

European Monetary Unification: The Challenges Ahead ¹

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I. Introduction

The transition to European Monetary Union (EMU) is rapidly approaching a critical juncture. Since 1990, with the commencement of Stage I of the three-step transition embodied in the Maastricht Treaty on European Union, Europe has been attempting to navigate a glide path to a single currency. Since August of 1993 it has been doing so without the "runway lights" and ability to fly under financial-market storm clouds afforded by the narrow (2 1/4 per cent) bands of the old European Monetary System. As 1995 unfolds, the treaty's putative deadlines for deciding whether to go ahead with monetary union, December 31st, 1996 and December 31st, 1997, loom as increasingly pressing realities.²

The pressure of time has not caught the politicians and markets unaware. The markets are scrutinizing the EU's commitment to meeting the Maastricht Treaty schedule and testing the readiness to participate of various European countries. This is evident in their recent treatment of the Italian lira, Spanish peseta, British pound, French franc, and Belgian franc, the outlooks

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² By December 31st, 1996 the EU Council must decide if a majority of EU countries meets the conditions required for adopting a single currency and if it is appropriate to commence with Stage III. If so, it sets the starting date. If it has not done so by the end of 1997, Stage III begins automatically on January 1st, 1999.

for all of which are clouded by political uncertainty and -- most prominently in the cases of Italy, Spain and Belgium -- by domestic economic problems of unemployment or debt. Meanwhile, politicians and officials in several large European countries, the U.K. and Germany most prominently, are increasingly vociferous about their doubts regarding moving ahead with monetary union.

At one level, these concerns revolve around the most basic of questions: whether the benefits of monetary unification justify the risks. German officials have renewed their concern about the commitment to Bundesbank-style policies of a European central bank whose decisions are reached by an Executive Board of six members appointed by the "common accord" of the heads of state or government of EU member states and by a Governing Council which will include also the governors of the participating national central banks. Others, like Eddie George of the Bank of England, have suggested that a single monetary policy and the associated constraints on fiscal policy will have a differential impact on Europe's high- and low-unemployment regions; given the likelihood that states whose unemployment problems are exacerbated will lobby the ECB to pursue inflationary policies, this provides an argument for deferring the inauguration of monetary union until some future date when unemployment rates and other indicators of real economic conditions have converged across countries. In practice this may mean deferring it indefinitely.

Even for politicians and officials who are committed to monetary union, recent developments such as post-1991 turbulence in European foreign exchange markets, political disarray in countries like Italy and Spain, and growing concern over imbalances and turbulence in the international financial system give rise to practical problems that must be addressed if the transition is to

be navigated. One is how to cope with "variable geometry." If Stage III is allowed to commence by the end of this century, not all EU member states will be regarded as ready to participate upon its inauguration. The variant of variable geometry in which not all countries that participate in the Single Market also belong the monetary union would appear to be an inevitability. The question this raises is whether the Maastricht Treaty makes adequate provision for governing relations between the monetary insiders and outsiders and for bringing the laggards on board.

Another practical problem is monetary relations between EMU countries and the rest of the world. The events of early 1995, when the U.S. dollar declined precipitously against the deutschmark, drove home to other European countries the dangers that will arise from locking their exchange rates against the DM but allowing their common rate against the dollar to be determined by the whims of the market. Aside from specifying that decisions over reform of the global exchange-rate system remain the province of Council of Ministers and not the European Central Bank, the Maastricht Treaty is silent on this critical question.

The agreement at Maastricht was that monetary matters would not be reopened at the 1996 Intergovernmental Conference (IGC). It is increasingly clear, however, that these problems will have to be met head on, if not at the IGC then in a separate venue.

This paper reviews these problems and offers suggestions for how they might be resolved. Sections II and III lay the groundwork by discussing the political economy of monetary union. Section II reviews what we know about the costs and benefits for the interest groups concerned. Section III argues that it is not by the cost-benefit calculus of monetary economics that the

viability of the monetary union project will be determined, however; rather, it is the symbiosis between the Single Market and EMU that is likely to drag the latter, kicking and screaming, into life. The single most important hurdle that must be surmounted in the course of completing the process remains German resistance to EMU, as we discuss in Section IV.

Sections V and VI then turn to problems that must be addressed to reassure skeptics of the viability of the monetary union project: how to reconcile EMU with variable geometry, and structuring the EU's monetary relations with the rest of the world. Section VII summarizes the implications for the 1996 IGC.

II. The Implications of Optimum Currency Area Theory for EMU

The economics of European monetary unification have held the attention of academics ever since exchange rates were declared to be a matter of "common concern" in the Treaty of Rome.³ At the center of the debate has been Robert Mundell's (1961) seminal article on the theory of optimum currency areas.⁴ Mundell argued that the decision to establish (or, for that matter, dissolve) a currency area -- a monetary union within which a single currency circulates -- should hinge on two variables: the efficiency gains from the abolition of separate national currencies, and the output losses from the imposition of additional constraints on stabilization policy. Forming a monetary union between several jurisdictions in which separate currencies previously circulated increases efficiency by eliminating the costs of foreign exchange transactions and the uncertainties of incompletely forecastable

³ See for example James Ingram (1959).

⁴ In addition, see Ronald McKinnon (1964) and Peter Kenen (1969).

exchange rate fluctuations. But it also prevents the constituent governments from using monetary policy to offset idiosyncratic national shocks. Whether the efficiency gains dominate the costs of the additional constraints determines the advisability of monetary unification. While theorists have spilled much ink over refinements, Mundell's insight remains at the center of the optimum-currency-area debate.

This consensus over the theoretical issues is not matched, however, by agreement on their empirical importance. Indeed, it is hard to think of another area in empirical macroeconomics where there is such pervasive disagreement about empirical magnitudes. While some authors emphasize the very large efficiency gains that will follow from the abolition of separate national currencies, others dismiss as unimportant the reduction in transactions costs and uncertainty. Some minimize the need for national monetary policy autonomy to address asymmetric macroeconomic shocks, while others stress the critical importance of money's stabilization role. As a matter of policy, as opposed to theory, there is little consensus on the desirability of monetary unification.

The reasons for this disagreement are not hard to find. Money remains perhaps the most difficult macroeconomic variable for economists to model and analyze. Standard approaches to modeling money as a medium of exchange, which place it in the utility functions of households and production functions of firms or assume a cash-in-advance constraint imposing a rigid relationship between the money stock and the volume of merchandise transactions, are ad hoc and unrealistic.⁵ Recent theoretical treatments, like Kiyotaki and Wright's

⁵ The approach which places money in the utility function (Sidrauski 1967, Brock 1975) simply assumes that money is useful without modeling its economic functions. The cash-in-advance approach focuses on money as a means of

(1989) model in which money throws off network externalities (that is, the convenience of using it depends on how many other consumers and producers do the same), lack an empirical basis on which they can be realistically calibrated. Absent a consensus on the structure of the relevant transactions costs, it remains essentially impossible to develop a plausible estimate of the benefits of eliminating them.⁶

Much the same can be said of the gains from reducing exchange rate uncertainty. The econometrician does not observe uncertainty; to estimate its effects she must make assumptions about its structure. Any estimate of the effects of exchange rate uncertainty on trade or investment is contingent on the validity of those assumptions. While most economists intuitively believe that exchange rate uncertainty discourages international trade, especially over the longer horizons at which there do not exist forward markets on which to hedge exchange risk, attempts to estimate the effect founder on the questionable nature of any empirical measure of the relevant risk. Add to this endogeneity (that trade affects the exchange rate as well as the other way around) and heterogeneity (that different kinds of trade are likely to display different degrees of sensitivity to exchange rate uncertainty), and it is evident why econometricians have been unable to isolate the effect.⁷

transacting rather than a unit of account or a store of value and typically neglects the role of substitutes for cash and the ability of agents to economize on their use of currency.

⁶ This has not prevented official bodies like European Commission (1990) from attempting to do so. The tendency for economists to dismiss their estimates out of hand is indicative of the problems described in the text.

⁷ The same is true of studies of the connections between exchange rate instability and investment (viz. Kenen 1979, Goldberg 1993). For example, Goldberg's disaggregated analysis uncovers important differences across sectors in the effects of exchange rate uncertainty on investment.

Worse still, quantifying the gains from eliminating exchange rate uncertainty requires not just identifying the link between uncertainty and trade but also the impact of trade on welfare or real GDP. Most economists believe that trade affect growth positively; the experience of the East Asian tigers is a particularly influential example of this nexus.⁸ But it is unclear whether eliminating the effects of exchange rate uncertainty are of the same order of magnitude as those of eliminating tariff and nontariff barriers to trade, as in East Asian in the 1960s. Evidence from East Asia may not carry over to European countries contemplating monetary unification, in other words. Economists simply know too little about the connections between trade and growth to come up with a convincing bottom line.

Similar problems prevail on the stabilization side of the optimum-currency-area equation. Because monetary union involves abolishing the exchange rate between the domestic currency and those of one's monetary partners, it prevents the governments involved from pursuing autonomous national monetary policies. It is no more possible for Luxembourg, which participates in a currency union with Belgium, to pursue a different monetary policy from its partner than it is for the Federal Reserve Bank of San Francisco to alter money market rates in California relative to those elsewhere in the United States. But this observation does not address the fundamental question of whether this loss of autonomy has costs. Some macroeconomists believe that monetary policy is ineffectual for countering recessions; in their view, workers quickly learn to anticipate the inflationary effects of monetary expansions, raising their wage demands in proportion to the percentage change in the money supply and neutralizing any

⁸ See World Bank (1993).

stimulative effects.⁹ If activist monetary policy only increases inflation, then there is no cost of giving it up. Other business cycle specialists reject the assumptions of perfect foresight and perfect wage and price flexibility that underlie models of monetary neutrality; in their view, discretionary monetary policy can be effective in raising output or reducing unemployment.¹⁰ The evidence on these two views is far from definitive. And they have fundamentally different implications for the efficacy of discretionary monetary policy.

Even if an independent national monetary policy can be effective for stabilization purposes, it will be unnecessary if there exist alternative adjustment mechanisms or if the incidence of macroeconomic disturbances is symmetrical across countries. If real wages adjust smoothly, falling in response to a rise in unemployment, the decline in domestic relative unit labor costs can price domestic goods back into international markets in response to a negative disturbance. The change in labor costs can effect a change in the real exchange rate, in other words, without requiring nominal exchange rate adjustment. Similarly, if labor flows freely from depressed to booming regions, it is possible to restore equilibrium in their economic relations without requiring a change in the exchange rate and relative monetary conditions. Finally, if two countries with similar economic structures experience recessions at the same time, they will want to adjust monetary policy in similar ways. They may not be constrained by the common

⁹ See e.g. Barro and Gordon (1983).

¹⁰ The "New Keynesian" literature which pursues this approach is surveyed in Mankiw and Romer (1994). The contribution by Akerlof to this collection, for example, demonstrates that small departures from complete rationality can give rise to large fluctuations in aggregate output and employment, creating a case for countercyclical monetary policy.

monetary policy that currency unification implies.

Here again, the problem is empirical, namely whether the incidence of supply and demand disturbances to output and prices is symmetrical across countries. Economists have sought to estimate the incidence of such disturbances in various ways.¹¹ A common feature of all these studies is that they derive their estimates from historical information. They use time series on output and prices for the postwar period, for example, and examine their correlation across countries. Unfortunately, historical correlations are apt to change with the creation of a monetary union, as monetary policies become more closely linked, factor mobility rises, and manufacturing activity becomes more concentrated regionally.¹² There are good grounds to worry whether data from the past provide useful guidance for the future, in other words. And absent information from the historical record, it becomes difficult to offer a convincing balance sheet of the costs of monetary unification.

This section has sought to drive home a simple point: economists are able to say little with confidence about the costs and benefits of monetary unification. There exists remarkably little consensus about the relative magnitude of the efficiency gains from expanding the reach of a currency area and of the costs of constraining the exercise of national monetary policy. The balance of costs versus benefits might as plausibly be positive or negative. Risk-averse policymakers are unlikely to find the case for monetary

¹¹ This literature is reviewed and new estimates are provided in Tamim Bayoumi and Barry Eichengreen (1993). Another approach to the same question can be found in Nicos Christodoulakis, Sophia P. Dimelis and Tryphon Kollintzas (1995).

¹² On these responses to economic and monetary union, see Paul Krugman (1993).

unification narrowly defined a compelling one.

It is useful to contrast this situation with the extent of consensus about the benefits of the Single Market. There is broad agreement that creating an integrated internal market throughout which commodities, technology, capital and labor flow freely has very significant efficiency advantages. A single European market allows European producers to more efficiently exploit economies of scale and scope. Dismantling border controls within the EU exposes national industries to the chill winds of intra-European competition. In contrast to the effects of exchange rate uncertainty, whose magnitude remain an open question, those of more intense competition and increased market size are apt to be great. The question then becomes whether it is possible, for purely political reasons, to reap the benefits of the Single Market without also creating a single currency.

III. The Political Economy Argument for Completing the Transition

The tools of monetary economics yield no clear conclusion about the balance of costs and benefits of monetary unification, narrowly defined. We know too little about the efficiency gains from substituting the Ecu for multiple European currencies, about the effects of monetary and exchange rate uncertainty on exports and growth, about the efficacy of automatic stabilizers and countercyclical stabilization policy, and about how the incidence of asymmetric disturbances affecting different European countries will change with the progress of economic and monetary union. The extent of disagreement and agnosticism among economists regarding monetary union is entirely understandable.

Political scientists, we argue in this section, have no reason to share

this uncertainty. There are sound political reasons to think that the viability of the Single Market project hinges on the completion of the monetary union. If the benefits of the Single Market are large, as most experts are inclined to believe (see e.g. European Commission 1988, Baldwin 1989), and if for political reasons the Single Market requires a single currency, then the case for completing the transition to EMU is compelling, especially if the alternative is sacrificing much of the progress already made in completing the internal market.

The argument runs as follows. The liberalization of capital movements has made intermediate exchange rate arrangements like the pegged-but-adjustable rates of the narrow-band European Monetary System more difficult to sustain. The elimination of capital controls, a corollary of the Single Market project, strips governments of the insulation they require to defend pegged-but-adjustable rates and removes the breathing space they need to organize orderly realignments. The increases in interest rates governments are forced to impose when their currencies come under attack may so aggravate unemployment, raise the cost of servicing the public debt, inflate mortgage payments and destabilize the banking system as to be unsupportable. In this environment, a government which would have been willing otherwise to maintain an exchange rate peg may be induced to abandon it by speculative pressure; speculative attacks can become self-fulfilling, in other words.¹³ As it becomes more difficult to operate pegged-but-adjustable rates, governments will have to choose between some form of floating on the one hand and permanently fixed rates on the other, where the second alternative can only be

¹³ For models of this situation, see Maurice Obstfeld (1986, 1994) and F. Gulcin Ozkan and Alan Sutherland (1994).

achieved through monetary unification.¹⁴

It is likely that this dilemma will grow increasingly sharp over time. One can imagine that turbulence in foreign exchange markets will continue to grow due to the scope for Mexico-like problems, the prevalence of weak governments, and dim prospects for global monetary reform. Countries finding it difficult to tolerate exchange rate turbulence and despairing of wider reform will find it tempting to retreat into regional arrangements. Even if the Maastricht Treaty is flawed, global monetary chaos will encourage its signatories to regard it as a safe haven.

The notion that the EU will follow this route is premised on the belief that, for the open economies of the EU, the political costs of floating are prohibitively high. The more integrated become European economies, the more pronounced are the distributional consequences of intra-EU currency swings. With the perfection of the Single Market, EU countries that depreciate their currencies will be able to flood other member states with exports. Resistance to accepting those imports will grow as integration proceeds. Countries that violate the monetary rules of the Maastricht Treaty, the adherents will argue, are not entitled to the privileges of the Single Market. Thus, exchange rate instability could be fatally corrosive of the Single Market program.¹⁵ If

¹⁴ According to the Maastricht Treaty, the European Central Bank at the outset of Stage III may choose to delay issuing the single currency. Instead, it may simply choose to exchange the existing national currencies of participating countries at par. Some would argue that such a monetary union can never deliver perfectly credible fixed exchange rates between national currencies, since there remains the possibility that participating countries may choose to defect from the union. If so, it is necessary to raise the barriers to exit by replacing national currencies with the single currency and eliminating the exchange rate itself.

¹⁵ A potential rebuttal to this argument is that Europe can have stable exchange rates without monetary union. This is the objection that the previous paragraphs were designed to preclude. Its argument is elaborated in considerably

the gains from completing the Single Market are large, it is important therefore for Europe to achieve monetary union.

Thus, where the traditional optimum-currency-area approach focuses on the costs of exchange rate volatility, this political-economy argument focuses on the consequences of misalignments. Even if the costs of day-to-day currency fluctuations are low, because for example exporters and importers are able to hedge against such fluctuations in forward markets, persistent movements in exchange rates away from equilibrium may elicit protectionist pressures that undermine the cohesiveness of the Single Market. According to our argument, it is in these persistent movements rather than short-term volatility that the significant costs reside.¹⁶

Skeptics may wish to consider what is for a Californian an obvious analogy: the 1993 recession in the United States. The end of the Cold War brought a defense build-down which disproportionately impacted a California dependent on defense spending. Many of the state's military bases were closed. Its aerospace and high-tech weapons industries suffered cutbacks. Unemployment rose to more than 9 per cent in 1992-93, two percentage points above that of the United States as a whole.¹⁷ An obvious way of stimulating the state's recovery from this asymmetric shock would have been to devalue

more detail in Eichengreen (1994).

¹⁶ This kind of argument has long been advanced by McKinnon to argue that an open world trading system requires stable exchange rates between the major currencies. See Ronald McKinnon (1990). Even if one is skeptical about the force of this argument or the feasibility of the recommendations for the world as a whole, it may still apply to Europe, whose economies are unusually open and sensitive to trade with one another and which has gone an unusual distance toward constructing the institutions required to stabilize exchange rates.

¹⁷ Unemployment in the U.S. excluding California averaged 6.8 per cent in 1992-93.

California's "peso" against the dollar of the rest of the United States, had only earlier generations anticipated the advice of optimum currency area (OCA) theorists and endowed a state economy subject to asymmetric shocks with a separate currency. This would have allowed California to reduce its real wages (in dollars), improve its competitiveness vis-a-vis the rest of the nation, flood other states with exports, and cut its unemployment.¹⁸

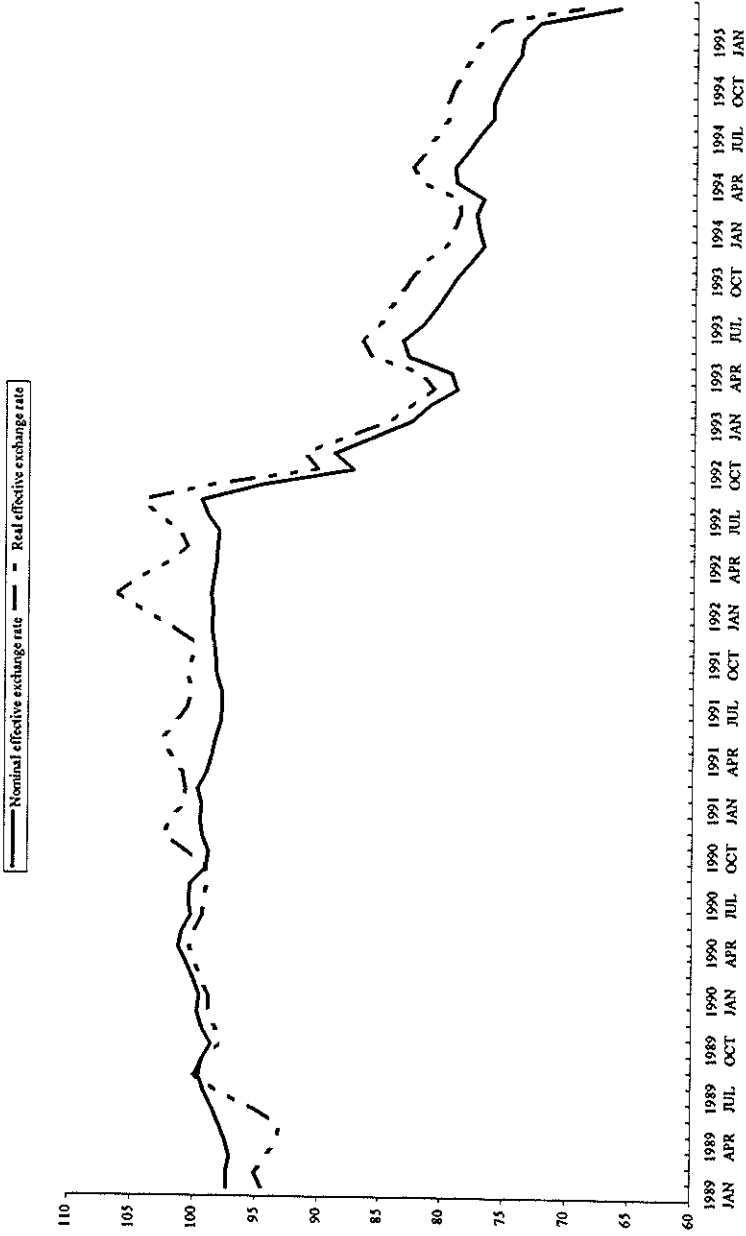
But imagine how the scenario would have evolved from there. Other states, seeing their markets flooded by imports and their citizens thrown out of work by "cut-rate competition," would have objected to the peso's beggar-thy-neighbor devaluation and slapped countervailing or "exchange dumping" duties on Californian goods. The integration of America's internal market would have been threatened. In the United States, by implication, a single currency is essential for the maintenance of a single market. There are good reasons -- and precedents like the "green exchange rates" of the Common Agricultural Policy -- to think that the same is true of Europe.¹⁹

The depreciation of the Italian lira since 1992, illustrated in Figure

¹⁸ This assumes, of course, that money wages in California would have remained stable. The validity of this assumption is not obvious, for there is reason to think that wage behavior depends on the exchange rate regime. Henrik Horn and Torsten Persson (1988) analyze this question theoretically. Olivier Blanchard and Pierre Alain Muet (1993) study it empirically for France in the 1980s, finding little evidence of such a relationship.

¹⁹ The green exchange rates are border tax equivalents designed to neutralize the consequences of intra-EC exchange rate changes for the prices of intra-EC exports of goods covered by the CAP. By forcing trade in these products to take place at green rates different from markets rates, they prevent a devaluing country from reducing the foreign-currency prices of its CAP exports and undermining agricultural price floors in neighboring countries. Recently the EU moved to a system in which farm prices in countries that devalue are supposed to rise automatically by the full amount of the devaluation. If export quantities respond to the higher domestic-currency prices, however, downward price pressure may still result in neighboring countries.

Chart 1



1, provides a concrete illustration of these pressures.²⁰ Italy is the one ERM country for which evidence of excessively expansionary fiscal policies in the period leading up to the EMS crisis is unambiguous.²¹ After the uncertainty surrounding the Danish and French referenda made clear that European monetary unification was not imminent, a speculative attack was launched against the lira. Failed attempts by the Bank of Italy and the Bundesbank to defend the currency and an emergency meeting between German and Italian authorities on September 12-13 led to the announcement that the lira would be devalued by 7 per cent. When the pressure of speculation did not cease, Italy was forced to suspend its participation in the ERM on September 17th. Since then, the lira has been floating freely, with a sharp decline following the crisis and a general tendency towards depreciation subsequently.

The currency's decline caused a sharp deterioration in the real exchange rate. In July 1992, the Italian government, industrialists, and trade unions had reached an agreement to remove the existing system of wage indexation. This agreement, which was renewed in July 1993, played a decisive role in preventing the nominal depreciation from being passed through into wages and export prices. In the presence of increasingly integrated markets for tradeable goods, this real depreciation significantly boosted Italian exports and strengthened the current account, helping to moderate the recession in Italy despite the government's attempts to adopt less expansionary fiscal policies.

But the repercussions abroad, as perceived by other EU member states,

²⁰ Figure 1 is constructed from data drawn from the International Monetary Fund's International Financial Statistics. The real exchange rate is measured as relative unit labor costs in manufacturing.

²¹ See Eichengreen and Wyplosz (1993).

were strongly negative. The acceleration of the lira's depreciation in the early months of 1995 illustrates why. At the end of February the lira reached a historic low of more than L1160 against the DM. This led EU commissioner for the internal market Mario Monti to warn of "growing concern among industrialists that the lira's devaluation is giving Italian companies an advantage over their European competitors..." reflecting the fact that Italian inflation had not risen to match the depreciation of the currency.²² "It was impossible to have a guaranteed single market in a situation where currency fluctuations remained unchecked," Mr. Monti was paraphrased as saying, "adding that the continuing devaluation of the lira would in the long run lead to prolonged disruption in the internal market." The implication, he suggested, was that countries could not at the same time be in favor of the internal market and oppose a single currency. The potential for conflict between market integration and exchange rate fluctuations point to the need for "some sort of monetary arrangement...to complement the single market."

What is revealing about the Italian case is that no one explicitly accused the government of deliberately manipulating the lira. The currency's weakness reflects the failure of the Italian Parliament to adopt a 1995 budget that might hold the deficit to its original target of 8 per cent of GDP. The ongoing budgetary problem implied continuing debt-service difficulties and, in the eyes of the market, the possibility that the Bank of Italy might be forced to monetize budget deficits or backstop the market for public debt in the event that private investors refused to roll over their holdings. It was widely believed, in other words, that there might be an acceleration of inflation in the future; the lira's depreciation in January and February

²² Financial Times (28 February 1995, p. 6).

reflected market anticipations of this fact. And yet the lira's fluctuation gave rise to strenuous objections elsewhere in Europe despite the fact that (1) its value had not been manipulated, and (2) there was good reason to believe that its impact on competitiveness would eventually die out. Imagine the complaints that would be voiced if Italy - or Greece or the UK - was perceived as deliberately manipulating its currency in ways that might produce long-standing implications for competitiveness.

This would appear to be the inference drawn by other observers. On 11 February 1995 (p.14) The Economist explained the point as follows. "...as long as Europe's currencies are free to move against one another, the single market will never be secure. The risk will remain that national governments will seek to protect their countries' firms against rivals in countries that have just devalued. The greater the volatility, the greater the pressure for national protection, and the greater the danger to all the past achievements of the common market." On 4 March 1995 (p.59), it addressed its U.K. audience as follows. "...the benefits we now gain from the European single market will come under threat and a question may arise over our very membership of the EU. If the pound is the only major EU currency outside the Ecu bloc it is likely to come under frequent pressure. The Ecu countries may well regard progressive devaluation of a weak pound as unfair competition. It is very possible that they will retaliate, and there are a variety of ways in which single-market rules can be changed to our disadvantage. The pressure to raise trade barriers could be considerable. Meetings of the European Council could become increasingly acrimonious."²³

²³ Still other evidence could be cited. On 26 April 1995, Helmut Werner, president of the Mercedes-Benz automotive group, warned that "unpredictable exchange rate fluctuations are threatening the European single market with

A third example also serves to illustrate the point. In early 1995 there occurred a series of discussions between U.S. President Clinton and U.K. Prime Minister John Major on the prospects for a trans-Atlantic free trade area (a merger between Europe's Single Market and the North American Free Trade Agreement). But the depreciation of the U.S. dollar against the German deutschmark and other ERM currencies undermined support in Europe for the initiative. Advisors to both then-Prime Minister of France, Edouard Balladur, and to his leading electoral opponent, the then Mayor of Paris Jacques Chirac, stressed that French support was contingent on the U.S. and EU first undertaking significant measures to limit trans-Atlantic currency fluctuations. "How can you expect Airbus ever to win a contract when Boeing starts with a discount of 15 to 20 per cent thanks to the drop in the dollar?" said a senior adviser to Balladur. "We feel this use of the dollar as a commercial weapon is a distortion of fair trade that has become one of the most serious problems since the last GATT agreement."²⁴ In the case of intra-EU relations, as opposed to relations between Europe and the U.S., the threat to free trade posed by exchange rate swings may be attenuated by the existence of sunk costs and issue linkage which prevent EU member states from being ejected from the Single Market in response to currency fluctuations.

disintegration..." and "appealed for political action to restore cohesion and the introduction of a single European currency to stabilise industry's cost and price structure." Parkes (1995), p.1. Similarly, on 24 May 1995, Corriere Della Sera reported that Alain Juppe, the new French Prime Minister, had warned that France would "react against" those countries which play "out of the [Maastricht] rules," making it clear that "French irritation against the depreciation of the lira and the peseta has reached the top level: the government level...that which until yesterday seemed the position of some sectors of the French economy (like the automobile and textile industries, which see Italian competition as unfair) is now the official position of France." Authors' translation.

²⁴ "France Leads Call to Realign Currencies," International Herald Tribune (8-9 April, 1995), pp.1, 4.

But there is no denying that the same corrosive tendencies are at work.²⁵

IV. Cementing Germany's Commitment to Monetary Union

If monetary union is essential for completing the Single Market, then, the EU must reinforce Germany's commitment to the process. Indeed, it has never been clear what Germany stands to gain from monetary union. The Bundesbank already sets the tone for monetary policy in Europe. Other EU states have been attracted to monetary unification and to the creation of a European Central Bank precisely in order to regain influence over Europe's common monetary policy.

Thus, Germany only stands to lose influence in the monetary sphere. Moreover, to the extent that monetary integration is needed for completion of the Single Market, one can argue that the latter is least valuable for Germany, the EU's largest economy (more so following the Federal Republic's absorption of the German Democratic Republic), which by virtue of its size can best exploit economies of scale and scope.

One way of characterizing German motives is that Germany was willing at Maastricht to trade concessions in the monetary domain for concessions in other issue areas.²⁶ The way this is typically put is that in 1990 Germany conceded monetary unification in return for the rest of Europe, and most

²⁵ A contrast between the two cases is that, in their dealings with the U.S., European officials called for exchange rate stabilization prior to trade liberalization, where in Europe the formation of a customs union preceded the creation of the Snake and the EMS. This difference may simply reflect historical circumstances rather than systematic factors: when Europe moved to create a customs union, exchange rate flexibility was still limited by the operation of the Bretton Woods System.

²⁶ This argument is elaborated by Michele Fratianni and Juergen von Hagen (1992).

notably France, agreeing to German economic and monetary unification (GEMU). Germany "gave" monetary unification and "got" in exchange the agreement of France and the other member states to the Federal Republic's rapid absorption of the eastern lander. There may be a tendency to exaggerate the linkage of these two issues, especially if one believes that, once Moscow gave its approval, there was nothing other European countries could have done to block GEMU. More importantly surely was Germany's desire to reacquire a foreign policy role. As a legacy of two 20th century wars, Germany has been unable to play a such a role. Diplomatic influence, to be effective, must be backed by military force, and the German military, for the afore-mentioned reasons, is unable to project force internationally. Hence, Germany can only acquire a foreign policy role in the context of an EU defense force and an EU foreign policy. The Federal Republic's desire for political integration can be understood in this light. And its support for monetary union can be seen as the requisite quid pro quo.

This desire to link monetary and political union finds further support insofar as it promises to solve several other problems that threaten to handicap the operation of the monetary union. Vesting additional power in the members of the European Parliament can close the democratic deficit that would otherwise prevent the European Central Bank from being held accountable and encourage an undercurrent of dissatisfaction with its policies. If the Platonic guardians of EU monetary policy, as Richard Cooper calls them, are to be accountable to the Greek in the street, political integration must be deepened.²⁷ And political integration that leads to the further transfer of budgetary responsibility to Brussels will increase the feasibility of the kind

²⁷ See Richard Cooper (1992).

of EU system of fiscal federalism that can smooth the operation of the monetary union.²⁸ For a variety of reasons, then, monetary and political integration go hand in hand.

None of this should allow us to lose sight of the skepticism about monetary union of the typical German. Fear of inflation is an abiding element of German political culture. The idea of replacing the deutschmark with the Ecu and assigning monetary policy to a European Central Bank feeds deep-seated historical fears. Reflecting those preoccupations, the German Constitutional Court has insisted on a strict interpretation of the convergence criteria that countries must meet in order to participate in EMU. It has insisted that the Bundestag, despite having ratified the Maastricht Treaty, can still veto Germany's participation. Even if the Council of Ministers and Heads of State concludes that Germany and the requisite number of other EU member states satisfy the preconditions for monetary union, the Bundestag may still refuse to authorize Germany's participation on the grounds that the convergence criteria have been inadequately enforced.²⁹

This threat is heightened by two developments post-dating the completion of the Delors Report. One is the 1992-93 crisis in the European Monetary System. That crisis underscored the difficulty -- some would say the

²⁸ The role of fiscal federalism in insuring against regional shocks within the U.S. monetary union is emphasized by Xavier Sala-i-Martin and Jeffrey Sachs (1992). Eichengreen (1994) argues that political integration is a prerequisite for an extensive system of fiscal federalism. We return below to this question of the feasibility of fiscal federalism in the present European context.

²⁹ Article 109J of the Maastricht Treaty states that the Council may decide to start Stage III if a qualified majority of its members votes in support. Technically, then, the German government cannot block a decision to start Stage III even if the Bundestag votes against it. The practical question is whether a qualified majority of European governments will choose to vote in favor of Stage III knowing that Germany will not. There is good reason to think that the answer is no.

impossibility -- of holding currencies within narrow (2 1/4 per cent) bands for at least two years as required by the convergence criteria. Narrow bands set up one-way bets that render central banks sitting ducks for currency traders and expose them to self-fulfilling speculative attacks. This realization has fueled resistance to the idea of restoring the narrow bands of the pre-August 1993 EMS. The Maastricht Treaty requires countries to hold their currencies within the ERM's "normal bands" for at least two years prior to qualifying for EMU. Although nothing technically prevents "normal" from being interpreted as 15 per cent, wider bands weaken the requirement for countries to demonstrate their ability to adapt their policies to the needs of exchange rate stability.³⁰ Wide bands therefore feed German doubts about the preparedness and reliability of its prospective EMU partners.

Similar qualms are provoked by suggestions that Germany and France (presumably in conjunction with certain of their smaller Northern European neighbors) jump directly to monetary union, short-circuiting Maastricht's lengthy deliberative process. It is important to recall that the three-stage transition and convergence criteria of the Maastricht Treaty were adopted precisely in order to assuage German fears of precipitate action. To assume that the carefully choreographed transition delineated there can be short-circuited is to neglect the political imperatives that shaped the treaty.

The other development subsequent to the Delors Report weakening Germany's allegiance to EMU is the progress of German unification and Eastern Europe's turn to the market. With German unification a fait accompli, the exchange of EMU for GEMU raises a time consistency problem. Now that GEMU is

³⁰ That there is no technical obstacle to interpreting the normal bands referred to in the treaty as the post-1993 15 per cent bands has been emphasized by Peter Kenen (1995).

irreversible, Germany's stake in EMU is correspondingly reduced. The three-stage transition specified in the Maastricht Treaty -- and in particular the requirement that Stage III commence on January 1st, 1999 even if only a minority of member states qualify -- was presumably intended to prevent Germany from succumbing to the natural temptation to renege. But this creates another temptation: for Germany to interpret the convergence criteria as strictly as possible.

German unification was but one consequence of the collapse of central planning and state socialism in the East. The repercussions elsewhere in Eastern Europe are of profound interest to the German Federal Republic. Buttressing political and economic stability in Eastern Europe remains a higher priority for Germany than for other members of the European Union. For historical and geographical reasons Germany is favorably positioned to export to Eastern Europe; compared to other EU countries, she consequently has less need for the Single Market. But if reform in Eastern Europe is interrupted, Germany will suffer the gravest consequences, not least in the form of immigration. It follows that Germany is the single largest source of foreign aid to Eastern Europe. But aid to the East (including, in this context, the former German Democratic Republic) leaves fewer resources to be transferred to member states experiencing adjustment difficulties as a result of monetary unification.³¹

Two lures might be offered to rekindle German enthusiasm. One is enlargement of the EU to encompass Eastern Europe. This was endorsed in principle at the European Council's 1993 Copenhagen meeting, and the European

³¹ This is not to argue that Germany now has no need for the Single Market, for it is implausible that Eastern Europe alone offers a market of sufficient size for it to fully exploit the relevant economies of scale and scope.

Commission is drafting a White Paper detailing the conditions the transition economies will have to meet to qualify for admission by the beginning of the 21st century. The French preference for the evolution of the EU remains, however, that deepening precede widening, both because Eastern Europe is of less concern to Paris and because the French are more confident of their ability to influence EU policies in the face of a relatively small number of member states.

Several problems will be solved simultaneously if other EU countries, and France in particular, rededicate themselves to enlargement to the East. Doing so may be a prerequisite for solidifying Germany's commitment to EMU. Indeed, it can be argued that France has little to lose financially from proceeding quickly with enlargement. The French fear is that if the EU expands eastward, France and the other high-income member states will find themselves obligated to undertake extensive transfers to the new entrants. But if the Visegrad Four and other Eastern European countries are not admitted, Germany will feel obligated to make extensive transfers on its own, especially insofar as Eastern Europe's difficulties in gaining access to the EU aggravate adjustment problems and threaten illegal immigration. This will leave less German money available for Structural Fund transfers to low-income member states and for other EU financial ambitions. If the latter are to go forward, France will have to take up the slack. On balance, according to this scenario, eastward enlargement will leave it no worse off financially.³²

The other lure that might be offered Germany is faster political

³² Whether the French Government is worse off politically is another matter. Because eastward enlargement promises to greatly increase the cost of the Common Agricultural Policy, the former threatens a program near and dear to the heart of France's powerful rural lobby.

integration. But this does not bode well for the participation of the United Kingdom, where skepticism about political union runs deep. Together with the fact that not all EU member states may wish to participate in the monetary union, this raises the problem of variable geometry, to which we turn in Section VI.

V. Coping with Variable Geometry

In Europe today, variable geometry (more fashionably "concentric circles," and more disparagingly "Europe a la carte") is all the rage. Not all current EU member states, much less potential entrants, are likely to satisfy the prerequisites for monetary union at an early date. If EMU is to occur, it will be limited in the first instance to a "hard core" or "inner circle" of members that have made the most rapid progress toward balancing their budgets, reducing their debts, suppressing inflation, and displaying the monetary and fiscal discipline expected of EMU participants. Different dimensions of the integration process will necessarily proceed at different speeds.

We do not pursue the parlor game of assembling "draft picks" of countries that might constitute the ECB's "expansion team roster." A prior question is whether a monetary union comprised of only a subset of EU member states is compatible with efforts to complete the internal market.

The fashionable answer is yes -- that variable geometry solves several problems simultaneously. It reconciles Denmark's skepticism about monetary union with her participation in the Single Market. It accommodates Britain's resistance to the Maastricht Treaty's Social Charter and her desire to maintain the traditional international role of sterling. It prevents

countries like Italy and Greece, where political instability threatens fiscal and monetary balance, from being presented with infeasible demands, thereby provoking political crises.

But recall the argument that exchange rate variability fuels resistance to market integration. If member states outside the monetary union are seen as manipulating their currencies in beggar-thy-neighbor ways, opposition will grow to their participation in other aspects of the Single Market program. If the U.K., Italy, Denmark, or Greece depreciates its currency and floods the rest of the EU with artificially competitive exports, questions will arise about whether it should retain its status as a member state in good standing. If, for example, sterling is allowed to depreciate further against the Continental currencies and the Hoover Company again moves jobs from Dijon to Scotland, as it did following Britain's departure from the ERM in 1992, then the EU's political solidarity could be jeopardized.

Indeed, a situation where some member states remain outside the monetary union would aggravate strains among the insiders as well as between the insiders and outsiders.³³ Some Continental countries trade more than others with the UK, for example; their export competitiveness and unemployment would be aggravated disproportionately by the unilateral depreciation of sterling. Different member states would therefore advance very different positions about whether ECB policy should be adjusted in response to fluctuations in the Ecu-sterling rate, and their positions could vary with their perceptions of whether the depreciation of sterling had been engineered by the British

³³ This is a standard result of game-theoretic analyses of macroeconomic policy coordination -- that cooperation among a subset of countries can leave one or more of the cooperating countries worse off. See Canzoneri and Henderson (1991).

government in order to secure an unfair competitive advantage.

Moreover, the kind of shock absorbers that monetary unions typically construct to absorb such strains will be more difficult to develop in an EU of concentric circles. Some economists argue that the regional coinsurance provided by fiscal federalism is a necessary concomitant of monetary union (Ingram 1959). When California's gross state product declines by \$1, tax payments by its residents to the federal government decline by more than 20 cents, and transfers to the Golden State from other states via Washington, D.C. rise by 10 cents (Sala-i-Martin and Sachs 1992). Thus, California automatically receives a one-third offset that insures against idiosyncratic regional shocks. Italianer and Pisani-Ferry (1992) have shown that this function can be provided by increasing the EU budget by some 0.25 percent of EU GDP.³⁴ All member states would make increased transfers to Brussels which would then be returned to them as a function of the differential between national and EU unemployment rates.

Variable geometry would significantly complicate the operation of such a scheme. Would only members of the monetary union, who no longer possessed a separate exchange rate to be adjusted in response to nation-specific shocks, receive compensation from the EU insurance fund? If so, EU expenditures would become biased in favor of the high-income member states that are likely to be the founding members of the monetary union. Would only participants in the monetary union eligible for such transfers pay additional taxes into the EU

³⁴ The EU budget currently accounts for some 1 1/2 per cent of EU GDP. The majority of it goes toward financing the Common Agricultural Policy. The next largest share underwrites the Structural Funds. These are targeted however to the EU's low income states and regions and do not vary closely with the business cycle; in the terminology of fiscal federalism, they provide equalization rather than insurance.

budget? If so, efforts to harmonize VAT rates across EU states would suffer a setback. With VAT rates continuing to differ across countries, there would be an incentive for cross-border arbitrage by consumers, which would in turn intensify the pressure to balkanize national markets. Would all members of the EU receive such transfers? If so, the members of the monetary union could object that the outsiders unfairly enjoyed the double advantage of receiving transfers and being in the position to manipulate their exchange rates.

What should be done to avert the problems created by variable geometry? One answer, quite possibly valid, is nothing. Countries which are not in the inner circle but aspire to move there have a strong incentive to keep their exchange rates from fluctuating widely and antagonizing their EU partners. The risk that countries that resist joining the monetary union may be ejected from the Single Market may provide a sufficient lure to surmount the reservations of British Euro-skeptics. To the extent that the Maastricht Treaty requires candidate countries to hold their currencies within the "normal fluctuation bands" as a prerequisite for EMU participation, their commitment to exchange rate stability should be reinforced. According to this scenario, "capricious" currency swings will not be a problem. And assuming that the laggards join the monetary union at an early date, the problems of variable geometry for fiscal federalism will evaporate.

This assumes, of course, that countries which are prevented from joining the monetary union initially have prospects of joining later. There are two reasons to be less than sanguine about this point. One is the danger that the early participants may stiffen their resistance to admitting the laggards. Alesina and Grilli (1994) model this scenario under the assumption that EU countries differ in their aversion to inflation. If ECB policy is decided by

the median voter (arraying participating countries along a continuum from least to most inflation averse and giving each country one vote), then the early, inflation-averse members may be made worse off by the subsequent admission of more inflation-prone member states. They may never therefore regard the laggards as ripe for admission.³⁵

The other reason to worry is the difficulty the slow-track countries will have in holding their currencies within their normal fluctuation bands against the Ecu for at least two years, which is specified in the Maastricht Treaty as a prerequisite for qualifying for EMU. This task is difficult under the best circumstances. If a government's commitment to doing so is tested by the markets, keeping the currency within the band may require raising interest rates to politically insupportable heights; knowledge of this fact may give the markets the very incentive they need to attack. As the quote from The Economist in Section III warns, the pressure they apply may intensify with the decline in the number of remaining EU currencies available to be picked off. And if the ECB initially pursued relatively restrictive policies, either because it took to heart the priority attached in the treaty to price stability or because it needed to convince the markets of its overriding commitment to Bundesbank-style policies, the pressure on the weak sisters would intensify.

Countries that enjoy the reciprocal credit lines of the present-day EMS would be even more vulnerable if the EMS went out of existence at the

³⁵ The interesting result from the Alesina-Grilli model is that the early members may prefer to bar the laggards indefinitely even if they are better off in a monetary union comprised of all EU member states than in a world of 15 separate EU currencies. Of course, the assumption that policy is decided by the median voter and that countries' preferences over inflation never change are strong and less than realistic.

beginning of Stage III and its collective agreements were abandoned. Indeed, there is a significant danger that the EMS will fall into neglect once the fast-track countries move to Stage III. The Maastricht Treaty says little about relations between the Ecu and the residual European currencies.³⁶ The founding members of the monetary union may insist on suspending all EMS obligations to facilitate the ECB's single-minded pursuit of price stability. Furthermore, the ECB statute gives the slow-track countries no voice in most matters pending before the ECB. It provides only for the creation of a General Council (to be comprised of the president and vice president of the ECB and the central bank governors of all EU member states, whether the latter participate in the monetary union or not). The General Council will participate in administrative decisions (overseeing the collection of statistical information and passing on personnel decisions, etc.) but will have no monetary role.

Thus, the General Council may have even less capacity to encourage policy coordination than the ECB's predecessor, the European Monetary Institute (EMI), which oversees the coordination of policies in Stage II. The EMI's statute instructs it to monitor national monetary policies, to hold consultations with national central banks, and to monitor the functioning of the EMS during Stage II. It has the right to be consulted in advance about national monetary policies. It may issue recommendations concerning them. "National monetary authorities are expected to consult with the EMI before taking decisions about monetary policy," in the words of one expert.³⁷

³⁶ A more detailed discussion of the points that follow is provided by Peter Kenen (1995).

³⁷ Peter Kenen (1995).

Countries which disregard its recommendations should not expect to be declared eligible to participate in Stage III.

But it is unclear that the General Council will be as effective a vehicle for monetary policy coordination during Stage III. The treaty speaks only of it inheriting the EMI's "tasks." It is unclear that it will also inherit its leverage. It will not clearly be entitled to be consulted in advance about national monetary policy decisions. While countries which run excessive deficits in Stage III may be denied access to European Investment Bank funds, be required to publish embarrassing financial information, and be subject to unspecified fines, none of these sanctions may be imposed by the General Council of the ECB, as opposed to the Council of Ministers, and none can be applied in response to inadequate monetary policy coordination. Thus, the ultimate sanction against outsiders that hesitate to coordinate their monetary policies with those of the ECB will be refusal by the Commission and the Council to allow them to join the Ecu area subsequently.

Thus, there remains the question of what to do about countries like the UK that may never wish to join. One response, again, is to do nothing. Perhaps the British government will conclude that currency depreciation has few advantages, although sterling's 1992 depreciation, which did much to stimulate the UK's recovery from recession, suggests that the authorities may hesitate to discard the policy. Perhaps the EU will be sufficiently robust to deflect the internal tensions resulting from currency movements. If not, conflicts among member states could obstruct completion the internal market.

These problems could be averted by providing for the continued existence of the EMS (where the Ecu replaced the currencies it supersedes in the EMS parity grid) and making participation and therefore exchange rate

stabilization against the Ecu a prerequisite for access to the Single Market.³⁸ Countries doing so would be subject to multilateral surveillance, which would discourage them from manipulating their currencies in beggar-thy-neighbor ways.³⁹ Still, there remains the danger that countries will lack the political capacity to endure the high interest rates required to fend off bear speculation, since foreign support will necessarily continue to be limited.

Creating a regional coinsurance fund and granting to EMS participants the same access extended to EMU participants would enhance the ability of the former to endure this burden. EMS countries outside the monetary union, when forced to raise rates to keep their currencies within their normal fluctuation bands, would be entitled to additional fiscal transfers if those higher rates aggravated unemployment. Knowledge of this offset would diminish political opposition to the requisite policies of austerity. Hence, the markets would have less incentive to test weak EMS currencies. Were such a scheme to be implemented, however, it would be critical to strengthen the oversight powers and sanctions available to the Monetary Committee to minimize problems of moral hazard (the temptation for governments to pursue policies for independent reasons that raised the danger of unemployment in response to the

³⁸ There is the further question, which we do not address here, of whether the fluctuation bands of the "residual EMS" should be narrow or wide.

³⁹ After the first draft of this paper was written, we came across the parliamentary testimony of Alexandre Lamfalussy, president of the EMI, who argued that it might be advisable "to create an arrangement similar to the European exchange rate mechanism of fixed but adjustable exchange rates..." in order to stabilize rates between the Ecu and non-EMU EU currencies. The implication, according to the Financial Times was that "even if the UK exercised its opt-out on EMU in 1999, it might still be required to rejoin the ERM, which it abandoned during the sterling crisis in September 1992." "MEPs Fret Over Likely Single Currency Delay," Financial Times (13 April 1995), p.3.

knowledge that insurance would become available). Moreover, for such a scheme to be politically acceptable to the founding members of the monetary union, there would have to be no question about the commitment of the outsiders to join them as soon as feasible.

VI. Implications for Europe's Relations with the Rest of the World

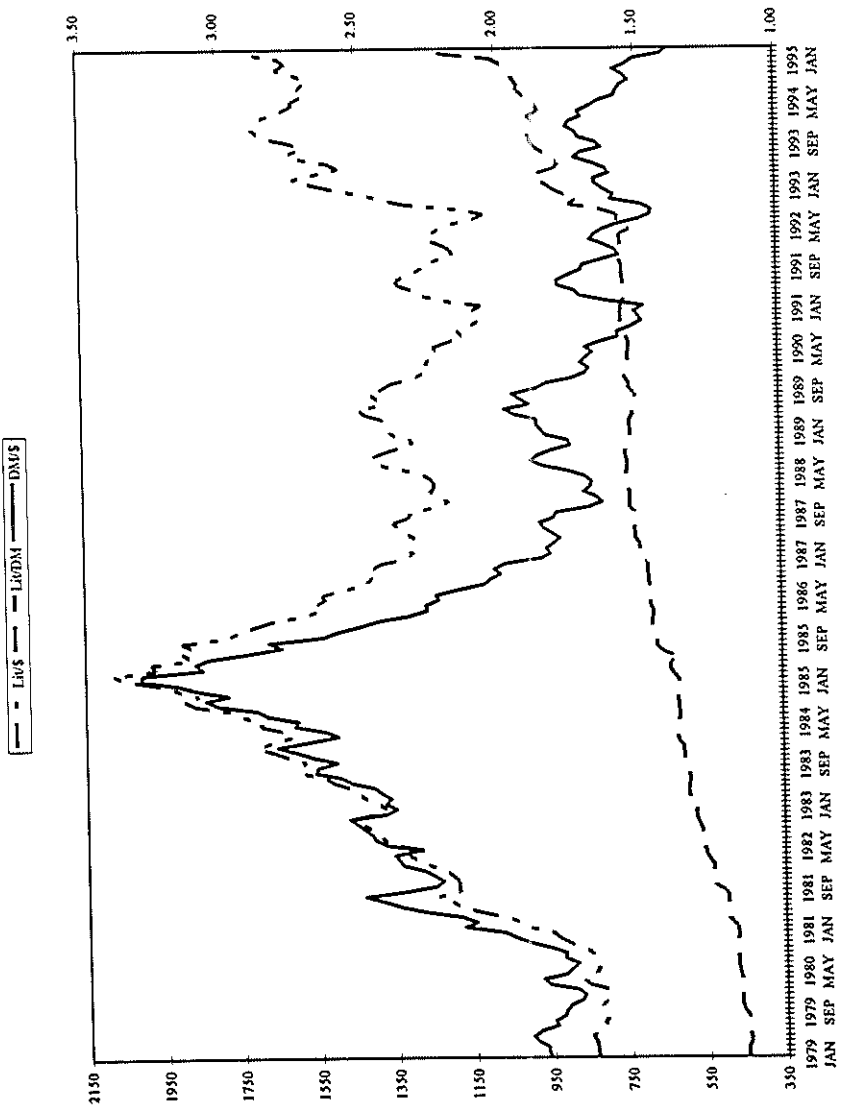
EMU will have implications for macroeconomic relations not just between nation states that participate in the monetary union but between those states and the rest of the world. One set of implications -- for currency and macroeconomic relations between EMU's founding members and other EU member states -- we have already considered in the context of our discussion of the future of the European Monetary System. Here we focus on relations between the Ecu bloc, the United States and (implicitly) Japan.

Will Stage III affect the behavior of European exchange rates against the dollar? Traditionally, when the deutschmark strengthens against the dollar, other European currencies weaken against the deutschmark in the European Monetary System.⁴⁰ From the standpoint of the United States, this provides insulation from trans-Atlantic currency swings; when the dollar falls against the deutschmark, it falls by less, or even rises, against other European currencies. (This pattern is evident in Figure 2.⁴¹) As in an individual investor's diversified portfolio, the diversity of exchange rate movements insulates the overall U.S.-European rate from shocks. The depreciation of the British pound and Italian lira starting in September 1992, coincident with a period when the deutschmark strengthened against the dollar,

⁴⁰ See Jeffrey Frankel (1986).

⁴¹ The data in Figure 2 are from Datastream.

Sheet Chart 2



provides a recent illustration of the point.⁴²

With Stage III, this portfolio diversification will be removed. European states participating in EMU will follow a common monetary policy; even if their separate currencies continue to circulate following the inauguration of Stage III, they will move in lock step against the dollar.⁴³ Like the return on an investment portfolio concentrated in a single asset, the volatility of the effective nominal dollar-EU exchange rate could rise as a result.

The extent to which, and indeed whether, this is the case depends on the stance of the Ecu bloc's common monetary and fiscal policies. The strong parallels between the ECB and Bundesbank statutes suggests that the ECB will follow policies that mimic those of the Bundesbank; this was, after all, the express intent of German negotiators at Maastricht. This suggests that the traditional behavior of the dollar-deutschmark rate is an obvious benchmark for gauging the likely behavior of the exchange rate between the dollar and the Ecu. But if there is any basis for German fears that members of the Executive Board drawn from more inflation-prone countries will incline the ECB

⁴² It is sometimes suggested that the weak-dollar-strong-DM-within-the-EMS phenomena was a product of capital controls and should no longer be evident in the 1990s. When investors in dollars sought to move out of the U.S. currency, the argument runs, they found it easier to move into the DM than other European currencies owing to the prevalence of capital controls in European countries other than Germany; their flight to the DM therefore strengthened the German currency relative to its European counterparts. Now that controls have been removed, this pattern should no longer be evident. But as demonstrated by events subsequent to the summer of 1992, traces of the old pattern remain. Whether or not the mechanism is the same, one can still argue that the existence of a diversified portfolio of currencies provides protection to governments concerned about exchange rate swings.

⁴³ Nothing in the Maastricht Treaty requires the ECB to replace separate national currencies with a single currency at the outset of Stage III. Rather, it may choose to exchange their currencies for one another at par until it judges that the time is right for issuing the single currency.

toward the pursuit of erratic policies, then one could imagine U.S.-European exchange rates becoming even more volatile.

Not only European monetary policies will change, of course. There may be an incentive for the Federal Reserve Board to adjust the stance of U.S. policy in response to events in Europe. The ECB Board may wish, in turn, to adjust its policies in response to events in the United States. Fiscal authorities in Europe and the United States may similarly have an incentive to change their stance with the advent of a single European monetary policy. And this in turn may influence the decisions of monetary policy makers.

To what extent and in what direction policy will change depends on the model of the macroeconomy and of policymaker preferences that one wishes to adopt. Canzoneri and Henderson (1991) utilize a three-country model of the French, German and U.S. economies, and assume that policymakers minimize a quadratic loss function that increases with inflation and unanticipated fluctuations in employment.⁴⁴ A negative world productivity disturbance causes prices to rise (since productivity and hence output are lower) but employment to remain unchanged; if exchange rates allowed to float, policymakers respond by contracting money supplies in order to damp down inflation in exchange for a little less employment. In doing so they may impose negative externalities on one another; as each country seeks to appreciate its currency in order to reduce its inflation, it exacerbates the inflation problem in the other countries which now have to pay higher import prices because their exchange rates have depreciated. Competitive appreciation leads to overly contractionary monetary policy in response to a

⁴⁴ For simplicity, they assume that the three economies are symmetric, with France and German exactly half the size of the United States.

negative supply shock.

If France and Germany now form a monetary union and their joint monetary policy is set so as to minimize the sum of their loss functions, they contract their money supplies by less, given the stance of U.S. policy. In turn, the U.S. will import less inflation and contract by less. Under these assumptions, moving from noncooperation to monetary union is welfare improving for the U.S. as well as Europe.

This result is contingent on the assumption that the intra-EU externalities associated with monetary policy are negative: when Germany contracts its money supply and the DM appreciates against the franc, the consequence for France is additional imported inflation (where inflation is the problem it is attempting to fight). Positive intra-European externalities are also possible: France may be so dependent on the German export market that a German monetary contraction lowers French inflation, and vice versa. Now Germany can help France fight its inflation problem, as France can Germany; cooperation implies doing more, and both countries adopt more contractionary policies. But because monetary contraction in Europe still fuels inflation in the U.S., a common EU monetary policy draws a more contractionary response from the United States. This noncooperative reaction by the U.S. may leave all three countries worse off than if the monetary union had not been formed.⁴⁵

⁴⁵ The intuition for this result is as follows. When monetary spillovers across countries are symmetric, all countries adopt policies that are biased in the same direction (in the present case, too contractionary) absent cooperation. Monetary union allows the Europeans to moderate this bias, which encourages the U.S. to do the same even in the absence of transatlantic cooperation. When spillovers are asymmetric, the bias of policy in different countries can run in different directions. When the Europeans form a monetary union, reducing their noncooperative bias, the U.S. may be induced to move policy in the other direction, reinforcing its bias. This can leave all three countries worse off.

In Canzoneri and Henderson's model, the three countries can still be better off from the formation of a European monetary union if there is transatlantic cooperation. The question then becomes how Stage III will affect its feasibility. At the outset of Stage III, the prospects for monetary policy coordination to stabilize exchange rates are likely to be limited. The ECB will be concerned to demonstrate its commitment to price stability and hesitant to jeopardize its reputation in the pursuit of policy coordination. The national governments of EU member states will remain in the strait jacket of the Excessive Deficits Procedure, and their high debts will give them little room for maneuver. This will be equally true of countries that are the founding members of the monetary union and of those who seek to gain admission subsequently.

With the passage of time, this situation could reverse itself. Once the ECB has established a credible reputation for the pursuit of price stability and it regains policy flexibility, it may be an advantage that Europe speaks with a single monetary voice. In the same way that it is easier for foreign central banks to coordinate their policies with the Federal Reserve Board rather than with 12 regional reserve banks, efforts at coordination will be simplified by the existence of a single European central bank. The United States may therefore grow more interested in coordinating its policies with Europe.⁴⁶

The irony is that Europe may at the same time grow less interested in coordinating with the United States. Insofar as an integrated EU is more of a large, closed economy than any of its constituent states, exchange rate fluctuations vis-a-vis the outside world will become less of a concern. There

⁴⁶ This is the conclusion of European Commission (1990), p.190 and passim.

are already signs that the member states of the EU, which trade more with one another now than they did in the past, are less concerned about fluctuations in the dollar. As the growth of intra-EU trade continues to outstrip the growth of the Union's trade with the rest of the world, this tendency will be reinforced.⁴⁷ The ECB may be inclined to follow policies of benign neglect with regard to the exchange rate, in the manner of the Federal Reserve.

None of this bodes well for the prospects for policy coordination. It is hard to quarrel with Kenen's (1995) conclusion that the advent of Stage III is unlikely to enhance the prospects for policy coordination, and that one effect of EMU may be to exacerbate exchange rate instability between the European currencies on the one hand and the dollar and the yen on the other.

Exchange rate instability in general and currency misalignments in particular prompt regular calls for international monetary reform, as we saw most recently in the first half of 1995. Along with the question of how interested a large, relatively closed Ecu bloc is likely to be in wider reform, there is the issue of whether the structure of decision-making in post-EMU Europe will be conducive to productive negotiation. While the ECB is responsible for monetary policy and foreign exchange market intervention, the Maastricht Treaty reserves negotiations over international monetary arrangements for the Council of Ministers. The Council may convene negotiations with non-EU countries, and acting unanimously conclude formal agreements on the establishment of an international monetary system. (The formulation of "general orientations" for exchange rate policy requires only a qualified majority.) Clearly, unanimous consent is a formidable barrier.

In addition, there is the problem of relations with the ECB. In

⁴⁷ This point is emphasized by C. Randall Henning (1994).

convening negotiations the Council must act on a recommendation from the ECB or the European Commission. If the recommendation comes from the Commission, the Council must consult with the ECB in an endeavor to reach a consensus consistent with the latter's responsibility for pursuing policies of price stability. It is not obvious how to interpret the critical phrase, "in an endeavor to reach a consensus..." Nor is it clear how supportive the ECB would be of the operation of a global system of, say, exchange rate target zones or pegged but adjustable rates.

Not surprisingly, these tensions resemble those which characterize the German Government's relations with the Bundesbank. The German government is responsible for negotiations over international monetary arrangements, while the Bundesbank is responsible for the formulation of domestic monetary policies consistent with the maintenance of price stability. In 1990 the government forced through the one-for-one conversion of ostmarks for deutschmarks over the Bundesbank's objections. In 1991 it agreed to the Maastricht Treaty despite the Bundesbank's reservations. The Bundesbank could only refuse to adapt its policies to the new imperatives thrust upon it against its will. It could refuse to reduce its discount rate to stabilize ERM exchange rates during Stage I of the Maastricht process, despite the German government's investment in the treaty and its desire to see a smooth transition to Stage II. One can imagine the same sort of conflict between the ECB and the Council of Ministers over European monetary policy in a reformed international monetary system. If, say, the dollar fell to the bottom of its target zone, the ECB, having had participation in that system forced upon it, might well hesitate to adjust its policies to aid the Federal Reserve Board. If there was not already enough reason to be pessimistic about the operation

of target zones and managed pegs in a world of high capital mobility, EMU provides further grounds for concern.

VII. Conclusion

In 1996, when the Intergovernmental Conference convenes, the immovable object will meet the irresistible force. The irresistible force is the very considerable pressure that exists to complete the transition to EMU. If effective completion and the subsequent functioning of the Single Market hinge on avoiding seriously disruptive exchange rate swings, and if monetary union is the only guarantee of currency stability, as argued here, then the incentive to reach Stage III is great. The immovable object is reluctance, mainly in Germany, to embrace the risks and uncertainties of monetary union. That Germany will necessarily be but one voice among many shaping the policies of the European Central Bank feeds Germany's understandable preoccupation with the stability of its currency and monetary affairs. This is a high hurdle to overcome.

The Maastricht Treaty went as far as possible -- some would say further than was advisable -- to include institutional safeguards of the sort that might reassure Germany about the conduct of the European Central Bank. Now that subsequent events have reduced the likelihood that even these safeguards will suffice to win German support, removing the immovable object requires policy trades across issue areas. This means acceding to German wishes for faster political integration and extending a credible commitment regarding EU market access to the transition economies on the Federal Republic's eastern border.

In turn, this implies coming to terms with variable geometry in a more

systematic way than the European Union has been prepared to do to date. Not all member states will agree to faster political integration or to participation in an EU foreign policy, raising the problem of how to coordinate the policies of the participants with the rest. Not all countries will be ready for monetary union in 1999, posing the problem of how to coordinate the monetary and exchange rate policies of the insiders and outsiders. These are issues on which public discussion and systematic analysis has hardly begun.

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