncertainty and risks of engaging in international trade, which, according to the theory of comparative advantage (still accepted as valid albeit with some recently developed conceptual caveats), should improve income and growth and, thus, welfare. Since exchange rate volatility might not be a major deterrent to trade, Thygesen,\textsuperscript{22} for example, suggests that the "contribution that a reduction in the short term variability of exchange rates can make to the creation of trade among the participants [in the EMS] is probably in itself modest."

More important is the avoidance of long term "misalignments" of exchange rates. John Williamson and others have argued that floating, far from establishing equilibrium in the exchange markets, has resulted in rates that diverge for very long periods from the fundamental equilibrium exchange rate. One measure of the latter is purchasing power parity, or the concept that in order to ensure competitiveness on the international market the exchange rate needs to change, at least in the medium- to long run, to reflect the relative rates of inflation between countries. Although it was first thought that floating would insure purchasing power parity, it is now clear with nearly two decades of experience that this has not been the case. One way in which the EMS may have helped is in avoiding misallocations of capital between sectors of the economy when rates are misaligned in this way. The real depreciation of the DM within the system, coincidental with very large German surpluses, has raised concern about the ability of the EMS to deal with such a problem.

The sense is that monetary union can take the perceived gains of the EMS onto a higher plane. The March 1990 working document suggests that there continues to be a high level of
exchange rate uncertainty — more damaging than exchange rate volatility — as evidenced by the exchange risk premia implicit in European interest rate differences. Only monetary union, or "credibly fixed" rates can solve this. In addition, the report makes a case that exchange rate transactions charges can be significant and are inversely related to the size of the transaction. The rates amount to 0.1 percent for very large transactions, but increase to 0.4 percent for 100,000 ECU bank transfers, to 1.5 percent for 10,000 ECU transfers, and to 12 percent for 100 ECUs.\textsuperscript{23} A common currency would eliminate these charges, as well as render price comparisons transparent, and thus reduce the information costs that can lead to price discrimination for the same product in different countries. In addition, the elimination of exchange rate uncertainty on intercountry investment decisions could be of large dynamic import for future EC growth.

The benefits already enjoyed by the development of the EMS applies as well to the reduction in inflation rates and differentials between the members. The theory behind this has to do with a recognition, in Europe and elsewhere, that there is no Phillips-Curve inflation-unemployment trade-off in the long run. There is, consequently, no positive benefit, except perhaps in the short run, provided a shock effect of unanticipated inflation is possible, and if one welcomes ever higher inflation rates.

The improved record of the EMS in the second half of its life was no coincidence: most central bankers now recognize the existence of a capacity level of output that could not be permanently reduced without running accelerating inflation — hence the desire to keep employment at the rather awkwardly termed "non-accelerating rate of inflation" level. Additionally, the system lent credibility to the bankers' proclaimed intention to disinflate.\textsuperscript{24} The perception remains of association, and a case can still be made that unless the EMS moves on to monetary union, the markets might assume that the freedom to change exchange rates will be used, and that the markets "will tend to settle down to a more rapid rate of increase of prices
and wages than if the exchange rate were definitively removed as an instrument.\textsuperscript{25} This presupposes that central bankers are mandated uncompromisingly to pursue price stability and to abstain of their power to increase the money supply in order to achieve temporary employment effects.

\textbf{SINGLE MARKET ADVANCES}

Another reason for the relatively rapid conceptual acceptance of the concept of EMU is the need to allow for the full benefits of the financial innovations inherent in movement to a single market. Increased financial integration coupled with capital liberalization implies not only greater interdependence and facile transmission of monetary disturbances, but promises greater competition as well as increased economies of scale in the financial sector, leading both to lower financing costs and higher returns to savers. Overall financial resources should be better allocated, leading to more and better investments, and hence, to higher growth rates for the Community as a whole.

It is difficult to imagine such an overarching thrust of financial deregulation without questioning the need to maintain separate monetary policies, and, therefore, potential exchange rate flexibility between member currencies. It makes little sense to allow for such a dramatic strengthening of economic integration in the financial sphere through deregulation without also understanding the effects on investment of implicit exchange risk, even in a relatively stable, but nevertheless adjustable, system such as the EMS. At the very least, the need for firms to tie up significant resources in currency management calls into question the benefits of not moving on to true monetary union.

\textbf{The EC and The Optimum Currency Area Argument}

A theory germane to this discussion is what Mundell called "optimum currency areas."\textsuperscript{26} This theory assumes that the adoption of a single currency as a means of payment, or,
alternately, immutably fixed exchange rates, provides great benefits to members through economies of scale and the elimination of exchange rate risk, assisting the growth of international trade and investment. On the cost side, however, fixed exchange rates eliminate domestic policy autonomy and the exchange rate policy instrument, which can be used in an adjustment process. The inability to change exchange rates may place an undue adjustment burden on certain regions by aggravating their unemployment problem.

The theory of optimum currency areas emerged from the realization that political and economic borders do not necessarily coincide and addresses the suitability of an irrevocably fixed exchange rate arrangement (or a single currency) for a particular group of nations for which the benefits of fixed exchange rates exceed their costs.

Although writers on the subject have different views regarding what constitutes an optimum currency area, five points emerge as important: first, for a region to constitute an optimum currency area, it must be "open" — openness of an economy being defined as one in which a large percentage of gross national product is traded, or as an economy with a high ratio of tradables to nontradables in its output mix. The more open the areas toward each other, the more interdependent they are, and the slighter will be the loss of autonomy resulting from monetary integration.

Second, factors must be very mobile within the area, while there might be little factor mobility between the area and the outside. In that case economic imbalances or tensions within the region can be corrected relatively easily through factor movement from areas of high- to areas of low unemployment, tending to equalize factor costs within the region.

Third, others posit a similar economic structure and similar product mix within a region as necessary preconditions for maximizing the benefits of an optimum currency area.

Fourth, moving from the real sector to the monetary sector, the existing degree of
monetary and financial integration in the area is an important aspect in the cost-benefit examination of an optimum currency area.

Last, but certainly not least important for the success of an optimum currency area, is the degree of similarity in economic policy priorities and convergence of economic performance among the countries — especially their ability to agree on major macroeconomic goals, such as price stability, and their level of coordination of fiscal and monetary policies.

Based on these considerations, can one classify the EMS an optimum currency area? While there is no simple answer, recent developments within the Community demonstrate that the European Community has been making great strides in this direction. We have been witnessing increasing levels of intra-EC trade flows; in the first fifteen years, intra-Community trade by the original six members increased ninefold as against a threefold increase in world trade; about 60 percent of member countries' exports constitutes intra-Community trade; the mobility of goods, services and factors of production in conjunction with "Europe 1992" will further increase; as does the July 1, 1990 abolition of barriers to capital movements among the major (and majority of) EC countries; and an unprecedented willingness to coordinate policies around similar macroeconomic preferences, especially lower inflation. This all suggests that the members of the EMS, and especially those belonging to its Exchange Rate Mechanism, are getting closer to constituting an optimal currency area. 27

There is, finally, one other way that stresses inherent in the working of the system may be bringing on greater pressure for monetary union. Very recent developments in the functioning of the EMS lead to the conclusion that the system has lost the DM as its nominal anchor, and with it some of the price stability that has characterized it in the past. This has come to pass along with the unwillingness of France, Italy and Spain to allow for an alteration of their exchange rates with that of West Germany. Since these are higher inflation countries that
generally have higher interest rates, the reduced threat of devaluation within the EMS has meant large inflows of capital into them, as opposed to the outflows from the weaker currencies that characterized the system before. These outflows were previously only partially sterilized by the authorities, meaning a disinflationary bias to the system as a whole. Now most of the inflows are sterilized too, but there is not the same degree of constraint on price increases as before. In Germany, with the Bundesbank unable to revalue the DM, and thus a real depreciation of its currency, exports are in great demand, the balance of trade in surplus (the largest in the world and equal to 4 percent of German GDP), and prices and wages are rising. The system has become more symmetrical in its operation than before.

One conclusion, recently expressed by Patrick Minford, is that the system will have to reset exchange rates, and once again allow for greater flexibility through periodic realignments. An alternative view is that this experience proves that the present EMS is too weak in its present configuration to be able to withstand such pressures, speaking again to the need to move to a much higher level of coordination and unification.

THREATS TO MONETARY UNION

The arguments concerning the benefits of monetary union do not imply that there have not been threats to the rapid adoption of monetary union in the near future. They include the coincidental loss of sovereignty of Member-States, the loss of seigniorage, a loss of control over fiscal policy, regional decline, and real shocks to the system.

Sovereignty Loss

Possibly the greatest level of concern has been over the loss of monetary policy autonomy by the separate states. Our previous discussion suggests, however, that the issue may have become academic, given the constraints implicit within a single market. Monetary policy is already sacrificed in such a setting, as long as fixed exchange rates are considered desirable and
capital is free to move from one country to another. In fact, many of the smaller countries of Western Europe seem already resigned to such a loss in their power independently to control their monetary policies.

Of the larger countries, Germany, after having been at the center of the EMS since its foundation, has become positive on monetary union — provided the necessary anti-inflationary safeguards for the system remain in place. The EMS has worked reasonably well toward satisfying most of Germany’s wishes, in that it has helped foster an anti-inflation mode in Europe; it has certainly kept inflation low in West Germany itself (though probably higher than if it had not been tied to the ERM), and it has kept output growth strong through a strong export sector encouraged by increased competitiveness when other member countries’ devaluations have not matched their domestic inflation rates. On the other hand, it appears as if this asymmetric functioning of the system is now coming to an end; the DM may have lost a good deal of its role as nominal anchor, and inflation is again picking up in Europe.

France has pushed for monetary union all along, and its experience with the EMS has been good since March 1983; it allowed France effectively and credibly to disinflate; monetary union could lower French interest rates further without serious threat to the franc’s exchange rate. In addition, monetary union is one more step toward political union, or a way in which to dissipate the power of a unified Germany throughout an integrated Western Europe.

Italy, similarly, has used the EMS — not entirely successfully, though — to discipline wage and price trends and the government budget. Italy may be characterized as welcoming the tying of one’s hands through a common monetary policy, especially since joining the narrow exchange rate band of the ERM in January 1990, and accepting some constraints on budgetary policy addressed in the Delors Report.

Of all countries, the U.K. was most concerned with the loss of sovereignty necessarily
involved with monetary union. The argument has been made that there are cases in which a loss of short run monetary and exchange rate policy could be a major disadvantage of British incorporation into EMU. Changes in the exchange rate, according to this view, remain useful, even for countries otherwise committed to low inflation rates, in order to restore competitiveness, or to avoid high interest rates when they are inconsistent with domestic priorities. The idea is that EC inflation rates will become a bargaining point, which will introduce an upward bias to those rates from representatives of the weaker currency countries—a strange argument in light of Britain's poor price stability record and the Treasury's influence on monetary policy.

Another scenario, allowing for other countries unwilling or meanwhile unable to accept a monetary union strongly committed to price stability, might be a "Europe at two speeds," if necessary.28

Loss of Seigniorage

"Seigniorage" is the gain in real resources that governments capture by issuing non-interest-bearing base money and spending the proceeds. It is an "inflation tax" because the resources are freed from those who hold money, which loses some of its value as prices rise in response to the overissue.

This is important for the European case since Southern European governments tend to finance more of their expenditures this way than do Northern European countries, probably because of the existence of considerable black markets (which by their very nature are not easily taxable) in the southern countries. Southern European countries, then, give up considerably more than northern European countries by lowering their inflation rates, because they sacrifice the ability to employ seigniorage. They must reduce their government budgets, either by increasing taxes or by reducing government expenditures, neither one of which are politically palatable.
This makes it difficult for the two groups to merge into EMU, and suggests an alternative criterion for an optimum currency area based on the propensity to employ the inflation tax.

Although the conclusions in this line of reasoning are hardly positive for European monetary union, others have responded that "the convergence of inflation rates among EMS countries during the 1980s has already considerably narrowed the discrepancies in the shares of GDP that fiscal authorities command through seigniorage," and that "by 1987 seigniorage revenues generally amounted to less than 1 percent of GDP." Moreover, there is the interesting notion that any seigniorage loss may be more than counterbalanced by the reduction (with greater price convergence), or elimination (with full monetary union), of the risk premium necessary to attract capital to the generally weaker-currency countries. Markets demand interest rate premia to counteract expected inflation which would reduce the real interest return of international lending. The elimination of the premia should not only lead to greater growth rates in the country, through greater and cheaper international investment, but lower government debt service requirements and budget improvement as well.

If, nevertheless, the loss in seigniorage is too large a cost to bear for these countries, this reinforces the arguments of those who will willingly accept a Europe at two speeds, or "geometrie variable."

Loss of Control over Fiscal Policy

A controversial aspect of the discussion of monetary union is to what extent controls are necessary at the center over the individual fiscal policies of countries. The Delors Report called for "binding" rules, rationalizing that the EC has too small a budget itself to have any macroeconomic impact, that one state could excessively command scarce EC savings for itself, and that deficit financing could put undue strain on any common monetary policy.

This position has been strongly criticized, with the suggestion that this part of the report
is "unnecessary and undesirable." There has been general agreement over the desirability of reducing deficit financing, but this has more to do with monetary policy than fiscal policy. Running deficits in an increasingly integrated Europe will be less productive, as the benefits of fiscal expansion would spill over to the other members of the union through increasing imports, while the costs in terms of a deteriorating balance of payments in a fixed rate system could be large; but that does not necessarily make them bad. In fact, deficits could be useful in generating savings to those countries willing to finance them. Interest rates would be lower with free capital movements and, unhindered by exchange risk, the only interest rate differentials that should occur between countries would be based on the credit-worthiness of the states. The monetary union that is Canada demonstrates that provinces may differ widely in their debts and deficits with very little difference in interest rates. It might even be considered an advantage of monetary union that it allows for independent fiscal policies to be more effective in reflecting the wishes of the respective countries and by being able to gather funds internationally to these purposes.

The Commission's Working Paper (1990) seemed to concede many of these points after the rash of discussion ensuing on the Delors Report. While finding some consensus around the need not to allow for monetary financing of deficits, or on the EC's "bailing out" countries with excessive budget deficits, it finds it "difficult to justify" recommending "specific binding rules" on national budgets, as opposed to more "qualitative criteria." There is in the language, some of it very similar to a U.K. Treasury report critical of the Delors Report, a clear softening of tone on the fiscal policy issue.

**Regional Decline**

Another level of cost involved with movement toward EMU, and therefore a potential threat to that development, is the possibility that monetary union will lead to regional decline. The sense of it is that this greater level of integration will further exacerbate the "regional
problem," where the benefits of greater economies tend to favor development in the center areas as opposed to the periphery where the infrastructure may be inadequate. In addition, monetary union eliminates a potential tool that a government of a state containing such a disadvantaged region may use to address the situation. It is for this reason that regional aid is usually connected with discussions of EMU. The proposals, including that contained in the March 1990 Working Paper, are frequently quite frank in pointing to the political, rather than the economic efficiency, objective of regional aid as a method of sharing the benefits of integration more equally throughout the Community.

At this juncture the discussion often turns to the broader question of the value of regional assistance, and whether or not government intervention into market results actually helps or hinders development and growth in these areas, including whether or not such aid could be adequate to the task. These discussions are beyond the scope of this paper, except to note the link with EMU, and the use of this connection for arguing for a significant increase in the regional and structural aid component of the EC budget, much of it to go to Portugal and Ireland.

One interesting theoretical insight regarding EMU and optimal currency areas arises from the perceived need for regional aid: if the EC were truly an optimum currency area there would be no need for such aid, because factor, especially labor, mobility would insure that the negative effects of differential growth would not be felt in high unemployment and low wages in disadvantaged, periphery, areas — or better, that such negative effects would, if they occurred at all, be of a very short-run nature. The laws are in place to assure complete mobility of the factors of production, including labor; however, since "linguistic and cultural barriers" will remain an impediment to the free flow of labor, the EC may be closer to being an optimal currency area than in the past, but has not yet arrived at that point, and so, the argument goes,
needs to consider aid for backward areas.

**Real Shocks**

Much of the concern over the gains from greater coordination of monetary policies deals with the monetary, rather than the real, aspects. Inflation, especially differential inflation rates, are the focus of much of the discussion about the gains from monetary union. Real changes to economies arising from shifts in demand or supply shocks do not figure as much in the examination of monetary and exchange rate policies, but some observers are persuaded that such changes can affect countries differently, and are so large as to require changes in real exchange rates in order to readjust the level of competitiveness of the country or countries affected. If nominal exchange rates cannot change, either through irrevocably fixed rates or a common currency, then price levels must. If, in addition, price levels are inflexible downward, then unemployment and reduction in output will result.

Others argue similarly when considering the impact of the single internal market on conditions within countries. The greater level of competition within the EC will lead necessarily to structural, that is, real changes, which will require changes in real exchange rates to allow some countries to continue to compete within the Community and with the outside world. In this view price changes can occur within economies, but they must affect the entire economy, rather than just the tradable sector, and will be difficult to absorb without negative implications on employment and output. It would be much more efficient to allow for nominal exchange rate changes, at least while the structural changes necessary effectively to forge a single market are taking place. The implication is to slow down the speed toward monetary union.

In a related way Richard Sweeney recently suggested that the positive and negative economic shocks that have occurred and undoubtedly will emerge from the events in Eastern Europe will have similar differential real shocks on EC countries. Germany, in his opinion, is
more exposed to such real shocks than Portugal would be. The differential nature of real changes — changes in demand and supply conditions not really related to monetary emission — will put pressure on countries to change their exchange rates. The strains such tensions will put on a monetary union with fixed exchange rates might be too great to bear, thus, there could a breach in the commitment ending the EMU. This may be a strong case for providing the increased credibility of a common currency. In this case real shocks are used as justification for accelerating the speed toward the completion of a monetary union with a common currency.

As persuasive as these points might be, others have reinforced the notion of the EC becoming more and more like an optimal currency area in the sense that differential shocks of large magnitude are becoming much rarer, at least those that affect countries as a whole rather than industries. As competition produces a more common EC-wide economic structure and product mix, and, as has been occurring, intra-EC trade becomes more and more intra-industry in nature, shocks will tend to be spread much more evenly over the Community. In such a region price levels do not need to adjust so dramatically, exchange rates changes are less needed as a way to adjust a loss of competitiveness at the country level, and the costs of monetary union are much lower.

CONCLUSIONS

During 1989 and 1990, the EC has achieved an unparalleled degree of progress toward monetary union in the EC. The institutional developments were crystallized in the Delors Report, a document that in terms of prior movement in this area, is astonishing for the force with which it has set the agenda for proposing what must be considered the most significant transfer of national sovereignty to the Community yet in the post-war history of Europe. This paper suggests that the conceptual and institutional movement inherent in the Delors Report, leading to an intergovernmental conference on economic and monetary union of December 14, 1990, did
not occur without precedent, but had its roots in the way the European Monetary System has worked, in the need to realize the full potential of the single market, and in tensions that are arising in the further economic development and integration of the Community.

There are, however, several threats to an immediate and general embracing of monetary union, including the noted reduction of sovereignty of Member-States, the loss of seigniorage, a loss of control over fiscal policy, a possible regional decline, and the effect of real shocks to the system. In a broader context, one has to take into account the impact of European EMU on the world monetary system, that is the implications for the dollar and the yen in particular. When the Wall Street Journal recently (December 5, 1990) asked former French finance minister Edouard Balladur, whether the quest for a single European currency furthered or impeded the effort to establish a new international monetary system, his Delphic pronouncement was that "In Europe we have already done what we had to do to protect ourselves from monetary fluctuations. But this is not enough because world trade and world financial balances depend on the relationship among the dollar, the yen and the European currencies."
NOTES


   The divergent country was free to choose the particular adjustment policy or policies.


   A curiosity: even currencies which did not participate in the ERM could be part of the currency basket, influencing other countries' exchange rates.


10. Ibid., p. 19.


15. These questions were addressed in a separate document in which, however, the ideas were "put forward by the members of the Committee in their personal capacity." *Ibid.*


17. This question was debated under the code words of "widening" versus "deepening" of the Community. The former concept referred to an enlargement of the Community, while the latter concerned itself with an even faster and more intensive integration of the Twelve, to include EMU and political integration. The general tendency of the EC-12 is note to consider pending applications by other countries (Austria, possibly Sweden and other countries that might be interest in joining the EC) before the completion of the internal market.

18. The GDR, on the other hand, recorded as foreign trade its economic transactions with the FRG.

19. "German unification gives an impetus to the completion of the single European market." Bangeman (October 1990). Community law applies in principle, with some transitory exceptions, also to the former GDR.


27. One must note overlook the fact that even within countries, that is, geographic areas that formed a political, economic and monetary union — great differences in economic welfare still exist. Italy's Mezzogiorno to this day belongs to the EC's poorest regions (with an unemployment rate exceeding three times that of Northern Italy), as do large areas of Spain, Portugal and Greece. The latest indications from the intergovernmental conference are that the push toward unity and the resultant demand to shrink government deficits, might harm the poorer regions of the EC, thus increasing the divergence and with it the distance to an OCA that would require convergence.
