Why Is Europe Forming A Monetary Union?

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European countries have become more and more integrated in recent decades. Now, Europeans routinely sell goods and services across national boundaries, own stocks and bonds from other countries, and work abroad. But since each country has its own currency, Europeans spend a lot of time and resources trading one currency for another.

To make their financial lives easier, 11 European countries are joining together to form the

European Monetary Union (EMU), which will have only one currency, the euro. A common currency will not only save these countries time and money, but it will also increase trade within Europe as well as make it easier for citizens of one country to buy stocks and bonds in another.

However, monetary union also has costs. European countries can now adjust their exchange-rate and monetary policies in response

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¹The EMU will be formed on January 1, 1999. Initial members will be Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain. For a discussion of the criteria for membership, see the article by Joseph Whitt.

to severe domestic economic problems. Although the introduction of a single currency will simplify trade between European countries, each country will give up the ability to use monetary policy to influence its economy. No individual country's central bank will be able to set interest rates. And no country in the EMU will be able to adjust its exchange rate vis à vis the others.

How large a sacrifice will it be to give up independent monetary and exchange-rate policies? The answer depends on the types of macroeconomic "shocks" that hit the economy and how well other adjustment mechanisms compensate for the lack of exchange-rate flexibility. In particular, it will depend on the degree to which prices and wages adjust to accommodate those shocks, the degree to which labor can move across borders, and the extent to which fiscal policy can be used to control the economy.

BENEFITS OF A SINGLE CURRENCY

The move to a single currency has many potential benefits. As noted above, reducing the costs of trading one currency for another is the most important. A single currency also helps nations in a number of other ways, such as reducing uncertainty about future exchange rates and preventing countries from devaluing their currencies to promote exports.

Reducing Costs of Exchange. When an importer pays for goods, domestic currency must be exchanged for foreign currency at a bank. The bank will demand a service charge for this transaction. For firms that import many supplies or that export to many countries, such transaction costs may be sizable and will partly be passed on to consumers through higher prices. These transaction costs are estimated to be roughly 0.4 percent of the gross domestic product of potential members of the European Monetary Union.²

Reducing Exchange-Rate Uncertainty. Although many countries now operate with a flexible exchange-rate system, the countries preparing for monetary union have already limited how much their currencies move with respect to each other. Each country stabilizes the exchange rates between its currency and the other 10, and the exchange rates of all move jointly relative to other currencies in the world. Policymakers can make large adjustments in the rate at which one European currency is exchanged for another only when economic circumstances in one country change a great deal relative to circumstances in the others.

Though large adjustments are infrequent, the current system allows a fair amount of day-today volatility in exchange rates. The resulting uncertainty about the future value of a currency poses a risk for importers and exporters. Imagine a French manufacturer contracting to export a certain amount of equipment to Italy six months from now. A price will be agreed upon today, payable in six months in French francs. If the cost of French francs in terms of lira rises during that period, the Italian importer will find herself paying more for the equipment than she had originally intended. Exchange-rate risk is, of course, associated only with international trade, so the Italian importer may prefer a local producer even if the French producer is currently less expensive. Although an importer or exporter can hedge against possible changes in the exchange rate by using forward or futures contracts, this activity is costly.

Thus, exchange-rate risk reduces trade by imposing a hidden cost on the transaction. A single currency eliminates all exchange-rate risk between the countries in the EMU and therefore increases trade and the benefits associated with it. These benefits include a greater variety of products and lower prices due to competition and economies of scale from producing for a larger market. In fact, many economists believe that one of the greatest benefits of a single currency comes from its favorable

²See the article by the European Commission.

effect on trade from increased competition.

Preventing Competitive Devaluations. Between world wars I and II, European countries engaged in what are known as competitive devaluations: one country would devalue its currency to boost its export sector, and its trading partners would retaliate by devaluing their currencies as well. Reducing the value of currency is inflationary, so competitive devaluations caused an inflationary spiral during that period. Although the current European exchangerate arrangement is designed to limit the threat of competitive devaluations, such devaluations remain possible so long as there are multiple currencies whose exchange rates are set by policymakers, rather than determined by the market as in a floating exchange-rate system.

As trade between European countries has increased, the costs to one's trading partners from using a competitive devaluation have increased but so have the potential gains to any one country. However, the effect of competitive devaluations on the world's economic welfare is clearly negative, and it can be disastrous if retaliation leads to a devaluation spiral. A single currency eliminates the threat of this type of competition.

Preventing Speculative Attacks. Because it allows large, though infrequent, exchange-rate adjustments, the current European exchange-rate mechanism is vulnerable to speculative attacks: if speculators believe the value of a currency will be reduced (devalued relative to other European currencies), they will sell their holdings. If enough speculators believe this, confidence in the value of the currency may collapse and may force the government to devalue even if that had never been its intent.

Although a government can try to thwart speculators by raising interest rates and thereby the return to holding money-market instruments denominated in that currency, there's a downside to doing so: higher interest rates mean that business firms face higher borrowing costs, so they'll do less borrowing and in-

vesting in new plant and equipment, which, in turn, will lead to slower economic growth.

The exchange-rate crisis of 1992 illustrates the effect of speculative attacks on the economy. Europe at that time had been in a deep recession for two full years; the average European unemployment rate was approximately 10 percent. Short-term political pressures in the countries most badly hit by the recession argued for a low-interest-rate policy to stimulate investment and bring about recovery. But such a policy would be inconsistent with maintaining stable exchange rates unless the policy were pursued across all of Europe. If only one country were to lower its interest rates, financial capital would move out of that country to ones that still had high rates (so long as capital is free to move, as in Europe). This movement of capital would put pressure on exchange rates.

However, although this recession affected all of Europe, there was no unanimity as to the appropriate interest-rate policy to pursue. The German government and central bank felt that they had already excessively stimulated the German economy in an attempt to help the former East Germany catch up with the West. Those policies, they believed, were already putting inflationary pressure on the economy.3 To offset those inflationary pressures, Germany was pursuing a high interest-rate policy. Because of Germany's relative size and economic importance in Europe, the other European countries were forced to raise their rates as well if they wanted to maintain stable exchange rates. All committed to doing so, but this commitment was not credible in the eyes of currency speculators. Speculators began to bet that at least three countries—the U.K., France, and Italy—would succumb to domestic political pressures and deviate from Germany's interest rate policy.

In September 1992 speculators began to bor-

³See the report by the Bundesbank.

row British pounds, French francs, and Italian lira and to convert the proceeds into German marks and U.S. dollars because they expected the price of pounds, francs, and lira to fall after the governments abandoned their commitment to keep interest rates as high as necessary to maintain a stable exchange rate. As more and more speculators sold these currencies, their value in terms of German marks continued to fall. In an attempt to attract buyers to their currencies, the British, French, and Italian governments offered very high rates of return on shortterm instruments denominated in their home currencies. A side-effect of this policy was a deepened recession in those countries, which made adherence to fixed exchange rates increasingly unpopular. That unpopularity, in turn, increased speculation that the policy of fixed exchange rates would not be sustainable. Of the three, only France was able to successfully ward off the speculative attack. Both Britain and Italy abandoned their fixed exchange rates as a result of the speculative pressures.

Although France "survived" the speculative attack on its exchange rate, survival was costly in the sense that the high interest rates and increased uncertainty prolonged high unemployment and low growth in that country. Britain and Italy recovered from the recession more quickly because lower interest rates and depreciation of their currencies stimulated domestic spending and exports. But there were costs to Britain and Italy as well; however, these costs came later, when inflation rose as a result of the devaluations.

Since much of the speculative activity within Europe has occurred when speculators have bet that one European currency would be devalued relative to another, moving to a single currency would eliminate such activity. And since investors will not have to be compensated for uncertainty about exchange rates, interest rates will fall, thereby stimulating investment and growth within the EMU. Although interest rates will fall more in those countries that are now

subject to the most speculation, many economists think that all countries will benefit from lower rates as the world economic environment becomes less risky.

COSTS OF A SINGLE CURRENCY

The benefits of switching to a single currency don't come without costs. Probably the biggest cost is that each country cedes its right to set monetary policy to respond to domestic economic problems. In addition, exchange rates between countries can no longer adjust in response to regional problems.

As a practical matter, the costs associated with giving up the possibility of independent monetary policy may be small for most European countries. As part of their effort to stimulate trade and investment, potential EMU members have eliminated all barriers to international capital flows, which has created a very competitive multi-country financial market. Consequently, there is little or no difference in the cost of borrowing (the interest rate) in the different countries so long as exchange rates between European currencies are kept fairly stable. This European interest rate is determined by the large European countries, implying that small countries in the European Union do not have the ability to lower interest rates during recessions unless they are willing to see their currencies devalued. In other words, European financial and exchange-rate treaties have left small member countries effectively without the ability to conduct independent monetary policy. But all member countries will have representation in monetary policy decisions after monetary union. The EMU will give small countries some influence in determining the European interest rate even as it formally eliminates the possibility of using independent monetary policy and exchange-rate adjustments.

The EMU member countries have also agreed to limit the use of fiscal policies. Consequently, when one or several countries within

the currency union, but not all, face recession or an overheated economy, adjustment must occur largely through changes in wages and prices or through the movement of workers from one country to another.

Monetary Policy. The biggest change in moving to a single currency is that each country will relinquish control over monetary policy to the new European central bank that will issue the single currency for all the countries in the union. But what happens if a recession hits just one country? Currently, its central bank may respond to the recession by increasing the money supply, thereby pushing interest rates downward and stimulating investment and economic recovery. The central bank for the European Monetary Union will be unlikely to use expansionary monetary policy to help one country, since doing so would cause inflation in those EMU countries not in recession.

To illustrate the consequences of having a single currency when there are disparate regional interests, let's consider a scenario in which Europe already had a single currency in 1992.

A single European currency in 1992. What would have happened had there been a single European currency at the time of German reunification and the 1990-92 recession if a European central bank had raised interest rates as the German central bank did? Consider first the implications for Britain and Italy: Britain and Italy devalued their currencies and lowered interest rates to stimulate exports and investment, allowing them to recover more quickly from recession but at the eventual cost of inflation. If they had been members of a currency union following Germany's interest-rate policy, they would not have been able to devalue, nor would they have been able to lower interest rates to stimulate investment for a quicker recovery. Thus, Germany would have combated its inflation through the high-interest-rate policy of the currency union, but Britain and Italy would have had prolonged recessions.

In lieu of reducing interest rates and devaluing their currencies, Britain and Italy might have used fiscal policy to stimulate their economies. Both nations could have cut taxes or increased public investment to stimulate aggregate demand during the recession, but such actions would have increased budget deficits and required additional government borrowing. Large and persistent government borrowing by one or more countries could impose costs on all countries in the monetary union by putting upward pressure on interest rates or by forcing the European central bank to increase the money supply to avoid higher interest rates, thus risking higher inflation. Therefore, European governments have agreed that none of the countries participating in the EMU will allow its yearly budget deficit to exceed 3 percent of its GDP. Moreover, participating countries have agreed that any country whose budget deficit exceeds that cap will pay substantial penalties to the others. These agreements prevent countries from issuing excessive amounts of government debt over the long run, but they also seem likely to restrict each country's ability to use stimulative fiscal policy during recessions.

These agreements do not, however, prevent using a federal fiscal policy to address regional imbalances in the currency union: those regions that are overheating could be taxed more heavily and the proceeds spent in the areas in recession. In the example above, policymakers in 1992 might have cooled inflationary pressures in the western part of Germany by raising taxes there and might have stimulated recovery in Britain, Italy, and France by spending the extra tax revenue on public investment in those countries. Currently, the federal budget for the European Union is not used as a tool to address recessions or overheating, either in particular countries or in Europe as a whole.

Of course, if economic adjustment from recessions happens quickly, there is very little cost associated with giving up interest- or exchangerate policy and no need for federal redistribution. The speed of recovery depends greatly on the flexibility of the European labor market. If workers are highly mobile, British and Italian workers who are unemployed or earning low wages during the recession will quickly relocate to Germany or other countries that have a high demand for labor. This type of flexibility has an equalizing effect across the monetary union and makes for greater symmetry in policy objectives. In Europe, however, cultural and linguistic differences hinder labor movements across countries, so this particular type of labor-market flexibility is not promising in the near future.

A second form of labor market flexibility occurs through wage adjustments. If, in a recession, workers are willing to accept lower wages, employers will not only be able to maintain the same number of employees but also to pass on the reduction in payroll costs in the form of lower prices. Lower prices, in turn, spur exports and lead domestic consumers to buy fewer imports and more locally made goods. That increase in demand spurs economic recovery. In practice, however, although wages seem to go up during booms, they do not fall so readily during recessions.

Thus, given that budget deficits in Italy and Britain in 1992 were already at or above 3 percent of GDP and that European labor markets are fairly inflexible, recovery in those two countries would have been much slower had they been members of a monetary union that followed Germany's high-interest-rate policy. France, however, might have experienced a quicker recovery under monetary union because French policymakers, determined to prevent devaluation of the franc and the resulting inflation, responded to the speculative attack by raising interest rates even more than Germany had. Thus, monetary union would have imposed no additional burden on the French economy, and moreover, it would not have suffered the destabilizing consequences of foreignexchange speculation. Thus, it is important to understand not only how regions differ in terms of their position in the business cycle but also cultural preferences and differences in policymakers' goals.

The 1990-91 recession: The U.S. experience. The United States also suffered a recession during the 1990-91 period. Although the recession was less severe in the United States than in Europe, the United States experienced regional differences in the severity and length of the downturn. The recession came as federal military expenditures were being cut back, and regions such as southern California, which had a heavy concentration of defense contractors and military bases, were particularly hard hit. Consequently, unemployment in California was higher than in the rest of the country; by 1993, U.S. unemployment was only 6.5 percent while in California unemployment stood at 8.6 percent.

The federal tax and transfer system aided unemployed Californians through unemployment benefits. The federal government also aided the region by subsidizing conversion of military bases to commercial use, the revenues for which came from more prosperous regions of the country. Labor-market flexibility also contributed to eventual recovery as workers migrated from California to neighboring states. Although direct evidence of worker migration is hard to come by, one careful study indicates that there was a net immigration of about 200,000 people from other states to California from mid-1989 to mid-1990 (just before the recession began) and a net out-migration of more than 250,000 people from mid-1993 to mid-1994.4 That out-migration was just under 1 percent of California's population. The outflow of the labor force, of course, put competitive downward pressure on wages in neighboring states, another painful part of the adjustment process.5

The relatively deep California recession also

⁴See the study by Hans Johnson and Richard Lovelady.

hurt neighboring states by reducing their firms' sales to Californians, which resulted in further job losses, most especially in Arizona, Nevada, and Hawaii. Thus, the flexibility of the labor market helped bring about recovery in California, but at the expense of exporting recession and unemployment to the rest of the region. In this particular example, fiscal transfers, sustained demand for the non-military goods sold to other states, and the availability of jobs in neighboring states lessened California's pain. However, in spite of these means of adjustment, which are necessary in a monetary union such as the United States, the relatively high unemployment that remained in California in 1993 demonstrated that the adjustment process in the United States is still a difficult one despite the country's relatively high labor-market flexibility and large fiscal budget.

REDUCING THE COSTS AND PRESERVING THE BENEFITS

The examples above show that the keys to a currency union's ability to adjust to economic shocks are the degree to which wages and prices are flexible and the ease with which labor moves across borders. So how is Europe likely to fare?

European Labor Markets Are Inflexible. Although labor-market flexibility can substitute for a policy response, labor-market flexibility in Europe is clearly much lower than that in the United States. Compared with their U.S. counterparts, European workers are much more willing to remain unemployed rather than accept lower wages. They are also much less willing to move out of regions with high unemployment rates. This situation is only partly due to the language and cultural barriers that hinder cross-country movements; European workers

are also less likely to move within their own countries in response to labor-market pressures. This reluctance may reflect the relatively high unemployment compensation in Europe.⁷

European governments recognize the need for greater labor-market flexibility, but attempts at labor-market reform are controversial. There has been some progress, however. For example, workers are now free to move across national borders, and this movement can reduce the cost of regional shocks. But it seems unlikely that European labor markets will be able to meet the demands for flexibility in the short run, following formation of the EMU.

The costs associated with losing independent monetary and exchange-rate policy might be small if there were either little evidence of regional asymmetry or great evidence of labormarket flexibility. In the European case, the opposite is true. In a well-known paper, Tamim Bayoumi and Barry Eichengreen find not only that shocks are more symmetric across regions in the United States but that labor markets in the U.S. regions stabilize much more quickly than labor markets in European countries. These findings seem to suggest that Europe will not form as successful a monetary union as that in the United States, since regional losses may be greater in Europe than the U.S. experience would suggest, but that conclusion might be premature.

Examination of labor-market flexibility compares the abilities of the United States and Europe to adjust to economic shocks. But comparing the shocks, as Bayoumi and Eichengreen do in their paper, may not be appropriate because it involves comparing asymmetries within an existing monetary union to those in a potential one. After inauguration of the EMU, sources of asymmetry will be reduced. For example, the EMU will eliminate asymmetries in setting monetary policy. Furthermore, countries

⁵See the article by Brian Cromwell.

⁶See, for example, the article by Tamim Bayoumi and Barry Eichengreen.

⁷See the article by Jose Vinals and Juan Francisco Jimeno.

that run fiscal deficits out of line with the European norm will be fined. In addition, the U.S. federal income tax and welfare systems redistribute income from expanding to contracting regions; this leveling effect may make U.S. regions appear more symmetric in their cyclical movements than their European counterparts. As similar tax and welfare policies take hold within the European Union, redistributive policies may create more symmetry across regions there as well.⁸

Although a single currency should lessen fiscal and monetary sources of asymmetry, there are, at the same time, reasons to suspect that adoption of a single currency may increase asymmetry within the EMU. By reducing transaction costs, adopting a single currency may increase trade. Trade tends to encourage regional specialization in the production of goods. If regions specialize in the types of goods they produce, shocks to demand or to the production of any particular good will affect regions differently. If monetary union does increase trade, regions within the common-currency area may become less alike than they are now. Ambiguity about the effect of monetary union on the structure of the economy makes evaluation of the potential costs and benefits of the EMU highly speculative.9

Could Fiscal Policy Help? Faced with asymmetric shocks, members of the EMU may have to rely more heavily on fiscal policy to compensate for the lack of independence in setting monetary policy. The current trend in Europe, however, leans toward the reduction of national budgets. As indicated earlier, taxation and redistribution across EMU countries may be a

⁸See the article by Barry Eichengreen for a discussion of the anticipated role of tax and welfare policies across EMU member countries.

⁹See the article by Maurice Obstfeld for a description of the mechanics behind conversion to the single currency. promising approach. But the European Union's budget is currently much too small for such a task; however, it may increase to meet the demands of post-monetary-union Europe in the next century.

How Do Countries in Europe Compare with Each Other? At one time economists referred to Europe as consisting of a "core" and a "periphery," with the core represented by the U.K., France, Germany, and perhaps Austria, and the periphery by the Mediterranean countries. Relatively large budget deficits and high inflation rates distinguished "peripheral" countries, as did the fact that their business cycles were rarely in sync with those in "core" countries.

This breakdown is no longer as clear as it once was, however. Budget deficits in Germany and France have grown over the past eight or nine years, while those in the once-peripheral countries have fallen, as have their interest and inflation rates. German re-unification represented a large asymmetric shock, relative to the rest of Europe, from which Germany is still recovering.10 Nonetheless, Europe as a whole has undergone a period of dramatic convergence in interest and inflation rates and government budget deficits since the ratification of the Maastricht Treaty on monetary union in 1993. This convergence may indicate increasing symmetry and harmony in policy objectives as the January 1, 1999, date for monetary union approaches.

SUMMARY

There are both costs and benefits associated with forming any monetary union. The benefits of monetary union stem from reducing transaction costs and eliminating exchange-rate uncertainty. Falling transaction costs mean fewer barriers to trade, which should increase com-

¹⁰See the article by Hans Werner-Sinn, which treats German re-unification as an asymmetric shock within Europe.

petition and reduce prices. Eliminating exchange-rate uncertainty will spur still more trade; it may also lower interest rates, therefore making it cheaper to borrow to finance new investment. In the European case, the benefits may be greater still because if each country has its own currency, speculative pressures heighten the risk of costly exchange-rate movements.

The costs depend on the extent to which member countries would prefer to use independent exchange-rate and monetary policies, on the asymmetry of shocks to their economies, and on how willing unemployed workers are to move or accept wage cuts. Compared to the United States, EMU countries are more likely to experience regional shocks, and these shocks

are less likely to meet with speedy labor-market adjustment.

Whatever the costs of EMU, mechanisms other than domestic monetary or exchange-rate policy will have to bear the burden of economic adjustment after adoption of the single currency. Barriers to movements of labor have been removed, which encourages that adjustment process. Further labor-market reforms may be necessary to increase labor markets' speed of adjustment. In addition, member countries may find it necessary to institute international tax and redistribution policies through growth of the European Union's budget to allow for regional differences in policy stimulus or restraint.

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