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**European Monetary Unification
and International Monetary Cooperation¹**

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Monetary affairs are not a leading sphere of U.S.-European cooperation. Were issues ranked by the extent of concerted and sustained cooperation, interest-rate and exchange-rate policy would surely fall behind security, financial-market regulation, and trade. Still, cooperation between the U.S. and Europe and among G-7 central banks and governments more generally has played a significant role on occasion, for example when the dollar soared in the mid-1980s and slumped in 1994, and during exceptional crises like the Mexican meltdown of 1995.

European monetary unification, if and when it occurs, threatens to discourage even modest initiatives such as these. The European Central Bank (ECB) will assume tasks of the national central banks of the EU member states that participate in the monetary union. The Council of Ministers (in consultation with the ECB, the European Commission and the European Parliament) will make decisions regarding European participation in any new global exchange rate arrangement. European policymakers and others are understandably preoccupied by how these bodies will manage the monetary affairs of the newly-formed Euro zone, to the neglect of the implications for cooperation with the rest of the world. Many American observers essentially ignorant of the entire process.

This development is unfortunate, for there is reason to think that EMU

¹ The authors are John L. Simpson Professor of Economics and Political Science and Graduate Student in Economics at the University of California, Berkeley. They thank Andrew Moravcsik, Robert Powell and participants in the Council on Foreign Relations Study Group on Transatlantic Relations for helpful comments and Kira Reoutt for editorial assistance.

will in fact increase the need for international monetary cooperation. During the run-up to Stage III of the Maastricht process, uncertainty about the timing and composition of the monetary union may increase the volatility of Europe's dollar exchange rates. Any tendency for the European Central Bank to liquidate the excess dollar reserves it inherits from national central banks will further disturb the foreign exchange market. Exchange market stability being a shared priority of Europe and the United States, this may lead to calls for concerted intervention and other forms of international monetary cooperation.

In this paper we describe some of the opportunities and perils for international monetary cooperation associated with EMU. Our approach brings together two strands in the literature; one concerned with institutions, the other focusing on policy consensus. Previous work on the subject has featured both perspectives. Our contribution is to show how they fit together.²

The rationale for emphasizing institutions is as follows. International cooperation in the monetary sphere must surmount significant problems of collective action. Countries, aware that their monetary policies spill over to the rest of the world and conscious of mutually-advantageous policy trades, may still find cooperation difficult in the absence of an adequate institutional framework. Institutions are required to overcome the

² While there are vast literatures on the roles of both institutions and ideas in international cooperation, the topics tend to be treated separately. The closest approximation we have found to the present approach is Goldstein (1988). However, Goldstein focuses on trade rather than monetary policy and on domestic rather than international institutions. Private-sector preferences should also figure in any discussion of monetary policy; while they feature in the account that follows, they are not the focus of our analysis. Henning (1994), in another study with points of contact with this one, stresses the role of domestic institutions in building domestic consensus. Our argument can be thought of as an international counterpart to his.

transaction, implementation and monitoring costs that otherwise create problems of coordination and collective action and frustrate policymakers' best intentions. Institutions can encourage international cooperation even when they lack enforcement power.

The second perspective focuses on the connections between policy consensus and international policy coordination. Strictly speaking, policymakers in different countries do not have to share a common outlook in order to implement a coordinated set of policies. One can imagine physicians prescribing a common course of treatment for a patient even when they diagnose different illnesses or hold different views of how a medicine works; such fortuitous coincidences are, however, likely to be rare. Officials have to justify their actions to different domestic constituencies (just as physicians must justify the course of treatment to different insurance carriers), and the credibility of their rationale may be called into question if they do so in conflicting ways. A shared diagnosis and prescription may therefore be needed to coordinate monetary policy internationally.³

We argue that the roles of institutionalization and consensus formation in international monetary cooperation are related to one another. Institutions, by providing a venue for the ongoing, systematic exchange of information and ideas, foster consensus formation. They serve an agenda-setting function that gives precedence to certain conceptual formulations above others. Expert analyses further define the terms of discourse and

³ While we emphasize the existence of barriers to sharing and processing information, a related literature (e.g. Morrow 1994) emphasizes the incentive of governments concerned with the international distribution of the gains to withhold information. We stress the costs of information processing and pooling because we think that this is particularly important in the international monetary sphere and that this is where institutions play a particularly important role. We do, however, provide some discussion of distributional considerations in Section I below.

decisionmaking. The written record and recollections of permanent staff allow these processes to endure beyond the terms in office of any particular set of elected officials.

The tendency for policy consensus to encourage institution building works in reciprocal fashion. Returning to the medical analogy, physicians who share a common view of threats to public health are more likely to agree on the equipment needed in hospitals and on the structure of diagnostic services.

The same is true of the monetary sphere. For example, an emerging consensus in the 1960s that international monetary cooperation was stymied by the inadequate resources of the International Monetary Fund led to the creation of the General Arrangements to Borrow, which in turn encouraged the formalization of the Group of Seven and Group of Ten and regular summits of industrial-country finance ministers and central bankers. Recognition that the balance-of-payments adjustment process was not working smoothly led to the creation of Working Party 3 of the Economic Policy Committee of the OECD. These examples illustrate the role of consensus in institutionalizing the policy coordination process.

Insofar as institutions and consensus affect one another in mutually-reinforcing ways -- with institutions encouraging consensus, and consensus facilitating institution building -- the system they comprise will exhibit positive feedback. A characteristic of positive-feedback systems is that outcomes are sensitive to initial conditions. This allows passing shocks to affect institutions, consensus and policy practices in permanent ways. Technically, these conditions can give rise to multiple equilibria and historical path dependence. The implication is that history matters for international monetary cooperation.

This leads us to start with an account of the history of international monetary cooperation designed to illustrate the roles of institutions and expert consensus. Cooperation has been most successful, we suggest, where it has been most systematically institutionalized and where the greatest policy

⁴ See Arthur (1988).

consensus has prevailed. These preconditions have been more prevalent in Europe than elsewhere in the industrialized world. While monetary-policy coordination in Europe has been far from perfect (we will use the aftermath of German unification to illustrate the point), it has been more extensive and systematic than that between Europe and the United States.

Looking ahead, our analysis raises questions about the scope for monetary cooperation in Europe and across the Atlantic. While institutional and intellectual support for monetary-policy coordination within Europe will be further strengthened in Stage III of the transition to EMU, a limitation of that framework concerns relations between the "ins" and the "outs" -- between member states that will and that will not be founding members of the monetary union. While this problem can be remedied, it presently looms as the principal threat to monetary cohesion in Europe and to the broader program of economic and political integration with which the EMU project is linked. By comparison, institutional and intellectual support for transatlantic monetary cooperation, and for G-7 monetary cooperation more generally, remains deficient. The advent of Stage III will only highlight these limitations.

We develop our argument in six steps. Section 1 elaborates the analytical perspective. Section 2 shows how it sheds light on the greater success of monetary cooperation in Europe than in the G-7 as a whole. Section 3 enumerates the institutional changes that will result from Stage III of the Maastricht process, and section 4 analyzes their implications for monetary cooperation within Europe. Section 5 considers the implications of these changes for transatlantic monetary affairs, and section 6 asks finally what can be done to strengthen the framework for international monetary cooperation.

⁵ Space constraints necessarily limit the scope of our treatment of this topic. Our focus is on European motives and capacities for engaging in international monetary cooperation, since it is in Europe that the most dramatic changes are taking place. We say less about the United States and even less about Japan. But to grasp the full implications of EMU it is necessary to view it in terms of the framework for international monetary cooperation provided by global institutions like the International Monetary Fund, the Bank for International Settlements, and annual Group of Seven summits. Hence, these arrangements figure prominently in the discussion that follows.

1. Institutions and Intellectual Consensus

In this section we describe problems of commitment and coordination that thwart attempts at monetary cooperation and suggest how institutions help overcome them. In doing so we highlight the role of intellectual consensus in concerted policy action and specify the linkages between institutionalization and consensus formation.

A. Prerequisites for Cooperation

A large literature analyzes the spillover effects of monetary policies and the welfare gains from policy coordination. A related historical literature shows, paradoxically, that the international coordination of monetary policies has actually been the exception, not the rule. This, it would appear, is the peculiar case of a free lunch -- where there exist significant unexploited welfare gains for the countries concerned.

A resolution to this paradox is that costs of policy coordination also exist, and that these costs can dominate when coordination is ad hoc. First, it is costly to **assemble the information needed to coordinate policies**. In order to identify a mutually-advantageous policy trade it is first necessary to acquire information on monetary and general economic conditions in countries that are party to the agreement. Monetary policymakers often operate behind a veil of ignorance -- they must reach decisions on the basis of incomplete information about the strength of the economy (and they have even less information on its strength six to nine months from now when the effects of monetary initiatives are generally felt). But the lack of

⁶ These gains arise for standard reasons suggested by the theory of externalities. International coordination can be thought of as moving to a situation where the international externalities associated with national policies are internalized. A good introduction to the relevant literature is Bryant et al. (1988).

⁷ See for example Cooper et al. (1989) and Henning (1994a).

⁸ These "costs" should not be interpreted too literally; the factors we next discuss can be thought of, more generally, as obstacles to international policy coordination, following Frankel (1988). Much of our discussion of the topic draws on this useful article.

information tends to be especially pervasive when foreign economic conditions are involved.

Second, it is costly to **evaluate the connections between policy and economic conditions**. Officials may not all understand, much less agree, on how policy affects the economy (on whether a change in monetary conditions mainly affects inflation or growth, for example). These problems are especially severe in the international domain, where the cross-border effects of monetary policy are a matter of particular dispute.

Third, it will be costly to **reach an international consensus on the impact of policy adjustments**. Frankel and Rockett (1988) show that policymakers are unlikely to agree on mutually-advantageous policy trades when they disagree on the model of the economy. In the presence of uncertainty, governments will not be inclined to strike a bargain unless they can expect to gain under both governments' models. This suggests that bargaining will not even start unless both countries have such expectations. Since there will in general be only a small likelihood that both countries gain in both scenarios, disagreements about the model are a major obstacle to cooperation. But reaching a consensus can involve protracted negotiations that themselves entail significant costs.

Fourth, it may be costly to **implement policy adjustments**. Few events draw more attention in financial and political circles than changes in monetary policy. Effective implementation of a policy requires preparing public opinion to ensure a favorable reception. The essence of international coordination is moving domestic policy in a direction that is undesirable when taken in isolation; the adverse effects are then more than counterbalanced by the beneficial impact of changes in policy abroad. Preparing public opinion may be difficult under such circumstances. In addition, it may be necessary

⁹ See Holtham and Hughes Hallett (1987) and Kenen (1990).

¹⁰ This issue of consensus formation is a key element of our argument; we return to it below.

¹¹ Readers need only recall the 1994-5 Mexican crisis for an illustration of the point.

to implement the adjustments in domestic and foreign policies simultaneously so as to impress the public with the linkage.

Fifth, it will be costly to **monitor compliance**. Typically, each country adjusts policy in a way that is undesirable in isolation but is then more than compensated by the adjustment of policy abroad. But countries will have an incentive to chisel on this bargain if they can do so without being caught (since the government then obtains the adjustment in foreign policies it desires without any compromise of its own policy stance). The longer the lag between a country's defection and its partners' reversion to noncooperative behavior, the greater the incentive to renege. Thus, effective monitoring will help to support cooperation.

Sixth, it is costly to **enforce the agreement to cooperate**. If the only response available when a country cheats is for its partners to withdraw their cooperation, they may be reluctant to agree to the bargain in the first place.

Because the effort to coordinate policies involves costs (for the reasons detailed above), countries will have sunk these without reaping compensating benefits if agreement breaks down quickly. As a precondition for cooperating, they may therefore demand sanctions adequate to limit the incentive to renege.

In practice, however, the development of an enforcement technology, involving penalties for countries that chisel on the agreement, may be impractical.

Thus, our discussion of the obstacles to international policy coordination emphasizes the difficulty of pooling information. In the real world, the nature of the economic problem, the stance of policy, and the direction of cross-border spillovers may not even be evident to the initiating country, much less to its foreign partners. Assuming that governments can costlessly pool the relevant information misses much of the action. Add to this problems of implementation and enforcement, and it becomes apparent that costs of cooperation can be significant.

B. Mechanisms for Cost Containment and Consensus Formation

The institutions of international monetary cooperation can be thought of as mechanisms for reducing these costs. The International Monetary Fund,

Working Party 3, G-7 summits, and the Monetary Committee of the European Union are all cases in point.

Because information is a non-rival good, effort will be duplicated if different governments gather it in parallel. An international institution can centralize this function at reduced cost. The roles of the IMF in assembling balance-of-payments and government-finance statistics, of the OECD in issuing its "Main Economic Indicators," and of the European Monetary Institute and European Commission in publishing member states' "convergence indicators" can be thought of in this light.

Assessing the cross-border spillovers of policy can be thought of as a central function of IMF surveillance, of OECD country studies, and of the directorates of the European Commission. Small countries in particular may not possess the expertise needed to analyze the connections between policies abroad and conditions at home; here an international organization may have a comparative advantage.

The institutionalized exchange of information and views can facilitate the achievement of consensus. The regular meetings of Working Party 3, G-7 Summits, the IMF Executive Board, the BIS, and the Committee of Central Bank Governors of the European Union do more than supply the vintage wine that lubricates the flow of ideas. Meetings provide precedents; past agendas shape future agendas; staff analyses provide terms of reference; statistics reported in background reports serve as focal points which direct officials to policy problems deserving their attention. The written record and institutional memory of staff lend continuity to a process that would otherwise be disrupted by changes in government and in cabinet composition.

As explained above, cooperation requires technologies for implementing policy adjustments and monitoring compliance. Institutions supply these prerequisites. The EU, for example, possesses a Monetary Committee that follows standard procedures when negotiating realignments of ERM currencies and supporting currencies under pressure. Another EU institution, the Commission, is empowered by the Maastricht Treaty to work with the Monetary

Committee in monitoring countries' compliance with their monetary, fiscal and exchange rate commitments. The treaty authorized the creation of an institution, the European Monetary Institute, to cultivate a consensus regarding monetary policy implementation and to harmonize the institutional arrangements of the prospective national participants in EMU. It provides for sanctions against countries that fail to adhere to the bargain: in Stage II of the Maastricht process, those violating the treaty's Excessive Deficit Procedure may be barred from the monetary union; in Stage III, the Council may also require the member state in question to publish additional information before issuing bonds and securities, invite the European Investment Bank to "reconsider" its lending policy toward the country, require that country to make non-interest-bearing deposits with the Community, and impose fines.

C. Comparisons with the Existing Literature

Our approach has points of contact with several literatures, although it diverges from each of them. First, there is the literature in economics on international policy coordination and specifically on the possibilities and effects of cooperation when policymakers disagree on the model. Some contributors to this literature (e.g. Bryant, 1987; Horne and Masson, 1988) argue that there could be sizeable gains from consultation and information exchange, including consultations designed to reconcile analytical frameworks and overcome conceptual obstacles to coordination. They do not focus, however, on institutions as mechanisms for facilitating consultation and information exchange.

Second, there is the literature in political science on international regimes, in which it is argued that the repeated-game nature of countries' interaction can assist in monitoring and sanctioning. Keohane (1983), for example, emphasizes the role of repeated interaction in oversight and enforcement. While he also discusses the role of institutions in disseminating information and reducing transactions costs, we move beyond his analysis by "unpacking" the functions of the institutions of international monetary cooperation.

Third, there is the work in economics on firms as communication networks. Bolton and Dewatripont (1994) analyze how organizations reduce costs of information processing and transmission. In their model, time is required to absorb information, whose flow is too large to be processed in its entirety by any one individual or set of agents. But the time needed to absorb it can be reduced if agents specialize in processing particular types of information. This may lead several individuals to form a team (or, in the context of industrial organization, a firm). Thus, the existence of processing costs, which makes it optimal for agents to assimilate less than all the information available, introduces bounded rationality and therefore a role for institutions.

This approach shares with our's the assumption that policymakers face costs of processing and transmitting information. It provides a rationale for the existence of a centralized organization (in our context, an international institution). But, compared to Bolton and Dewatripont, we are inclined to interpret the information advantages of institutionalization more broadly. In their framework, institutionalization permits teamwork and specialization. We would argue in addition that institutionalization reduces communication costs by providing a structure for discussions, by generating documents that serve as points of reference, and by encouraging the development of a common analytical language.

Fourth, there is a literature in political science on epistemic communities, "networks of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-

¹² Time can be thought of as a metaphor for costs of information processing generally.

¹³ One can imagine how it can be similarly costly for governments to process information about economic conditions and policies in foreign countries. In this case, the specialized information-processing and dissemination services required to enhance communication can be lodged with an international organization with a constituency large enough to support a range of such specialized services. The size of that institution would be determined, as in Bolton and Dewatripont, by the tradeoff between the returns to specialization and the costs of communication (since additional specialization entails additional communication and hence additional costs).

relevant knowledge..." (Haas, 1992, p. 3). These experts are a source of information and knowledge that help to overcome uncertainty about the problem facing policymakers. Their expert status legitimizes particular interpretations of phenomena, guiding policymakers toward shared formulations and common characterizations of the linkages between policies and outcomes.

This approach shares with the preceding one the assumption of bounded rationality, insofar as it posits that policymakers may be unable to adequately conceptualize the problem they face and to comprehend the connections between policy instruments and targets on their own. However, we emphasize not any superior analytical ability of experts, but rather the tendency for institutions to channel the discussions and discourse through which policymakers themselves arrive at consensus formulations. The obstacle to cooperation may not be the inability of policymakers to formulate "models" of the connection between instruments and targets but rather their inability to agree on the applicability of any one model to the problem at hand. Institutionalized procedures and structures, besides allowing expert analysis to lend legitimacy to some models above others, makes certain models the point of departure for discussions and thus vests influence in particular formulations.

Finally, there is a literature in political science in which a government withholds information in order to maximize its share of the gains from coordinating policy. In a world of uncertainty, policymakers may misrepresent their willingness to cooperate, for example, in order to increase the likelihood that cooperation will take place on their preferred terms. But that misrepresentation may limit the probability that cooperation will take place at all. Hence, mechanisms of communication, in which players agree on the structure and interpretation of messages, can increase the scope for

¹⁴ An illustration of the point in the context of international monetary cooperation and the construction of international monetary institutions is the role of U. S. and British economic experts in the Bretton Woods negotiations, as analyzed by Ikenberry (1993).

¹⁵ See for example Morrow (1994).

cooperation. Institutions can provide this, thereby encouraging cooperation even when they lack enforcement power.

This approach shares with our's an emphasis on uncertainty. Actors in the international monetary domain may be uncertain about the solution they prefer, and this very uncertainty may be the reason they prefer different policies. Nor is it difficult to imagine circumstances under which governments withhold information for strategic reasons. The institutionalization of intergovernmental communication can therefore help officials to determine when governments are sending meaningful messages. By helping them to interpret those messages, they can help to arrive at a shared interpretation. However, we do not emphasize distributional aspects of international monetary bargains in the discussion that follows. In many international monetary applications, the barrier to cooperation is not just distributional haggling but also costs of information processing and pooling, as described above. It is this which we emphasize in our historical account.

To summarize, our approach focuses on the consensus-building role of international monetary institutions which work by facilitating consultation and information exchange. Relative to previous treatments we provide a more disaggregated analysis of their functions. Rather than stressing the superior analytical ability of experts, we highlight the capacity of the institutions within which such individuals operate to channel the discussions and discourse through which policymakers arrive at consensus formulations. We emphasize obstacles to information processing and pooling rather than distributional conflicts as barriers to coordination.

2. Recent Experience with International Monetary Cooperation

In this section we analyze in more detail the role of institutions in facilitating the international coordination of monetary policies, reviewing industrial-country experience generally before focusing on the European case.

We argue that more extensive institutionalization and growing policy

¹⁶ Such communication requires both a forum for exchanging messages and a shared interpretation of their meaning. There is an obvious analogy with the literature on cheap talk (Farrell and Gibbons, 1989).

consensus have supported more systematic monetary policy coordination in Europe than elsewhere in the advanced industrial world.

A. Transatlantic Cooperation from Bretton Woods to Today

The motivation for creating the International Monetary Fund was a desire to prevent a recurrence of the competitive devaluations and beggar-thy-neighbor monetary policies of the 1930s. To this end, the framers of the IMF Articles of Agreement hoped to create a mechanism for consultation and collaboration on monetary problems. But disputes over the structure of the Fund and over its capacity to influence the domestic policies of its members circumscribed this role. The only explicit obligations members incurred under the Articles of Agreement were to maintain the par values of their currencies and restore current-account convertibility after a transitional period. With the advent of IMF conditionality in the 1950s, Fund credit came with stipulations that sometimes took into account the foreign repercussions of domestic policies, but invocations of international policy coordination in the context of Fund conditionality were rare. The industrial countries were reluctant to subject themselves to IMF oversight. Restricting exchange rate adjustments to episodes of fundamental disequilibrium rendered that step and associated consultations with the Fund an embarrassing admission of policy failure.

The restoration of current account convertibility in 1958 made clear the inadequacy of existing policy-coordination mechanisms. Working Party 3 of the Economic Policy Committee of the OECD was a response to this institutional lacuna. It was designed to encourage dialogue on policies affecting balance-of-payments adjustment, which had emerged by the 1960s as a principal problem afflicting the Bretton Woods System. The members of Working Party 3, deputy ministers and deputy central bank governors of the leading industrial

¹⁷ In the words of the Articles, the purpose of the Fund was "to promote international monetary cooperation through a permanent institution which provides the machinery for consultation and collaboration on international monetary problems."

¹⁸ Two useful accounts of the history of Working Party 3 are Crockett (1989) and Schoorl (1992).

countries (along with the OECD Secretariat and representatives of other international institutions), met every six to eight weeks, making dialogue on the impact on other countries of domestic policies a regular affair.

Along with providing background documentation, forecasts, and analyses of national economic conditions, the OECD responded to the demand from Working Party 3 and the Group-of-Ten countries (the advanced industrial nations that underwrote the General Arrangements to Borrow) for a more systematic framework for the formulation of balance-of-payments policies. The result was a landmark report (Working Party 3, 1966) acknowledging that provision for policy coordination should extend beyond monitoring countries' compliance with their obligation to maintain par values and current-account convertibility. While its focus was on the sustainability of individual countries' balance-of-payments positions rather than the implications for their industrial-country partners and systemic stability, this report was a significant step toward establishing a framework for more systematic international policy coordination. It encouraged the regular exchange of information on national policies and economic conditions. It emphasized the importance of regular analysis of the compatibility of national forecasts. It recommended the development of an "early warning system" to signal incipient payments problems.

These functions are interpretable in terms of the information exchange, monitoring and consensus formation roles of institutions described in Section 1 above. But as attested to by the troubled history of balance-of-payments diplomacy in the second half of the 1960s, consensus formation remained incomplete. In particular, U.S., French and German policymakers developed different views of the sources of the American balance-of-payments deficit. As in Morrow's (1994) model, they had an incentive to withhold information on their true interpretation of the roots of U.S. balance-of-payments deficits and on their true willingness to adjust in order to secure agreement by their foreign counterparts to bear the bulk of the adjustment burden. And institutional support for information exchange, monitoring and consensus

formation did not extend to implementation and enforcement.

The breakdown of the Bretton Woods System, one interpretation of which was in terms of U.S. failure to take into account the systemic repercussions of its policies, offered an opportunity to extend the institutional framework.

The initiatives that followed can be understood in terms of information exchange, monitoring and consensus formation. The Interim Committee agreed in 1976 on a new Article IV of the IMF's charter. While opening with a faint echo of the original Bretton Woods Agreement, committing countries to maintain stable exchange rates and to refrain from manipulating their currencies, Article IV also instructed the Fund to exercise "firm surveillance" of national policies and develop principles for policy formulation.

Institutionalization took the form of regular Executive Board discussions of the IMF's World Economic Outlook, which offered staff analyses of the global impact of national economic policies; of increasingly comprehensive and regular consultations with national governments under the aegis of Article IV; of a mandate for special consultations with countries whose policies potentially created problems for their neighbors or the international system (although these special consultations turned out to be rare in practice); and of an "information notice system" alerting the Executive Board and providing staff analysis of exceptional currency fluctuations.

While a step forward, Article IV surveillance suffered from the same limitations as the Working Party 3 initiative. Information exchange, monitoring and expert analysis were necessary but not sufficient for consensus formation. This became evident in the 1980s when agreement did not exist on the causes of either the dollar's fluctuation or the debt and financial difficulties of the developing countries. Governments had a familiar incentive to withhold information about their interpretation of events and

¹⁹ Insofar as IMF stand-by arrangements in the upper credit tranches became increasingly prevalent in the second half of the 1960s, there existed at least one mechanism with financial carrots attached to encourage the implementation of these principles. As before, however, IMF programs were mainly directed at developing countries, not toward the industrial countries that are our focus here.

willingness to adjust in the hope that their foreign counterparts could be forced to assume the greatest part of the adjustment burden. Absent enforcement power, even course corrections on which policymakers agreed were difficult to implement. Hence, there was no comprehensive, coordinated policy response to either problem.

Those problems did, however, engender concern about the limitations of the prevailing framework. Another report by the Group of Ten, this one published in the mid-1980s, again advocated strengthened surveillance and peer pressure to encourage consistent policies. But again, this weak soup nourished only limited cooperation. Policy coordination, where it occurred, was ad hoc and restricted to exchange rate support, most notably at the time the Plaza and Louvre Accords and subsequent episodes of concerted intervention on behalf of the dollar, most recently in April 1995.

The limitations of the ad hoc approach are apparent in connection with the Plaza and Louvre accords. That historians continue to dispute the effectiveness of these agreements is an indication that the impact of these initiatives was far from overwhelming. The reason was the unwillingness of governments to follow through with changes in domestic, in particular fiscal, policies, and the inability to commit central banks to sustained shifts in monetary policy. The only instrument which therefore remained available was sterilized intervention. And sterilized intervention not backed by a commitment to adjust domestic policies had at best limited effects. In the end, these efforts foundered over the absence of an institutional mechanism to compel domestic policy adjustments.

The practice of issuing regular communique following G-7 summits and ministerial meetings was a modest positive step. The IMF took part in these exercises from the 1980s, providing statistical and analytical input. The practice of drafting communique encouraged information exchange and consensus formation, although the substantive content of the communique, and therefore the pressure for policy changes, varied. When consensus was lacking, as with the causes of the "twin deficits" of the United States in the 1980s,

communiqués tended to be relatively content free. The same was true of the agreement at the 1986 Tokyo Summit to rely on an explicit set of economic indicators; exactly what indicators to consider and what to do with them remained unspecified. It was also true of efforts to lend content to the Interim Committee's 1987 declaration that national economic policies should be gauged in terms of their "desirability" and "sustainability."

A final illustration of the advantages and limitations of institutionalized cooperation is the Mexican rescue of 1994. The IMF and G-10 possessed mechanisms, namely stand-by arrangements and the General Arrangements to Borrow, intended to cope with this situation. But the Fund process operated neither on the requisite scale nor at the necessary speed. Members of its Executive Board had to consult with their home governments, and that took time. In the absence of a consensus diagnosis of the crisis, U.S. and European governments could not agree on a response. In addition, the limited resources of the Fund required supplementation. While the GAB was the obvious source of supplementary finance, supporting a non-contributor required, in the words of the arrangement, an "exceptional situation of a character or aggregate size that could threaten the stability of the international monetary system." In the short period available no agreement could be reached that Mexico satisfied this condition. As a result, effective management of the crisis required exceptional action by the United States and the IMF.

B. European Exceptionalism

The European economies are relatively open and trade disproportionately with one another. They have long been sensitive to the cross-border spillovers of national policies, having suffered heavily from disruptions associated with the competitive depreciations of the 1930s. Hence, they were

²⁰ For further discussion of this history, see Frankel (1990).

²¹ Whether an equally effective ad hoc response will be forthcoming in future crises is an open question. Steps are underway to more effectively institutionalize the capacity to manage financial crises in emerging markets. These include IMF initiatives to encourage the dissemination of information and to strengthen surveillance, as well as an effort to double the size of the GAB.

quick after World War II to develop institutional arrangements to encourage monetary policy coordination. That legacy has evolved into the monetary institutions of the European Union.

The organization of European nations that eventually came to be known as the OECD (previously named the CEEC and the OEEC) was established in response to the U.S. offer of the Marshall Plan. The U.S. insisted that recipients cooperate in the allocation of its aid: this required reconciling their forecasts of unfinanced current-account deficits to see that these did not exceed the aid on offer and adjusting policies accordingly. The European Payments Union, the clearing system established in 1950, was a direct descendent of the Marshall Plan. The EPU agreement established a Managing Board made up of experts seconded by participating countries reporting to the Council of the OEEC. Their charge was to monitor national policies and recommend adjustments. Countries obtaining exceptional EPU credits had to accept the Managing Board's policy conditionality and report monthly on their progress.

With the resumption of current account convertibility, the OECD was expanded to include the United States. The smaller European countries insisted that its Working Party 3 should retain the same membership structure as the EPU Managing Board. This institutional continuity lent structure and coherence to its deliberations.

The desire for closer policy coordination reflected two imperatives: European integration as a strategy for locking Germany into Europe and the need to insulate European monetary affairs from unpredictable U.S. policy. The Treaty of Rome acknowledged that exchange rates and macroeconomic policies were matters of "common concern" (Paras. 103-7). The EEC's first achievement in this domain was the creation of a Monetary Committee comprised of a

²² Schoorl (1992), pp. 7-8.

²³ In fact, the two influences were related. One of the EEC's first achievements was the creation of the Common Agricultural Policy, which was exceedingly vulnerable to disruption by exchange rate changes and hence subject to destabilization by the United States.

representative of each national central bank and each finance ministry, plus two representatives of the European Commission, to exchange views, cultivate consensus, and prepare for meetings of the Council of Ministers of Economics and Finance (ECOFIN). The Committee of Central Bank Governors was created in 1964; by the time the European Monetary System was established in 1979, this committee had been meeting for 15 years.

Still, until the 1980s there was less institutionalization of policy coordination than met the eye. This was reflected in the difficulty governments experienced in holding their exchange rates within the narrow bands of the Snake following the breakdown of Bretton Woods. Inspired by the report of the Werner Committee (1970), which emphasized the advantages of European monetary integration, participants in the Snake established Short-Term and Very-Short-Term Credit facilities to support weak-currency countries.

A European Monetary Cooperation Fund, with a board made up of governors of national central banks, was established to monitor European monetary policies, oversee the operation of credit facilities, and authorize realignments.

In practice, the European Monetary Cooperation Fund possessed little authority, central bank governors being unwilling to delegate their prerogatives. For their part, the central bankers, meeting as the Committee of Governors, did little more than periodically coordinate foreign exchange market intervention, abrogating their putative responsibility for coordinating policies. In the end, there was no effective institution to monitor policies and press for adjustments. The absence of such a mechanism meant that the strong-currency countries could not be assured that their weak-currency counterparts would adjust. This meant that the foreign support they were willing to provide was limited.

Analogous problems afflicted fiscal policy. The fiscal federalism and centralization foreseen in the Werner Report, which would have helped weak-

²⁴ In addition, in the early 'sixties it established a trio of committees concerned with conjunctural policy, medium-term economic policy, and budgetary policy; these were merged into a newly-created Economic Policy Committee in 1974.

See Gros and Thygesen (1991), pp. 22-23.

currency countries cling to the Snake, remained pie in the sky. There was no political entity in Brussels accountable to constituencies at the national level, leading governments to resist ceding fiscal responsibility to the Community. Hence, the adjustments in national fiscal policies needed to hold exchange rates within the Snake were not forthcoming.

Underlying the ineffectiveness of these arrangements was an absence of policy consensus. National officials held different views of the appropriate response to disturbances. The idea that monetary policy should be targeted at the maintenance of price stability was not yet a prevailing orthodoxy. Policymakers, having had little opportunity to experiment with expansionary monetary policy under Bretton Woods, failed to appreciate how attempts to aggressively utilize the instrument, especially in an environment of unbalanced budgets, could stimulate inflation rather than output and employment. Given Germany's aversion to inflation, the result was a predictable lack of policy cohesion.

EC member states sought to rectify these deficiencies and, more generally, to restore symmetry to the operation of Europe's monetary system when creating the EMS. As envisaged by the French and German negotiators, the EMS Agreement would have replaced the moribund European Monetary Cooperation Fund with a European Monetary Fund to manage the combined foreign exchange rate reserves of the participating countries and intervene in currency markets. Germany sought to endow the Monetary Committee with strengthened oversight powers as a way of creating a body to which national monetary policymakers could be held accountable. Among the responsibilities of this committee was to be the development of a "trigger mechanism" requiring changes in domestic policies when these jeopardized currency pegs. A violation of agreed-upon indicators would force strong-currency countries like Germany to expand and weak-currency countries like France to contract. In return for subjecting itself to this oversight, France secured a provision in the EMS Act of Foundation authorizing governments to draw unlimited credits from the Very-Short Term Financing facility.

The political viability of this bargain hinged on the effectiveness of Monetary Committee oversight and of the trigger mechanism. If oversight was lax and the trigger failed to fire, Germany might be required to extend unlimited exchange-rate support to its more inflation-prone EMS partners, undermining its commitment to price stability. The Bundesbank's reservations led it to obtain a letter from the finance minister, Otmar Emminger, conceding it the right to opt out of its intervention obligation if the Government was unable to secure an agreement with its European partners on the need to realign. In return, the German government dropped its demand for a trigger mechanism.

Notwithstanding these compromises, the EMS of the 'eighties functioned more smoothly than the Snake of the 'seventies, reflecting strengthened surveillance and more generous credit lines. None of the countries which participated in the EMS saw their currencies driven out of the system, in contrast to experience under the Snake. Still, the reach of these institutions was limited. In particular, they did not extend into the sphere of domestic fiscal policy. They could not significantly shape the monetary policies of the strong-currency countries. Nor could they force countries to realign if they were reluctant to do so. This became evident in the wake of German economic and monetary unification, when countries' preferences proved to be different and the German monetary-fiscal mix placed strains on other ERM currencies. The EC's institutional apparatus proved incapable of bringing about timely realignments of those currencies. It could force neither budgetary retrenchment by weak-currency countries nor a change in the German policy mix. The resulting lack of policy coordination, emphasized by Buitter et al. (1995), culminated in the 1992-93 crisis which drove the U.K. and Italy from the Exchange Rate Mechanism of the EMS.

Thus, while Europe has made much progress toward constructing institutions to support systematic and successful monetary policy coordination, success remains less than complete. The Maastricht Treaty and

See Otmar Emminger (1986).

the monetary union project respond to this need. How they will reshape the institutions of monetary cohesion in Europe is the subject of the next section.

3. Post-EMU Europe

The advent of the European Central Bank will transform the institutions of monetary cooperation. Article 2 of the statute of the European System of Central Banks (comprised of the ECB and the national central banks of the participating countries) mandates that it take price stability as its primary objective. This language illustrates the importance of the emerging policy consensus of the late 1980s and 1990s in facilitating the negotiation of the Maastricht Treaty and the role of the treaty in institutionalizing that consensus.

The ECB's objective will be carried out by an Executive Board appointed when the starting date for Stage III is set. The Board will have six members, including the president, chosen by common accord of the countries participating in the monetary union on a recommendation of the Council of Ministers and after consulting with the European Parliament and the Governing Council of the ECB. They will serve long terms in office, typically eight years. They will be joined on the Governing Council by the heads of the central banks of the participating countries, whose independence will have been strengthened and terms in office lengthened in Stages I and II. The Governing Council will take the key decisions regarding the stance of monetary policy (setting the level of interest rates, for example), while the Executive Board will oversee the implementation of those decisions.

Insofar as exchange rate fluctuations have implications for the ECB's primary objective, responsibility rests with the Governing Council. At the same time, Article 109 of the Maastricht Treaty empowers the Council of Ministers, acting by qualified majority, to adopt "general orientations" for

²⁵ Some members will serve shorter terms in office during the initial period to permit the eventual staggering of appointments.

exchange rate policy vis-à-vis non-EU currencies. One purpose of this provision is presumably to facilitate the negotiation of Louvre-like intervention agreements. Article 109 states that such orientations must not jeopardize the pursuit of price stability, although it does not indicate who will decide whether or not this is the case. Nor does it provide a mechanism that would make the Council's general orientations binding on the ECB.

A decision to establish a system of pegged exchange rates for the industrial countries, as suggested by Volcker (1995), or a global system of target zones, à la Williamson (1987), would rest with the Council of Ministers. The Council must act unanimously after consulting with the ECB and attempting to reach a consensus on the compatibility of its decision with price stability. In this case the Council's decision will bind the ECB.

As indicated by our discussion in Section 2, efforts to coordinate monetary policies can be hampered by an inability to adjust national fiscal policies. One can imagine that this problem could be quite severe under the institutional arrangements of Stage III. While the monetary policies of EMU members will be run by the ECB, fiscal policies will still be determined in national capitals. The Excessive Deficit Procedure (EDP) of the Maastricht Treaty might conceivably provide some relief. A member state will be said to have an excessive deficit when it is declared to do so by the European Council upon a report by the European Commission and a judgement by the Monetary Committee. The EDP is set in motion if the country's deficit and general government debt exceed 3 and 60 percent of GDP, the "reference values" specified in a protocol to the treaty. While this procedure is not intended to facilitate fiscal policy coordination per se, it will encourage the exchange of information and the analysis of cross-border impacts of national policies. Whether it can be applied with the flexibility needed for the sensible coordination of fiscal policies is another matter; if rigidly

²⁶ See Kenen (1995), pp. 32-3.

²⁷ We discuss some consequences of this using a formal framework in Ghironi and Eichengreen (1996).

enforced it could in fact pose a barrier to coordination.

Acknowledging these questions, the Maastricht Treaty provides the Mutual Surveillance Procedure (MSP) of Article 103. It instructs the Council to develop guidelines for the economic policies of member states, to monitor their economic policies, and to issue recommendations should policies be inconsistent with its guidelines. However, the treaty contains no sanctions for countries that fail to respond as requested, and does not indicate how the MSP and EDP will be coordinated.

The treaty does little to articulate a framework for monetary relations between the founding EMU members and other EU countries. Articles 44-47 and 109 provide for a General Council of the ECB, to include the Governing Council plus the heads of the central banks of non-EMU member states, but its responsibilities are limited to collecting statistics and determining staffing policy. The treaty makes scant mention of the EMS.

4. Implications for Monetary Cooperation in Europe

The Maastricht Treaty makes little mention of the EMS or of other mechanisms for monetary policy coordination between the EMU insiders and outsiders because EU officials failed to forecast the current situation. They anticipated that all EU member states would be ready to enter Stage III as soon as it commenced. If all countries were not ready, then it was optimistically thought that the laggards would join as soon as possible, anchoring exchange-market expectations. On the assumption that governments would be willing and able to hold their exchange rates within narrow bands (EMS bands being 2 1/4 per cent at the time), two years of doing so were made

²⁸ See Eichengreen and von Hagen (forthcoming). This problem is more likely if the EDP is supplemented by a stability pact or stability council, as suggested by the German Government, and a set of normative ceilings for budget deficits even tighter than those specified in the protocol to the treaty.

²⁹ In addition, the General Council is entitled to be informed of the decisions of the Governing Council. Only the president of the ECB and the heads of the national central banks, not the other members of the Executive Board, vote on the General Council.

one of the four convergence criteria governing admission. For all these reasons, then, the presumption was that intra-EU exchange rates would be stable.

Today's situation is very different. The 1992 EMS crisis drove Italy and the U.K. from the ERM, and the second of these two countries has still made no move to rejoin. It forced two new EU members, Sweden and Finland, which had previously pegged their currencies, to float. Fluctuation bands for the remaining participants were widened from 2 1/4 to 15 per cent, increasing the scope for currency variability. Debate in Britain and Denmark made clear that these countries, which possessed opt outs from EMU under the Maastricht Treaty, might prefer not to join. Successive recessions underscored the difficulty of meeting the debt and deficit criteria for entry, highlighting the likelihood of multi-speed monetary union.

For all these reasons, it is now certain that there will exist both insiders and outsiders when EMU begins. This creates a need for mechanisms to promote policy coordination between the two groups. The Mutual Surveillance Procedure, described in Section 3, is one such mechanism. But it does not come with an effective enforcement technology, especially for countries that do not wish to participate in the monetary union. While the protocol to the treaty makes two years of exchange rate stability within "normal" EMS bands a precondition for entry, it does not define "normal." Increasingly the view is that normal means 15 per cent. And even this relatively lax constraint will not bind for member states with no immediate intention of entering EMU.

This raises the specter of significant exchange rate fluctuations between the Euro and the currencies of the EU "fringe," a prospect which countries like France find particularly alarming. The French fear competitive currency depreciation and the dumping of goods by EU member states like Italy and the U.K. that will not be among the founding members of the monetary union. The departure of those countries from the ERM and their subsequent

³⁰ Certain countries which joined the ERM relatively late were allowed to operate wider, 6 per cent bands, but the presumption was that they would follow Italy in moving from the wide to the narrow band as soon as they were ready.

export-led recoveries, which have taken place partly at French expense, resonate with France's long-standing aversion to currency fluctuations. This has prompted French pressure for a new EMS to be constructed around the single European currency. This would be a "hub-and-spoke system" in which other currencies would be linked to Euro by bilateral bands, in contrast to the multilateral grid that currently links ERM currencies.

The notion that Europe will follow this route is premised on the belief that, for its relatively open economies, the political costs of floating are prohibitively high. The more integrated European economies become, 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. The implication is that uncontrolled fluctuations between the currencies of the insiders and outsiders may undermine the Single Market and hence be unacceptable to all concerned.

However strong the argument for exchange rate bands to prevent the uncontrolled fluctuation of the currencies of countries that stay outside EMU, there remains the question of the viability of such a system. The history of the EMS in the 1990s has demonstrated the difficulty of defending exchange rate bands in today's highly liquid markets. Once the strong-currency countries join together in a monetary union, only the weak sisters will remain outside, leaving them sitting ducks for speculators. The ECB will be concerned to establish the credibility of its commitment to price stability. It will hardly be prepared to lend extensive support to currencies outside. The result may be to situate the monetary union in a fragile monetary and financial environment.

³¹ We present examples of public statements and other evidence consistent with this prospect in Eichengreen and Ghironi (1996).

Thus, the prospects for monetary cooperation between the EMU insiders and outsiders remain clouded. The Maastricht Treaty fails to specify the institutional framework for cooperation. The 1992-3 EMS crisis undermined the policy consensus that once existed between countries like Sweden and the U.K. on the one hand and France and Germany on the other. These problems remain to be solved.

5. Implications for Transatlantic Monetary Cooperation

EMU, if not accompanied by advance planning, threatens to disrupt the institutions of international monetary cooperation. Consider Article IV consultations between the International Monetary Fund and EU member states participating in the monetary union. Article IV consultations with individual EU member states have traditionally taken reviews of monetary policy as their responsibility; in Stage III, however, that policy will no longer be under the control of the national government in question. Nor will fiscal policy, insofar as the latter is influenced by the Excessive Deficit and Mutual Surveillance Procedures of the European Union. Little thought has yet been given to these implications of EMU for the coordinating role of the IMF.

Consider G-7 summits. Since 1977 it has been standard practice for the president of the European Commission to attend these summits, along with the leader of the country holding the presidency of the Council of Ministers. In the late 'seventies a meeting of the Council was always timed to occur shortly before the summit, in the effort to define a common EC position and maximize the coherence of member countries' bargaining positions. This has been less true subsequently, and coordination between EC and national representatives at G-7 summits has been loose at best.

But neither the president of the European Commission nor the finance minister of the country holding the presidency of the Council of Ministers can

³² One exception is Allogoskoufis and Portes (1991).

³³ The Commission has participated in discussion of all questions arising at the summit, not just those directly involving the European Community. See Putnam and Bayne (1987).

speak for the European Central Bank, which will control the levers of monetary policy for the Euro zone. The ECB cannot speak for Italy and the U.K. so long as they remain outside the monetary union. It will, however, represent Austria, Ireland, and the Benelux countries, not presently members of the G-7 (assuming they are among the founding members of the monetary union).

The president of the Commission is an appropriate spokesman for EU fiscal authorities if the stance of fiscal policy in member states will be shaped by the European Council, European Commission and Monetary Committee's administration of the Excessive Deficit and Mutual Surveillance Procedures. But countries in fiscal surplus will still control their own fiscal policies; while in principle the Mutual Surveillance Procedure applies to them as well, in practice they are likely to retain considerable fiscal autonomy. In any case, it is far from clear that the Excessive Deficit and Mutual Surveillance Procedures will be strictly enforceable. (It is worth observing that the Mutual Surveillance Procedure also applies in Stage II, in which countries have displayed little willingness to delegate responsibility for fiscal policies to the Council of Ministers.) Thus, the existence of overlapping monetary and fiscal competencies suggests additional complications and interests, not fewer. We think it unlikely that G-7 summits of finance ministers and central bankers will collapse into a G-3 format.

Moreover, the attempt to reach Louvre-style agreements may founder on the inability of the Council of Ministers and ECB to agree among themselves. Article 109 of the Maastricht Treaty empowers the Council to adopt general orientations for exchange rate policy vis-à-vis non-EU currencies, a clause which is meant to permit the negotiation of foreign-exchange-market intervention agreements. But Article 109 does not bind the ECB to accept and to act upon the Council's general orientations, out of which it may opt if these conflict with price stability.

This is a veiled reference to Bergsten and Henning (1996), who argue the opposite.

³⁴ According to Kenen (1995, p. 32), it is "widely agreed" that the ECB will decide this for itself, although this is not specified in the treaty. The

In fact, there is unlikely to be a strong consensus in favor of monetary cooperation in the early phases of Stage III. With the creation of a European economic and monetary union, the EU will become more of a large, relatively closed economy like the United States. The bulk of member states' commercial and financial transactions already take place with other member states. Theories suggesting a further expansion of transactions within the integrated economic zone imply that this will be even more true in the future. Exchange rate fluctuations vis-à-vis the rest of the world will then become less disruptive. According to the theory of optimum currency areas, such a relatively large, closed economy will be inclined to float its currency. If so, the U.S. will find it harder to enlist the support of the ECB and Europe's national governments in Louvre-style operations. Europe will respond less eagerly to any U.S. initiative to create a Volcker-like system of exchange rate pegs or Williamson-style target zones.

The ECB in its early years will surely be reluctant to commit to concerted foreign exchange market intervention. Its priority will be to establish its commitment to price stability. Evincing excessive interest in other targets, including the exchange rate, may be seen as calling that commitment into doubt. The Governing Board will be inclined toward a stringent interpretation of Article 109, rejecting the Council's general orientations as incompatible with price stability. This makes monetary policy

Council or even the European Parliament, to which the president and Executive Board of the ECB may be called to testify, might be able to exercise the political leverage needed to get the ECB to accept its general orientations. The heat thrown off by the television lights of parliamentary hearing rooms may make it uncomfortable for the ECB to resist. On the other hand, the most powerful lever available to national parliaments seeking to influence their independent central banks is the threat to abrogate the latter's statutory independence. This sanction is not available to the European Parliament, since the ECB statute is part of an international treaty that can be modified only with the unanimous consent of the signatory countries.

³⁵ Initially, we adopt a long-run perspective compatible with the assumption that all EU member states participate in the monetary union. Below we attempt to draw out some of the implications of two-speed monetary union for transatlantic relations.

³⁶ Empirical evidence to this effect is provided in Bayoumi and Eichengreen (1996).

coordination along the lines of the Plaza and the Louvre agreements less likely in the initial years of Stage III.

This point applies with even greater force to schemes for pegged exchange rates or G-7 target zones. The unanimous consent of the Council of Ministers needed before the ECB can enter into such an arrangement is a high hurdle. While the ECB would then be bound by the Council's decision, the threat that its Board might object in a way that damaged the Council's reputation for financial probity, not to mention the viability of the exchange rate agreement, would give it at least potential veto power. And the aforementioned argument suggests that it would be inclined to exercise this power in the early years of Stage III.

The high likelihood of multi-speed EMU complicates these dynamics further. Fluctuations in the foreign exchange value of the dollar have long been a strain on the EMS. Assume that the insiders and outsiders establish a new EMS designed to limit the movement of other EU currencies against the Euro and that the European Central Bank is responsible for its operation. Then the ECB will also acquire an interest in stabilizing the dollar exchange rate and may therefore be more favorably inclined to a wider exchange-rate stabilization agreement. Working in the other direction are the limited resources of the ECB and its concern with the inflationary effects of intervention. Intervention to limit the dollar's decline, intended to insulate the weak EMS currencies, will then discourage direct intervention on

Hennig (1996) therefore recommends revising Article 109 to permit the Council to endorse such an arrangement by a simple or qualified majority vote.

³⁷ How such a conflict would play out is unclear. In 1978-9, when the Bundesbank objected to the EMS negotiation, it obtained the Emminger letter. But in 1990-1, when it objected to immediate German monetary unification at a conversion rate of one to one, it was unable to hold the line. In any case, it is unlikely that the Council will be willing to force the issue until confidence in the ECB is well established. Ghironi and Eichengreen (1996) analyze these interactions between governments and central banks using a simple theoretical model, showing that central banks will be inclined to cooperate only when they are "forced" to do so by their respective governments.

³⁸ Official analyses (e.g. Committee of Central Bank Governors, 1993; Commission of the European Communities, 1993) assign them a place of prominence in explaining the 1992-3 crisis, for example.

behalf of those currencies. Knowledge of this tradeoff may dim the ECB's enthusiasm for a wider agreement.

Conceivably other interest groups will grow more interested in Transatlantic monetary cooperation with the advent of Stage III. Industrial groups in France, for example, which have traditionally complained about the disruptive effects of currency swings on profitability will shift their attention from the DM to the dollar and the yen. (There has already been some evidence of this, as in 1996, when the franc-DM rate remained relatively stable but fluctuations in the dollar and the yen aggravated the difficulties of the French economy, eliciting complaints about U.S. and Japanese policy in the French financial press.) Moreover, in the early years of Stage III the dollar and yen exchange rates will be the obvious metric by which to gauge the success with which the ECB carries out its mandate to pursue price stability.

The information content of the new price index for the Euro zone will not yet be unclear. Financial markets will be uncertain how to interpret measures of price stability newly constructed and published by the European Commission. Whether the Euro rises or falls against the dollar will be an obvious measure of success. While the ECB may be reluctant to agree to formally stabilize the Euro against the dollar and the yen, it may favor informal initiatives designed to deliver that result.

6. Strengthening the Framework for International Monetary Cooperation

Strengthening the framework for international monetary cooperation should be most straightforward in Europe. Compared to the formidable task of erecting a system of pegged rates or target zones for the G-7 as a whole, experience with the EMS and with the Short-Term and Very-Short-Term Credit facilities should make it easier to construct a system designed to stabilize the exchange rates between EMU insiders and outsiders. But a new hub-and-spoke EMS may actually weaken monetary-policy coordination within Europe, not strengthen it. It seems unlikely that ECB will commit to extensive foreign-exchange-market support for the currencies of the outsiders. Those countries

will have been left outside the Euro zone precisely because their fiscal and financial policies are questionable; the ECB is unlikely to view its commitment to price stability as compatible with demands that it support the financial programs of governments with such dubious reputations. The rationale for the Maastricht convergence criteria, including the requirement that governments hold their exchange rates stable for two years prior to admission to Stage III, is designed to force them to prove their financial rectitude on their own. The prospects for concerted intervention in the markets for the exchange rates between the Euro and the currencies of the outsiders will therefore be limited.

Wyplosz (1996) has suggested that the ECB might be willing to provide extensive support for other EU currencies if the outsiders accept strong policy conditionality. Support should be extended only to countries which are in the ERM, which are in conformance with the dictates of the Excessive Deficit Procedure, which are firmly committed to entering EMU after a short transitional period, and which are therefore prepared to make the requisite policy adjustments. Obvious questions can be raised about the viability of this proposal. No matter how committed to EMU membership a country is, it may still change its mind. The political where-with-all to defend the currency may be lacking when this requires raising interest rates to double- or triple-digit levels. An attack may itself cause a country to reconsider its priorities, like the 1992 crisis caused a Sweden committed to pegging the krona to become skeptical of EMS and EMU participation. All this will lead the ECB to hedge its bets. It will make unlimited support unlikely. And the knowledge that unlimited support is unlikely will encourage the markets to test the policymakers' resolve.

The only other option that has attracted serious attention is inflation targeting (CEPR, 1995). If the ECB and other EU central banks adopt a credible operating strategy of targeting inflation, its proponents assert, exchange rate expectations will be anchored. Markets, cognizant that price levels will move in tandem, would not drive exchange rates away from their

long-run equilibrium levels. The requisite level of exchange rate stability could be obtained without condemning countries to an unsustainable system of currency bands.

This proposal has elicited some support in the U.K. and Sweden, where inflation targeting is already utilized. But neither of these countries is a member of the EMU "hard core." Neither has demonstrated the commitment to the monetary-union project necessary to shape the EU-wide debate. In core countries like Germany and France, intellectual consensus and practice favor instead targeting monetary aggregates and exchange rates (suggesting, by analogy, that the ECB target the money supply, the EU outsiders their exchange rates against the Euro).

Moreover, there is no provision for coordinated inflation targeting the Maastricht Treaty. This raises questions of credibility, since it is not clear that member states will be obliged to maintain their inflation targets when push comes to shove. Proponents of inflation targeting tend to assume that the targets would be credible without inquiring into the prerequisites of such credibility. They assume that expectations will not be disturbed by shifts in fiscal policy, business cycles, or politics. While the answer to these questions is not clear, our own view is that coordinated inflation targeting is a better basis than a new hub-and-spoke EMS for monetary cooperation within Europe. Regrettably, there exists neither the intellectual consensus for the institutional basis for implementing the proposal.

The scope for strengthening transatlantic monetary cooperation is even more limited. Unlike Bergsten and Henning (1996), we think it unlikely that the G-7 countries, or even the U.S. and Japan alone, will be able to agree on a durable system of exchange rate target zones as the centerpiece of

See for example Hamilton et al. (1996).

Moreover, proponents of this approach dismiss fluctuations in the dollar-yen exchange rate, which exceeded 30 per cent in 1994-95 despite the fact that the Federal Reserve System and the Bank of Japan have followed policies not dissimilar from inflation targeting. They cannot say, in other words, how much exchange rate variability would remain and how corrosive it would be of the Single Market.

rejuvenated G-7 cooperation. We view as unrealistic the idea that the U.S. could demand a revision of Article 109 of the Maastricht Treaty to remove unanimity within the European Council as a precondition for the construction of any new global exchange rate regime. The same is true of proposals to revise the complicated procedure by which the ECB might agree to participate in a future Louvre-style accord. This is not to deny that it would be helpful for the Council and ECB and their American counterparts to clarify the conditions under which they might be prepared to contemplate such operations.

The G-7 as constituted is not an ideal venue for this process, for the president of the European Commission, who participates in those meetings, speaks only indirectly for the Council. This is an argument for again coordinating Council meetings with G-7 summits. It supports the practice of including both the president of the Commission and the finance minister of the country currently holding the presidency of the Council.

Article IV consultations with individual EU member states will have to be supplemented with Article IV consultations with the EU itself, insofar as the institutions of the latter will determine the monetary policy of EMU participants and influence, through the Excessive Deficit and Mutual Surveillance Procedures, the fiscal policies of all 15 member states. Consultations with the EU member states participating in EMU should not be abolished; the latter will still be able to draw on their quotas, and it is with the individual member states that the Fund will presumably continue to conclude stand-by agreements. But absent planning, these parallel consultations are a potential source of confusion: for example, it is possible to imagine both the Fund and the EU making loans to member states in fiscal and financial difficulty subject to conflicting conditions. It would be as if the Fund held Article IV consultations not just with the U.S. government but with each of the 50 U.S. states. This points to the importance of having the Fund coordinate with the EU to ensure the compatibility of their policy

³⁹ One of us has provided a lengthy argument for why such a system is unlikely to be feasible in Eichengreen (1994).

condi ti onal i ty.

In principle, EMU should be an occasion for restructuring EU representation at the Fund. Because EMU members will no longer experience exchange-rate-induced payments problems vis-à-vis one another, any more than one Federal Reserve district can have an unsustainable balance of payments with another, there is an argument for netting out intra-EMU trade and financial flows when calculating Fund quotas. This would reduce the voting power of the EMU member states. It would provide an opportunity to meet Japan's long-standing demand for a quota increase and to take into account the rise of new trading powers. Doing so would enhance the legitimacy of the Fund, which is viewed elsewhere in the world as unfairly dominated by North Atlantic interests. There is a case for acknowledging these changes in global trading arrangements if the IMF is to retain the legitimacy required of a major player in the policy coordination process.

Some observers suggest that the focus of international monetary cooperation in coming years will be safety-net operations for countries experiencing Mexico-like sovereign liquidity crises. It may be necessary to provide international lender-of-last-resort assistance or to cut interest rates to relieve the pressure on a debtor experiencing a liquidity crisis. The Mexican episode illustrates the need for such measures but also our theme concerning the obstacles to coordination. The industrial-country response to the Mexican crisis suffered from the absence of an institutional mechanism through which the requisite financial resources could be assembled and

⁴⁰ At present, the votes of France, Germany, Austria, Ireland and the Benelux countries nearly match those of the United States. Still, it is hard to imagine the EMU members voting as a bloc at the IMF, given the fact that members of the Executive Board represent groups of countries, and prospective EMU states are grouped together with non-EU members in the various constituencies. To take the point to its logical extreme, this is an argument for reconfiguring constituencies so that all EMU states belong to a single constituency.

A problem for advocates of quota revision is that EMU is a moving target. The number of participants will continue to change as current EU members are progressively admitted and the EU expands to the east. This militates against a change in quotas when EMU arrives and will make it a more complex task for the Fund to move to a system in which it treats the EMU bloc as the subject of Article IV consultations.

deployed, as well as inadequate international consensus on the form such intervention should take. The scale of the Mexican crisis required unprecedented levels of finance, forcing the United States and other G-7 governments to supplement IMF resources in an ad hoc fashion (in the U.S. case, through the Clinton Administration's resort to the Exchange Stabilization Fund). IMF procedures did not allow that institution's Executive Board to respond with the speed required to prevent a financial meltdown. The normal process of consensus building within the Executive Board had to be short-circuited, leading to international recrimination, causing some European governments to abstain on the final vote on the Mexican loan, and potentially dimming the prospects for future cooperation.

Some progress has now been made on this front. The IMF has established a new emergency-financing mechanism to speed the disbursement of funds. The G-10 and Switzerland have reached agreement with other creditor countries to double the General Arrangements to Borrow in order to ensure that the Fund possesses the requisite resources. The G-10 study group set up to consider responses to sovereign liquidity crises, composed of leading industrial-country central bankers and finance ministers, has reached a consensus in favor of limited intervention. It recommends rewriting loan contracts to clarify the representation of investors, to permit a qualified majority vote to restructure lending terms, and to require the sharing of all debt service payments. It urges the IMF to consider providing credit before a country has cleared away its arrears. The first recommendation is intended to facilitate the orderly restructuring of defaulted debts. The second is meant to provide countries working capital to support their banking systems and economies while the restructuring process is still underway. Less controversially, the G-10 report also recommends strengthening IMF surveillance, speeding data dissemination, and attaching stronger policy conditionality to IMF loans.

Group of Ten, "The Resolution of Sovereign Liquidity Crises," abridged version reprinted in Peter Kenen (ed.), "From Halifax to Lyons: What has Been Done About Crisis Management?" Essay in International Finance no. 200, International Finance Section Department of Economics, Princeton University (October 1996).

But much remains to be done. Representation, sharing and qualified-majority voting clauses will be added to debt instruments slowly if at all without action as well as words by G-10 governments. Providing for a trustee and a bondholders meeting will do little to facilitate negotiations; there is still the need to create standing bondholders committees. Access to the GAB is limited to countries whose difficulties pose a threat to the international monetary and financial system, which some European officials do not grant of the Mexican crisis. If the case for contagion and systemic effects cannot be made, access would not be permitted under current rules. Thus, the GAB may not be available to future Mexicos, requiring the IMF to mobilize the requisite resources in other ways. Hence, there remains the need for an IMF quota increase.

7. Conclusion

International monetary cooperation between Europe, the U.S. and Japan remains sporadic at best. The institutional mechanisms and intellectual consensus needed to support more systematic efforts both remain underdeveloped. With the advent of the Euro and the European Central Bank, even today's relatively limited arrangements will be threatened with disruption. We have suggested some modest measures that might be taken to encourage institution building and consensus formation both within Europe and across the Atlantic and Pacific, but we do not claim that our recommendations would inaugurate a new golden age of international monetary cooperation.

Cultivating international monetary cooperation is slow, laborious, and incremental. This is necessarily the case insofar as the preconditions are a more elaborate institutional framework and deeper policy consensus, as argued here. In closing, it is worth acknowledging a third precondition for effective international cooperation. Monetary cooperation is extensive in Europe in part because it is linked to other issue areas. The EMS matters because it has been linked to the Common Agricultural Policy and Internal

Here we summarize the conclusions of Eichengreen and Portes (1996).

Market, both of which can be disrupted by exchange-rate fluctuations. EMU matters because it is linked not just to the internal market but to Germany's agenda of political integration. More extensive cooperation on other issues, such as transatlantic free trade, would work to create comparable linkages across the Atlantic and thereby encourage U.S.-EU monetary cooperation.

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