## The political economy of policy coordination in the EMU

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#### Summary

■ The beginning of the Third Stage of the Economic and Monetary Union has changed the quality of economic policy making of the member states, as EMU creates new and amplifies existing externalities of economic policies among them. In this paper, we analyze the resulting interactions between a single monetary policy and national fiscal policies in the short and the long run. In the long run, monetary policy and fiscal policies are independent, and there is no need for coordination beyond deficit constraints. In the short run, when changes in nominal demand affect real output, monetary and fiscal policies interact in determining aggregate output at the union level. This creates a potential conflict among national fiscal policies and between these and the single monetary policy. We analyze these conflicts and derive some principles for policy coordination. Coordination requires agreements among member states on a joint fiscal policy stance at the aggregate level, reconciling this joint fiscal stance with the union's monetary policy, and procedures to express and aggregate preferences over the output-inflation trade-off at the EMU level. We review the existing policy processes in the EMU and show that they are insufficiently focused on the interaction between monetary and fiscal policies and do not meet the requirements of a framework for effective policy coordination.

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# The political economy of policy coordination in the EMU

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The beginning of the Third Stage of the Economic and Monetary Union in Europe (EMU for short) has changed the quality of economic policy making by the member states. In the integrated monetary and financial market system created by the euro and the Eurosystem (the European Central Bank and the national central banks of the countries participating in EMU), all participating member states share the benefits—or suffer from the lack—of a well-conceived "single" monetary policy. Price stability is the key example. Since the price level is properly defined only for the entire domain of a currency, all euro area member states simultaneously either enjoy price stability or suffer from inflation.<sup>1</sup> Similarly, the welfare benefits of low currency risk (reflected in the common level of long-term interest rates), external balance (reflected in the level and variability of the exchange rate of the euro against other currencies), and the stability of the EMU banking sector and financial markets (reflected in efficient and stable financial intermediation) jointly accrue to all member states.

The euro area member states have delegated the authority over monetary policy to a common supranational institution, the European Central Bank. Other important parts of economic policy continue to be decided at the national level, however, even if they affect the welfare of other member states, because they affect price stability, financial stability, or the EMU's external balance directly or indirectly through the ECB's reactions to national economic policies. EMU thus creates new and amplifies existing externalities of economic policies among the member states.

<sup>\*</sup> We thank Lars Calmfors for numerous and helpful suggestions improving an earlier draft of this paper.

<sup>&</sup>lt;sup>1</sup> Individual countries can experience price developments that differ from the average inflation rate in the euro area. However, such differential developments must be properly interpreted as regional *relative price movements*, which cannot be the subject of EMU monetary policy.

Furthermore, EMU weakens the incentives for governments to consider the consequences of their national economic policies for price stability, financial stability and external balance, i.e. it invites free-riding behavior, because the benefits from policies aiming at these variables partly fall on other member governments in EMU.<sup>2</sup> The interdependence between the ECB's monetary policy and national economic policies and the existence of externalities and free-riding incentives in EMU imply that non-cooperative national economic policies and ECB monetary policy do not yield efficient policy outcomes in EMU.

There are two basic channels through which national economic policies affect the aggregate EMU variables. The first and obvious one is that some national policies directly affect the relevant euro area aggregates. This is true for national policies affecting the euro area price level, the euro's exchange rate with other currencies, and the external balance of the euro area. To the extent that the ECB takes economic growth and unemployment in the euro area into consideration when setting its monetary policy, national policies affecting these variables are also relevant.<sup>3</sup> This applies primarily to public spending and taxation, but goes beyond budget deficits, as the level and the structure of public sector revenues and expenditures have important macro effects on growth, employment, and prices.

The second channel works through national economic structures that shape the environment where ECB monetary policy operates. For example, structural changes affecting the slope of the Phillips curve or the NAIRU in an individual member economy will change the constraints faced by the ECB in its low-inflation policy, as the long-run equilibrium inflation rate of the euro area depends on such parameters.<sup>4</sup> Again, the reduced impact of national policies on price stability in EMU implies a reduced incentive for governments to undertake policies that could improve the monetary policy environ-

<sup>&</sup>lt;sup>2</sup> The recognition of this problem with regard to the level of public sector debts and deficits has been the justification for the Excessive Deficit Procedure of the Maastricht Treaty and the Stability and Growth Pact.

<sup>&</sup>lt;sup>3</sup> Although the ECB's main goal is price stability, it has a wider mandate of pursuing the general economic policies in the community, provided that price stability is not endangered. Furthermore, the policy statements of the ECB clearly reflect a concern with cyclical developments in the euro area.

<sup>&</sup>lt;sup>4</sup> This is the main tenet of models of monetary policy based on credibility arguments, e.g. Barro and Gordon (1983).

ment.<sup>5</sup> The implication is that policy coordination in the euro area does not naturally end with macroeconomic policies (Jacquet and Pisani-Ferry, 2000). Beyond that, the logic of the euro area framework implies that coordination should include structural policies affecting the performance and flexibility of European markets for goods, services, and labor.

The purpose of this paper is to analyze and discuss the political economy of policy coordination in EMU. In Section 1, we develop a framework for studying monetary and fiscal policy in a monetary union to explore the implications of the common currency for policy coordination. We show that there is little need for coordinating monetary and fiscal policies in the long run. In the short run, however, a monetary policy firmly committed to price stability at the EMU level implies that the central bank controls aggregate demand at the euro area level, while national fiscal policies determine the distribution of aggregate demand across the participating countries. Thus, national governments are engaged in a distributional game with inefficient outcomes, unless policies are coordinated. In Section 2, we review the existing mechanisms for policy coordination and show that they are insufficient for generating efficient policy outcomes. The current mechanisms largely ignore the interdependence of national economic policies and the ECB's monetary policy and instead seem to focus on the long-run perspective. Section 3 concludes.

#### 1. Monetary and fiscal policy conflicts in EMU

We analyze the political economy of macroeconomic policy making in the euro area in a general framework of a monetary union. To sharpen the focus of our discussion, we consider the reference case of a monetary union consisting of two countries of equal size. The two countries produce tradable goods, which are imperfect substitutes in consumption. Aggregate demand in each country depends on the real interest rate, the relative price of the country's output (i.e. the real exchange rate) and the primary government deficit. Aggregate supply in each country is determined by a Lucas-supply function motivated by one-period nominal wage contracts. Output supply depends on unexpected price movements in the short run only. The long-run output level is determined by national good and labor market policies and is unaffected by changes in the price level. We also assume that the two

<sup>&</sup>lt;sup>5</sup> See e.g. von Hagen (1999), Sibert and Sutherland (2000), and Calmfors (2001).

members of the monetary union have symmetric aggregate supply and demand functions.

The two countries share a common currency and a fully integrated capital market with a single interest rate. Money demand in the monetary union depends on aggregate income (at the union level), the aggregate price level (a weighted average of the two national output prices), and the single interest rate. The model thus entails a hierarchical structure, where the price level and the interest rate are determined at the union level, while relative prices between the two countries and output are determined at the national level.

The central bank is in charge of monetary policy for the union as a whole. It controls the nominal interest rate, taking inflation expectations as given. Its principal mandate is to maintain price stability, i.e. to keep the rate of inflation close to zero. Agents' expectations are rational and based on the information available at the beginning of each period.<sup>7</sup>

#### 1.1. Monetary and fiscal policy in the long run

Consider the long-run interaction of monetary and fiscal policy in this setting. As there are no unexpected price movements in the long run, the aggregate supply curve is vertical both at the national and the aggregate level. With forward-looking inflation expectations, the long-run solution for the price level depends on the expected future paths of money supply and the primary deficits in both countries. In the long run, price stability in the monetary union therefore requires a convergence of the cumulated expected future deficits, which justifies the imposition of long-run deficit constraints, such as the requirement of sustainability first included in the Maastricht Treaty.

Given this condition on future deficits, the important long-run property of the model in our context is that the central bank can choose the rate of inflation for the monetary union without affecting neither the output level of the union as a whole nor the output levels in each country. Given the central bank's choice of the rate of inflation, a change in the government deficit in one country affects the relative output price and the distribution of output between the pri-

<sup>&</sup>lt;sup>6</sup> As in existing monetary unions, it would, under realistic conditions, be difficult to measure money demand at the national level, as residents in one country will hold bank deposits in the other. See von Hagen (1993).

<sup>&</sup>lt;sup>7</sup> For a detailed exposition of the model, see Mundschenk and von Hagen (2001).

vate and the public sector, but not the long-run level of output. Adverse supply-side policies in one country, such as a rise in distortionary taxes or a tightening of labor market regulations, reduces that country's level of aggregate output, and also the aggregate output of the monetary union. However, the central bank can still maintain the same inflation rate by adjusting the monetary policy accordingly, with no long-run consequences for the other country's output.

The essence of this is that monetary policy can achieve long-run price stability without interfering with fiscal policy, and that national governments can choose and implement supply-side policies according to national preferences. Thus, beyond the imposition of an appropriate long-run constraint on government deficits, there is no need for coordinating monetary and fiscal policies.

#### 1.2. Monetary and fiscal policy conflicts in the short run

Consider now the short run, where wages are sticky and unexpected changes in prices have real output effects. The aggregate supply curve has a positive slope. By controlling the interest rate, the central bank can determine the equilibrium price level or the equilibrium rate of inflation and hence, the equilibrium level of aggregate demand for the monetary union as a whole. Assume now that one of the governments desires to increase output in its country and thus increases its deficit. Initially, this drives up aggregate demand in this country and in the monetary union. Responding to the resulting inflationary pressures, the central bank raises the interest rate, pushing the union's level of output back towards its initial position. As the interest rate rises, the demand for output falls in both countries. In the new equilibrium, aggregate output at the monetary union level is the same as before, but output is higher in the first and lower in the second country. The point of the example is that the monetary union exhibits a conflict between monetary and fiscal policies in the short run. Given the short run supply schedules, this conflict focuses on the determination of aggregate output in the monetary union and its distribution over the two countries.8 The conflict results from the price level and the inflation rate of the monetary union being determined together with its aggregate level of output in equilibrium.

There are two ways of framing this conflict. Assume first that the central bank is hard-nosed on inflation and unwilling to tolerate any

<sup>&</sup>lt;sup>8</sup> For a strategic analysis of this conflict, see Dixit and Lambertini (2000, 2001).

deviation from its target rate. The central bank then fully offsets all deviations of aggregate output at the monetary union level from the level compatible with this target. As a result, fiscal policies at the national level are in a pure distributional conflict, i.e. any increase in the deficit in one country crowds out demand in the other. Suppose that output falls short of the governments' target levels in the initial equilibrium. If the two governments fail to recognize this distributional conflict, they will both increase government deficits in an effort to achieve their output goals. Since aggregate output is controlled by the central bank, however, the fiscal expansions will only lead to higher interest rates and, eventually, larger public debts, but neither of the governments achieves its output goal. Fiscal policy coordination is required to recognize the externality of fiscal policy and avoid inefficiently large deficits.

The other way of framing this conflict is to assume that the central bank is willing to tolerate some deviations of inflation from its target rate in the short run and allows national fiscal policies to affect output and the price level at the union level. Fiscal policies in the two member states then have an impact on the level and distribution of output in the monetary union, as well as on the rate of inflation in the short run. There are thus two problems to be solved at the same time, the determination of aggregate output and inflation at the monetary union level and the distribution of output across the two countries. In the absence of policy coordination, the governments and the central bank now compete in determining aggregate output in the monetary union. If, for example, the governments pursue output targets exceeding the level of aggregate output the central bank wishes to achieve, they will boost public deficits. In anticipating this, the central bank will tighten monetary policy more than it otherwise would, resulting in an inefficient combination of tight monetary and loose fiscal conditions. Cooperative policies could achieve a better policy mix with lower interest rates and smaller deficits.

It is straightforward to extend this argument to the case of an exogenous shock to aggregate demand in the monetary union. Once more, the central bank uses monetary policy to counteract the inflation effects of such shocks and thus, to determine the level of aggregate output for the monetary union. Fiscal policies at the national level are reduced to determining the distribution of the shock over the two countries. Unless the governments recognize the situation, their reactions to demand shocks will be inefficiently large.

Consider the scenario where only the first country is hit by a positive, exogenous demand shock. The output of this country then rises as does the level of output of the monetary union. Faced with a rising inflation rate, the central bank responds by tightening monetary conditions, thereby pulling back the union's aggregate output. Assuming that the central bank is willing to tolerate some additional inflation, the level of aggregate output will lie somewhat above the initial one; the first country's output will be larger and the second country's output will be smaller than before. Monetary policy thus determines both the aggregate effect of the shock and its distribution over the two countries. The governments can obviously try to use fiscal policy to change the aggregate and the distributional outcomes before the monetary union settles down in a new equilibrium. An extreme version of this would be that fiscal policy in the first country entirely absorbs the shock. But it is far from clear that governments would agree to this. In general, a conflict between monetary and fiscal policy can thus not be avoided in the short run.

Finally, consider the case of structural policies, which increase the first country's equilibrium level of output. With no adjustment in monetary policy and government deficits, inflation declines in the monetary union, and output expands in both countries. As a result, both member states benefit from the improvement of the first country's supply conditions. The central bank might ease monetary policy in view of the falling inflation rate and hence, induce a further expansion of aggregate demand and output, which would benefit both countries. If the monetary union's inflation rate depends negatively on its long-term aggregate output level because of credibility effects, further benefits of reduced inflation arise for both countries. Thus, supply-side policies yield positive externalities in the short run. In the absence of policy coordination, these externalities are unrecognized and the incentives for undertaking such policies are too low.

### 1.3. Macroeconomic policy coordination in the long and the short run

A first point to take from this discussion is the stark difference between the interaction of monetary and fiscal policies in the short and the long run. In the long run, there is no point in coordinating monetary and fiscal policies in the monetary union beyond the long-run deficit constraint, for there is no conflict between the two. Thus, the central bank can be entrusted with the mandate to maintain price sta-

bility in the monetary union and the governments can adopt fiscal and structural policies as they see fit. In the short run, this separability of monetary and national economic policy does not hold, however. As long as changes in nominal demand have real effects, monetary and fiscal policies interact in determining aggregate output; an interaction which creates the potential conflict between monetary and fiscal policies and a scope for beneficial policy coordination.

Our simple framework allows us to discuss several options for policy coordination. A first point is that there is no need for coordination between the governments and the central bank, if the latter has a lexicographic preference function with price stability as its overriding policy goal. As noted above, however, such a scenario sharpens the distributional conflict between the member governments and thus there is a need for cooperative policies among the governments.

A second point is the suggestion that the central bank could avoid the conflict between monetary and fiscal policy by declaring that its monetary policy was strictly oriented towards price stability in the "medium run", as the ECB currently does. Defining price stability as a rate of inflation below two percent in the medium run might signal the central bank's willingness to tolerate inflation rates above two percent, provided that they are expected to be temporary. In strategic terms, such a declaration constitutes a central bank commitment to set monetary policy before fiscal policy and refrain from reacting to changes in aggregate spending caused by fiscal policy. It is quite obvious, however, that such a policy entails a risk of undermining the central bank's ability to effectively maintain price stability, as the governments might choose to engage in fiscal expansions for long periods of time. In the context of models of central bank credibility, such a declaration would destroy the commitment value of a "conservative" central bank placing higher weight on price stability than the governments (Dixit and Lambertini, 2001).

Another suggestive solution to the problem might be the proposal that the central bank should manage aggregate demand in the monetary union, while fiscal policy is responsible for eliminating differences in aggregate demand among the countries. This proposal is unrealistic for at least two reasons. The first is that it assumes that this will always be desired by the governments, i.e. all governments have

<sup>&</sup>lt;sup>9</sup> As noted by Pisani-Ferry (2001), this suggestion is implied by the EU's Broad Economic Policy Guidelines.

the same preferences regarding output, employment and inflation, and that these are compatible with those of the central bank. The second is that governments are unlikely to find the proposal to make the level of public spending a function of asymmetric shocks to their economies attractive, as this would expose public sector activities to the risk of such shocks. It is implausible to expect that a government would cut back on public policy programs to adjust to an exogenous increase in the demand for its country's output.

For similar reasons, the suggestion that policy conflicts disappear if governments focus on supply side policies (such as the reduction of distortionary taxes), is unconvincing. Ultimately, this amounts to proposing that the central bank can choose its most preferred rate of inflation by controlling aggregate demand at the monetary union level, while governments choose the level of output by controlling aggregate supply. This is an appropriate assignment in the long run, but not in the short run, for in the latter case the rate of inflation is determined by the interaction of aggregate demand and supply in the monetary union. Even refraining from the use of deficits to control aggregate demand at the national level would, therefore, not eliminate the interdependence between monetary and fiscal policies, which creates the need for policy coordination in the first place. Furthermore, in many EMU countries today, there may be a consensus that output and employment could be increased by improving the incentive effects of tax systems and by deregulating labor markets. Once the current distortions have been reduced, however, it is hard to imagine that governments and their constituencies would accept subjecting tax codes and labor market protection to frequent changes in response to exogenous shocks. The suggestion then simply comes down to asking governments to refrain from using fiscal policies to counteract fluctuations in output and employment, i.e. assuming away that governments have preferences over short-run economic outcomes.

Thus, there is no easy way out of the short-run conflict between monetary and fiscal policies in a monetary union. As argued above, non-cooperative policies are unlikely to achieve optimal outcomes in this context. One alternative would be that the two governments set their fiscal policies cooperatively, while the central bank plays non-cooperatively against the two. There would thus be a framework for fiscal cooperation but not for cooperation between fiscal and monetary policy, which would lead to a different combination of output and inflation, but not necessarily a more desirable one than the fully

non-cooperative outcome. As is well known from game-theoretic literature, cooperation among subsets of players can lead to worse results than those achieved without coordination.<sup>10</sup>

#### 1.4. Cooperative solutions

A convenient way of considering solutions to the short-run policy problem in the monetary union is to divide it into two sub-problems, the problem of choosing a point on the aggregate output-inflation trade-off at the monetary union level, and that of solving the distributional conflicts across the members of the monetary union. Looking at the problem in this way suggests a two-tier approach. The first tier consists of reaching an agreement on a joint fiscal stance at the monetary union level among the member state governments. The second tier consists of reconciling the fiscal stance with the monetary policy stance.

First, consider the second tier. Here, an agreement about the policy mix in the monetary union is necessary. This requires an evaluation of the output inflation trade-off at the aggregate level on both sides, and a decision-making process achieving a desirable equilibrium. In a world without transaction costs, the central bank would negotiate with policy makers representing the joint view of the governments and find an agreement. In a world with transaction costs, cooperation could be based on rules prescribing in detail which actor does what under given circumstances. In practice, however, it is impossible to write a contract specifying all contingencies between the central bank and the governments and a combination between discretion and rules is therefore necessary.

A realistic procedure would distinguish between "normal times" and "exceptional circumstances." In normal times, when exogenous shocks are small and short-lived, governments set fiscal policies in advance of monetary policy and, given their policies, leave the determination of aggregate demand to the central bank. Making such an approach viable requires that governments can effectively commit to fiscal programs, and that the central bank explains how it will react to their programs and to exogenous shocks, if these should occur. As we explain below, neither condition is fulfilled in EMU today.

<sup>&</sup>lt;sup>10</sup> See e.g. von Hagen and Fratianni (1991). Note, however, that the proposal not to coordinate is not an equilibrium strategy.

"Extreme circumstances" are characterized by large and permanent shocks to the aggregate economy. The point here is that the shocks would call for large adjustments in fiscal policies and monetary policy to regain an acceptable combination of output and inflation in the monetary union. Such circumstances would require an institutional framework for coordinating monetary and fiscal policies, such as negotiations between the ECB Board and a representative of the governments. In countries with independent central banks, such negotiations typically take the form of allowing a member of government to participate in central bank board meetings, or a direct dialogue between the president of the central bank and the head of government. While the latter is ruled out in EMU, the former is foreseen in the Maastricht Treaty and the Statutes of the ECB, as the president of the European Council is allowed to play that role. Such negotiations can only be effective, however, if there is sufficient cooperation among the governments enabling their representative to present a common view and make binding agreements with the central bank that commit them to take adequate actions.

Turning to the first tier, the purpose of policy coordination is to develop a common fiscal stance among the member governments. This requires mechanisms to express and aggregate preferences over the output-inflation trade-off at the EMU level among the governments, and mechanisms to solve the distributional conflicts between them. In the next Section, we will argue that the existing framework for policy coordination in the EMU does not meet these requirements. Existing processes might provide a basis for expressing the distributional conflicts among the member states, expressing concerns about policies in one country that could have negative effects on others through the EMU aggregates, and peer pressure encouraging reforms. However, they provide no framework for analyzing the relevant conflicts in detail nor for arriving at binding agreements among the governments assuring the consistency of their individual fiscal policies with their policy goals at the national and the aggregate level. Thus, the current institutional setup largely keeps the member states in a non-cooperative policy game. One implication is that the central bank is rightfully reluctant to engage in cooperative policymaking with the fiscal authorities, as it cannot count on the reliability of agreements it might enter into with the governments. Thus, the lack of commitment among governments implies an inability to commit between the monetary and fiscal authorities.

#### 2. Policy coordination in the EU and EMU

#### 2.1. Methods and principles of policy coordination

Before EMU, policy coordination in the EU relied on two main methods, harmonization of policies based on common rules of behavior, and delegation to community institutions (Jacquet and Pisani-Ferry, 2000). The administration of the Internal Market is a prime example of delegation, as the authority over common policies was given to community institutions. The rationale was to ensure free dispositions of private agents throughout the member states as a common objective of the Single Market. An example for rules-based coordination among national authorities was the coordination of monetary policies within the European Monetary System.

EMU has expanded the scope of coordination using both methods. The conduct of the common monetary policy by the Eurosystem is an example of delegation. The fiscal strictures of the Excessive Deficit Procedure and the Stability and Growth Pact are examples of rules-based coordination in EMU. But in addition to these traditional methods, the Maastricht Process and the development of the union during the 1990s also introduced new forms of coordination, based on dialogue, exchange of information, peer pressure, and persuasion. The reliance on "soft" enforcement, i.e. peer pressure and persuasion, indicates that the EU member states were unwilling to give up further sovereignty over their economic policies. The scope of policies covered by the existing coordination processes ranges from budgetary policies over labor market policies to regulatory policies at the national level.

Policy coordination can have a narrow or a broad agenda. With a narrow agenda, coordination is limited to monitoring the national economic policies of the member states and challenging practices expected to worsen the quality of the EMU's macroeconomic performance, e.g. with regard to price stability. The Excessive Deficit Procedure is an example of coordination under such a narrow agenda. Coordination with a narrow agenda leaves the member states the freedom to choose their policy goals, instruments, and methods of implementation. With a broad agenda, policy coordination goes beyond this and develops an explicit framework for cooperative policies. This requires an agreement on a set of common policy goals and methods for achieving these goals. Apart from the single monetary policy and

the administration of the Single Market, policy coordination in EMU today proceeds under a narrow agenda.

Apart from the single monetary policy and the administration of the Single Market, policy coordination today also is of an "unconditional" nature in the sense that the participating member governments (and the ECB, where applicable) inform each other about their intended actions, given their expectations about future economic circumstances. What will happen if these expectations fail to materialize is not part of the various procedures, however. This limitation is particularly important in the context of coordination between monetary and fiscal policy in the EMU, where the development of transparent rules for reactions to shocks could greatly help guide private sector expectations.

#### 2.2. Actors

According to Article 99 of the Treaty on European Union (TEU), member states coordinate their economic policies at the EU level within the Council of Ministers with the participation of all 15 member states and the presence of the European Commission and the European Central Bank where deemed necessary. The Council of Economics and Finance Ministers (ECOFIN) is the forum for discussing and deciding on government deficits, spending and taxation, while the Labor and Social Affairs Council deals with employment and social policies. In the coordination procedures established by the Treaty, the Council adopts economic policy guidelines and recommendations by majority voting on a proposal from the Commission. There is also a host of ministerial committees working below the Council to prepare its work.

Although the title of ECOFIN suggests otherwise, it is noteworthy that the members of this body are far from a homogeneous group, as the functional and political roles of finance ministers varies considerably across EU member states. The degree to which individual members can enter credible commitments for the macroeconomic policies of their governments thus also varies.

In recognition of the specific coordination requirements among participants of the euro area, the 1997 European Council in Luxembourg established the Euro Group (also known as the Euro12-Group) of the finance ministers of the EMU member states. The Euro Group has no formal decision-making authority and it is limited to assessing the economic situation and discussing the major policy

issues for the euro area. The group is chaired by the finance minister of the state holding the EU presidency if that state is a member of EMU, and, in periods when a non-EMU member holds the EU presidency, by a minister of the next EMU member state to hold the EU presidency. This subgroup of ECOFIN gathers in connection with ECOFIN meetings.

The European Commission is present both at Council and Euro Group meetings. The Commission has the right to set the policy agenda for Council meetings and to provide analyses for multilateral surveillance. The Economic and Financial Committee (EFC) has advisory and preparatory functions for the Council meetings. It consists of representatives of the national administrations and the national central banks, as well as two representatives of the European Commission and the ECB. Within the limits set by the consensus agreements of the national governments, both the EFC and the European Commission have played leading roles in the development of the coordination process, e.g. by proposing and developing the various procedures reviewed below. While the European Commission and the EFC cover macroeconomic and financial issues, the Economic Policy Committee (EPC), which consists of officials from economics ministries, is primarily concerned with structural policies.

According to insider views, the European Council and the Council can hardly be regarded as effective institutions for cooperative decision-making. Padoa Schioppa (1999) argues that the Council is too large a forum to develop concrete policy actions or policy rules. Furthermore, the Council involves too many participants and catches too much media attention to provide an environment for confidential discussions and deliberations. The more informal Euro Group allows a more focused debate, since national delegations are restricted to two persons. Its role is limited, however, since decisions can only be taken at the Council level. Jacquet and Pisani-Ferry (2000) argue that the Euro Group has played a useful role in developing the quality of economic policy debates among its members, but that the role of this group is largely exhausted with this function. In sum, the lack of a forum for discussing and making consistent choices between alternative policies at the EMU and the national levels is a deficiency of the

<sup>&</sup>lt;sup>11</sup> Italianer (1999) states that because of the abundance of accompanying officials, the focus of attention has shifted towards the bi-annual informal meetings of ministers of finance and central bank governors, which have often given decisive political impulses to the EMU process.

current framework. The implicit assumption behind the current setup seems to be that a competitive policy process, where each government takes the single monetary policy and the fiscal constraints of the Excessive Deficit Procedure and the Stability and Growth Pact as given and pursues its own goals at the national level, serves best to guarantee a good performance of the EMU under all circumstances. As argued above, there are good reasons to believe that this assumption is correct only in a 'long-run' world.

Experience in the EMU and other contexts suggests that the responsiveness of governments to peer pressure is not the same in all countries. Large countries in particular are less likely to react to peer pressure in the desired way, as the wish to be a "good European" typically plays a much weaker role in their domestic politics than in smaller countries.<sup>12</sup> This is indicated by the observation that the share of EU initiatives in the total number of legislative initiatives is usually smaller in the parliaments of large countries such as Germany, where 15-20 percent of all initiatives are due to the implementation of EU initiatives (see von Beyme, 1997), than in smaller countries like Belgium, where it is around 50 percent. The slippage in fiscal discipline observed in 1999-2001, and the fact that France and Germany undertook significant tax measures without referring to them in their stability programs (European Commission, 2000), also support the impression that the effectiveness of peer pressure for securing the commitment of the large member states is limited.

The effectiveness of recommendations made at the EU level to guide national budgetary policies is limited by several procedural impediments. Although the deadline for the submission of stability or convergence programs has been moved from 1 March to the end of the preceding year, national budget processes and the writing of these programs run on different and loosely connected calendars. In many EMU member states, the budget and the stability program are prepared by different administrative units and thus, the link between these processes is then weak (Hallerberg et al., 2001). A further difficulty in this context is that the procedures for policy coordination do not always involve the relevant actors at the national level. This implies that negotiations at the EU level often lead to no more than

<sup>&</sup>lt;sup>12</sup> In this context, it is interesting to note that during the convergence process to EMU in the 1990s, the small EU countries were much more responsive to the pressures for adjustment of budgetary policies than the large countries. See von Hagen et al. (2001).

statements of good intentions to influence the relevant actors at the national level.

Recent empirical studies of fiscal practices in the EU states show a large degree of variation in the implementation of the fiscal rules of the Excessive Deficit Procedure and the Stability and Growth Pact (Hallerberg et al., 2001; Fischer and Reitano, 2001). In some states, the fiscal targets formulated in the context of the stability programs are translated into detailed targets at the level of individual ministries, and the governments have developed detailed frameworks enabling them to keep their budgetary aggregates close to the target when revenue or expenditure shocks occur. In other states, the connection between the targets stated in the stability programs and the national budget process is quite loose. Moreover, rules for exceptional circumstances do not exist. On the one hand, this suggests that the effectiveness of the Excessive Deficit Procedure and the Stability and Growth Pact as a framework for policy coordination varies across countries. On the other hand, the political economy of fiscal policy shows that the appropriateness of fiscal targets and multi-annual programs to guide a government's fiscal choices and serve as a commitment device depends on political factors, such as the organization of government and electoral systems (Hallerberg and von Hagen, 1998). Given the variance of these factors across EU member states, the strong reliance of the EMU on this approach is questionable.

#### Information exchange between monetary and fiscal authorities

Article 113 forms the Treaty basis for a dialogue between the Council and the ECB. It foresees the participation of the ECB in Council meetings where issues relating to monetary policy are discussed. In turn, the Council president has the right to participate in meetings of the ECB Governing Council and submit motions for deliberation by the Governing Council. However, note that since the president of the EU Council represents all members of the EU, he/she is not necessarily a good counterpart with whom to discuss the policy mix for the ECB in the euro area. This is partly recognized by the practice that if the EU presidency falls on a non-euro state, the Council president is represented by the chairman of the Euro Group, i.e. the finance minister from the next EMU member state to hold the EU presidency. The ECB president is always invited to participate in meetings of the Euro Group.

In a study based on surveys of the national central banks and finance ministries, Bini-Smaghi (2000) finds that the quality and frequency of the dialogue between the Council and the ECB are lower compared to the dialogues between the national finance ministries and the central banks before the start of EMU. As long as national finance ministries regard their policies as a matter of national concern, the reduced information exchange decreases the incentive to internalize the ECB's reaction and, therefore, leads to insufficient coordination.

Monetary and fiscal authorities and wage setters in "structured dialogue"

The Cologne Process, an informal macroeconomic dialogue, was introduced under the German presidency in 1999. It consists of biannual, informal consultations between public authorities and representatives of the social partners, without setting objectives. The social partners are represented by their respective organizations at the European level and the dialogue focuses on issues of monetary, fiscal and wage policies. The exchange takes place on a political and technical level between the ECB, ECOFIN, the Labor and Social Affairs Council, the Commission, and the social partners.

Although the dialogue explicitly recognizes the necessity of wage policies at the national level being consistent with price stability in EMU, the forum is unlikely to play a major role in the coordination process. This is due to the fact that the European federations of trade unions and employers do not have the authority to represent the common views of their respective partners in all member countries and, therefore, cannot assure the enforcement of any agreements on guidelines for wage policies at the national level. This, in turn, is due to the institutional heterogeneity of social partner organizations in the member countries (See OECD, 1996).<sup>13</sup>

#### 2.3. Processes for macroeconomic policy coordination

Table 1 presents an overview of the processes of economic policy coordination in the EU. They include the Broad Economic Policy Guidelines (BEPGs), the process of multilateral surveillance, the Excessive Deficit Procedure and the Stability and Growth Pact, the Co-

<sup>&</sup>lt;sup>13</sup> Wyplosz (1999) argues that further centralization at the EU level is also hindered by the diverging labor costs throughout Europe, e.g. labor costs in Germany are five times larger than in Portugal.

logne Process, the Luxembourg Process, and the Cardiff Process. While the latter two mainly address structural issues, the first five procedures intend to coordinate the macroeconomic policies. Finally, the open method of coordination, introduced at the Lisbon Summit, aims at coordinating the coordination processes with respect to EU goals. The last method is not an additional process alongside the others, but a concept of how to link existing procedures. Its task is to exploit the fact that the processes interact with respect to policy goals, such as employment and growth.

According to Article 99 of the TEU, the BEPGs form the center of the economic policy coordination process at the community level. The BEPGs consolidate the different existing processes (Luxembourg, Cologne and Cardiff, see below) and aim at exploiting the synergies between these. BEPGs also constitute the reference for the multilateral surveillance procedure, under which the consistency of national economic policies with the BEPGs and the functioning of EMU in general are monitored. The Multilateral Surveillance Procedure includes the possibility to make (confidential or public) assessments of the policies of individual member states and to give (confidential or public) recommendations to their governments. The European Council decides by unanimity vote on the BEPGs, upon proposals by the European Commission and recommendations by ECOFIN. Since 2001, an enhanced framework for preparing and monitoring the implementation of the BEPGs is used, including explicitly different decision-making levels and actors at national and EU levels, in order to strengthen the responsibility for the final implementation.

The difference between the EU and the EMU is of particular importance in this context. The BEPGs do not sufficiently distinguish between economic goods shared among all EU members, such as the Single Market, and those shared only among the members of the euro area, such as price stability in the EMU. At the EU level, the Internal Market constitutes the reference point for policy coordination. As in pre-EMU times, the coordination of economic policies assures that countries do not engage in policies undermining the smooth functioning of open markets—competitive devaluations being the traditional example. The euro area has a broader need for policy coordination, however

The BEPGs thus do not constitute an adequate framework for developing the macroeconomic policies for a proper policy mix in the

euro area. When the European Commission explicitly considered EMU issues in the BEPGs for 2000, Council ministers, including some EMU members, objected to that distinction. When the BEPGs in the following year did not distinguish between the EU and the EMU in their analysis, some of the same Council members claimed that such a distinction would have been useful. This example suggests that the process of policy coordination is still in a flux.

Moreover, the BEPGs include recommendations for the behavior of the social partners. It is unclear whether the bodies developing and discussing the BEPGs can really make commitments on behalf of the social partners in the member states and secure the implementation of this part of the guidelines at the national level.

Fiscal policy remains a national competence for EMU member states, but under several constraints. EU Procedures for the conduct of fiscal policy are the Excessive Deficit Procedure, the Multilateral Surveillance Procedure (Articles 99, 100, and 111 of the TEU) and the Stability and Growth Pact (Regulations 1466/97, 1467/97, and 97/C236/01-02). The No-Bail-Out-Rule (Articles 103 of the TEU, Article 21 of the ESCB Protocol) protects member states from becoming responsible for the financial liabilities of other member states against their will. The Excessive Deficit Procedure includes the mandate (Article 3 of the Protocol) that the member states of EMU should implement appropriate institutions at the national level that will enable them to fulfill their obligation for maintaining sustainable finances. In contrast to the obligation for all member states to have independent central banks, there is, however, no explanation of what this means in practice. For members of the EMU, the Excessive Deficit Procedure is an unconditional obligation to avoid excessive deficits. In addition, the Stability and Growth Pact calls for mediumterm budgetary positions close to balance or in surplus. The higher the debt-to-GDP ratio of a country, the greater must be its efforts to rapidly reduce it. Member states are required to take immediate corrective actions if they are found to have an excessive deficit. The Excessive Deficit Procedure and the Stability and Growth Pact allow for imposing financial sanctions in such cases—a feature distinguishing them from other coordination procedures.

Table 1: The annual EU procedures and actors involved

Procedures	Form of coordination and instruments	Actors	Tasks
Broad Economic Policy Guidelines (BEPGs) (Article 99 Amsterdam Treaty)	Core of economic policy coordination within the EU defining common objectives Annual guidelines and recommendations to member states Implementation reports	European Council ECOFIN Council (Euro Group) European Commission Member states Economic and Financial Committee Economic Policy Committee European Parliament	The BEPGs define the economic policy orientations for the EU in accordance with Article 2. The BEPGs integrate the different processes mentioned below.
Multilateral Surveillance (Article 99(3) Amsterdam Treaty)	Monitoring process Peer review	ECOFIN Council European Commission Member states Economic and Financial Committee	The process monitors and assesses the economic developments and policies in member states as well as in the community as a whole. It forms the basis for the community compliance procedure (Article 99 (4))
Excessive Deficit Procedure (EDP) (Article 104)  Stability and Growth Pact (SGP) Regulation 1467/97	Common rules and objectives Budgetary surveillance Pecuniary sanctions  Member states annually submit stability or convergence programs	ECOFIN Council European Parliament National governments (finance ministries) European Commission Economic and Financial Committee	The EDP and SGP represent an obligation for member states to achieve medium-term budgetary positions close to balance or in surplus.
Luxembourg Process (Article 128 Amsterdam Treaty)	Open coordination: guidelines and recommendations Peer review Benchmarking, best practices Pecuniary incentives (European Structural Funds) for member states to provide high quality information	European Council Council of Labor and Social affairs and ECOFIN European Commission National governments European Parliament Employment Committee	The Luxembourg Process coordinates the European employment strategy. The purpose is to improve the effectiveness of national employment and labor market policies by better focusing on the respective problem groups, thereby improving

	Member states annually submit National Action Plans and implementation reports.	Committee of the Regions Economic and Social Committee	the set of instruments and establishing a continuous evaluation process.
Cologne Process (ECOFIN 1999)	Informal macroeconomic dialogue at the community level Informal exchange of views 2 meetings per year on technical and political levels	ECB (+ representative of non EMU central banks) European Commission Troika of current, subsequent and preceding presidency of ECOFIN and Labor/Social ministers Social Partners	The Cologne Process aims at improving the interaction between wage developments and monetary, budgetary and fiscal policy at the EU level. The process was introduced to complete the Cardiff and Luxembourg processes.
Cardiff Process (ECOFIN 1998)	Monitoring process within the Single Market Identification of best practice Peer review	European Commission Economic Policy Committee National governments (economics and finance ministries)	The Cardiff Process is a multilateral review of economic reforms in product, capital and labor markets. The purpose is to improve the market efficiency of member states' economies so as to enhance the favorable environment for growth, high employment and social cohesion.
Open method of coordination (ECOFIN 2000)	Coordination among existing processes Fix guidelines and timetables for the union Set national implementation targets Establish performance indicators and benchmarks where appropriate Monitoring, evaluation and peer review		Enhancing the consistency between the different processes

In the context of the Stability and Growth Pact, the EMU members are required to produce annual stability programs that present the main fiscal decisions and budgetary choices in order to attain the medium-term objective for budgetary positions close to balance or in surplus (2001-2004 for the latest programs). The Council considers whether the budget policy strategy and the economic targets continue to meet the requirements of the Stability and Growth Pact and the BEPGs. To prevent the occurrence of excessive deficits, the Council may give an early warning in line with Article 99(4) of the Treaty.

While the combined Excessive Deficit Procedure and Stability and Growth Pact acknowledge the importance of fiscal discipline for conducting monetary policy, the setup is still unsatisfactory with respect to the EMU for several reasons. First, the procedures focus on individual member country performance, with no regard for the aggregate fiscal policy stance of the euro area as a whole. Implicitly, the setup is based on the assumption that being close to balance is unconditionally the proper contribution of fiscal policy to macroeconomic stability in the euro area. While this may be true in the long run, conventional macroeconomics hold that stability demands different constellations of monetary and fiscal policy at different stages of the business cycle.

Second, the Excessive Deficit Procedure and the Stability and Growth Pact narrowly focus on deficits and debts and ignore other aspects of fiscal policy affecting the common exchange rate and external balance as well as the contribution of fiscal policies to growth, employment and prices, such as the level and structure of public spending and taxation. In the context of policy coordination, the emphasis of the Excessive Deficit Procedure and the Stability and Growth Pact on government borrowing is only justified if assuming that national fiscal policies affect the macroeconomic performance of EMU and predominantly cause horizontal spillovers through their capital market effects.

Third, the Excessive Deficit Procedure and the Stability and Growth Pact are designed to prevent countries from running excessive deficits defined in terms of fixed, numerical thresholds. No guidance is provided for the member countries' fiscal policies in times when the numerical limits have been achieved, however. There is now

<sup>&</sup>lt;sup>14</sup> The Lisbon Council asked the Commission to develop a concept of "Quality of Public Finances" as a broader framework and to evaluate the connection between public finances and economic growth (e.g. European Commission, 2000).

ample evidence showing that problems with non-sustainable public finances are typically the result of policies allowing a small number of spending items to run out of control (e.g. Perotti et al., 1998). The reemergence of fiscal laxity in the EMU member states after 1999 (von Hagen et al., 2001) is consistent with that experience. It suggests that the rules for fiscal policy are not sufficient to guide fiscal choices in good times and prevent the emergence of excessive deficits.

Within the existing framework for policy coordination, the place for formulating and monitoring the achievement of such objectives would be the BEPGs. Other processes such as the Excessive Deficit Procedure and the Stability and Growth Pact as well as the Cardiff and Luxembourg processes described below should provide a detailed analysis of the respective policy areas. Therefore, it is interesting, to note that the Commission's and the Council's 2001 recommendations for more fiscal discipline in Ireland were made under Article 99.4, which refers to the BEPGs, although the analysis was made in the context of the Stability and Growth Pact (Fisher and Reitano, 2001). Thus, there seems to be some recognition of the incompleteness of the framework for fiscal policy coordination provided by the Excessive Deficit Procedure and the Stability and Growth Pact. But the weaknesses of the BEPGs for policy coordination in the EMU context also suggest that the potential for using these for the above purposes remains limited.

#### 2.4. Structural reforms: The Cardiff and Luxembourg Processes

Structural reforms are national responsibilities, as most of the reform effects on employment and output are experienced by the country undertaking them. However, since structural policies of member countries can affect the output-inflation trade-off for the whole euro area, there is a reason for monitoring them and assessing their implications for the aggregate level. The "Cardiff Process" monitors the structural reform efforts of member states in product, capital and labor markets. Here, the Economic Policy Committee plays a leading role by conducting a process of multilateral surveillance (Synthesis Report). The instruments used for coordination are peer pressure and an extensive reporting, monitoring and evaluation system. In accordance with the open method of coordination, more emphasis has been put on the identification of best practices. The Cardiff Process is now joined with the Single Market Report. The objectives of the Cardiff Report rely on the concept of competition between national eco-

nomic policies and aim at abolishing barriers to the free movement of goods, services, capital and workers. In 2000, quantitative indicators were developed by the Commission in order to better assess the progress in this regard.

The "Luxembourg Process" was launched at the end of 1997 and reinforced by the inclusion of the Employment chapter (Title VIII) in the Amsterdam Treaty.<sup>15</sup> It aims at building a coherent approach for dealing with structural labor market problems in EU countries. The purpose is to improve the effectiveness of national employment and active labor market policies by better focusing on problem groups, improving policy instruments, and establishing a continuous evaluation process. Four 'pillars' and more than 20 'guidelines' serve to guide labor market and employment policies and also constitute a basis for the assessment of country activities. The Employment Committee, working closely with the Economic Policy Committee (EPC), advises the Council on the preparation of guidelines and recommendations and serves as a principal vehicle for policy debates and peer review. The Treaty sets up a framework for an annual multilateral surveillance procedure, similar to the Multilateral Surveillance Procedure of Article 99 and in some respects goes even further by giving the Council the possibility to adopt incentive measures. Specifically, the disbursement of monies from the European Structural Funds has, in some categories, been made conditional on the member states' compliance with the Luxembourg Process.

One intention of the Luxembourg Process is to spread best practice among member countries. This is problematic because policies cannot simply be translated from one country to another, as is suggested by the current evaluation process. For example, active labor market policies can improve the overall employment performance targeted at specific market failures. A review of the individual labor market performances (Mundschenk, 2001) shows that some countries have achieved full employment, while others have not. Among the latter, some countries predominantly have regional unemployment problems (Italy and Germany), while others have problems with spe-

<sup>&</sup>lt;sup>15</sup> The Treaty recognizes that member states retain the principal responsibility for employment policies. Nevertheless, Article 125 calls for the development of a coordinated employment strategy by the member states and the community, and Article 126 calls upon the member states to contribute to the objectives of this strategy through their employment policies, to regard promoting employment as a matter of common concern, and to coordinate their actions in this respect.

cific social groups, which may be age-related (youth unemployment in France) or skill related (e.g. in the UK). These differences suggest that trying to commit all countries to adopting similar policies is not a promising approach.

Practical experience with the process so far has shown that monitoring labor market policies across countries is not an easy task. The Luxembourg Process requires a common evaluation of the 'input' and 'output' of labor market policies. The definition and use of common indicators are complicated by the prevalence of different statistical conventions and different institutional settings, which imply that the same indicator can mean very different things in different countries.

Finally, the main actors involved in the process are the Ministers of Labor and Social Affairs and their social partners. It is unlikely that these actors consider the implications of their choices for price stability in the EMU context. Thus, the process insufficiently accounts for the interaction between, on the one hand, labor market policy and, on the other hand, monetary and fiscal policies.

A comprehensive evaluation of the Luxembourg Process covering the entire period since 1997 is planned for 2002.

#### 2.5. Assessment

Our review of the existing procedures at the EU level shows that the scope of cooperative economic policymaking is, in fact, much broader than budgetary policy, which is the traditional reading of the concept of "economic policy" in the EU context (Harden and von Hagen, 1997). The national policies covered by the existing processes range from budgetary policies over labor market policies to regulatory policies.

Our discussion in Section 1 indicates that the current procedures for cooperative policies are unsatisfactory in two respects. First, they do not make sufficient room for formulating trade-offs or for making the relevant choices at the aggregate level, which implies that no mechanism for expressing preferences over the aggregate policy stance is in place. On the one hand, the processes are rather compartmentalized in terms of policy fields, while the analysis and evaluation of trade-offs require dealing with more than one field of policy at a time. On the other hand, such an analysis and discussion currently only occur in the context of the BEPGs. Yet, the specificity of the BEPGs and the analysis surrounding them generally seem rather low. Second, there exists no proper mechanism for addressing the short-

run fiscal policy conflicts in the monetary union. For reasons stated above, the ECOFIN Council, the relevant decision-making body in this context, does not seem to be the appropriate body for a detailed assessment of trade-offs and policy choices for the euro area.

With the creation of the EMU, governments have chosen to ignore the short-run interaction between monetary and fiscal policies. A framework for cooperative policymaking among the ECB and the national governments has not yet been developed. Instead, the current setup of the EMU seems to rely on the assumption that economic policy in the euro area can be separated into the different fields covered by the various processes, and that interdependencies between these fields are negligible (Padoa Schioppa, 1999). In Section 1, we saw that such a separability between policies only holds in the long run. In the short run, a potential conflict exists between fiscal and monetary policy together with a distributional conflict between national policies. So far, these conflicts have not been addressed in existing procedures and a coherent analytical framework for policy evaluation at the aggregate level is still missing in practice.

#### 3. Conclusions

We have discussed the interactions and potential conflicts between monetary policy and the national fiscal policies in EMU. The analysis shows that in the long run, monetary policy can achieve price stability without interfering with fiscal policies. The central bank may choose the rate of inflation for the monetary union without affecting output in the individual member countries or in the union as a whole. But, in the short run, there is a potential conflict between monetary and fiscal policies, as both interact in determining aggregate demand in the monetary union. If the central bank firmly targets price stability, fiscal policy at the national level results in a pure distributional conflict. If the central bank tolerates deviations from price stability in the short run, fiscal policy in the member states has an impact both on the level and the distribution of output in the monetary union and on the rate

<sup>&</sup>lt;sup>16</sup> The existence of such a potential conflict was recognized by the Luxembourg Council in 1997, concluding that "...To the extent that national economic developments have an impact on inflation prospects in the euro area, they will influence monetary conditions in that area. It is for this basic reason that the move to a single currency will require closer community surveillance and coordination of economic policies among euro area member states."

of inflation. In the absence of policy coordination, the governments and the central bank then compete in determining aggregate demand and inflation in the monetary union. There is a risk that ignoring the interdependencies between monetary and fiscal policies in the short run might lead to an unsatisfactory macroeconomic performance of the monetary union.

Our analysis suggests that, in creating the policy framework for EMU, the governments have chosen to ignore the short-run interaction between monetary and fiscal policies. The existing processes and mechanisms for policy coordination are inadequate for dealing cooperatively with the relevant conflicts at the EMU level. They are insufficiently focused on EMU macroeconomic variables, and they do not provide a framework for entering binding commitments among the governments and between these and the central bank.

Solutions to the short-run policy problem require agreements among the member states on a joint fiscal policy stance at the aggregate level and to reconcile the fiscal stance with the union's monetary policy. For this purpose, there is a need for procedures to conduct the appropriate economic analysis, to express and aggregate preferences over the output-inflation trade-off at the EMU level, and to solve the distributional conflicts among the governments. A practical solution would be to make coordination conditional on circumstances. In "normal times," when exogenous shocks are small and short-lived, governments would set fiscal policies in advance of monetary policy and leave the determination of aggregate output, given their policies, to the central bank. Coordination would then largely be rule-based. Under "exceptional circumstances" of large shocks, adjustments in fiscal and monetary policies would be the result of cooperative agreements on policies, aiming at acceptable output-inflation combinations at the aggregate level.

The Nice Treaty has made room for improvements in the institutional framework of policy coordination, by giving subgroups of states within the EU the option to form 'Enhanced Coordination Arrangements'. The member states of EMU could use this opportunity to develop effective mechanisms for coordinating their economic policies in the future.

#### References

- Barro, R. F. and Gordon, D. B. (1983), Rules and discretion in a model of monetary policy, Journal of Political Economy 18, 101-125.
- Bini Smaghi, L. and Casini, C. (2000), Monetary and fiscal policy co-operation: institutions and procedures in EMU, Journal of Common Market Studies 38, 375-391.
- Calmfors, L. (2001), Unemployment, labor market reform, and monetary union, Journal of Labor Economics 19, 265-289.
- Dixit, A. and Lambertini, L. (2000), Symbiosis of monetary and fiscal policies in a monetary union, Mimeo, UCLA.
- Dixit, A. and Lambertini, L. (2001), Monetary-fiscal policy interactions and commitment versus discretion in a monetary union, European Economic Review 45, 977-997.
- European Commission (2000), Public Finances in EMU, European Economy, Brussels.
- Fisher, J. and Reitano, E. (2001), EU budgetary surveillance and national budgetary rules and procedures: interactions and incentives, Paper presented at the Banca d'Italia 3<sup>rd</sup> Workshop on Public Finance, Perugia.
- Hallerberg, M. and von Hagen, J. (1998), Electoral institutions and the budget process, in K. Fukasaku and R. Hausmann (eds.), Democracy, Decentralization, and Deficits in Latin America, OECD Development Center, Paris, 65-94
- Hallerberg, M., Strauch, R. and von Hagen, J. (2001), The use and effectiveness of budgetary rules and norms in EU member states, Mimeo, ZEI, University of Bonn, Bonn.
- Harden, I. and von Hagen, J. (1997), The European constitutional framework for member states' public finance, in M. Adenas, L. Gormley, C. Hadjiemmanuil, and I. Harden (eds.), European Economic and Monetary Union: The Institutional Framework, Kluwer Law International, Dordrecht, 141-170.
- Italianer, A. (1999), The euro and internal economic policy coordination, Empirica 26, 201-16.
- Jacquet, P and Pisani-Ferry, J. (2000), La coordination des politiques economiques dans la zone euro: bilan et propositions, in Conseil d'Analyse Economique, Questions Europeennes, La Documentation Française, Paris.
- Mundschenk, S. (2001), Auswertung der nationalen beschäftigungspolitischen Aktionspläne der anderen EU Staaten für 1999 und 2000, Forschungsbericht 288, Bundesministerium für Arbeit und Sozialordnung, Bonn.

- Mundschenk, S. and von Hagen, J. (2001), The functioning of economic policy coordination, in: A. Sapir and M. Buti (eds.), EMU and Economic Policy in Europe: The Challenge of the Early Years, Edward Elgar, London.
- OECD (1996), OECD Employment Outlook, Paris.
- Pisani-Ferry, J. (2001), The EMU's economic policy principles: words and facts, Paper prepared for the DG ECFIN workshop on The Functioning of EMU: Challenges of the Early Years, Brussels, 21-22 March 2001.
- Padoa Schioppa, T. (1999), Europe's new economic policy constitution, in D. Currie, A. Donnelly, H. Flassbeck, B. Hall, J. Lemierre, T. Padoa-Schioppa, and N. Wicks (eds.), Will EMU Lead to a European Economic Government?, Center for European Reform, London, 55-63.
- Perotti, R., Strauch, R. and von Hagen, J. (1998), Sustainable Public Finances, CEPR, London.
- Sibert, A. and Sutherland, A. (2000), Monetary union and labor market reform, Journal of International Economics 51, 421-435.
- von Beyme, K. (1997), Der Gesetzgeber, Westdeutscher Verlag, Opladen.
- von Hagen, J. (1993), Money demand, money supply, and monetary union—a review of the German monetary union, European Economic Review 37, 803-636.
- von Hagen, J. (1999), Co-ordination of economic policies and employment, in A. Lamfalussy, L. D. Bernard and A. Cabral (eds.), The Euro-Zone: A New Economic Entity?, Bruylant, Brussels.
- von Hagen, J., Hughes-Hallett, A. and Strauch R. (2001), Budgetary consolidation in EMU, Economic Policy Paper 148, European Commission, Brussels.
- von Hagen, J. and Fratianni, M. (1991), Policy coordination in the EMS with stochastic asymmetries, in C. Wihlborg and T. D. Willett (eds.), Financial Regulation and Monetary Arrangements after 1992, Elsevier Science Publishers B.V., Amsterdam, 255-276.
- Wyplosz, C. (1999), Towards a more perfect EMU, CEPR Discussion Paper 2252.