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THE MAASTRICHT WAY TO EMU

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1 Introduction

For more than thirty years, the European Community (EC) has spent considerable time, effort, and political capital in building a monetary union. This endeavor has now culminated in a revision of the Treaty of Rome, adopted in December 1991 by the European heads of state and government meeting in Maastricht (European Council, 1991). The revision makes the European monetary union one of the official goals of the Community, devises a strategy to achieve it, and lays out the institutional framework by which it will be regulated.

Although there are surely economic benefits to be expected from a monetary union,[1] the main driving force for its resurgence remains the quest for the political integration of Europe.[2] The European Council emphasized the importance of linking monetary and political unification at its October 1990 Summit in Rome:

> Intergovernmental Conferences on Political Union and Economic and Monetary Union will open in Rome on 15 December 1990. . . . The European Council confirms that the work of the two Conferences will proceed

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[1] The Commission of the European Communities (1990) estimates the economic benefits from a single currency in the EC to be about 10 percent of Community real gross national product (GNP), half a percent of which is from reduced transactions cost and the remainder from greater monetary stability and the elimination of exchange risk. Minford, Rastogi, and Hughes Hallett (1991) rightly point out that most of the benefits can be achieved equally well without monetary union, as they require monetary discipline rather than monetary union.

[2] The dominance of political considerations in the quest for European monetary integration was stressed long ago by Triffin (1960). See von Hagen (1991) and Fratianni and von Hagen (1992, chap. 3) for a historical review of that quest, and Tyrie (1990) on the current political motivations behind EMU.

> in parallel and should be concluded rapidly and at the same time. The results will be submitted for ratification simultaneously with the objective of ratification before the end of 1992. (European Council, 1990, p. 10)

The main objections to monetary union have also been largely political (see, for example, Bank of England, 1990a and b). Although the forces in favor of monetary union have now prevailed, there remain important questions about the optimal design of its institutions and the strategic approach by which to achieve it. We address these issues here.

The recent debate over monetary union was shaped largely by the plan presented in the Report of the Committee for the Study of Economic and Monetary Union (Delors Report, 1989). The stature of its membership, which included the governors of the EC central banks, and the Report's official endorsement in 1989 by the European Council meeting in Madrid make it a natural point of reference. Section 2 of our essay juxtaposes the Maastricht Accord with the Delors Report, highlighting the main strategic aspects to show how the discussion has evolved since the Report's publication.

Section 3 discusses the main criteria for choosing a strategy for monetary union—credibility, flexibility, effective institution building, and a smooth transition to the new regime—and assesses the Accord in terms of them. Section 4 evaluates and compares the constitution for the proposed European Central Bank (ECB) with that of the German Bundesbank (BBK). Although the structure of the ECB resembles that of the BBK in many respects, there are enough important differences between the two institutions to question whether the ECB will be as successful in maintaining price stability in Europe as the BBK has in Germany.

From the Delors Report to the Maastricht Accord

Traditionally, a monetary union is defined as a group of regions or countries linked by a common currency or by permanently fixed nominal exchange rates (Allen, 1976; Corden, 1972). It may be managed in many ways, ranging from a unified central-banking system to a decentralized system such as the Gold Standard, in which individual autonomous central banks operate under a common constraint. The Delors Committee recommended that the European monetary union be built on joint and centralized management of monetary policy and defined monetary union as

> a currency area in which policies are managed jointly, [with] the single most important condition for a monetary union [being] fulfilled only when the decisive step was taken to lock exchange rates irrevocably. (par. 22)

The Committee stated further that

> a new monetary institution would be needed because a single monetary policy cannot result from independent decisions and actions by different central banks. (par. 32)

The process of European monetary union is linked with economic union, the Single European Market in which goods, services, assets, and production factors are freely traded. The ultimate goal is, thus, Economic and Monetary Union (EMU). Building EMU involves two qualitatively different processes. With markets for goods and services already largely integrated, the completion of economic union requires the elimination of remaining constraints on the mobility of services, capital, and labor within the EC. The steps leading to monetary union, however, introduce new constraints on monetary policy, that is, the permanent fixing of nominal exchange rates, the introduction of a common currency, and the transfer of responsibility for monetary policy from the national to the European level. A fundamental problem in designing a strategy for EMU is in timing the elimination of the old constraints and the addition of new ones, that is, with the sequencing of economic union and monetary union and with the speed of the process.

The Delors Strategy: Parallelism, Gradualism, and the European Monetary System

The strategy proposed by the Delors Report rests on the principles of parallelism and gradualism, with the European Monetary System (EMS) as the launching pad for EMU. The principle of parallelism says that

> economic union and monetary union form *two integral parts of a single whole* and would therefore have to be implemented in parallel. (par. 21)

The reasoning behind this principle is vague. The Report states, on the one hand, that

> achieving monetary union is only conceivable if a high degree of economic convergence is attained, (par. 21)

but maintains, on the other, that

> the creation of a single currency area would add to the potential benefits of an enlarged economic area because it would remove intra-Community exchange rate uncertainties and reduce transactions cost. (par. 26)

Monetary union adds value to economic union, but monetary union is not essential for the success of economic union. The Report insists, instead, that

> the success of the internal market program hinges to a decisive extent on a much closer coordination of national economic policies. [Thus] a number of the steps towards economic and monetary union will already have to be taken in the course of establishing a single market in Europe. (par. 14)

The Report notes, however, that fixed exchange rates would be one of the costs of adjustment toward economic union:

> At the same time, however, exchange rate adjustments would no longer be available as an instrument to correct economic imbalances within the Community. (par. 26)

Such imbalances are particularly likely to occur during the building phase of economic union, as individual governments remove country-specific regulations and market interventions and put new Community regulations into place. To compensate for the fixing of exchange rates, the Report argues that

> Community policies in the regional and structural field would be necessary in order to promote an optimum allocation of resources and to spread welfare gains throughout the Community. (par. 29)

The principle of parallelism thus entails a predisposition for bureaucratic regulation, which contradicts the spirit of deregulation embedded in the Europe 1992 program. It suggests, furthermore, that the processes of establishing monetary and economic union will have to be fine-tuned in order to assure that monetary union neither follows nor precedes economic union. This approach reenforces the tendency to rely on centralized Community decisionmaking instead of market processes to implement the Single Market.

Parallelism also favors a gradual movement toward monetary union over a swift reform introducing the new monetary regime in one bold step. Because economic integration requires changes in private-sector behavior, it is necessarily a gradual process. Under parallelism, monetary union must, then, also proceed slowly. The Delors Report, like the Werner Report (Council, 1970), envisions a three-stage progression toward EMU, starting with the incorporation of all EC members into the Exchange Rate Mechanism (ERM) of the EMS. At this first stage, parity realignments remain possible; the member central banks merely commit to keeping exchange rates within bands of ± 2.25 percent (± 6 percent for Spain and the United Kingdom) around the central parities (pars. 50 and 52).

Because realignments can support persistent differences in inflation rates among the member countries, the ERM theoretically requires only a limited degree of policy coordination. The possibility of realignments, however, exposes the ERM to speculative attacks. The more likely a realignment, the more likely that a bet against the central banks' ability or willingness to maintain the parities will be profitable. The prospect of a realignment can therefore trigger speculative capital flows that will themselves precipitate the realignment (Krugman, 1979).

By trying to wed exchange-rate flexibility with exchange-rate fixity, the ERM becomes an unstable arrangement.

The literature calls this instability the "inconsistent quartet" of free trade, free capital flows, fixed exchange rates, and monetary autonomy (Padoa-Schioppa, 1988). One of these four must be dropped to obtain a consistent monetary environment. The solution in the EMS so far has been to give up free capital flows. Only in recent years, when capital controls have been gradually dismantled, have countries in the EMS tacitly relinquished some monetary autonomy and chosen not to exercise the realignment option. EC regulations prevailing when the Delors Report was written retained an escape clause allowing for the reintroduction of capital and exchange controls in times of exchange crises (Bofinger, 1989, p. 433; Key, 1989, p. 596). Because of this, Stage One would not complete economic union.

Stage Two in the Delors Report would add the European System of Central Banks (ESCB) to the EMS. The functions of this new institution remain vague, however, with the Report stating that

> While the ultimate responsibility for monetary policy decisions would remain with national authorities, . . . a certain amount of exchange reserves would be pooled . . . [and] regulatory functions would be exercised by the ESCB in the monetary and banking field in order to achieve a minimum harmonization of provisions (such as reserve requirements or payment arrangements) necessary for the future conduct of a common monetary policy. (par. 57)

Realignments would still be possible during Stage Two. The completion of both economic and monetary union would not be final until Stage Three:

> The *final stage* would commence with the move to irrevocably locked exchange rates [par. 58] . . . with the ESCB assuming all its responsibilities as foreseen in the Treaty. (par. 60)

This last step at once eliminates the possibility of imposing capital controls, terminates the EMS, irrevocably fixes exchange rates, and transfers full authority for monetary policy to the ECB.

Although proposing three stages for EMU, the Delors Report does not establish a timetable for their realization, insisting only that Stage One should begin on July 1, 1990 (par. 43). Instead, the Report argues that

> the conditions for moving from stage to stage cannot be defined precisely in advance; nor is it possible to foresee today when these conditions will be realized. The setting of exact deadlines is therefore not advisable. (par. 43)

The Report is vague in another important respect. Although it states that "greater convergence of economic performance is needed" (par. 11), before monetary union can be achieved, it does not spell out the criteria

for measuring convergence. Noting the political significance of the decisions to move from stage to stage (par. 15), the Delors Committee foresaw that the European Council and, for the move to Stage Three, the ESCB, would assess the situation and decide on the optimum time to move to the next stage. Thus, the implementation of the process would be left to political discretion and bargaining.

The Report takes a similar stand on participation in EMU. Although declaring that the full participation of all EC members would be highly desirable, it recognizes the possibility that some members might join EMU later than others. Again, the Committee chose to leave the question of membership entirely to the politicians. For about two years after the publication of the Report, the prevailing political view was that all EC members should enter EMU at the same time, including Greece, Portugal, and Spain, whose economies are less mature. These latter countries soon voiced the fear that the developmental gap between their economies and the rest of the EC would leave them with severe structural and competitive disadvantages within EMU. They consequently requested increased funds for "structural policies" as well as the adoption of a European Social Charter to harmonize issues such as workers' rights and compensation and social protection throughout the EC so as to minimize their expected welfare loss from joining EMU. A high political value attached to unanimity during this period gave these countries considerable bargaining power. The Social Charter was adopted in October 1989, confirming the political necessity of enlarging the Community's regional and structural programs.

The British Reaction: Gradualism and Currency Competition

The British government under Mrs. Thatcher opposed the Delors strategy from the start, arguing that the case for monetary union remained inconclusive, although there were solid reasons for economic union. In fact, Mrs. Thatcher flatly ruled out British participation in EMU. British opposition, which continued after the demise of the Thatcher government and Britain's entry into the ERM in October 1990, rested on two concerns. One was the fear of losing political and economic sovereignty in a more closely integrated Europe. The other was a deep mistrust of the growing EC bureaucracy and of centralized decisionmaking in Brussels. This was, in the British view, contrary to the spirit and effort of deregulation in the Single Market.

The Thatcher government responded to the Delors Report by proposing an "evolutionary approach" to EMU (HM Treasury, 1989, 1991). Accepting the enlarged EMS as a starting point, the British

proposal emphasized that economic union should be completed in Stage One, including

> the strengthening of coordination of economic and monetary policies [and] the inclusion of all currencies in the ERM on equal terms. (UK Treasury, 1989, par. 4)

The removal of all restrictions barring residents of one country from using another country's currency would encourage currency substitution and competition and would reduce national incentives to inflate. Economic union would thus create strong disciplinary pressures on national monetary policies, would induce convergence of inflation rates at a low level, and would eliminate exchange-rate variability. All EC currencies would thus be used interchangeably with "more or less fixed exchange rates" (par. 23).

Stage Two of the British proposal would introduce a Hard European Currency Unit (HECU), issued and managed by a European Monetary Fund (EMF) operating essentially as a currency board (see Walters, 1988, on the operation and historical significance of currency boards). The HECU would participate in the ERM, but its central parity would never be devalued against any member currency. HECU accounts would thus be perfect substitutes for the strongest currency in the ERM but would spare their holders the need to forecast which currency that might be or to forecast the timing of realignments. Over time, the superiority of the HECU would drive all currencies with high and uncertain inflation rates out of the market. Only those regarded as stable and certain would remain. The choice of currencies, including the adoption of a single European currency, would thus be left to market forces rather than to bureaucratic decree.

It was soon clear, however, that the British proposal was not a serious challenge to the Delors strategy. On the one hand, it was economically dubious. On the other, and more important, it was politically unacceptable, as it left no room for compromise with other EC members critical of the Delors Report. Because it strictly refused to consider a Community-led strategy for monetary union, the British proposal could not win over countries like Germany that, although sympathetic to economic union, were reluctant to accept monetary union as the price for political union.

The Maastricht Accord: Gradualism and Conditionality

The Maastricht Accord represents the end of a bargaining process that began a year earlier in Rome. It proposes a revision of the Treaty of Rome that would make monetary union, price stability, and sound public finances part of the Community's principles (Maastricht Accord,

Article 3a). The Accord lays down the Community's strategy to achieve EMU by the year 2000; it sets up the institutional framework for European monetary union; and, while accepting a gradual approach to EMU, it alters the strategy suggested by the Delors Committee in several important ways.

First, it drops the principle of parallelism entirely. The Accord (Article 73a-h) foresees the completion of economic union, with total and unconditional freedom of capital movements within the EC, beginning by January 1, 1994. Only those member countries that have been allowed to retain capital controls thus far may postpone liberalization until the end of 1995 (Article 73e). Intra-Community capital and exchange controls will no longer be admissible instruments of national economic policy within the union. Capital movements between EC members and third countries may be restricted only when these flows endanger "the operation of economic and monetary union," at which time "the Council . . . may take safeguard measures with regard to third countries for a period not exceeding six months if such measures are strictly necessary" (Article 73f). To mitigate the potential instability that the removal of these safety valves may have on the EMS, Article 109e calls on the EC members to engage in "multiannual programmes intended to ensure the lasting convergence necessary for the achievement of economic and monetary union, in particular with regard to price stability and sound public finance" (par. 2a). There is no reference in the Accord to the interaction between the achievement of economic union and monetary union; consequently, there are no provisions for bureaucratic fine-tuning of the two processes.

Second, the Accord outlines the institutional developments leading to EMU. At the beginning of Stage Two, a new European Monetary Institute (EMI) will be created, which will administer the EMS and prepare the ground for the ECB by coordinating national monetary policies and creating the instruments and procedures for the ECB in Stage Three (Article 109f). The EMI in turn will be liquidated when the ECB begins operations in Stage Three.

Third, the Accord sets up conditionalities and a precise timetable leading to EMU. These conditionalities—set out in Article 109j, in conjunction with Article 104c, and in a separate protocol—address the entry to Stage Three and aim at the convergence of inflation rates, the performance of public finances, and the development of the monetary institutions in the EC. To be eligible for EMU, a country's inflation rate must not exceed the lowest three EC inflation rates by more than 1.5 percentage points; its interest rate on long-term government bonds

must not exceed by more than 2 percentage points those of the three member states with the best inflation performance; its total government deficit must not exceed 3 percent of gross domestic product (GDP), and its outstanding government debt must not exceed 60 percent of GDP.[3] For at least two years, the country's exchange rates vis-à-vis other EMS currencies must have remained within its EMS band without a devaluation of its central parities. Finally, the statutes of its national central bank must be compatible with the ECB Statute as established by the Accord (Article 108).

Stage Two is scheduled to begin on January 1, 1994. To prepare for Stage Three, Article 109j requires the EC heads of state or government to assess, by December 31, 1996, whether a majority of the EC members meet the entry conditions and whether the Community is ready for Stage Three. If so, a date is to be set for its beginning. Countries that do not meet the conditions—technically, "countries with a derogation"—are placed on a waiting list to be reconsidered for membership in subsequent years. Those that do meet the conditions will form the core of EMU. If, by the end of 1997, however, no date has been set for the start of Stage Three—that is, if a majority of countries cannot fulfill the entry conditions or the heads of state or government decide it is not appropriate to start EMU—Stage Three will begin anyway on January 1, 1999 and will include all those countries meeting the entry conditions. In this case, the core group may be only a minority of the member states.

The formulation of entry conditions and a timetable leaves the individual governments with the responsibility of achieving their countries' entry to EMU. On the one hand, this significantly reduces the prospect that high-inflation, high-public-debt countries will be admitted into a low-inflation community of countries with sound public finances. Thus, low-inflation countries may go ahead with EMU without having high-inflation countries join for a free ride. On the other hand, discarding the principle of an EMU that automatically includes all EC members has reduced Southern Europe's power to bargain for additional compensation and has diminished the relevance of the Social Charter.

Finally, the Maastricht Accord recognizes that individual members of the EC may, for political reasons, not wish to join EMU. In the separate Protocol on the Transition to the Third Stage of Economic and Monetary Union, the European heads of state determined to address this potential problem by promising that no member will keep the Community from

[3] The Treaty language is actually more guarded concerning application of the fiscal-convergence criteria. See below.

entering EMU. That is, no country will exploit its veto power to block EMU in decisions requiring unanimity, even if the country itself does not participate in the union. This allows the United Kingdom, in particular, to disagree without impeding progress toward EMU.

Furthermore, the Protocol on Certain Provisions Relating to the United Kingdom of Great Britain and Northern Ireland recognizes that the United Kingdom will not be obliged to join EMU unless she expresses her willingness to do so. If she does not, the new Treaty provisions relating to monetary union will not apply to the United Kingdom. The same protocol determines that, if the United Kingdom opts out, she will not be "included among the majority of Member States" required to form a majority by the end of 1996.[4] This eliminates the possibility that today's most likely core group of Belgium, Denmark, France, Germany, Luxembourg, and the Netherlands can proceed with EMU before 1999, unless Italy or Ireland or one of the Southern countries meets the requirements by 1996 to form a majority of seven (out of twelve) countries.[5] To the extent that this seems unlikely, the British opposition will have succeeded in raising obstacles and slowing down the creation of EMU.

2 The Maastricht Way to EMU: An Evaluation

Strategies for EMU must be evaluated on the basis of the four fundamental criteria of credibility, flexibility, effective institution building, and the phasing out of the existing regime. Together, they are the main determinants of the cost of transition. We develop these four criteria here and use them to evaluate the Maastricht Accord.

Credibility

Following the literature of game theory, we say that a commitment to a strategy of monetary policy, announced at a certain time, is credible if it remains an optimal strategy, that is, if it would be more costly for the policymaker to abandon his commitment than to honor it whenever he can revise his strategy at a later date. The economic importance of

[4] A similar provision applies to Denmark in recognition that the Danish constitution may demand a public referendum on entry into EMU.

[5] Note, however, that the protocol might be interpreted as saying that the United Kingdom will not be counted in the group of countries relevant for the calculation of a majority. Under this interpretation, the relevant total number of countries will be eleven, and six will constitute a majority.

credibility in this regard relates to the role played by expectations in private-sector behavior. Unless a strategy is credible, private-sector expectations, and consequent behavior, will not support the strategy's goal. Not only may the goal then be unachievable, but the strategy itself may be suboptimal.

A major problem on the road to EMU is to convince private investors and wage and price setters that national authorities are firmly committed to the final goal of a common currency and a common central bank. Belief in this commitment is important in guiding private expectations during the transition. Without it, the public will view the institutional changes in preparation for EMU as evidence of increasing ambiguity and uncertainty in the existing monetary environment. They may then be unwilling to take bets on EMU: interest rates will continue to embed risk premia for exchange-rate volatility, and wage and price setters will write contracts embedding higher expected inflation rates than would be warranted on the way to EMU (Giovannini, 1990b; De Grauwe, 1992). Lack of credibility will thus create market distortions, which will, in turn, diminish EMU's attractiveness, make its achievement more difficult, and raise the likelihood of a withdrawal by national authorities.

No commitment is credible, of course, if the end itself is unattractive for the majority of the parties involved. This rules out credibility for a commitment to an EMU expected to perform less well than today's monetary arrangements in a majority of countries. Furthermore, although EMU may be attractive today, there is no assurance it will continue to be so. Unexpected economic shocks and political changes may weaken the struggle toward EMU, with governments giving in to short-sighted political interests and pressures and abandoning the objective before it has been achieved. It will be important to convince markets that, because withdrawal will always be the least attractive alternative, it is very unlikely.

An excellent way of achieving credibility would have been to introduce EMU in one bold step through a comprehensive monetary reform that immediately created very visible common institutions, including a common currency. This would have raised the political costs of withdrawal considerably. Under the gradual approach advocated by the Delors Committee and adopted with the Maastricht Accord, withdrawal is relatively cheap politically as long as the common institutions have not been completely established. Thus, the private sector may not believe in the commitment to EMU under the gradual approach, because the penalty for abandoning the goal is not sufficiently large.

The Delors and Maastricht strategies try to overcome this problem by using adherence to the fixed exchange rate in the EMS as a sign of a government's commitment to EMU. But the ERM adds little credibility as long as realignments remain possible and member countries have substantial room for independent policies.[6] Giovannini (1990b) suggests in this regard that realignments be ruled out and final monetary reform accelerated in response to exchange or money-market turmoil. These measures would enhance the value of EMS membership as a sign of commitment by equating parity changes with the politically unattractive exit from the system. Giovannini (1990a, p. 9) notes, however, that "ostensibly fixed exchange rates have been changed before." As long as national interests count more than Community interests, the probability of realignments will remain nonzero.

The Maastricht Accord seeks to strengthen the signal value of the ERM by adding new institutions. Article 109c makes the Monetary Committee responsible for monitoring monetary and fiscal developments in the EMS during Stage One and for delivering reports and recommendations to the European Council and Commission. Member states deviating from the common policy thrust toward EMU may be reprimanded by the Monetary Committee and incur some political cost in defending their actions. In addition, Article 109d gives the Council as well as individual members the right to ask the Commission for a recommendation or a proposal regarding the consistency of economic policies and monetary and fiscal developments in member countries. Deviant countries may therefore be targeted for public admonition even if the Monetary Committee has been permissive. Once Stage Two is under way, the more visible institutional organization and its broader responsibility will increase the weight of opinions expressed by the EMI and thus contribute further to the political cost of deviations from the common policy course. Although the mandate of the EMI does not mention the surveillance of fiscal policies explicitly—Article 109f mentions strengthening central-bank cooperation and coordinating monetary policies—the EMI is authorized to "submit opinions or recommendations . . . on policies which might affect the internal or external monetary situation in the Community and, in particular, the functioning of the European Monetary System" (Article 109f, par. 4).

Given the prominent role the Accord gives fiscal-policy provisions in the context of EMU, the EMI could deduce from this statement an

[6] Although the Report calls for the formulation of convergent policies by all EMS members (par. 39), such formulations would be no more than mere declarations of intent.

authorization to speak up against deviant fiscal developments in individual member countries. Whether or not it exercises this authority will largely depend on the boldness of its president.

The Maastricht Accord continues to rely heavily on the fixed exchange rate as a sign of commitment to EMU. But the utility of the fixed rate as a sign is severely restricted by its nature. As long as inflation rates have not fully converged, the fixed exchange rate implies a continuous change in real exchange rates and, consequently, in competitive market conditions. Those countries with higher inflation rates will experience increasing competitive disadvantages. If the public believes that governments will not tolerate such disadvantages for long periods of time and yet will not reduce inflation, the perceived likelihood of realignments rises over time, and belief in the fixed rate vanishes. Private-sector contracts will embed the likelihood of a realignment, making sure that inflation and interest rates will not converge. This phenomenon is exemplified in the ex post real interest rates in French and Dutch money markets, which, in the late 1980s, continued to be high compared to German rates although no realignment occurred. So long as inflation rates diverge and the public perceives that governments can resort to realignment to reduce competitive pressure, the fixed exchange rate will not be a good sign of commitment.

At the heart of the credibility problem lies the temptation to use monetary policy to pursue goals other than price stability, such as short-term gains in employment or reductions in the real value of government debt through surprise inflation. Removing this temptation would raise the credibility of commitment to a price-stable EMU. One way to do this would be to assure that no political reward can be expected from surprise inflation. If a majority of voters consistently declares price stability to be the first and only goal of monetary policy, policymakers can reap no gain from pursuing other ends. This emphasis on democratic consent as a basis for a low-inflation EMU is clearly visible in the British position (Richards, 1990, p. 4; Bank of England, 1990a). Political practice shows, however, that voters change their views over time about the priorities of monetary policy.

Alternatively, the temptation can be reduced by making the central bank independent of government and the electoral process and by giving it a reward structure favoring price stability.[7] Under such an arrange-

[7] The independent central bank can be regarded in this context as being in a principal-agent relationship between the electorate, which agrees on the long-run desirability of price stability but reneges on the commitment to price stability in the short run, and the central bankers, who expect no gain from reneging (O'Flaherty, 1990; Rogoff, 1985).

ment, central bankers have no incentive to aim at short-sighted goals and recognize that their best interest lies in the pursuit of low-inflation policies. In contrast to politicians, they are able to make credible commitments to price stability, because they stand to lose influence and public standing from inflation.[8] Because a low-inflation EMU requires that individual countries eventually give up the use of monetary policy for short-sighted purposes anyway, the commitment to this goal will be more credible if made by independent central banks instead of by governments retaining authority over monetary policy in the transition.

Under a gradual approach to EMU, the credibility of the commitment to a low-inflation EMU can thus be enhanced by giving the national central banks independence. This would place the transition to EMU under the control of national monetary authorities, each credibly committed to price stability. The ECB would then emerge from the fusion of these independent central banks. As mentioned above, the Maastricht Accord takes a step in this direction by requiring that all member states make their national central-banking legislation compatible with the independent status of the ECB. But the Accord does not go far enough. Rather than require that the EMS central banks be granted, and operate with, independence before engaging in Stages Two and Three, the Accord demands only that appropriate legislative changes be made during Stage Two (Article 109f), with no need to implement them before the start of Stage Three. Thus, instead of laying the institutional foundations early on, the Accord relies on national legislative actions as another fuzzy signal of the governments' commitment to EMU.

Flexibility

During the transition to EMU, the integration of money and capital markets will cause changes in the behavior of money demand and financial institutions and make monetary control more difficult. Furthermore, one cannot exclude the occurrence of severe economic shocks to the Community in the transition phase. To respond to these risks, monetary policy should remain flexible during the transition.

Flexibility has two dimensions here. One is to allow for variations in real exchange rates in response to country-specific economic shocks. With sluggish goods and factor prices, real-exchange-rate adjustment to

[8] On the strategic aspects of central-bank independence, see Neumann (1991) and von Hagen and Fratianni (1990). Note that independence does not imply lack of accountability as long as central-bank officials have limited terms and are subject to the statutes of the central bank as well as to auditing procedures.

idiosyncratic supply and demand shocks is accelerated by nominal-exchange-rate changes. Consequently, nominal-exchange-rate flexibility is more valuable as an adjustment tool the more often real-exchange-rate changes are required, that is, the more important idiosyncratic shocks are compared to common shocks. The need for flexible adjustment was a basic consideration in the British proposal and the Delors Committee's view that realignments should not be ruled out during Stages One and Two. In the context of a strategy for EMU that relies on the fixed exchange rate as a sign of commitment, however, the authorities must, and do, fear loss of credibility from a parity adjustment. Thus, there will be fewer and smaller nominal-exchange-rate adjustments than are optimal. The experience with German unification is a telling example. The combination of a large positive demand shock with restrictive monetary policy in Germany after July 1990 required a real appreciation of the deutsche mark to reduce Germany's external surplus. Instead of facilitating this reduction with a nominal appreciation, however, Germany's EMS partners sought to safeguard their deutsche mark parities by pushing up their interest rates together with the German rates, thereby aggravating the recessionary tendencies in their economies.

The apparent conflict between credibility and flexibility on the way to EMU (Giovannini, 1990) is entirely due to the flawed strategic choice that has made fixed exchange rates a sign of the authorities' commitment to EMU. The same trade-off would not arise with independent national central banks, which could commit credibly to price stability and EMU and therefore facilitate a smoother management of the ERM. If central parities were managed by independent central banks, the public would understand that parity changes were simply responses to country-specific shocks and not indicative of a weakening in the commitment to EMU. Thus, optimal parity management would not interfere with long-term expectations about monetary trends in Europe.

A recent paper by Begg et al. (1991) focuses on a related, pernicious consequence of the use of the exchange rate as a commitment signal. The authors advocate that a "final" realignment be effected in the EMS soon, so as not to burden a fledgling EMU with the distortions created by a long period of fixed nominal exchange rates and diverging inflation rates. No such burden would arise if the ERM parities were managed optimally by independent central banks. The efficient way to free EMU from adverse initial conditions calls for an appropriate institutional reform rather than a final realignment now.[9]

[9] Begg et al. also advocated a fixed-exchange-rate adjustment before signing the Treaty

The second dimension of monetary-policy flexibility is the optimal response to common shocks. As Begg et al. point out, an independent central bank is preferable to a rigid monetary rule enforcing price stability, because it can be left with enough policy discretion to respond to aggregate economic shocks. For example, a monetary expansion to counteract a transitory adverse demand shock would not trigger increasing inflation expectations, for the public would understand that there is no permanent price-level effect implied. The early establishment of central-bank independence on the way to EMU would therefore give the national authorities more flexibility to respond to current economic shocks and would raise the quality of monetary policy in the EMS.

Effective Institution Building

A common currency and new policy institutions in Europe will transform financial-market behavior. As new links between money, interest rates, income, and prices evolve, the new monetary authority will have to adjust to new conditions of monetary control. The Delors Committee addressed this problem by granting the ECB a learning period:

> Stage two must be seen as a period of transition to the final stage and would thus primarily constitute a training process leading to collective decision-making, while the ultimate responsibility for policy decisions at this stage would remain with national authorities. (par. 55)

Responsibilities would be gradually transferred to the new institution, giving the ECB time to acquire the skills necessary for its role in Stage Three and to minimize the cost of policy errors along the way. Yet, the coexistence of central and national decisionmaking in Stage Two of the Delors proposal would have created institutional conflict and, in the absence of rules to resolve it, room for political discretion in the conduct of monetary policy. Eichengreen's (1991) account of the early period of the Federal Reserve System highlights the adverse effects of uncertain allocation of monetary-policy authority on central-bank performance.

The Maastricht Accord drops altogether the concept of a learning period and provides a much cleaner solution to Community institution building in the transition period. It leaves monetary policy entirely in the hands of the national authorities until the start of Stage Three. During Stage Two, the EMI is set up as a transitional institution

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revision and a provision in the Treaty to have no more realignments. This would have suppressed any speculation about a final realignment at the start of Stage Three.

preparing the way for the ECB. The ECB, which will be created at the start of Stage Three, will not be burdened with public memories of the political or economic quagmires that may be encountered during the transition phase.

The administrative structure of the EMI bears some resemblance to the ECB. The EMI Council, its decisionmaking body, consists of a president, a vice-president, and the governors of the national central banks. The president is appointed for a period of three years, by common accord of the European heads of state or government, initially upon recommendation of the Committee of Central Bank Governors and subsequently upon recommendation of the EMI Council; the vice-president is selected from among the governors. Article 8 of the EMI Statute grants the EMI independence from Community institutions and national governments and is qualitatively similar to Article 7 of the ECB Statute. The decisionmaking rules of the EMI differ somewhat from those of the Governing Council of the ECB. For example, the president does not have a casting vote in the event of a tie and is not the sole representative of the national central banks. These differences make the EMI Council a more "federal" institution than the ECB in the sense that national interests carry more weight than international interests.

The EMI has three main functions. To begin with, it will inherit the EMS and administer its operation. During Stage Two, it is charged with "strengthen[ing] cooperation between the central banks of the Member States [and] the coordination of the monetary policies" (Article 109f, par. 2). In exercising this function, the EMI is explicitly committed to price stability. Its role is to organize the exchange of information among the national central banks and to monitor monetary developments in the member states. Recalling that, from the start of Stage Two, the EMS can no longer rely on capital controls as safety valves, this coordinating function will be much more important than policy coordination in the current EMS. The EMI Council has the right to formulate and publish opinions about such developments and to rebuke governments for too profligate monetary policies. The fact that such opinions and their formulation require a qualified majority to pass the EMI Council (EMI Statute, Article 10) assures, however, that the six most price-stable countries of the EMS will not be able to use the EMI as an outlet for public admonitions to EMS members with less stringent monetary discipline.

Looking to the future, the EMI will oversee the development of the ECU and prepare "the instruments and procedures necessary for carrying out a single monetary policy in the third stage [and] the rules

for operations to be undertaken by the national central banks in the framework of the ESCB" (Article 109f, par. 3). Article 4.2 of the EMI Statute directs the EMI to specify a "regulatory, organizational and logistical framework for the ESCB to perform its tasks in the third stage." These specifications will be submitted for decision to the ECB at the beginning of Stage Three. In setting the operating procedures for the ECB, the EMI will take a major responsibility for the initial performance of the new central bank. The unanimity requirement in the EMI Council for the main decisions in this field (EMI Statute, Article 10.4) gives even those countries that will not join Stage Three by 1999 significant influence on the design of the future ECB. This, again, underlines the "federal" character of the EMI. The timetable established by the Maastricht Accord implies that, at the beginning of Stage Three, some EC members may have a derogation and may therefore not join the ESCB. Because the EMI disappears at the start of Stage Three, an institutional arrangement will be necessary to facilitate the continuation of an exchange-rate agreement between members of EMU and those countries with a derogation. The Accord says nothing specific about the future of the EMS with respect to countries with a derogation. Article 109l requires the ESCB to take over functions of the EMI at the start of Stage Three; these would include monitoring the functioning of the EMS and the tasks of the current European Monetary Co-operation Fund, which finances EMS exchange-market interventions. However, Article 109m merely requires a member with a derogation to "regard its exchange rate policy as a matter of common interest" and to "take account of the experience acquired in cooperation within the framework of the EMS." Kenen (1992) concludes that EMU will develop an exchange-rate arrangement vis-à-vis members with a derogation that will be looser than that of the EMS.

For this purpose, a General Council is added to the ECB to remain as long as there are countries with a derogation (ECB Statute, Article 45-47). The General Council consists of the governors of the national central banks and the president and the vice-president of the ECB. Its mandate is to administer the functions of the EMI for the countries with a derogation, to prepare the abrogation of those derogations, and to take part in the general advisory functions of the ECB. Thus, the main role of the General Council is to give the countries with a derogation a voice in the ECB in matters concerning them after the start of Stage Three and to avoid potential conflicts and misgivings between "insiders" and "outsiders" that might prevent the final extension of EMU to the entire Community.

Phasing Out the Existing Monetary Regime

Recent experience with German monetary union has demonstrated the relevance of end games during institutional transition phases. End games arise when the participants know that a particular arrangement will stop at a certain time and that they can influence their relative wealth or income positions in the subsequent arrangement by taking certain actions under the current one.[10] In the context of EMU, an end game might arise from the announcement that a new currency will be introduced on a certain date. Governments will then have an incentive to enter the new regime with a depreciated currency and a lower real value of government debt and might, therefore, run a monetary surge before the inception of monetary union. If the announcement specifies both a date and a final parity, instead, a different kind of end game will take place. In that case, governments will postpone disinflations until shortly before joining the union. Labor unions, however, will push for wage hikes shortly before entering the monetary union in order to secure relatively high levels of purchasing power for their wages once in the union.

Another end game that might arise is the "inflation-devaluation" end game with the Barro-Gordon model of central-bank credibility (see Froot and Rogoff, 1991). Devaluations temporarily raise a country's competitiveness by an amount that depends on degrees of price and wage rigidities. At the same time, devaluations raise inflation expectations and equilibrium inflation and cast doubt on the central bank's reputation for commitment to price stability. The competitive gain from a devaluation is felt mostly in the short run, whereas the loss of reputation is uniformly distributed over time. Because inflation in EMU

[10] The most telling example comes from German monetary union and involves the round of wage negotiations between labor and management that took place in the old, formerly socialist companies after German monetary union was announced. Under normal circumstances, the survival of the firm puts a limit on labor's wage demands and management's wage concessions. However, when both labor and management concur that the firm is destined for bankruptcy, an end game arises. Labor will demand excessive wages to secure generous benefit levels, if, as in Germany, unemployment benefits are tied to exit wages. Management has no reason to object but may have good reasons to concede. Managers, who were appointed for political merits under the socialist regime, are more interested in building a reputation of concern for workers than in preserving the firm's viability. The end game predicts exactly what happened during 1990: very high wage increases in East Germany despite falling production, high unemployment, and no productivity gains.

no longer depends on national policies, the incentive for a devaluation rises as the system approaches Stage Three. Interest rates will diverge between high- and low-inflation countries as the deadline becomes imminent, making the conditions for Stage Three less favorable.

Still another end game might result from the rules of seigniorage distribution that will prevail in the monetary union. If, for example, seigniorage distribution in the new regime depends on the relative sizes of the national monetary bases, each government will have an incentive to increase monetary-base growth to secure a larger seigniorage share. The end game here will be similar to the behavior of individual firms in a cartel, in which cartel profits are distributed according to relative capacities. The Maastricht Accord rules this out by determining that "the sum of the national bank's monetary income shall be allocated to the national central banks in proportion to their paid-up shares in the capital of the ECB" (Article 32, par. 5), which will be determined by population and their shares in Community GDP (Article 29, par. 1).

The important point of the above illustrations is that, in the transition phase to EMU, governments and private-sector agents may be tempted to engage in policies aimed at manipulating their position in the new regime rather than assuring sound monetary and fiscal conditions. Optimal end-game strategies will depend on the governments' previous fiscal stances, the levels of their outstanding debt, and the political importance of export industries seeking competitive advantages. These factors are likely to work against the convergence of economic performance required for the introduction of EMU.

Theoretically, end games can be discouraged by keeping the conditions and timing of the transition sufficiently uncertain with respect to the relevant decisionmakers. This is not, of course, politically feasible in the present context. Alternatively, the parameters of the monetary union, such as the conversion ratios, that determine the real value of government debt in the common currency and the competitiveness of the members can be tied to empirical criteria determined *before* the announcement of the final transition to EMU. This option has now been foregone with the determination of a deadline for EMU. Because the relevance of end games will depend critically on the extent to which monetary policy in the transition phase depends on government policies, end games can also be avoided by establishing central-bank independence in all participating countries before the announcement of the final decision. As noted above, the Maastricht Accord does not do that.

Finally, end games can be avoided by stipulating entry conditions that must be met by prospective members for a specified time before joining

EMU. This is the approach taken by the Maastricht Accord, which sets entry conditions for Stage Three with respect to fiscal variables, inflation rates, exchange rates, and long-term interest rates, and also sets a legislative requirement for the national central-bank laws.

Entry conditions for inflation and exchange rates are set to enforce the convergence of *actual* inflation for some time before Stage Three. Conditions for long-term interest rates and fiscal variables deal, by contrast, with *expected* inflation.[11] Long-term interest rates on government bonds reflect long-term expected inflation rates and risk premia reflecting the perceived probabilities of debt consolidation, unexpected impositions of taxes on interest payments, or similar forms of partial debt default by the national governments. With perfect capital-market integration in Stage Two, real interest rates on long-term government bonds will be equalized net of such risk premia. Thus, systematic real-interest-rate differentials must be due to differences in partial default risk. If expected inflation rates (like actual rates) diverge by 150 basis points, the maximum interest-rate spread of 200 basis points will tolerate risk premia differentials of up to 50 points relative to the three countries with the best inflation performance.[12]

The "unpleasant monetarist arithmetic" of Sargent and Wallace (1981) implies that a permanent increase in the ratio of public debt to GNP indicates a rise in future inflation. From this perspective, the fiscal entry conditions merely introduce additional indicators of expected inflation. Their contribution is to make national fiscal policies directly responsible for the achievement of EMU. Governments currently violating these conditions will have to alter public spending and taxation, which, with their direct impact on the allocation of public goods and subsidies and the distribution of income, are even more at the heart of government than is monetary policy. The fiscal conditions will force deviant governments to make political sacrifices at home for the sake of EMU. In this sense, they may become a litmus test strengthening the credibility of those truly committed to EMU.

[11] The Accord (Article 109j, par. 1) speaks of the "durability of convergence" as "being reflected in the long-term interest rate levels."

[12] To illustrate, consider two government bonds for which the payoff, corrected for expected inflation, will always be 1 ECU per pound. Let T be the risk-free real interest rate and assume that one bond has a default probability, p, in every period and the other has a default probability of zero. The price of the first bond is $(1 - p)/(T + p)$, the price of the second is $1/T$. If the real rates of return cannot differ by more than 50 basis points, and T = 3.0 percent, p cannot exceed 0.52 percent.

Table 1 shows the 1990 realizations for the EC countries of the critical variables for entry to EMU. Only four countries qualify on the basis of these data: Denmark, Germany, France, and Luxembourg. Greece, Italy, and Portugal meet none of the four criteria; Ireland and the United Kingdom meet three; Belgium and the Netherlands meet two; and Spain meets one. Assuming that Denmark, Germany, France, and Luxembourg will continue to meet the requirements in the future, at least three more countries, not including the United Kingdom, will be necessary for Stage Three to be declared by majority at the end of 1996. Ireland, Belgium, and the Netherlands are natural candidates with regard to their price and interest-rate performances. There is little

TABLE 1
CONVERGENCE INDICATORS

	1990 Realizations				Required Reductions[a]			
	Inflation Rate (CPI)	Long-Term Bond Yield	Budget Deficit to GDP	Debt to GDP	Inflation Rate (CPI)	Long-Term Bond Yield	Budget Deficit to GDP	Debt to GDP
Belgium	3.4	10.1	5.5	130.2	-	-	2.5	70.2
Denmark	2.6	11.0	1.6	58.9	-	-	-	-
Germany	2.7	8.9	2.5	41.2	-	-	-	-
Greece	20.4	n.a.	20.2	81.6	16.3	n.a.	17.2	21.6
Spain	6.7	14.7	4.0	44.1	2.6	3.1	1.0	-
France	3.4	9.9	1.7	46.5	-	-	-	-
Ireland	3.3	10.1	2.3	115.2	-	-	-	55.2
Italy	6.5	13.4	10.7	101.1	2.4	1.8	7.7	41.1
Luxembourg	3.7	8.6	–3.3	7.8	-	-	-	-
Netherlands	2.4	9.0	5.3	79.3	-	-	2.3	19.3
Portugal	13.4	16.8	6.0	67.8	9.3	5.2	3.0	7.8
UK	9.5	11.1	0.7	35.8	5.4	-	-	-
3 Lowest Countries (Avg)	2.6	9.6	-	-	-	-	-	-

SOURCES: Commission of the European Communities, *European Economy*, Supplement A, No. 6, June 1991, for the inflation rate and long-term government bond yields. Organisation for Economic Co-operation and Development, *OECD Economic Outlook* 50, December 1991, for budget deficit and debt, except for Luxembourg and Portugal. For these two countries, the data come from the Commission of the European Communities, *European Economy*, No. 46, December 1990.

[a] In the case of the inflation rate, the required reduction is the amount needed to reach the average of the lowest three countries plus 150 basis points; in the case of the long-term interest rate, it is the amount required to reach the average of the lowest three plus 200 basis points. In the cases of the budget deficit and debt, the required reductions are the amounts required to meet the reference levels under the excessive-deficit procedure.

realistic hope, however, that Ireland and Belgium can appropriately reduce their debt-to-GDP ratios. Nominal GDP will have to grow 11.1 percent faster on average than nominal debt between 1992 and 1996 for Belgium to make it and 9.1 percent faster for Ireland. Assuming that current inflation rates remain the same in these countries and that the growth of nominal debt is brought down to zero, real GDP will have to grow by 7.6 percent in Belgium and 5.8 percent in Ireland to satisfy the debt entry condition. Both possibilities are remote. A more positive outlook emerges if the majority declaration is foregone and EMU begins on January 1, 1999. For this scenario, the required excess (real) growth rates of GDP over public debt are 7.9 percent (4.5 percent) for Belgium and 6.5 percent (3.2 percent) for Ireland.

Alternatively, the Council of Ministers, which oversees the fiscal conditions, may decide that a strict application of those conditions will excessively delay Stage Three, and they may therefore adopt a "dynamic interpretation." This interpretation, designated "dynamic" by the Italian delegation at Maastricht, would consider the *change* in the debt-to-GDP ratio instead of its *level*, together with the *primary* deficit rather than the *total* deficit. A country with a high but declining debt ratio and primary surpluses could be considered eligible for Stage Three, even if the entry conditions were not met. Belgium and Italy provide interesting contrasts. The Belgian debt ratio peaked in 1988 at 134 percent of GDP, and the country has enjoyed primary surpluses since 1985, indicating that a fiscal correction has been in the making for some time. Italy, by contrast, has a rising debt ratio coupled with primary deficits. Belgium would meet the "dynamic" criterion; Italy would not. The possibility of a dynamic interpretation is embedded in the Treaty.

Article 104c entrusts the Commission with monitoring fiscal developments in member states to determine their compliance with the reference values specified in the Protocol on the Excessive Deficit Procedure. The protocol, however, leaves room for ample discretion:

> . . . unless either the ratio [of the planned or actual deficit to gross domestic product] has declined *substantially* and continuously and reached a level that comes close to the reference value; or, alternatively the excess over the reference value is only exceptional and temporary and the ratio remains *close* to the reference value. (par. 2, italics added)

A similar escape clause exempts member states from the debt ratio:

> . . . unless the ratio is sufficiently *diminishing* and approaching the reference value at a *satisfactory* pace. (par. 2, italics added)

The terms *substantially*, *close*, *diminishing*, and *satisfactory* will be interpreted in different ways by different countries at different times and seem ideal to induce significant compromises among member states.

Furthermore, the Council of Ministers may take into account "any observation which the Member State concerned may wish to make" (Article 104c, par. 6) before determining whether the member's deficit or debt is excessive.

The optimal transition strategies of the high-debt countries in the EC will depend largely on the desire of the European governments to begin Stage Three with a majority of member states and on the degree of perceived likelihood that the dynamic interpretation will be adopted for that reason. Governments anticipating that the fiscal conditions will be rigidly applied and desiring to spread the cost of a fiscal adjustment over time will do best to change their policies soon and attempt a gradual debt reduction. Governments anticipating a Community desire to have a majority in Stage Three will realize that the dynamic interpretation implicitly rewards a particularly strong effort made right before the deadline to comply with the conditions. Rather than spread the adjustment over time, such governments may be tempted to continue their profligate policies for another few years and then abruptly slam on the brakes. Obviously, this would work against both the purpose of convergence to sound public finances and the stability of financial markets. To avoid pernicious end-game incentives issuing from the Maastricht provisions, the Community should therefore avoid giving any sign indicating the priority of a majority solution for Stage Three and a too lenient, dynamic interpretation of the entry conditions.

Finally, the condition on the debt-to-GDP ratios poses the risk that countries with large debts might engineer a bout of inflation before the EMU deadline to lower the real value of their debt. With the additional inflation and exchange-rate conditions, however, such inflation spikes would have to come fairly soon. The likelihood of this happening is reduced by the relatively large share of short-term debt in total outstanding public debt (Bishop, 1991), a share that implies that a rise in inflation would soon translate into higher refinancing requirements and, hence, rising deficits. The Protocol on the Excessive Deficit Procedure gives detailed definitions of debt- and deficit-accounting rules and statistical norms in order to mitigate the danger that high-debt countries will use the time until 1999 to hide their debt and deficits under off-budget items (von Hagen, 1992, shows that U.S. state governments use such strategies to meet their debt limitations and balanced-budget requirements).

The Two-Tier EMS: A Strategy for Implementing the Maastricht Accord

As a strategy for EMU, the Maastricht Accord represents a significant improvement over the Delors Report. It still shares with the Report,

however, severe weaknesses arising from the strict reliance on fixed exchange rates as a sign of commitment to EMU. By insisting on fixed rates during the transition, the Maastricht strategy removes the flexibility to adjust to country-specific shocks and creates a fragile environment in which policy coordination is not yet enforced but safety valves, such as capital controls, have already been removed. By requiring only that the laws of the central banks have to be made compatible with the independent ECB, but not implemented before the beginning of Stage Three, the Accord forgoes the opportunity to ensure that the necessary fiscal adjustments take place before the start of EMU. In this section of our essay, we propose a procedure for implementation of the Accord that will overcome these weaknesses. Our proposal rests on the premise that formalizing and practicing cooperation among independent central banks during the transition will resolve the conflict between credibility and flexibility and will provide a stable environment on the way to EMU. To make our approach compatible with the Maastricht Accord, we propose to loosen the formal EMS constraints and add tighter, but unilateral, exchange-rate constraints as well as a provision to implement central-bank independence during Stage Two. Our proposal is summarized as follows:

(1) The ERM of the EMS would be transformed into a two-tier system. All participating currencies in the EMS would adhere to the ordinary bands of ±6 percent around the central parities. Compulsory interventions backed by the current financing mechanism of the EMS would be undertaken to defend these bands. Within the normal band, all participating monetary authorities would declare narrow bands of (initially) ±2.25 percent as a voluntary commitment. Interventions to defend the narrow bands would not be compulsory and would not be eligible for the financing mechanisms provided by the EMS.

(2) The EMI Council would meet at least ten times a year to discuss monetary policy in the EMS and make policy recommendations. If individual exchange rates were to move outside the narrow band for more than, say, five consecutive days, the Council would meet and discuss the situation. If individual rates were to move outside the band for more than ten consecutive days, the Council would issue a formal decision either to realign or to maintain the relevant central parities.

(3) All participating governments would commit to reducing their influence on monetary policy and to implementing central-bank independence during the transition to EMU. The EMI would issue an annual progress report on the state of independence of the national central banks.

(4) The transition to Stage three of EMU would be marked by both increasing central-bank independence and a stepwise narrowing of the inner band in the ERM, reflecting the growing convergence of the national economies and the commitment of the national authorities to fixed exchange rates.

(5) Monetary union, including the creation of the ECB with full responsibility for European monetary policy, would be announced following a decision by the European Council, but no earlier than two years without a realignment decision, and no earlier than two years after central banks joining Stage Three would have begun to operate with a degree of independence comparable to the level desired for the ECB.

More specifically, we propose:

(6) That each national central bank choose between an exchange-rate band of 12 percent or a narrower band initially set at 4.5 percent. Although the wide band would be backed by the financing mechanisms of the EMS, the narrow band would not. Countries with stable currencies in the EMS would opt for narrow bands with other stable currencies to indicate their commitment to price stability and EMU. The narrow bands would not be exposed to speculative attacks as exchange rates approach the limits of the narrow bands, because interventions would not be compulsory, and speculators would be subject to the risk of capital losses even at the margins of the narrow bands. The noncompulsory nature of interventions at the margins of the narrow band would mean that hard-currency central banks would not be forced to soften their monetary discipline in support of weaker currencies. Inflation rates would thus be encouraged to converge at a low level, as required by the Maastricht Accord.

The wider bands would conform with current EMS practice for new entrants and hence would minimize formal changes in the current setup. Of course, no visible change in the exchange-rate bands would be required if the countries currently in the 4.5-percent band did not wish to opt for wider bands. During the transition to EMU, the wide bands would serve mainly to prevent speculative bubbles and to insure against the possibility of too large exchange-rate changes resulting from large asymmetric shocks.

(7) The EMI would play a central role in the formulation of common monetary targets or other forms of consistent monetary strategies in the EC during the transition. This would build experience and the mutual knowledge necessary for increasingly closer policy coordination and, eventually, a common monetary policy. These provisions would be

broadly consistent with the tasks assigned to the EMI by Article 109f of the Maastricht Treaty.

An important responsibility of the EMI under our proposal would be to issue formal realignment decisions whenever exchange-market tensions occurred. Making realignment decisions regular and formal events would reduce the symbolic and political significance these decisions now have. The requirement of a formal realignment decision would also encourage the monetary authorities to state their reasons for or against a realignment. There is no reason why the private sector would interpret a realignment, decided among independent central banks reacting to country-specific shocks, as evidence of a weak commitment to EMU. The two-tier EMS would therefore combine credibility with the flexibility to respond to asymmetric shocks.

The two-tier EMS would also create an early-warning system, ensuring that realignments were small enough to make the new central parity fall within the wider band. Realignments would thus contribute little to nominal- and real-exchange-rate variability, and the danger of speculative attacks would be further reduced.

(8) The requirement that central banks be given independence in practice would force participating governments to give up power over monetary policy before EMU is reached. We choose to interpret Article 109j of the Accord not merely as a formal criterion of legal compatibility but as a behavioral concept. Whether or not independence is realized must be judged by the EMI considering the actual policies of a national central bank (for example, to what extent the bank follows government instructions). The resultant hardening of the government budget constraint would induce fiscal authorities to limit budget deficits so as to be compatible with central-bank independence.

Central-bank independence implemented during the transition would also reduce the threat of end-game behavior, because independent national central banks would have little incentive to manipulate the competitiveness of national industries or the real value of government debt.

(9) The narrow bands in the EMS would be gradually tightened during the transition. Because the narrow bands would be unilateral commitments, the national central banks could, as they saw fit, announce and adhere to increasingly smaller bands around the exchange rates of the most stable currencies. Adjustments could proceed as policy-induced asymmetric shocks dissipated, and the commitment of all members to EMU would grow stronger over time. There would be no reason, by contrast, to change the width of the wider band.

(10) Our plan, like the Maastricht Accord, recognizes the political prerogative in making the final decision about EMU. Our provision, however, would be to give veto power to the EMI, because the EMI would judge central-bank independence and make realignment decisions. Requiring a period of two years before a realignment decision, rather than before an actual realignment, would imply that exchange rates had never gone beyond the narrow bands for more than nine consecutive days and would demonstrate a large degree of political and economic convergence. This type of convergence would also limit the importance of end games during the transition.

The two-tier EMS would overcome the weaknesses resulting from the excessive symbolic weight given to fixed exchange rates. In addition, it would foster convergence and policy coordination at a speed chosen by the participating governments, would generate a sorting-out mechanism for the "multi-speed" approach to EMU, and would be easy to implement. In all these respects, it is consistent with the objectives and many of the provisions of the Maastricht Treaty.

3 The European Central Bank

The performance of EMU will depend critically on the institutional design of the ECB, one important aspect of which is its independence from the European governments (Rogoff, 1985). Central-bank independence from government is not only necessary to achieve lasting price stability (Neumann, 1991; O'Flaherty, 1990); empirical evidence suggests also that long-run inflation rates are lower in countries with independent central banks (Bade and Parkin, 1987; Alesina, 1989; Alesina and Grilli, 1991; Demopoulos, Katsimbris, and Miller, 1987).

The Delors Committee described the future European central bank simply as "independent" (par. 32), without further explanation. The Maastricht Accord, however, is very specific on the subject. In this section, we review the ECB Statute and discuss its implications for the performance of EMU. Table 2 (pp. 30-31) summarizes the relevant articles from the Statute and reports for comparison the corresponding provisions of the Bundesbank Act. Following a brief description of the institutional organization of central banks, we concentrate on the objectives of central-bank policy, institutional and personal independence, and the excessive-deficit procedure.

Central-Bank Organization

There are strong similarities in the structure of the decisionmaking bodies and processes of the ECB and the BBK. Both have councils formulating the general guidelines of monetary policy to be discharged by their executive boards. Both councils are composed of the members of their respective boards (six for the ECB and up to ten for the BBK) and either the central-bank governors of countries without a derogation or the presidents of the eleven land central banks. Members of both councils have one vote each, and only in specific cases may the ECB call for weighted voting.[13] In the event of a tie, the presidents of both councils may cast two votes. Actions before both councils require a simple majority vote, unless specified otherwise.

One important aspect of the composition of the central-bank council in the Community system is the weight given the representation of central, or Community, interests relative to that given the member states in monetary-policy decisions. With a common currency, the objectives of monetary policy will necessarily be defined in terms of Community aggregates, that is, a *European* price level and *European* output and employment. The governors of the national central banks, however, will have little interest in Community variables and will be primarily concerned with price stability and output and employment in their own regions.

Realizing that a common monetary policy is not suited to meet regional output and employment targets, the Governing Council will naturally be inclined to give higher priority to the low-inflation target of the common monetary policy than will the ECB Executive Board, which, because it represents a Community institution, will define its responsibilities in terms of Community aggregates. The Executive Board members will therefore push more strongly in the Governing Council for active, discretionary output and employment stabilization at the Community level than will the governors of the national member banks.

[13] Weighted voting applies to Articles 28 (ECB capital), 29 (subscription to ECB capital), 30 (transfer of foreign reserve assets to the ECB), 32 and 51 (allocation of monetary income of national central banks), and 33 (allocation of net profits and losses of the ECB). Members of the Executive Board have no voting power in these instances, whereas the governors of the national central banks have weights determined by their countries' shares in the subscribed capital of the ECB. Decisions are carried with a two-thirds majority.

The histories of the BBK and the Federal Reserve System provide good examples of the internal conflict between federal and regional interests. In Germany, the Adenauer government pushed strongly for increasing the influence of "central" representation on the BBK Board to gain more influence over German monetary policy when the central-bank act was revised in the mid-1950s (Vaubel, 1991). In the United States, the district-bank presidents generally place less weight on active stabilization policies than do the members of the Federal Reserve Board of Governors (Woolley, 1984, p. 64).

Although the weight of the ECB Board on the Governing Council will be one-third when EMU is complete with twelve EC members, Community interests may be expected to be represented disproportionately before that. Under normal circumstances, the number of ECB Board members will be six; initially, it may be four but no fewer (ECB Statute, Article 50). Should seven countries qualify for Stage Three in 1997—a very optimistic scenario—the weight of the Board on the Governing Council will be no less than 36 percent but perhaps as much as 46 percent. If Stage Three starts in 1999, instead, with fewer than seven members, the Board members might have 50 percent of the votes (6 out of 12) or might even form a majority on the Governing Council. In comparison, there have been either six or seven Executive Board members on the BBK Council since the 1970s, accounting for either 35 or 39 percent of the Council's total votes. Thus, in time, the ECB is likely to be a less federalist institution than the BBK.

Another significant departure for the ECB relates to the determination of central-bank instruments. Article 18.2 of the ECB Statute foresees the establishment of general principles for open-market and credit operations. It allows the ECB to purchase and sell claims and marketable instruments in transactions with virtually anyone—governments, corporations, or individuals. Article 20 of the ECB statute allows the ECB to introduce new methods of monetary control at its own discretion, provided only that they be consistent with "an open market economy with free competition" (Article 2). In contrast, the BBK Act is more restrictive. It limits credit operations to those with credit institutions and permits open-market operations only in certain types of assets. The BBK Act is also more specific than the ECB Statute on minimum-reserve requirements. This greater specificity effectively protects the BBK from pressures of groups attempting to use or invent new instruments—such as cheap refinancing opportunities for government-owned financial institutions—to serve their own financial interests.

The Objective of the Central Bank

The constitutions of both the ECB and the BBK spell out the principal objective of monetary policy and subject this objective to a condition. The ECB Statute, however, is much more specific in this regard than is the BBK Act. Article 2 of the ECB Statute, which repeats Article 103 of the Maastricht Accord, declares price stability to be the primary objective of the ECB. The BBK Act has no such specific provision. Its Article 3 gives the BBK a mandate to safeguard the "stability of the currency," a much broader notion than "price stability." In fact, the authors of the BBK Act made it very clear they did not want to commit the bank specifically to price stability.[14] Although the bank itself interprets its mandate mainly in terms of price stability, it is clear that output and employment stabilization and external considerations are also important. The BBK Act leaves much more room for discretionary policies than does the ECB Statute.

Article 12 of the BBK Act requires the BBK to support the general economic policies of the German government, subject to the requirement of Article 3. Similarly, Article 2 of the ECB Statute requires the ECB to support the "general economic policies in the Community with a view to contributing to the achievement of the objectives of the Community." In the absence of an EC government, however, the Community's objectives for economic policy exist in broad and vague formulations at best: Article 103 of the Maastricht Accord foresees that the Council of Ministers will draft a report describing the "broad guidelines of the economic policies of the Member States and the Community" to be adopted after discussion by the European Council. Thus, the ECB will not find it difficult to defend its own policies against requests to support vague policy goals. The BBK, by contrast, has often been asked to support specific policies to raise output and employment or to support the government's fiscal stance.

Central-Bank Independence

Central-bank independence means that monetary policy can be carried out without government interference and even, if necessary, against the

[14] The relevant parliamentary committee explained that it "did not consider it appropriate to commit the central bank to safeguard the purchasing power of the currency, as it is the case in some foreign laws, because such a commitment might lead to a two-tier economic policy and might also demand too much of the central bank." Bundestagsdrucksache 3603, 28 June 1957, p. 2, cited by Vaubel (1991, p. 5).

wishes of the government. By removing monetary policy from the domain of political interests, the central bank's ability to commit itself to long-run low-inflation policies is improved.[15] This requires, in addition to institutional independence, personal independence for individual decisionmakers at the central bank.

Institutional independence. One way to sever the link between government and the central bank is to cut off all channels of communication between the central bank and other government agencies; they cannot create mischief if they cannot talk to each other. Although seemingly extreme, this is essentially the solution adopted by the ECB Statute (Article 7, which restates Article 107 of the Maastricht Accord) ruling that neither the ECB nor the national central banks shall seek or take instructions from Community institutions or member governments, and that member governments shall not try to influence the ECB. One interpretation of this ruling is that the ECB Statute was written to accommodate concerns of those countries that had no experience with central-bank independence and that independence rules out neither auditing nor the central bank's requirement to report regularly to the European Parliament, the Council of Ministers, and the European Commission (Article 15). It is easy to see that Article 7 is bound to create problems once a conflict arises between the ECB and the European governments, or between governments, about the proper course of monetary policy. How can one discern the difference between information gathering and consultation with national authorities, the Council of Ministers, and the European Commission—as mandated in Articles 108 and 109 of the Accord—and actions that reflect seeking and taking instructions? By addressing specific activities instead of simply establishing a status (as the BBK Act did), the ECB Statute makes communications between the monetary and political authorities unnecessarily complicated and thus contributes to public uncertainty about monetary policy. In short, the ECB's definition of independence is not fully operational.

[15] Note, however, that independence does not make the central bank an apolitical institution. In a private conversation, Charles Goodhart pointed out to us that an independent central bank is forced to defend its policies continuously against pressure groups and in public debates and to seek coalitions in the political arena; a dependent central bank enjoys the government's protection against direct political attack. In this sense, the position of independent central banks is more political than that of dependent central banks.

Article 109b of the Maastricht Accord allows the president of the Council of Ministers and a member of the Commission to attend meetings of the ECB Governing Council as nonvoting participants; the president may also submit a motion. In Germany, members of the government may attend meetings of the BBK Council, propose motions, and request that decisions be delayed for two weeks. Although the ECB provisions foster greater political independence than the BBK enjoys, they do not entirely immunize the ECB from political influence, for the EC governments can exert pressure on the ECB outside the Governing Council.

An important difference between the Maastricht Accord and German law is in the jurisdiction over the exchange-rate regime. Article 109 of the Accord holds that "the Council [of Ministers] may, acting by unanimity on a recommendation from the ECB or from the Commission, and after consulting the ECB in an endeavour to reach a consensus consistent with the objective of price stability, [and] after consulting the European Parliament, . . . conclude formal agreements on an exchange-rate system for the ECU vis-à-vis non-Community currencies." Thus, the initiative for exchange-rate arrangements may come only from the Commission or the ECB itself. The same Article 109 gives the Council the right, with a qualified majority, to set the ECU central rates within an exchange-rate arrangement, yet again on the initiative of either the ECB or the Commission and after consulting the ECB. In the absence of a formal exchange-rate arrangement, the Council may formulate guidelines about the Community's exchange-rate policies consistent with the objective of price stability, again subject to the requirement of a qualified majority after consulting the ECB. Altogether, the Accord gives the ECB a strong role in determining the exchange-rate regime. A politically weak Council will not want to go against the recommendation of the ECB, especially if departing from such a recommendation will publicly compromise price stability.

The BBK's position is, by contrast, weak in this regard. The German finance ministry has the authority to choose the exchange-rate regime without consultation with the BBK. Indeed, this authority was exercised when the EMS was formed in 1978 despite the BBK's explicit concern that Germany's price stability was at risk under the new system. Under both Bretton Woods and the EMS, the BBK and the government have often disagreed on exchange-rate matters, and the BBK has often been forced to tolerate deviations from its low-inflation course (Neumann and von Hagen, 1992). Former German Chancellor H. Schmidt (1990) gives

a different view of the story in his memoirs, in which he writes that he was quite annoyed by the BBK's unwillingness to comply with the wishes of government, for he regarded exchange-rate policies and, in particular, the formation of the EMS as important elements of general foreign and strategic policy. The regulations of the Maastricht Accord give hope that such conflicts and abuses of monetary policy will be rare in EMU.

One important reason for creating an independent central bank is to prevent a government from using the money supply to finance public spending, transfer payments, and tax reductions to interest groups in exchange for votes. One way to achieve this is to keep the central bank from buying "too much" government debt or from overextending credit to government in other ways. The BBK Act limits the extension of credit to the government to small overdrafts and prohibits altogether the purchase of public debt in primary markets. The BBK's ability to finance the government indirectly is limited by the absence of a secondary market for short-term government debt. Purchases of long-term government bonds play only a small role in German money supply.

The ECB Statute goes a step further and prohibits any direct monetary financing to the Community or to national or local governments (Article 21.1). The Maastricht Accord rules that the Community "shall not be liable for or assume the commitments" of member governments (Article 104b), implying that the ECB will not bail out insolvent governments. The ECB shall not extend overdraft credit to national governments or purchase debt instruments directly from them. The ECB may conduct open-market operations, however, for there are no restrictions on the purchase of government debt in secondary markets.

A crucial feature of an independent central bank is that it generates its own revenues and does not rely on a fiscal authority for its operations. The ECB will be constructed in this regard like a private bank. Each national central bank will provide capital (Article 28 and 29) and will transfer foreign assets to the ECB (Article 30), and the property of the ECB will be exempt from all forms of requisition or expropriation. The ECB will earn income on specifically designated assets and will distribute it to the member banks according to their capital shares (Article 32). It will, in sum, be financially independent.

Personal independence. Personal independence relates both to the relations between central bankers and the administrations in office, and to partisanship on the part of the central bankers.[16] The appointment

[16] For example, Waller (1992b) shows that countries with a high degree of nominal wage rigidity (and suffering more output variability than countries with less nominal wage

process is the most important channel for political and partisan influence in this regard. If a government can freely appoint and dismiss board members, the members have good reason to conduct policies in the government's interest. Similarly, in countries where parties alternating in government have different views on monetary policy, the party in power is likely to appoint central bankers who share its ideology.

A prerequisite for personal independence—guaranteed under both the ECB and the BBK—is that the individual central bankers cannot be removed from office for the design and execution of monetary policy. Appointees to the central bank will thus converge more toward the "median central banker," that is, their monetary policies will reflect the median voter's preferences the longer their terms are relative to the government's tenure in office (Waller, 1992). Additional means to ensure independence are nonrenewability of terms, so that board members will not be tempted to defer to the government in power, and staggering of terms, so that all the members are not appointed by the same administration. Staggering has the further benefit of reducing private-sector uncertainty about future policy actions (Waller, 1989). If terms are structured to enforce a gradual turnover in the bank board, the public can reasonably forecast future monetary policy by the policy preferences of the incumbent board members and will not have to guess what a new majority may advocate.

Appointments to the ECB Board will be for eight years without renewal and are made by the European Council "by common accord" after consulting with the Governing Council and the European Parliament. Appointments are staggered (Article 50) by giving the first vice-president a term of four years and the other members of the Board terms of between five and eight years. The national central-bank governors are appointed by the national governments for terms of not less than five years. In contrast, appointments to the BBK Board are for renewable terms of eight years (with a second term granted almost automatically) and are made by the government without consultation with the BBK.[17] Although not staggered by statute, appointments have become staggered over time. The presidents of the land central banks are appointed by the German Upper House, the Bundesrat.

Even in the German case, where two eight-year appointments extend over four regular electoral periods, partisanship has not been fully

rigidity) would have an incentive to appoint a central banker who is more concerned with output stabilization than with inflation reduction.

[17] In a remarkable change of traditional practice, the BBK was asked to submit a list of three candidates for the latest appointment to the Board.

excluded (Vaubel, 1991). The Christian Democrats, for example, secured for themselves at least 50 percent of the appointments on the BBK Council from 1962 to 1974 and after 1986, and the Social Democrats had at least 50 percent from 1974 to 1976 and from 1978 to 1981. On the Executive Board, the Christian Democrats had 50 percent of the appointments from 1958 to 1976 and again in 1990. The effect of staggering is illustrated by the fact that the Christian Democrats maintained their majorities for years after leaving government in Bonn in 1969, but it took them five years to regain a majority on the Board and almost a decade to regain a majority on the Council after returning to power in 1982. Vaubel (1991) concludes from his empirical analysis that partisanship has had significant effects on German monetary policy since the 1960s.[18] He finds no evidence, however, of "opportunistic behavior" in the sense of the classical political business cycle, that is, monetary expansions to raise the chances of a government's reelection.

For the ECB, opportunistic behavior and political business cycles are unlikely as long as national elections remain uncoordinated in the Community. The possibility of partisanship in the ECB Board and Governing Council cannot be excluded, however, because the European Council itself consists of party politicians and because party similarities exist across member countries. The length of the term for Governing Council members offers some protection in this regard. At eight years, it is longer than most electoral cycles in the EC, including that of the European Parliament (although those for the French president and British government come close). The provision that the Governing Council must be heard for appointments and the semi-annual rotation of the presidency of the European Council add further protection. Partisanship may, however, develop between the ECB and the political bureaucracy in Brussels, particularly once the European Commission is appointed by the European Parliament rather than by the Council of the Heads of State or Government. In consideration of the fact that inter-national agreements are difficult to amend, it would have been better if the ECB Statute had included stronger safeguards against potentially partisan appointments.

The Excessive-Deficit Procedure

We have argued that central-bank independence requires freedom from any obligation to finance government deficits or monetize public debt.

[18] Specifically, Vaubel (p. 33) tests the hypothesis that, "if the majority in the central-bank council changes in favor of the Federal Government compared with the previous pre-election year, then the rate of monetary expansion increases in the pre-election year; if the majority changes in disfavor of the government, the opposite happens."

Because the central bank remains part of the public sector and governments can change central-bank laws to regain access to monetary financing, such freedom can ultimately be credible only if the government's financial position promises to remain stable. From this perspective, sound fiscal policies (the avoidance of permanent growth of public debt in excess of real income) are a necessary condition for central-bank independence.

The Maastricht Accord recognizes this necessity and includes several provisions regarding fiscal policy in the member countries. Article 104b states that, as a matter of principle, the Community shall not be responsible for any financial obligations incurred by member governments or other public authorities. This same principle is reenforced in the same article, which states also that a member state shall not be liable or assume any kind of public debt of another member state. Member states in a debt crisis will continue, however, to have the right to be bailed out by the Community or by other members.

Yet, the EC is a community of solidarity, and the equalization of standards of living across member states is one of its official goals. This means that the members will likely see it as a moral right, if not a legal obligation, to help a fellow member in financial trouble. Furthermore, policymakers will surely prefer crisis management, including a rise in the rate of monetary expansion in EMU, if the alternative is to impose additional taxes and massive spending cuts on a troubled country. In short, EC membership implicitly provides insurance against debt crisis, a provision that may compromise the quality of EMU. In view of this moral-hazard problem, Article 104c of the Accord introduces an innovation called the "excessive-deficit procedure."

Article 104c commits all members to avoiding excessive government deficits and charges the European Commission with monitoring the budgetary positions of the member governments. Violation of one or more of the reference criteria triggers a fairly complex process. First, the Commission prepares a report to determine whether or not the government deficit of the country involved exceeds its investment spending. The Economic and Financial Committee (the Monetary Committee until Stage Three) then formulates an opinion based on the report. If the Commission finds the deficit to be excessive, it addresses its concern to the Council of Ministers, which, after hearing the government of the country in question, decides by qualified majority whether or not an excessive deficit does indeed exist. If the Council decides that it does, a number of increasingly severe penalties are imposed. First, the Council makes a recommendation. If the country

does not comply, the recommendation is made public. If the country still does not comply, the Council may insist that the country take appropriate policy actions and ask for a timetable for their implementation. If this action also fails, the Council may oblige the country to furnish detailed information and warning statements when issuing new debt; it may ask the European Investment Bank (EIB) to reconsider its lending practices to the country, may ask the country to deposit bail with the EC, or may impose fines. These penalties will be abrogated when the Council decides and publicly states that the deficit problem has been solved. The spirit of these provisions is to reduce the risk of monetization of public debt in EMU by subjecting all member governments to the close scrutiny of the Commission and the Council. Three aspects of the provisions are particularly noteworthy.

First, there is little in the procedure that is automatic. Judgement and discretion are involved at each step to determine whether or not a problem exists or a reaction is adequate. In one sense, the resulting ambiguity of the process is necessary, for there is little empirical or quantitative knowledge about what constitutes sustainability of public debt or deficits. Any numerical criterion must, therefore, be arbitrary. Although the numerical thresholds specified in the relevant protocol are useful as triggers, judgement is essential to prevent the functioning of EMU from becoming overly dependent on a set of more or less random numbers. In another sense, however, the ambiguity of the process invites political bargaining and reduces its value as a safeguard against fiscal profligacy.

Second, it is not clear that penalties, if imposed, can be enforced. The Council of Ministers will find it hard in any case to collect fines imposed on governments that are in financial difficulty, and the Accord does not give the Council the authority to resort to "natural" penalties, such as the suspension of regional and structural funds or funds covered by the Common Agricultural Policy (CAP). Furthermore, European politicians will dislike the prospect of governments having to tell their citizens they must suffer the consequences of austerity programs to satisfy bureaucrats in Brussels. The power of the excessive-deficit procedure to discipline members who willfully disregard the concerns of EMU is, therefore, questionable. An alternative to the questionable threat behind Article 104c would be to reward members in good standing with positive incentives, such as better credit conditions at the EIB, for budgetary processes compatible with stability in EMU.

Third, the Accord gives the Commission a critical role in the future political economy of EMU. Because the Council of Ministers can only

take action upon recommendation by the Commission, and paragraph 10 explicitly excludes a member's right to take another member to the Court of Justice in fiscal matters, the Commission will have the power to decide whether or not a country's fiscal policy is subject to Community scrutiny. Although the Council of Ministers has the power to decide not to act on the Commission's recommendations, the procedure set out is a first step toward centralizing EC fiscal policy under the Commission. Political ties and partisanship between the Commission and national governments will play an important role in the application of the procedure. This role may not be significant as long as the Commission remains remote from the national governments and regards itself as a truly European institution. Once the European Parliament gains more power over the Commission, however, the current procedure risks becoming vulnerable to political considerations and losing its ability to safeguard the financial stability of EMU.

4 The ECB: A European Bundesbank?

In terms of price stability, the BBK has undoubtedly been the most successful European central bank in the past four decades, a success credited to its institutional framework. It is now commonly agreed that price stability should be the most important goal of the ECB. Has, then, the BBK served as a model for the ECB? Is the ECB of the Maastricht Accord simply a tighter edition of the BBK?

The ECB and the BBK share a formal status of independence, similarities in administrative structure, and explicit commitments under conditionality clauses. But the institutions follow two distinct models. The BBK model is restrictive in the choice of instruments, vague in its objective, and has a well-defined conditionality clause. The ECB has an unrestricted choice of instruments, a concrete objective, and a vague conditionality clause. The weight of "central" interests is small and the definition of institutional independence is simple and operational in BBK decisions as compared to the ECB. In addition, the BBK's independence is weakened by its lack of control over the exchange-rate regime and by shortcomings with regard to personal independence. The ECB's position is the opposite.

The ECB will thus have less discretionary power than the BBK to pursue an optimal monetary policy. It can be expected to focus more on price stability and less on output and employment stabilization. For lack of explicit provisions, the ECB will find it harder, in comparison to the BBK, to defend itself against pressures to apply specific instruments and

harder, therefore, to use only those most suitable for its policy. The ECB will be more strongly exposed to political pressures than the BBK is once a common European economic policy follows further political integration. In addition, the Accord relies much more on personal independence than does the BBK, and the control it places on exchange-rate policies reflects the influence of political pressures on European monetary policy.

It is clear that the ECB constitution promises much better outcomes than most existing central-bank constitutions in Europe. The fact that we know little about the empirical link between the constitutions and performances of central banks suggests, however, that the BBK model has less predictive power for the future performance of the ECB than we might have expected. Whether the ECB will match the BBK's success, therefore, remains an open question.

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