European Monetary Union

This century, which saw two world wars devastate the nations of Europe, will likely conclude with the willing surrender of an important national prerogative in the name of European unity. On January 1, 1999, eleven nations in Europe plan to begin a process of replacing their national currencies with the Euro. This event is at once both unprecedented and part of a development in Europe that stretches back over a quarter of a century. The adoption of the Euro is unprecedented; never before have so many countries surrendered their national monies for a common currency at a single stroke. In this way, the launching of the Euro means that European countries will be entering uncharted waters. But we have some landmarks that can guide our understanding of the likely consequences of the adoption of the Euro, since European Monetary Union (EMU) is the latest stage in a historical process that began in the wake of the collapse of the Bretton Woods system in the early 1970s. As shown in the box “Movement toward a Common European Currency,” European monetary union has progressed in fits and starts since that time.

Europe in the Bretton Woods System

The initial moves toward European monetary union began during the final days of the Bretton Woods exchange rate system in the early 1970s. In the dollar-centered Bretton Woods system, which began after World War II, currencies of all major industrial countries had a fixed price in terms of the United States dollar and the dollar, in turn, had a fixed price of $35 per ounce of gold. The system also fixed intra-European exchange rates since, for example, the fixed exchange rates of 4.5 French francs per dollar and 2.8 deutsche marks per dollar implied an exchange rate of $35/4.5 = 7.8 French francs per deutsche mark.
The Bretton Woods system came under increasing pressure in the late 1960s and early 1970s as policies pursued by the United States diverged from policies preferred by other countries. The United States faced rising unemployment and an increasing current account deficit at that time. In response, monetary policy in the United States became more expansionary. This was at odds with the policy stance required for the smooth maintenance of the fixed exchange rate arrangement, since authorities in European countries did not wish to follow the United States’ lead toward higher inflation. A fixed exchange rate system requires each member to pursue a common monetary policy.¹

¹ The link between monetary policy and the exchange rate is through the interest parity relationship, which states that the difference in interest rates across two countries must equal the expected rate of depreciation of their bilateral exchange rate in order to avoid unexploited profit opportunities from arising. Therefore, interest rates must be equal across countries in an exchange rate regime where exchange rates are credibly fixed and the expected...
This tension between the internal goals of the country at the center of a fixed exchange rate system, in this case the United States, and the demands of the exchange rate system itself is, as we will see, a common theme in international monetary economics.

In the Bretton Woods system, the tension between the policies of the United States and the desires of other countries led to speculative pressures against the dollar. In an effort to address these pressures while still maintaining fixed exchange rates, a dollar devaluation was negotiated in December 1971. Market pressure against the dollar continued, however, and in March 1973 the Bretton Woods system collapsed.

**Between Bretton Woods and the European Monetary System**

The collapse of the Bretton Woods system freed dollar exchange rates to be determined by market forces. This opened the door for other bilateral exchange rates also to be determined by market forces rather than by government fiat. But market determination of exchange rates raised concerns in Europe. Even before the demise of the Bretton Woods system, plans were being made to limit intra-European exchange rate movements. A committee headed by Pierre Werner, prime minister and finance minister of Luxembourg, began work in 1970 on a report in which it proposed fixed intra-European exchange rates and a federated system of European central banks. This report was adopted by the European Council in March 1971. A common monetary policy was seen as a way to enhance Europe’s role in the world monetary system. Fixed intra-European exchange rates were also thought to be important for promoting trade in goods and services and capital flows within Europe. Finally, exchange rate movements within Europe raised the costs of the agricultural price supports mandated by the European Union’s Common Agricultural Policy, costs that made up a significant share of the European Union’s budget.

The first efforts to fix intra-European exchange rates after the collapse of the Bretton Woods system had limited membership and were short-lived. The “snake-in-the-tunnel” instituted in 1972 attempted to establish bands for European currencies of ±4.5 percent around a central dollar rate. This evolved into the “floating snake” with the advent of generalized floating in March 1973. This exchange rate arrangement placed the full burden of adjustment on weak-currency countries, which had to respond with restrictive policies, rather than mandating a more even distribution across all members. The “snake” also did not provide for adequate financing to weak-currency central banks during times when their currencies were being widely sold. Partially as a consequence of these factors, Great Britain, France, and Italy left the “snake” arrangement early on. By 1979 only Germany, the Netherlands, Denmark, Norway, Sweden, Belgium, and Luxembourg remained members of the European fixed exchange rate system.

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2. Investors face a “one-way bet” against central banks when they perceive an increased likelihood of a devaluation. If the currency does in fact fall in value, then investors who have bet against the central bank by selling the potentially weakening currency will realize capital gains. These investors will not suffer corresponding capital losses, however, if the exchange rate peg is maintained.

3. The European Council consists of the heads of state or government of the members of the European Union. The European Community, the forerunner to the present-day European Union, began with six signatories to the Treaty of Rome in 1957 including Belgium, France, Germany, Italy, Luxembourg, and the Netherlands. In 1972 the European Community expanded with the accession of Ireland, Denmark, and the United Kingdom.

The European Monetary System and Planning for a Single Currency

A more comprehensive effort at an exchange rate system for Europe, the European Monetary System (EMS), began in March 1979 with eight of the nine members of the European Community (all but Great Britain) participating in its Exchange Rate Mechanism (ERM). At that time differences in inflation rates across members of the ERM were as large as 10 percentage points. These inflation differentials made it difficult to maintain stability in the ERM since, with fixed exchange rates, differences in inflation translate directly into changes in relative prices, which shift competitiveness across countries. Eleven realignments occurred in the EMS between 1979 and 1987 in an effort to offset ongoing inflation differentials. But the prospect of realignment leads to destabilizing international capital flows as investors speculate against a potentially weakening currency. To curb these capital flows, EMS member countries erected pervasive controls limiting the ability of private citizens to buy and sell foreign exchange. These capital controls prevented investors from finding the cheapest source of funds and blocked savers from earning higher returns outside their own borders.

Inflation rate differentials narrowed across Europe by the mid 1980s and by 1987 most capital controls were lifted. There were no further exchange rate realignments in the 1980s after 1986. Many observers thought Europe had entered a period of the “new EMS.” The groundwork had been set, so it seemed, for a single European currency. The timing was opportune, since the Single European Act of 1986 called for removing all internal barriers to trade, capital movements, and labor migration within Europe by the end of 1992. The Single European Act was another step in the march toward European economic integration, which began with the Treaty of Rome in 1957. A single currency was viewed by some as crucial in this process. The report issued in 1989 by a committee headed by Jacques Delors, president of the European Commission, stated that “A single market requires a single currency.”

The Delors Committee proposed a three-stage transition to a single currency. The first stage included widening the membership of the Exchange Rate Mechanism (ERM). The second stage involved narrowing exchange rate bands as well as shifting control over some macroeconomic policies from national control to control by a central European authority. The third stage would establish a European System of Central Banks to replace national central banks and replace national currencies with a single European currency. The Maastricht Treaty, signed at the end of 1991, set up a timetable for this process, with Stage 3 starting no later than January 1, 1999.

Within a year, however, the timetable planned at Maastricht was in tatters and the likelihood of a single European currency ever materializing was questionable. In the wake of a June 1992 Danish vote against ratification of the Maastricht treaty, and with growing public skepticism about the desirability of a common currency, speculative attacks roiled European currency markets. Great Britain and Italy dropped out of the ERM in September 1992; Sweden and Finland, which had been shadowing the deutsche mark in hope of eventually joining the EMS, were forced to devalue later that autumn; and, in 1993, France was able to retain its membership in the ERM only through a widening of the bands from ±2.25 percent around the
central parity to ±15 percent. By that time, the prospects for European Monetary Union appeared grim.

The Road Ahead to European Monetary Union

Against the backdrop of these economic events, political support for European Monetary Union (EMU) among the leaders of Europe remained strong. Political support among elites helped keep the prospects for EMU alive by fostering an ongoing effort to meet the requirements of the Maastricht Treaty. (See the box “The Road Ahead to EMU” for these requirements.) This effort led to economic policies that were more restrictive than those consistent with purely domestic economic considerations.

The Maastricht Treaty requires convergence of inflation rates and long-term interest rates among countries joining EMU, as well as exchange rate stability and deficit and debt reduction. Inflation convergence is important because, as seen at the outset of the EMS, fixed exchange rates require common inflation rates to prevent wide shifts in competitiveness. Differences in inflation rates among most prospective members of EMU have narrowed dramatically since the early-EMS period and continue to decrease (Figure 1). Long-term interest rates reflect the market’s forecast of future inflation. Like inflation rates, these interest rates have converged substantially over time (Figure 2). This reflects both policy convergence and greater expectation of a successful transition to monetary union.

The fiscal requirements of the Maastricht Treaty are often seen as less compelling than the other convergence requirements. The case for fiscal requirements for membership in the European Monetary Union is based on the fear of the costs to all members of high debt burdens by any one member. While some potential members of EMU have not met the fiscal requirements, they may still be voted in because of their progress toward meeting those requirements (Figure 3). In particular, both Italy and Belgium have ratios of public debt to national income in excess of the 60 percent limit. Italy has undertaken substantial reforms to reduce its fiscal profligacy.9 It would be politically difficult, therefore, to exclude Italy from

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9 Fiscal reforms in Italy, such as efforts to eliminate fraud and waste, were undertaken, at least in part, to meet the requirements of EMU. See “Italy’s Cleanup of Fraud, Waste Yields Results,” The Wall Street Journal, Monday, March 2, 1998, p. B3A.
participating in EMU without also excluding Belgium, one of the founding members of the EMS and a consistent participant in Europe’s fixed currency systems since the early 1970s. Also, some of the progress various countries have made in meeting the fiscal criteria reflects one-time efforts to improve finances through privatization. Thus, Maastricht “requirements” reflect political realities and not just numerical targets.

At the end of February 1998, when European governments released their official results for 1997, eleven members of the European Union met the fiscal and inflation criteria required for participation in the European Monetary Union at its initial stage.10 These eleven members include Germany, France, Italy, Spain, Netherlands, Belgium, Austria, Finland, Portugal, Ireland, and Luxembourg. All had inflation below the required rate (which is about 2.9 percent for 1997). All also had fiscal deficits of less than 3 percent of GDP, although recent performance on this front across the European Union represents opportune economic conditions, true fiscal consolidation, creative accounting, and privatization in varying measures. Interestingly, the deficit ratios of the three countries that were initially the source of the greatest concern, Italy, Spain, and Portugal, were each lower than the 2.7 percent ratio recorded by Germany. Sweden, the United Kingdom, and Denmark are choosing not to join EMU at this stage. Greece is the only country that desires early membership in EMU but will be precluded from this because of its failure to meet the economic criteria.

An important political reality in the process leading up to European Monetary Union is the strong support it has enjoyed among the leaders of Europe. A similar level of support is not to be found among the citizens of European countries. Negative views of EMU stem from concerns about the political implications of a surrender of national sovereignty as well as concerns about the economic costs of a common currency. This divergence in support between leaders and the general population is striking because many proponents of EMU argue that the most compelling argument for its adoption is political rather than economic. It is hoped that a common currency will bind together the countries of Europe and set the stage for closer integration on other fronts, such as the realms of security and regulation. But the opposite argument is also made; forced into a monetary ar-

\[\text{Figure 3} \]

**Qualifying for the Euro**

- Likely to join at inception
- Fails to meet requirements
- Not joining at inception

<table>
<thead>
<tr>
<th>Fiscal Restraint</th>
<th>Price Stability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Deficit as Percent of Gross Domestic Product</td>
<td>Inflation Rate</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>1</td>
<td>40</td>
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<td>4</td>
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</tr>
<tr>
<td>0</td>
<td>120</td>
</tr>
<tr>
<td>1</td>
<td>140</td>
</tr>
</tbody>
</table>

In the first chart, countries below the horizontal dashed line satisfy the budget criterion; those to the left of the vertical dashed line satisfy the debt criterion; those in gray area meet both requirements.


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The Road Ahead to EMU

March 1998  European Monetary Institute and European Commission issue final convergence reports.

May 1998  Decision by leaders of the European Union on which countries will participate in European Monetary Union at its outset.

“Requirements” of the Maastricht Treaty include the following:
1. Currency must remain within the Exchange Rate Mechanism for at least two years.
2. Budget deficit 3 percent of GDP or less.
3. Government debt 60 percent of GDP or less.
4. Inflation no more than 1.5 percentage points above the average rate of the three members with the lowest inflation.
5. Long-term interest rates no more than 2 percentage points above the average of the three members with the lowest rates.

Bilateral Euro rates announced but not yet enforced.

European Monetary Institute dissolved and European Central Bank (ECB) formally constituted with its Governor and Governing Board announced. ECB, together with national central banks, forms the European System of Central Banks (ESCB).

Consensus

Eleven of the fifteen members of EU will qualify and will want to join EMU at its outset. These include Germany, France, Italy, Spain, Netherlands, Belgium, Austria, Finland, Portugal, Ireland, and Luxembourg.

Denmark, the United Kingdom, and Sweden do not want to join at outset and Greece will not meet the criteria.

Jan. 1, 1999  Stage 3 to begin.

- Currencies irrevocably linked with fixed exchange rates.
- Single monetary policy framed and implemented by ESCB.
- New public debt of member states will be denominated in Euros.
- Financial markets will use Euro and thus introduce it into the international monetary system.

Jan. 1, 2002  Euro notes and coins begin circulating alongside national currencies.

July 1, 2002  Changeover to Euro is completed.


Economic Costs and Benefits of a Common Currency

Economic analysis has been brought to bear on the question of whether EMU represents a political marriage of convenience or an economically sound match made in Brussels (if not heaven). To assess

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the relative economic benefits and costs of a common currency in Europe, another single-currency zone, the United States, has been used as a reference. These comparisons have been used by both proponents and detractors of EMU. Proponents have pointed to the ease with which trade in goods and assets occurs over a common currency zone and to the ensuing economic efficiencies provided by a common currency. Detractors have pointed out that these benefits come at the cost of forgoing monetary policy within individual regions of the currency zone. This cost is mitigated in the United States when labor moves from slumping regions to booming areas and when federal fiscal transfers are made to states in recession. Comparable labor mobility and arrangements for fiscal transfers do not exist in Europe.

Proponents of EMU argue that detractors fail to recognize particular reasons why fixed exchange rates and a common currency are important for Europe. Historical events are cited; flexible exchange rates among European currencies in the 1930s contributed to economic destabilization as countries pursued policies of competitive devaluation. Institutional factors are raised, especially the costs associated with the Common Agricultural Policy mentioned earlier. And the successful establishment of the single European market along with the extensive trade linkages within Europe is given as a reason why a common European currency is needed.

A central part of the discussion of the costs of a common currency in Europe has focused on the limits it will place on national macroeconomic policy. The EMS period provides a telling demonstration of the theoretical maxim that, with a fixed exchange rate, a choice must be made between national determination of monetary policy and the free international movement of capital.13 The government of a country with a fixed exchange rate and open capital markets must stand ready to alter its monetary policy to maintain its exchange rate peg. In the face of market pressure against a currency, a central bank committed to the external goal of a fixed exchange rate must raise domestic interest rates, even if this means forgoing the internal goal of setting interest rates with an eye toward domestic economic conditions. The only way to maintain monetary independence is either to allow the currency to float or to have in place controls on the international movement of capital.14

In the early years of the EMS its members chose independent monetary policy and fixed exchange rates, forgoing international capital mobility. Capital controls insulated the EMS member countries from speculative attacks on their currencies. But international capital movements offer important gains, and as EMS members liberalized capital markets in order to realize these gains, the potential for a destabilizing speculative attack grew. In the “new EMS,” member countries chose the free flow of capital and fixed exchange rates, forgoing independent monetary policy. For several years following the dismantling of capital controls in 1987, this regime survived as monetary policy goals seemed to be consistent across members of the ERM. But the arrangement unraveled when Germany pursued its own anti-inflation goal at a time when unemployment in other countries made easier monetary policy politically desirable. Thus, just

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10 March/April 1998 New England Economic Review

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13 Another option is that all necessary adjustments be undertaken by other members of the fixed exchange rate system, an option obviously not open to more than one member.

14 Sterilized intervention by a central bank, such as the coincident sale of foreign assets and purchase of domestic assets in a manner leaving the overall money stock unchanged, could in theory allow monetary authorities to manage exchange rates with one hand and the domestic money supply with the other. Evidence suggests, however, that in practice sterilized intervention has at best a limited effect on exchange rates, especially if it is not followed by a change in monetary policy. For a review of this topic, see Kathryn M. Dominguez and Jeffrey A. Frankel, Does Foreign Exchange Intervention Work?, Institute for International Economics, Washington, DC, September 1993.
his place in history, the general public and members of other branches of government have voiced concerns. At the time of this writing (early March 1998), the Bundesbank is preparing a report on EMU which will likely evaluate the extent of convergence among prospective members, a report that may be at odds with the reports of the European Commission and the European Monetary Institute which will be published in late March. A Bundesbank report less sanguine than the other studies could fuel German opposition to EMU, opposition most recently voiced by 155 German economics professors who signed a declaration calling for an “orderly postponement” of EMU for “a couple of years.”

Barring such a postponement, the current timetable calls for a meeting of the European Council on May 1, 1998, to decide which countries can participate in the European Monetary Union. The eleven nations mentioned earlier, those that have met the fiscal and inflation requirements for EMU and desire to join in its first round, will probably be approved for membership in EMU. Bilateral exchange rates for the Euro will also be announced at this meeting, although they will not be in effect until the locking of rates on January 1, 1999.

In some ways, a European Monetary Union beginning in January 1999 with 11 members may not differ substantially from its predecessor, the European Monetary System. Like EMU, the EMS constrained the ability of its members to set independent monetary policy. These constraints have been especially noteworthy in the last few years as countries have restricted policy in order to meet the Maastricht criteria. This has contributed to the high unemployment rates across Europe, although monetary policy is only one factor here and structural unemployment is an important component of overall unemployment rates (Figure 4). As under the EMS, a central focus of monetary policy under EMU will be price stability. Under the EMS this was achieved by the centrality of the Bundesbank. More voices at the table could argue for more accommodating monetary policy under EMU but, especially in its early years and perhaps permanently, members of the European System of Central Banks will want to establish credibility as inflation hawks. Thus, we are unlikely to see much of a policy shift toward a systematically easier monetary policy, and EMU is likely to be “more of the same” in this sphere.

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Figure 4

**Structural and Cyclical Unemployment**

<table>
<thead>
<tr>
<th>Country</th>
<th>Cyclical Unemployment Rate</th>
<th>Structural Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>10.9</td>
<td>12.2</td>
</tr>
<tr>
<td>France</td>
<td>11.9</td>
<td>11.9</td>
</tr>
<tr>
<td>Italy</td>
<td>6.2</td>
<td>7.0</td>
</tr>
<tr>
<td>Austria</td>
<td>12.4</td>
<td>7.0</td>
</tr>
<tr>
<td>Belgium</td>
<td>10.8</td>
<td>7.0</td>
</tr>
</tbody>
</table>

Source: OECD Economic Outlook, June 1997.

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**A Single European Currency: A U.S. Perspective**

Discussion in the press sometimes suggests that European Monetary Union may pave the way for a new reserve currency to replace the dollar. The death of the dollar as a reserve currency has been predicted before, most recently during its decline in value in the spring of 1995. As was the case then, these reports are probably greatly exaggerated. It will take some time for the Euro to establish itself and full membership in the European Monetary Union may not be achieved until 2002. Low inflation and the strong growth of the United States economy will help support the dollar’s role as the world’s reserve currency. While this role could be threatened by widening trade deficits in the United States, widespread flight from the dollar to the Euro is unlikely, at least for the next few years.

From the perspective of these shores, the establishment of European Monetary Union is an interesting event. It could help strengthen European economies by making intra-European price comparisons more transparent, lowering transaction costs, and pro-

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moting good economic policies. European Monetary Union also presents some risks for Europe, since it forces a “one-size-fits-all” monetary policy on its members without the safety net of fiscal transfers and labor mobility that we have in the United States. If EMU promotes growth in Europe, then it will be beneficial for the United States since we benefit from a strong Europe. But EMU’s greatest impact on the United States may well result from its political ramifications rather than its economic implications since, in many important ways, the economic consequences of a single European currency do not differ in any radical way from the economic consequences of the European Monetary System.

The key question for Europe is whether the period of the move to a single currency turns out to be more like the stable “new EMS” of the late 1980s and early 1990s or the unstable period of speculative attacks in 1992 and 1993. The economic viability of the Euro depends upon a smooth transition. Success of the Euro may help foster greater economic progress in Europe, although the magnitude of the economic benefits of EMU over and above those realized through its predecessor, the EMS, remains to be seen. On the other hand, it is not implausible that EMU fails, an event which, whatever its economic consequences, could have markedly adverse political implications.