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European Monetary Union: Costs and Benefits

The achievement of closer economic integration, including monetary union, has been one of the long-term goals of the member countries of the European Community (EC). A monetary union is a form of economic integration that involves the establishment of permanently fixed exchange rates between the currencies of member countries or regions. Typically, a monetary union involves the adoption of a common currency as well.

The U.S. is an example of a monetary union, with the dollar serving as the accepted currency unit in all states of the country. Monetary unions need not be political unions, however. In the British Commonwealth, for instance, the British pound was the currency unit of a monetary union that included the United Kingdom, Canada, Australia, New Zealand, and South Africa. Panama has achieved an effective monetary union with the U.S. by permanently fixing the exchange rate between the dollar and its currency, the balboa.

The twelve current members of the European Community (EC) have moved closer to a monetary union since the establishment in 1979 of the European Monetary System (EMS), an arrangement intended to narrow the range of exchange rate variations among member currencies. Currently, there is much debate over the final form of a European monetary union and how rapidly it should be pursued. Some have argued that when remaining internal regulatory barriers to goods and factor mobility have been removed in 1992, Europe will be "just like the U.S." and will be best off if its monetary institutions are patterned after the model of the U.S. Federal Reserve.

In fact, the most prominent plan now, the so-called Delors report, envisions a European monetary union based on a single currency with a single monetary policymaking authority that incorporates national central banks. (See the *Letter* of August 10, 1990.) Such an institutional

arrangement would be similar to the U.S. system, where the overall monetary policy stance is determined collectively by the Federal Reserve Board and the regional Federal Reserve banks.

Whether or not individual countries or regions are better off participating in a monetary union depends on the benefits and costs of permanently fixing exchange rates and surrendering local monetary policy autonomy. This *Letter* discusses how the success of the U.S. as a monetary union depends, at least in part, on particular economic conditions and institutions that are not yet present or well-developed in Europe. It suggests that the costs to individual countries of establishing a European monetary union are greater than the example of the U.S. implies.

Benefits and costs

Forming a monetary union entails both benefits and costs for member countries. Permanently fixing exchange rates creates benefits in the form of reduced uncertainty about exchange rate changes. This encourages the flow of trade and investments among member countries and more efficient allocation of resources within the region as a whole. Adopting a common currency creates further benefits, since the use of a universal medium of exchange and unit of account among countries significantly lowers direct and indirect transaction costs. In this case, a German and a Frenchman involved in a business transaction would not need to concern themselves with whether the money exchanged was denominated in German marks or French francs; such a transaction would be little different from one between a Californian and a New Yorker.

Joining a monetary union also imposes costs on individual members, primarily because they lose national monetary policy independence. If exchange rates are permanently fixed and capital is highly mobile, domestic and foreign assets are virtually perfect substitutes. As a result, national

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currency interest rates are equalized across members of the union (adjusted possibly for differences in risk). Consequently, any independent effort by an individual central bank to reduce its domestic interest rates is negated by an outflow of funds to more attractive assets in other countries. Thus, just as California cannot conduct a monetary policy independent from the rest of the U.S., members of a European monetary union would be unable to conduct independent monetary policies as well.

Value of monetary policy autonomy

The value of monetary policy independence depends on the sacrifices associated with forgoing the use of monetary policy. Monetary policy can be used chiefly as a source of government revenue and as a macroeconomic stabilization tool.

Monetary policy provides a government with a source of revenue when the money supply is increased to pay for goods and services. The resulting inflation acts as a tax, also known as seigniorage. Until the mid-1980s, seigniorage was the source of a significant share of government revenue (at least 5 percent of the total) in Greece, Italy, Portugal, and Spain. In the last several years, however, seigniorage in these countries has fallen with inflation. Indeed, the desire to credibly renounce inflationary monetary policies was one of the main reasons that these countries participate in the EMS. Thus almost all countries in the EC have evidenced willingness to forgo collecting seigniorage by using monetary policy.

For the majority of EC members, an independent monetary policy is more crucial as a macroeconomic stabilization tool. However, in a monetary union European countries will be constrained in their ability to respond individually to macroeconomic disturbances.

The cost of losing monetary policy as a stabilization tool is least when macroeconomic disturbances affect all members of the union at the same time and in the same way. For example, if all EC members simultaneously experience a recession because of a fall in domestic demand, all can expand their money supplies simultaneously, without necessarily experiencing pressures on their bilateral exchange rates or balance of payments. Thus, if shocks affect all members of the union symmetrically, the loss of monetary policy autonomy is irrelevant. In this case the

benefits are likely to exceed the costs of monetary union.

However, if shocks are asymmetric, in the sense that macroeconomic disturbances affect one member of the union much more than the others, then the loss of policy autonomy matters more. For example, if a country is in recession, while others are not, its inability to use monetary policy to stimulate its economy may be costly. In this case, the costs of belonging to the monetary union may exceed the benefits.

One gauge of the symmetry of shocks is provided by movements in the real exchange rate, which measures the price of a basket of goods produced and consumed in one country relative to another. If two countries are affected symmetrically by a disturbance, relative prices and hence the exchange rate between them will be stable. If the disturbance is asymmetrical and affects demand or supply more in one country than another, it should be reflected in a real exchange rate movement.

A comparison with the U.S. indicates that in the 1980s real exchange rates among four U.S. regions (North Central, Northeast, South, and West) were only one-quarter as variable as among the members of the EC. Within Europe, real exchange rate variability was greatest for Portugal, Spain, Italy, Greece, and Ireland. This suggests that asymmetric shocks are more prevalent within Europe than in the U.S. It implies that some European countries, particularly those in the southern tier, may face greater costs in belonging to a monetary union than do regions in the U.S. For these countries the sacrifice of monetary autonomy is likely to be significant.

Factor mobility

To offset the costs of forgone monetary policy autonomy in a monetary union, other adjustment mechanisms are needed. Easy cross-border movement of factors of production provides one such mechanism for adjustment to asymmetric shocks. To the extent that labor and capital can migrate from an area negatively affected by disturbances, adverse income swings can be reduced.

Much progress has been made on eliminating legal and bureaucratic restrictions on the mobility of capital, labor, and goods within Europe. However, factor mobility is now and is likely to

remain much lower than in the U.S. because of Europe's greater social, linguistic, and cultural diversity. In consequence, European factors of production are less likely to move in response to developments requiring economic adjustment. The absence of monetary policy autonomy and the limited degree of factor mobility suggest that a successful European monetary union will require other mechanisms and institutions to offset or cushion the costs of adjustment to economic disturbances.

Fiscal policy

In principal, fiscal policy provides another stabilization tool that can be exercised in response to economic disturbances. The use of discretionary fiscal policy, however, typically involves lags due to legislative and political considerations; therefore, it may be a relatively inflexible instrument when a short-term policy response is warranted. Furthermore, governments are limited in financing more fiscal spending by existing high public debt levels and constraints on seigniorage revenue. Within Europe, this is particularly so for Belgium, Denmark, Ireland, and Italy, all of which currently have relatively high ratios of public debt to GNP.

Fiscal policy may still play a stabilizing role insofar as it automatically redistributes resources among regions. In the U.S., income tax, unemployment insurance, and social welfare provisions act to some extent as automatic mechanisms to transfer resources from rich regions to poor regions, and from the employed to the unemployed. For example, when a state in the U.S. suffers a recession, resources are transferred to it from other states automatically via the federal budget. It is estimated that for every dollar fall in state income, the typical state's tax payments to the federal government decline by 30 cents, while transfers from the federal government, mainly in the form of unemployment insurance, rise by 10 cents. This fiscal federalism mechanism, in effect, relieves the state government

of the need to offset 40 percent of the fall in state income.

Europe, however, lacks such an automatic fiscal mechanism at the Community level. Even if the EC established such mechanisms, another problem to be confronted is the disparate size of the central and regional governments. The EC budget currently amounts to only a couple of percentage points of European GNP and is only one-tenth of the expenditure of the largest member, Germany. By contrast, in the U.S., federal government spending represents some 25 percent of GNP and is 20 times as great as that of California's state expenditure. Hence the mechanisms to redistribute resources from one European country to another do not exist on the same scale as in the U.S.

Conclusions

Whether individual European countries are better off forming a monetary union depends on the costs and benefits of fixing exchange rates and surrendering national monetary policy autonomy. Any lessons from examining the U.S. experience as a monetary union must take into account differences in economic conditions and institutions in Europe and the U.S.

In comparison to the U.S., Europe appears more subject to asymmetric economic disturbances. Moreover, Europe is characterized by a relatively low degree of factor mobility and by a less effective fiscal redistribution mechanism to offset or cushion the costs of adjustment to such disturbances. This suggests that the costs to individual countries of establishing a European monetary union are greater than those implied by the U.S. example. While a successful monetary union in Europe may emerge, these barriers should not be underestimated.

Reuven Glick
Research Officer

Monetary Policy Objectives for 1991

Federal Reserve Chairman Alan Greenspan presented a report to the Congress on the Federal Reserve's monetary policy objectives for 1991 on February 20. The report includes a summary of the Federal Reserve's monetary policy plans along with a review of economic and financial developments in 1990 and the economic outlook in 1991. Single or multiple copies of the report can be obtained upon request from the Public Information Department, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco, CA 94120; phone (415) 974-2246.

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Research Department
Federal Reserve
Bank of
San Francisco

P.O. Box 7702
San Francisco, CA 94120