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A Political Economy Analysis of the Maastricht and Stability Pact Fiscal Criteria

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For Andrew Hughes Hallett, Michael Hutchison and Svend Jensen, eds.,

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I. Introduction

The fiscal provisions of the Maastricht Treaty have proven to be highly controversial. Many economists have attacked the Treaty's convergence criteria provisions which limit the size of budget deficits to 3 percent of GDP and debt-to-GDP ratios to 60 percent as being arbitrary and likely to impose substantial costs in terms of unemployment and lost economic output due to forced fiscal stringency at inappropriate times.¹ With monetary union removing the option of countercyclical monetary policy at the national level, one can argue that greater flexibility in fiscal policy is needed to compensate. The requirement to reduce deficits to Maastricht reference levels, however, has subjected many economies to self-imposed deflationary shocks and has robbed governments of the flexibility to respond to future shocks.² For better or worse, the role of the fiscal convergence criteria is now ended, but their spirit lives on in the Excessive Deficit Procedures (EDP) of the Stability Pact. These provide for penalties of up to 0.5 percent of GDP per year for budget deficits in excess of 3 percent of GDP.³

Critics often explain the fiscal provisions of Maastricht, and the subsequent Stability Pact, in terms of German politics reflecting government desires to prevent some countries, such as Italy, from participating in the initial membership of the monetary union and to assure German public opinion that the Deutsche mark would be replaced with a hard, not a soft, Euro.⁴ These considerations probably did influence some German officials, but it should be recognized that the basic case for fiscal limitations was unanimously supported by the members of the Delors Commission. It was not just something imposed by Germany.

It is true that the Maastricht and Stability Pact fiscal criteria make little, if any, sense from the standpoint of traditional optimal policy analysis. They can be rationalized, however, on political economy grounds. Unfortunately, political economy considerations also suggest that the criteria may well not work as intended. Much of the debate among economists about the Maastricht and Stability Pact fiscal provisions has focused on the extent to which monetary union itself presents a case for fiscal limitations. Other important topics concern the form of fiscal limitations and enforcement mechanisms adopted and their interrelations with central bank independence. The analysis of these issues cannot be limited to the type of optimal policy analysis which until recently dominated economists' thinking on such issues. Rather a broader public choice or political economy perspective is required. In this broader framework optimal policy analysis continues to play a role, but it is not center stage.

This paper suggests that while monetary union *per se* provides some arguments for fiscal limitations, these are much weaker than the purely domestic arguments for fiscal limitations to offset political distortions (the nature of which will be discussed below). Indeed, in the absence of domestic distortion arguments, the case for monetary union increasing the need for group fiscal limitations virtually disappears. The purely economic spillover effects on interest rates and output that would remain are likely small and would call for policy coordination rather than the adoption of joint constraints.⁵ From the standpoint of the subsidiary principle this suggests that collectively determined fiscal limitations is not the best approach. Rather each country should adopt the form of limitation, if any, that it prefers.

Practical political economy considerations present a strong pragmatic argument in favor of the Maastricht Treat and Stability Pact limitations, however. Some of the same types of political biases or distortions which create a case for monetary and fiscal limitations in the first place also make it difficult to get such limitations adopted. Thus it makes sense for advocates of limitations to seize whatever opportunities they may.

From this perspective the Maastricht and Stability Pact negotiations are similar to IMF conditionality and the use of exchange rates as nominal anchors to constrain inflation.⁶ They should be seen not so much as external limitations being imposed on unified national actors, but rather as

processes which strengthen the hands of some actors, i.e., pro-stability monetary and fiscal officials, vis-à-vis others in the domestic political economy process.

Political economy considerations also help explain the forms taken by the Maastricht and Stability Pact fiscal limitations. If we limited our analysis to technical economic considerations, optimal fiscal limitations or constitutional rules would likely look quite different from those adopted. They would certainly be much more complicated. But for this very reason they would likely be far less effective. It is clear from the literature on constitutional political economy that simplicity and transparency are important desiderata of major institutional reforms. Optimal contingency rules are unlikely to provide a potent political rallying cry and would make monitoring and enforcement more difficult.

There is considerable disagreement about the effectiveness of institutional reforms in actually modifying behavior. Some critics fear that the fiscal criteria may generate severe economic hardships and impede rather than aid progress toward European integration. Others suspect that they will have little effect. This paper argues for an intermediate view of the effectiveness of institutions and suggests that this has important implications for the design of institutional arrangements. Such considerations will often make the best rules look quite different from what they would be if enforceability were not a problem. In particular, where one assumes that despite its high degree of formal institutional independence the European Central Bank may still be subject to political pressures, then there is a case for fiscal restrictions which would be redundant if central bank independence and the no-bail-out clause were expected to be fully effective.

Corsetti and Roubini (1993) discuss the tradeoff between correcting biases toward budget deficits and facilitating tax smoothing in the face of shocks. They conclude that

the optimal fiscal policy...would be one of full tax smoothing where fiscal deficits and surpluses are run in the face of transitory shocks. If such a first-best solution is not

enforceable in a political equilibrium, a second best equilibrium might take the form of a 'fiscal rule with an escape clause'. Such a flexible rule would impose a fiscal balance whenever the real output shock is below a certain threshold and would allow for tax smoothing fiscal deficits if the transitory disturbance is large enough (P. 50)

This is indeed the form taken by the EDP of the Stability Pact where an automatic exemption to the three-percent budget deficit limit occurs if output falls by 2 percent or more. (A drop between 2 and 0.75 percent may qualify with the concurrence of the Council.)⁸

From a political perspective the question is not whether the simple three-percent budget deficit limitations adopted in the Maastricht Treaty and Stability Pact can be derived from formal optimizing models, but rather do they seem likely to produce a better ratio of benefits to costs than potentially feasible alternatives. The range of considerations relevant to such analysis is far too broad for us to be able to include all of them in a comprehensive formal model. Thus evaluations at this point must be judgmental and may be subject to differences in view among reasonable people. It is clear, however, that from the perspective of constitutional political economy analysis the Maastricht and Stability Pact provisions look far more sensible than from the optimal policy perspective adopted by many of their critics.

Still, a political economy perspective suggests a number of potentially serious problems with the Maastricht Treaty and Stability Pact criteria. While the three percent deficit limits are not particularly severe for counties starting from a solid fiscal position, they were quite stringent for the disequilibrium positions in which most European countries started and this has been exacerbated by slow economic growth. As a strategy for limiting the initial membership in EMU, such stringency had a rationale, but in the event this purpose of the Maastricht criteria did not work politically and EMU is starting with eleven participants. To make this feasible, Germany's initial insistence on a strict interpretation of the criteria was abandoned in all by rhetoric. Attention

to the debt criteria was dropped almost entirely, and the deficit criteria were subjected to numerous fiddles, including by Germany itself.

The net result so far has been close to the worst of all possible worlds. The criteria proved to be of little effectiveness in limiting EMU membership (only Greece was screened out). Despite the fiddling the deficit criteria did ensure considerable fiscal tightness, but it would have been hard for the timing of these adjustments to have been worse from the stand point of standard stabilization policy. This could be worth the short-term costs if these adjustments yielded substantial improvements in the longer run budget outlook, but sadly for most countries this has not been the case. Laudably the Maastricht Treaty called for countries to take actions that would improve their medium term fiscal positions and adopt domestic budget reforms which would make this easier to accomplish. The goal was to have budget balance or even a small surplus in normal times, giving plenty of room for automatic budget stabilizers to operate during mild recessions without violating the three-percent deficit limit. Maastricht represented a golden opportunity for countries to use the external clout of the European project to help implement reforms in domestic budget practices which would reduce the political biases toward budget deficits. Unfortunately, however, for many countries little productive use has been made of this opportunity. As Masson (1996:997) notes "...it is striking that the measures to reduce deficits since EU 'convergence programmes' were formulated (starting in 1992) are predominately tax increases rather than spending reductions..." For most countries little reform of budget procedures has taken place and as Alesini and Perrotti (1995) have documented, tax increases tend to have much less permanency than spending cuts in reducing budget deficits. 12 Thus I will argue that while there is a good political economy case for Maastricht type fiscal restrictions, the specific formulations of the criteria were sensible only if the convergence criteria were going to be used as a tight screen to limit initial EMU membership and/or if they were going to be used to spearhead domestic budget reforms. Neither of these has occurred.

In the following section the need for taking a political economy perspective to analyze these issues is discussed. In section III, different views of the effectiveness of institutional reforms are discussed and the case for an intermediate view of partial effectiveness is argued. In section IV the issue of whether EMU increases the need for fiscal restrictions is addressed. In section V a number of the specifics of the Maastricht and Stability Pact fiscal criteria are discussed and possibilities that the operation of the Excessive Deficit Procedures (EDP) of the Stability Pact could actually increase rather than reduce the pressures on the ECB are considered. Section VI concludes.

II. The Need for a Political Economy Perspective

In approaching the issue of imposing institutional limitations on the operation of the democratic political process in the area of economic policy one needs to ask whether there are serious biases or distortions in the operation of the political process. If there are, then the first best solution is to reform collective decision making procedures to remove these biases. If this does not appear feasible then constitutional-type measures to limit the range of permissible policy actions and/or to cede authority to independent officials. In both cases one must consider whether there are feasible rules or other institutional reforms which would be likely to perform sufficiently well in practice that on average they would improve outcomes sufficiently to justify the costs of institutional innovation. The possibilities for unintended negative side effects should also be carefully analyzed..

In approaching this question, purely economic analysis can be tremendously useful because it can help predict the likely economic effects of alternative policy rules under different patterns of shocks and economic structures. The potential for a wide range of shocks, which will come in variable proportions, implies that optimal policy rules will typically be quite complicated. Further, the existence of uncertainly about the correct economic model and technical limitations on

our ability to identify disturbances suggests that they can seldom be uniquely specified. ¹³ Thus as a practical matter there is often a strong case to leave scope for discretionary policy actions. This must be balanced against the benefits of constraints on political behavior designed to offset the effects of political biases or distortions. Combined with the need to develop public support for institutional reforms, these considerations suggest that the best design will often be the delineation of a set of constraints on the allowable range of policy actions rather than a specific automatic rule. ¹⁴ Thus, for example, increased variability in the demand for money led some economists to advocate more complicated monetary rules which took velocity movements into account, but these proved to be too complicated to generate a substantial following. ¹⁵ On the other hand, inflation targeting has now become quite popular. ¹⁶

In undertaking such political economy analysis it is important to consider the effects that constraints will have on the incentives facing decision makers. Sometime the effects will be perverse, such as efforts to shift items off budget. In other cases they may be favorable. For example, if officials paid no attention to constraints until they were hit, then constraint systems would likely produce costly instability in the setting of policy instruments. However, if farsighted policymakers are concerned with the costs of becoming constrained, then, as Artis and Winkler discuss in their contribution to this volume, this lump sum threat can provide graduated incentives to adjust prior to hitting the constraint. As we shall see in section V, which way the EDP constraints operate will make a huge difference in their desirability. Sadly, the continuous pressures version is likely to operate more effectively on centralized than decentralized decision makers. Thus as we shall discuss, the limitations and improved procedures approaches may be better seen as complements than as substitutes.

Inevitably there will be considerable subjectivity in the analysis of political biases or distortions. These distortions can occur because of a variety of real world limitations on the efficiency of collective decision-making structures and the information of participants in the political process. Limited and costly information and the problems of free riding all suggest that unconstrained political processes will generate levels of government spending, budget deficits, and inflation that will be excessive from the standpoint of what far-sighted, well-informed median voters would desire. This is accepted even by many economists who are critical of the Maastricht fiscal criteria. Thus, for example, Buiter, Corsetti, and Roubini (1993:84) conclude that "the empirical evidence is consistent with the view that a bias toward excessive deficits exists in a number of countries." Basic public choice analysis suggests that groups who benefit from government expenditures and tax breaks are likely to be more involved in the political process than the typical taxpayer, leading to incentives to overexpand government expenditures and underfinance them with tax revenues. Furthermore, the ability to finance expenditures from non-tax sources (such as deficits and regulatory fiat) further increases the bias toward excessive expenditures. Higher government expenditures and budget deficits in turn create pressures for monetary accommodation.

In principle the design of optimal constraint systems may depend on the specific nature of the biases to be corrected. As is stressed in the contribution by Beetsma in this volume, the general theory of the second best applies to political economy as well as to economic analysis. In a distortion-ridden world, the correction of a single deficiency may worsen another one. ¹⁹ This problem of unintended consequences needs to be taken very seriously in the analysis of proposed institutional reforms.

While formal modeling must necessarily consider the possible sources of bias one or, at most, a few at a time, in reality a number of different processes may be at work simultaneously.²⁰ The theory of economic policy tells us that the first-best policy response to a distortion is to attack it directly. In this vein, the best solution to excessive budget deficits is to remove the bias in the operation of the political system. Where there are multiple sources of bias, the case for a second-best constraining rule is strengthened. Issues of political feasibility also often point in this

direction. Especially where institutional reforms have only partial effectiveness, direct limitations on budget deficits and efforts to reform the budget process directly are better seen as complements than as substitutes. (This will be discussed further in section V.)

In considering various types of political biases or distortions analysis it is important to distinguish clearly between the frequency with which they are modeled and their likely empirical importance. In the formal modeling literature in macroeconomics issues of time inconsistency and opportunism have understandably become highly popular.²¹ These do describe some real-world problems I believe, but far more important in my judgment are cases where biases result from the inability of often well-intentioned officials to withstand political pressures for higher government spending and lower taxes.

The extent to which these different sources of bias may have different implications for the design of desirable institutional reforms is an issue which I believe deserves a great deal more attention. Thus, for example, in the model Beetsma presents in this volume, central bank independence increases budget deficits. However, when interest rate effects are included in the analysis central bank independence may induce governments to run lower deficits, for which there is some supporting empirical evidence.²² In addition, Jensen (1996) concludes that firm monetary rules reduce the likelihood that fiscal coordination will be counterproductive. Thus we should not draw policy conclusions from Beetsma's model until more thorough analysis is undertaken.

Another illustration of how the effects of an economic change may depend on which of various political economy considerations dominates is given by Willett and Banaian (1996). They argue that while international currency competition will reduce optimal rates of inflation for efficiency- or revenue-maximizing governments since there is less revenue generated per unit of inflation, for this very reason it is likely to increase inflation for weak governments where deficits are the method of financing of last resort, i.e., a constant-sized deficit would generate more

inflation in terms of the domestic currency. Thus without specifying the model of government, we cannot predict the effects on inflation

III. Three Views of the Effects of Institutions

Alternative views of the effectiveness of institutions have had a profound impact on the evaluations offered concerning the Maastricht and Stability Pact fiscal criteria. The two extreme views are that institutional provisions are virtually fully effective and alternatively that they have almost no effect. Ironically, both views have been used to criticize the fiscal criteria. The role played by the little effectiveness view is straightforward. From its perspective the debate about fiscal criteria is largely irrelevant, as they will have little effect on actual behavior. This view has been perhaps most consistently espoused by the realist school of international relations scholars. In this view underlying power relationships dominate international relations and institutional mechanisms and international agreements have little ability to alter the behavior of contending nations.²³

A number of critics of budget limitation proposals have also pointed to numerous channels through which the intent of various types of budget limitation measures can be circumvented.²⁴ For example, studies of the effects of the balanced budget requirements in most states in the United States find effects on the composition but not the total amount of state debt. The direct government deficits were reduced, but debt issue by state authorities was increased by approximately the same amount.²⁵ At the US federal level, the Gramm-Rudman-Hollins deficit limitations are widely viewed to have been a failure.²⁶ As von Hagen (1998:140 stresses, "numerical constraints induce substitution effects that work against the intended effect on aggregate discipline...." Not only does such circumvention reduce the effectiveness of the constraints, but in some cases it actually will increase the perverse economic effects of government activities by, for example, increasing the incentives to put activities off budget, which often increases their costs and reduces transparency.

At the other extreme are views that institutional reforms are typically highly effective. Such a view has underlain the beliefs not only of idealistic advocates of world government, but also of economists who have argued that the provisions for the independence of the European Central Bank and the no bail-out rule are sufficient to ensure that the Euro will enjoy low inflation and that, therefore, there is no need to worry on anti-inflation grounds about budget deficit limitations or convergence prior to monetary union.²⁷

In my judgment both of these extreme views are fundamentally wrong. The critics are right that it would be naïve to assume that rules on the size of budget deficits will be effective, but De Grauwe (1997:210) likely goes too far when he argues that "the case for strict rules on the size of national government budget deficits is weak. There is no evidence that these rules are enforceable." As Poterba (1996) points out, the nature of the prohibitions on budget deficits vary widely across the states of the United States. For example, many of these apply to only a part of the budget, and most states have no explicit enforcement mechanism for their balanced budget mandates. The available studies suggest that weak commitments have little, if any, direct effects. However, in his recent review of the studies on the US states, Poterba (1997:398) concludes that "The studies surveyed ... suggest that there are correlations between state balanced budget rules and state fiscal policy. Constitutional or legislative provisions that make it more costly to balance the budget in a given fashion, for example by raising taxes or issuing long-term debt, appear to discourage these fiscal actions." Similar studies by von Hagen and others focusing on comparative institutional analysis across countries also find that "institutions shaping the budget process of a country are an important factor in determining that country's level of public deficits and debts" (von Hagen 1998:1).²⁸

Institutions do matter, but there can be considerable slippage in their effectiveness, and sometimes they have unintended consequences that are more important than their direct effects. As a result, careful microanalysis is required of how institutions change actors' incentive structures

and their relative influence. This partial effectiveness view emphasizes issues of enforceability and implies the need for careful attention to the details of institutional designs and realistic appraisals of how much various institutional reforms can actually do to alter behavior. As will be discussed in section V, such analysis suggests that there are good reasons to be concerned about the effectiveness and possible perverse effects of the budget limitations imposed by the Stability Pact.

This approach also suggests that one cannot safely assume full effectiveness of the no-bailout and central bank independence provisions of the Maastricht Treaty. Analysis of central bank
independence has become a major industry in recent years. This work illustrates both the
difficulties and fruitfulness of the new institutional or public choice analysis. There has been
considerable disagreement about the classification of specific central banks with regard to their
degree of independence, about the relative importance of different types of institutional provisions,
and about the extent to which correlations between central bank institutions and inflation reflect
causation or are themselves the result of third factors such as the public's aversion to inflation.
Still, out of this controversy some consensus is emerging.²⁹

In the industrial countries greater formal institutional independence does appear to give central banks greater, but far from complete, insulation from political pressures, and some aspects of institutional design have been found to be more effective than others. The need to distinguish between target and instrument independence has been stressed, with independence being seen as desirable for the latter and public accountability important for the former. In developing countries, where the rule of law typically has much less tradition, formal institutional independence appears to have offered central banks much less insulation from political pressures.

Despite having an institutional design that receives high marks from the standpoint of the literature on central bank independence, the European Central Bank will be a new institution which will start with considerably less credibility than the Bundesbank. And the comments of the French government on the desirability of greater political supervision of the ECB have done little to help

the Bank's initial stock of credibility. Nor has the agreement, forced by the French after considerable acrimonious bargaining, that Win Duisenberg would step down half way through his term as Governor of the ECB to be succeeded by the head of the French central bank, Jean Claude Trichet.³⁰ If the new institutions of the European Monetary Union could be assumed to begin with full effectiveness and credibility, then the arguments that there is no need for prior convergence would be quite powerful and there would be no need for the Stability Pact on anti-inflation grounds. On the partial effectiveness view, however, there is a strong case for such provisions to help the ECB have a successful launching.³¹

IV. Does EMU Increase the Need for Fiscal Restrictions?

The effectiveness of institutions is also quite relevant to the debate about whether monetary union per se increases the case for fiscal limitations.³² It has been argued that participation in monetary union will lower the interest rate cost of financing budget deficits, thus increasing the bias toward excessive deficits and imposing negative externalities on the other members of the monetary union.³³ For example, in an intertemporal optimization model based on tax smoothing and reelection considerations, Corsetti and Roubini (1997) show that "access to international capital markets, by reducing the financial constraint of the government, increase the size of the [budget] deficit" (p. 44). They stress that in their model "it is the slope of the supply schedule for capital, not the level of the interest rate, that produces this result" (p. 44). In their simulations this effect of international borrowing is large, increasing deficits by as much as 2 percent of GDP. They note, however, that if governments and the private sector have equal access to international borrowing, then a restraint on international borrowing by the government will have no effect on the bias toward excessive government borrowing.³⁴ Agell, Calmfors and Jonsson (1996) also present a model in which fixed exchange rates will increase budget deficits and argue that their "conclusions receive some empirical support from a comparison of the fiscal deficits in the [OECD] countries

choosing monetary cooperation with Germany within the ERM.... The average fiscal deficit [over 1980-87] rose by 2 percentage points more in countries that opted for exchange-rate cooperation with Germany" (p. 1414).

This argument provides an important qualification to the traditional discipline argument for fixed exchange rates. While external discipline over monetary policy will be increased, external discipline over fiscal policy may be reduced in the short term. Indeed, this appears to have been the case for Italy during the sticky pegged rate period of the EMS.³⁵

There are several counters to such arguments. One is that as long as the no-bail-out provisions of the Maastricht Treaty are observed, the private market will appropriately evaluate the risk of national government debt and penalize growing deficits with increasing risk premia. The experience of state governments within the United States suggests that financial markets are relatively efficient in making these types of distinctions. Restoy (1996:1630) concludes "The available empirical evidence is relatively supportive of the hypothesis that markets do discriminate among securities issued by regional governments with different degrees of financial and fiscal discipline."

If the no-bail-out clause is not viewed as credible, however, the likelihood of group support in the case of a liquidity or solvency crisis with respect to a member country's debt provides an implicit subsidy. Many commentators have already questioned the credibility of the no-bail-out clause, indicating that this particular institutional provision is likely to be of limited effectiveness. However, as De Grauwe (1997:205) points out, "keeping Italy outside the Union does not necessarily reduce the risk that EU members will have to engage in a future bail out operation." Thus the increased interest-rate subsidy accruing to countries with budget deficits which would be due to joining the EMU per se, is likely to be small.

Furthermore, once one drops a unified actor model of a government whose objective is to maximize economic efficiency, there is little reason to believe that modest variations in interest

rates would have substantial effects on government behavior. As von Hagen (1998:1) points out, "the extent to which governments base their borrowing decisions on the level of real interest rates is much in doubt." When one adopts more realistic political economy views of the operation of the political process, then unless interest rates reach sky-high levels, such as was the case in the 1994–95 Mexican crisis, it seems unlikely that the level of interest rates would substantially influence unconstrained government tax and spending policies. As Corsetti and Roubini (1993:74) suggest,

the argument ... that the discipline of the market will be enough to ensure fiscal discipline in the deviant countries, seems based more on wishful thinking than an assessment of the incentives faced by member countries. The market discipline in the form of higher interest rates did not prevent members of the Community from pursuing unsustainable fiscal policies throughout the 1980s.

Drawing on an analysis of unitary and federal states, Eichengreen and von Hagen (1995) find that budget limitations are not a general feature of federal states, and that in many of the cases where they are present these constraints were adopted unilaterally by the subgovernments rather than being imposed by the central government. Bayoumi, Eichengreen, and von Hagen (1997) conclude that "The key to understanding the cross-country incidence of borrowing restrictions lies in the structure of the tax base...countries in which subcentral governments control a large share of the tax base are less likely to restrict borrowing by subcentral governments" (p. 81). This is a useful finding which shows that there is not a strong historical precedent for the Maastricht fiscal restrictions. But then there isn't a strong historical precedent for EMU either. Small countries have at times adopted a larger nation's currency, and EMU is not the first example of a monetary union among countries of roughly equal size (see Cohen 1994), but it is quite unusual. Thus I believe that Bayoumi, Eichengreen and von Hagen go too far when they argue that "the implications for EMU

are clear. Taxes in the EU are controlled almost entirely by national governments...Given the scope for EMU members to use their own taxes to deal with financial difficulties, the EDP would appear to be redundant" (p. 81).

Another counter, offered by De Grauwe (1992), is that "countries who join the union reduce their ability to finance budget deficits by money creation. As a result, the governments of member states of a monetary union face a 'harder' budget constraint than sovereign nations (p. 175).³⁷ As noted above, there is indeed some evidence that countries with more independent central banks tend to run lower budget deficits on average.³⁸ Furthermore, as De Grauwe shows, during the 1980s the budget deficits of the states within federal systems, such as Australia, Canada, Germany, Switzerland and the United States, have tended to run deficits which are a much smaller proportion of their revenues than have their national governments or other member states of the EU. As De Grauwe notes, such evidence is not conclusive, but "at the very least, the results...suggest that the idea that in monetary unions members states have a strong incentive to create excessive levels of government debt is not corroborated by the facts of the 1980s" (p. 177).

In interpreting such results, however, we need to draw a sharp distinction between concerns that joining EMU would substantially increase the tendency for national governments to run budget deficits and concerns that in the absence of institutional reforms national budget deficits would likely continue to be a serious problem under EMU. I think that it is quite unlikely that on balance joining the EMU would substantially increase problems on this score, but I think that for other (i.e., domestic) reasons, budget deficits would likely continue to be a major problem in the absence of institutional reforms.

Even with formal independence, the ECB will be subject to pressures. Buiter, Corsetti, and Roubini (1993:80) are likely correct that the "possibility seems remote...that fiscal norms are necessary to render it impossible, or at any rate unlikely, that the new ECB will effectively be forced to monetize the budget deficits of countries without fiscal discipline." The pressures are

likely to be much more subtle than this. The danger may not be so much that the ECB will be forced, but that it will be induced, into partial monetary accommodation of budget deficits. As Gerlach (1998:110) argues, there are likely to be differences of opinion among the members of the ECB board at times and "the fact that a tightening of [monetary] policy is likely to worsen the debt situation and increase the risk of financial instability may lead the average [ECB] council member to be marginally less willing to tighten or marginally more willing to relax monetary policy. Large public debts could therefore impart an inflation bias to the ECB's monetary policy. While it is difficult to speculate how large this inflation bias could be, a few per cent seems plausible."

If the independence of the ECB were firmly established, there would be less need for budget deficit limitations on monetary stability grounds. As a fledgling institution, however, the ECB will have to earn its credibility. We now have considerable evidence that the adoption of strong institutional arrangements, such as currency boards, does have immediate effects on credibility. But these initial effects are not complete. Additional credibility has to be won by policy actions. ³⁹ Good institutional arrangements can help full credibility be earned more quickly, but seldom, if ever, are they sufficient to generate instant full credibility. Thus efforts to limit budget deficits are especially important for the beginning period of EMU and the ECB. It is not EMU per se, but the birth of the ECB that presents the strongest international case for fiscal restrictions.

V. Evaluation of Specifics of the Stability Pact

A number of objections have been raised with regard to the specifics of the Stability Pact. The question of the consistency between the deficit and debt level provisions is addressed in the papers by Hughes Hallett and by Vines in this volume. As a long-run guide for fiscal policy the three-percent budget deficit rule appears quite reasonable. Allowing for the effects of normal cyclical fluctuations, this suggests that governments should shoot for full-employment balanced budgets or even a small surplus, and this goal is explicitly stated in the Stability Pact. ⁴⁰ It is open

to question whether a full employment balanced budget formulation or the three-percent nominal deficit limitation could be explained more effectively to the general public, but either would seem to be a reasonable choice. Given the initial budget positions in many countries, however, the amount of budget adjustments required over a relatively short period of time to meet the letter of the Maastricht criteria has proven to be too great to be met without fudging.

In the initial German view this was to be expected and would help the credibility of the monetary union by excluding the less disciplined countries from initial entry. However, as Artis (1996:1010) points out, "barriers that one set too high may not be revealing. ⁴¹ The German view misforecast both the strength of feelings of other members of the EU that the initial group of EMU members should be broad rather than narrow and also the problems that the two core members, France and Germany, would have in meeting the three-percent limits themselves. As a consequence, the specific Maastricht fiscal criteria adopted have proven to be quite unfortunate. With hindsight, adoption of a looser requirement of progress in fiscal restraint would have been more desirable.

A great deal of controversy has arisen on the degree of automaticity and structure of penalties for excessive deficits. From the standpoint of the design of international institutional arrangements, the Stability Pact makes important innovations both in the adoption of fines to sanction wayward behavior and in providing for graduated penalties. In the negotiations on international monetary reform following the breakdown of the Bretton Woods exchange rate system, a similar approach to dealing with sustained balance of payments disequilibrium was proposed, but never adopted. The only sanction against persistent payments surpluses provided in the original Bretton Woods agreements, the scarce currency clause, was a very blunt instrument and consequently was never used. Having graduated penalties is clearly superior. It more closely approximates the increasing costs in terms of conditionality imposed on deficit countries' borrowing from the International Monetary Fund.

Some have criticized the structure of the penalties of the Stability Pact for increasing the deficit when an excessive deficit is the problem in the first place. A second criticism is that the penalties are capped at 0.5 percent of GDP per year of violation whereas we would expect the externality costs imposed by the deficit to be an increasing function of its size. From the standpoint of the standard theory of optimal taxation and corrections of distortions this objection is well taken. From the standpoint of practical political economy, however, it may be of little relevance. If the enforcement mechanisms have not been sufficient to keep the deficit from exceeding the level of maximum penalty, it seems extremely unlikely that additional penalties would help.

Indeed, it is not clear that the offending country would be willing to pay or what would happen if they refused to pay. Most international sanctions are self-enforcing by those imposing them, for example, by increasing tariffs. The levying of fines under the Stability Pact is not self enforcing in its present form. Perhaps a better structure of penalties would focus on exclusion of an offending country from participation and/or voting in some of the EU decision-making bodies until its house was put in order (or substantial progress toward this was being made). Indeed, during the Maastricht negotiations Belgium proposed just such a suspension of voting rights as a sanction for excessive deficits. ⁴⁴ Also superior on enforceability ground is the recommendation made by the EU Monetary Committee that possible sanctions include suspension of payments from the EU budget. (Under the EDP the Council may also encourage the European Investment Bank to reevaluate its lending to the wayward member.) In any event I would suspect that moral suasion and the concerns of the harsh (if often belated) discipline which can be imposed by international financial markets will prove to be more important in practice than will be the use of formal penalties. ⁴⁵ As *The Economist* recently asked, "In any case, who really believes that those penalty fines, if levied, would actually be paid?" (May 22, 1998, p. 45).

Eichengreen and Wyplosz (1998) conclude that

the Stability pact will have some effect. Governments will adjust their fiscal policies just enough to avoid incurring fines...Actually imposing fines would...lead to recrimination and deal a blow to EU solidarity. Actually incurring fines would subject a government to serious embarrassment and loss of political face. (P. 68)

Our assessment is that enforcement of the pact will be relatively loose, but still tight enough to affect some member states deficits. EU officials will be reluctant to levy fines and lose goodwill. Members states will be reluctant to incur fines and suffer embarrassment...EU decision-makers...and governments will compromise, eliminating deficits that egregiously violate the Stability Pact, [governments] will modify their fiscal policies just enough to avoid forcing their neighbors to impose fines. (P. 101)

Eichengreen and Wypolsz (1998:106) also argue that

The problem with the Pact as presently framed is that it is all stick and no carrot; rewarding good behavior in booms rather than, or in addition to, punishing bad behavior in slumps would surely make better sense. This could easily be done by relating payments to the EU budget or the distribution of euroseignorage to fiscal positions.

Much as the exchange rate provisions of the EMS were used over time by a number of national leaders as a way of strengthening their hands in the domestic battle to bring and keep inflation under control, ⁴⁶ the fiscal provisions of Maastricht and the Stability Pact can be used as a powerful external force to help promote domestic budget discipline. ⁴⁷ Unfortunately, to date this mechanism has not been utilized nearly as effectively as was the Exchange Rate Mechanism in the 1980s. The partial effectiveness view of institutions implies that neither the external exchange rate nor fiscal provisions should be viewed as an absolutely binding constraint, but rather as a valuable

mechanism for helping to rally domestic political support in favor of discipline. This was done quite effectively by the Mitterand government in France with respect to monetary and fiscal discipline. National leaders have put much less effort into explaining or selling the need for fiscal restraint to their voters. As a consequence there is considerable danger that the fiscal retrenchments of recent years—albeit in many cases likely insufficient to meet the strict letter of the Maastricht criteria—may generate a severe backlash among voters. Instead of the European project lending support to efforts at fiscal restraint, the fiscal restraints may be greatly damaging to the support for the European project.

One of the greatest problems in designing institutions to constrain pressures on monetary and fiscal policies is that it is much easier to maintain sound economic policies once a stable situation has been achieved than to get to this point from a position of substantial disequilbrium. Such transitions can be quite painful and failures in the transition process can seriously damage the credibility of the new institutional arrangements. The Maastricht fiscal criteria unfortunately provide an excellent example of this point. They have been partially effective in bringing about greater fiscal restraint in a number of countries, but the process has been contaminated with considerable fudging, and the criteria for initial entry into EU were applied with considerable looseness. Furthermore, the criteria have been sharply criticized for forcing fiscal restraint at a time of high unemployment. All of these developments will serve to reduce the initial credibility of the Stability Pact.

The experiences with the convergence criteria of the Maastricht Treaty offer clear evidence, I believe, that such agreements can provide external help to the process of reducing budget deficits, but that the effectiveness of this help has its limits. Both the French and German governments have taken unpopular actions to reduce their budget deficits, but they have also clearly indicated limits to how much domestic political pain they were willing to suffer to meet the strict letter of the Maastricht deficit criteria. As von Hagen (1998:18) notes, "The success of the

Maastricht program...has been limited. A number of the smaller countries, Portugal and Ireland in particular, used the convergence process for a successful reduction of their deficits and debts. Yet, when the Maastricht process started in 1992, the average debt ratio of the European Union states was 60 percent, today it is over 75 percent." An optimist might counter that at least the average budget deficit as a percent of GDP had fallen over this period from over 6 to under 3 per cent. Still it is difficult to disagree with von Hagen's conclusion that "In large countries...the role of external political constraints such as admonitions brought by the European Commission is simply too weak to coerce internal politics." It is also interesting to note that von Hagen and Harden (1995:778) in their study of OECD countries find that "the budget processes of all governments of large states that successfully limited spending and deficits in the 1970s and 1980s (France, Britain, and Germany) are based on a procedure-oriented approach. In contrast, the budget processes of all governments of smaller countries (Denmark, the Netherlands and Luxembourg) that successfully limited spending and deficits are based on a target-oriented one."

Alesina and Perotti (1995) find that the composition of fiscal adjustments have a major impact on their durability. ⁴⁹ The most persistent adjustments came from reducing social expenditures and the wage component of government consumption. The least durable adjustments come from raising taxes and cutting capital expenditures. Unfortunately, for most EU countries the sustainability of the recent fiscal retrenchments does not look secure on these criteria. Indeed, as Eichengreen and Wyplosz (1998:76) argue, "while some progress has been made in curbing deficits in Stage II, the EDP [Excessive Deficit Procedures] has also encouraged fiscal fiddles like refundable 'euro taxes,' sales of central bank gold reserves and one-off appropriations of public enterprise reserves." Perhaps one of the most outrageous fiddles was the receipt by the French government of a substantial one-time payment in exchange for taking over the pension liabilities of France Télécon. Vying with this was the Italian euro tax with its promise of a future refund. Both were certified by the EU statistical office as meeting the criteria of actions contributing to sustained

reductions in deficits. Furthermore, by general consensus, the debt as opposed to deficit criteria were treated as nonrelevant considerations for the purposes of meeting the convergence criteria.

Such acts are bound to hurt the credibility of the new EMU institutions. As a weapon to limit the size of the initial membership of the EMU the "strict" convergence criteria had a strong, though admittedly controversial, rational. However, as a mechanism for safeguarding monetary stability under the new-born ECB, it would have made much more sense to provide for transitional arrangements that started with looser targets, but which would be more effectively enforced. Indeed, there is considerable danger given that the way the criteria have been implemented to date they will not only not help the ECB in pursing monetary stability, but could even make its job more difficult by having reduced the credibility of the EMU process.

Bayoumi, Eichengreen and von Hagen (1997) do point to a serious problem which the budget restrictions could create, however. In an ideal world member states would adjust their fiscal policies so that they would normally run balanced budgets or small surpluses, leaving plenty of room to allow automatic stabilizers and perhaps even some discretionary actions to help cushion negative macroeconomic shocks. If instead, however, budget deficits tend to average close to the 3 percent limit, the scope for such cushioning at the national level will be sharply curtailed. This would likely stimulate pressure for Brussels to take on a larger fiscal role in the EU. "And because the member states will resist giving up their tax revenues as quickly as they demand additional services from the EU...restraints on the budgetary freedom of subcentral governments may thus increase the demand for central government borrowing, ultimately weakening the financial portion of the center" (p. 83)

Furthermore, as De Grauwe argues (1997:207) "as countries will be hindered in their desire to use the automatic stabilization in their budgets during recessions, they will increase their pressure on the ECB to relax monetary policies. Thus, paradoxically, the stability pact whose aim it was to protect the ECB from political pressure may in fact have increased the risk of such

pressure." Or as Artis and Winkler put it in their paper in this volume, "Tying the fiscal authorities' hands may well turn out to *increase* rather than decrease the burden on monetary policy with respect to stabilization policy."

These are possibilities which clearly must be taken seriously. Efforts to impose discipline through fiscal constraints seem likely to have effects quite similar in many respects to the use of pegged exchange rates as a nominal anchor. Where there is a good deal of discipline anyway, the exchange rate constraint has often been effective in increasing it further, but where the domestic forces for discipline are weak, the adoption of pegged rates has typically proven to be only a short-term palliative, which has typically resulted in crises and undermined stabilization efforts. While fiscal restrictions are not likely to be as prone to generating crises as exchange rate pegs, the danger of generating perverse reactions is similar.

This presents further support for our intermediate view that institutional arrangements are generally neither completely effective nor completely ineffective. It also clearly suggests that international agreements are not a substitute for domestic institutional reforms designed to reduce or harness the political pressures for large budget deficits. They can be useful complements, and indeed this was explicitly recognized in the Maastricht Treaty (Article 103d), but most EU governments have not yet put enough effort into taking advantage of this potential complementary. This is a source of considerable danger. As just discussed, if governments do not respond as the designers of the fiscal criteria intended and succeed in running balanced budgets or surpluses in normal period, then it is not just a question of the effectiveness of the fiscal criteria being reduced—the effects may be quite costly in terms not only of the ability to cushion the employment and output effects of shocks and cyclical fluctuations, but also in terms of contributing to rather than reducing pressures on the ECB.

Bayoumi, Eichengreen and von Hagen (1997) suggest that "an alternative to the numerical guidelines and politicized procedures of the EDP would...be to encourage countries seeking to

qualify for monetary union to reform their fiscal procedures and institutions...This approach is consistent with that adopted to guide the policies of the European Central Bank. The framers of the Maastricht Treaty did not set numerical targets for money growth but gave the ECB a mandate to pursue price stability and specified the procedures it was to follow" (pp. 84-85).

I am very sympathetic to the general thrust of this argument, but I do not think that the analogy holds fully. In one sense, the price stability and budget mandates are quite similar. The major difference is that a numerical target is specified for the budget deficit, three percent of GDP or less, while the meaning of price stability is left (perhaps wisely) undefined. The procedures for giving the ECB independence were specified, but not the procedures by which it would adjust monetary policy in order to achieve price stability.

As Bayoumi et al. discuss, there are a number of ways to reform national budgetary procedures to help promote fiscal discipline. One approach is greater centralization of budgeting — "centralized procedures empower the prime minister, the finance minister or the treasury minister to overrule spending ministers, limit the scope for parliamentary amendments to the government's budget, and limit modifications of the budget law in the implementation stage" (p. 84). Other examples include requirements that all spending proposals be accompanied by specific proposals for how the spending would be financed, either through revenue increases or cuts in other programs, and line item vetoes for the executive. As Bayoumi et al. go on to discuss, "a still more ambitious approach would be to create independent agencies at the national level to monitor the budget and prevent spending ministers and legislative coalitions from engaging in creative budgeting. Still more drastic reform would establish in each country a national Debt Board with the power to set a binding ceiling on the annual increase in public debt" (p. 84). ⁵²

Given the range of options, it is very unlikely that the EU member states would have agreed on a common one. Alternatively, it would be very difficult to judge equivalencies among the options of the type--pick any x of the following y options for reform. What mix of such reforms

would be best is far from clear, and it seems likely that the answer would differ from one country to another. Conceptually, each country could present its own provisional mix for approval by some central body such as the Council of Ministers, but this would likely be a highly awkward and politicized process.

There is considerable technical attraction to an EU level Debt Board, which would set periodic debt limits for member states, but it seems doubtful that such a centralized approach would have been politically feasible, especially since Debt Boards are not a well-known concept. Thus I think it quite unlikely that a procedures approach would have worked as a substitute for the fiscal limitations of the convergence and Stability Pact criteria, serious efforts on the procedures front are likely to be a necessary conditions for the fiscal limitations to work well. To date there is little cause for optimism on this score.

A further danger, raised by Eichengreen and Wyplosz (1998) is that

in the present climate, where electorates lack the appetite for further spending cuts...the danger is...that the Stability Pact will divert efforts from the fundamental reforms needed.... In particular, without fundamental labor market reforms, Europe will fail to grow by at least 3-3 1/2 % a year, and deficits will not decline....Our view is that leaders have a fixed amount of political capital that they allocate to politically costly fiscal reform or politically costly labor market reform....[T]he Stability Pact may have some slight benefits in terms of fiscal discipline, but may have significant costs, both in diverting political effort from more fundamental problems and indeed in making those fundamental problems worse than before. (P. 69)

Masson (1996) reaches a similar conclusion.

I would therefore argue that the fiscal criteria are not necessarily bad in themselves, but rather the difficulties have been with the measures taken to meet the criteria....It has tended to swamp considerations of the problems...such as inadequate labor flexibility. (P. 998)

Given the strict time tale...the criteria may have produced a perverse focus on measures that could be implemented more easily—tax measure—rather than the needed structural reforms on the spending side. (P. 1003)

Obstfeld and Peri (1998) agree that with an EMU with low labor mobility and limited scope for automatic fiscal stabilizers "it will become hard to resist pressures for a more extensive 'transfer union'" (p. 2091) and argue that "if one views the prospect of a European transfer union with alarm...the first option is to rethink and relax the excessive deficits procedure and the Stability Pact as soon as possible after the EMU starts" (p. 246).

VI. Concluding Remarks

The basic objective sought by the Maastricht and Stability Pact fiscal criteria is a desirable one, but the need for it comes primarily from domestic political biases and the infancy of the ECB, not from EMU *per se*. The basic form of the Stability Pact is not necessarily seriously deficient. What is clear, however, is that it is not sufficient by itself to meet its objectives. On the one hand, its enforceability is open to considerable question. On the other hand, its full enforceability at the EU level in the absence of national budgetary reforms could generate substantial costs in terms of reduced flexibility to cushion asymmetric shocks. Paradoxically, if countries do not achieve approximate budget balance during normal periods, then the limits on fiscal deficits designed to protect the ECB from pressures to accommodate fiscal deficits could generate even greater pressures for monetary expansion to counter unemployment. The loss of automatic fiscal

stabilizers could also stimulate pressures for greater fiscal transfers at the EU level, which in the opinion of a number of economists could generate deficits at the EU level and retard the incentives for adjustments to shocks.⁵³

This is the worst case scenario, but is also perhaps the most unlikely. More probable is that the Stability Pact will be viewed as a symbolic victory for the Germans, but one which will be given few teeth and have relatively little effect on the fiscal behavior of EMU governments. This also would be unfortunate. The ideal solution would be a concerted political push to implement Article 103d of the Maastricht Treaty "which instructs member states to make their budget procedures conducive to fiscal discipline" (Bayoumi, Eichengreen and von Hagen 1997:84).

Unfortunately, however, as with the need to promote greater labor market flexibility, little progress has been made during the runup to EMU, and this bodes ill for progress afterward. The problem is not that the Maastricht and Stability Pact fiscal criteria were wrong headed, but rather that the opportunity to piggy back domestic budgetary reforms on the EMU project has borne so little fruit. It is still not too late to try, but time is short.

^{*} Helpful comments from Tom Borcherding, Richard Burdekin, Michael Hutchison, Neils Thygesen and an anonymous reviewer are gratefully acknowledged.

¹ See, for example, Buiter, Corsetti, and Roubini (1993), De Grauwe (1993, 1996, 1997), Eichengreen (1994, 1997), Eichengreen and von Hagen (1995), Glick and Hutchison (1993) and Kenen (1995). The fiscal provisions of the Maastricht Treaty and the Stability Pact are summarized in the paper by Niels Thygesen in this volume.

² See, for example, von Hagen and Lutz (1996).

³ Procedurally, the EDP process would begin with a report from the European Commission of the existence of an excessive deficit. This will be studied by the Economic and Financial Committee, which will issue an opinion. Taking this opinion into account, the Commission will make a recommendation to

the Council. If the Council concludes that an excessive deficit exists, it will offer guidelines for policy adjustments in the offending countries. The member is then expected to take actions within four months that would bring its deficit back within bounds within a year. If no actions are taken, sanctions are to be imposed within ten months of the report of the violation.

⁴ See, for example, DeGrauwe (1993, 1996, 1997).

⁵ See Emerson et. al (1991) and Eichengreen and Wyplosz (1998).

⁶ See Allson and Viners (1996) and Buiter, Corsetti, and Roubini (1993).

⁷ See the analysis and references in Willett (1995, 1987).

⁸ Corsetti and Roubini are critical, however, of the specific Maastricht formulation, arguing that "such guidelines are ...too rigid because they impose targets on the inflation-unadjusted and cyclically-unadjusted overall fiscal balances" but are also "too loose because their implementation will be subject to a 'political' evaluation" (p. 50).

⁹ See, for example, Masson (1996).

¹⁰ See Artis (1996).

¹¹ For discussion of the evidence that the financial markets view the maxi EMU as a source of monetary weakness, see Fratianni (1998).

¹² The Economist (1998:9) argues that despite all of the fiscal fudging, the Maastricht criteria encouraged Italy and Spain "to make genuine improvements in their public finances." Ireland also made noticeable improvements.

¹³ See the discussion and references in Byrant (1995) and Willett (1997).

¹⁴ See Willett (1987, 1995).

¹⁵ See, for example, the analysis and references in Willett (1987).

¹⁶ See, for example, Mishkin and Posen (1997).

¹⁷ See also Willett (1987).

¹⁸ See, for example, the contributions in Perrson and Tabellini (1994), Wijnholds et al. (1994) and Willett (1988).

- ²⁰ Corsetti and Roubini (1997) identify five classes of political models of fiscal deficits: the public choice approach (which they identify with Buchanan; see Buchanan, Rowley, and Tollison 1993); models of government weakness and decentralized government; distributional conflicts models; models of strategic public debt choice; and political business cycle models.
- ²¹ For similar arguments that the formal literature on policy coordination overemphasizes the problem of cheating relative to the problems of securing domestic political support for implementation, see Byrant (1995) and Putman and Henning (1989).
- ²² See Burdekin and Laney (1988) and Parkin (1993).
- ²³ For recent discussion of the realist view see Frieden and Lake (1995) and Willett (1996).
- ²⁴ On ineffectiveness of particular fiscal limitations see Alesina and Bayoumi (1996), Poterba (1996) and von Hagen (1990). Inman (1996) finds that the important requirements for budget rules to constrain fiscal behavior are that they be constitutionally based, i.e., they require a super majority to be overridden; they focus on ex post accounting; and they be enforced with penalties by an independent body.

- ²⁸ For other recent analysis and references to the literature, see Weaver and Rockman (1993) and Steinmo and Tolbert (1998).
- ²⁹ See, for example, Banaian et al. (1995), Cukierman (1995), Effinger and De Hann (1996), Fischer (1995), Grilli, Masciandaro and Tabellini (1991), Hutchison and Walsh (1998), Masciandaro (1995), Posen (1995) and Willett et al. (19950

¹⁹ For a more general discussion of this problem see Jervis (1997).

²⁵ See von Hagen (1990).

²⁶ See, for example, von Hagen (1998).

²⁷ See, for example, De Grauwe (1993, 1994) and Dornbusch (1997).

³⁰ See, for example, Feldstein (1997).

³¹ See Andrews and Willett (1997), Corden (1993) and Crockett (1993).

³² See, for example, Buiter et al. (1993), De Grauwe (1992), Glick and Hutchison (1991, 1993) and Gros and Thygesen (forthcoming).

³³ Note that the effect of deficits on other countries' interest rates is a pecuniary externality that does not generate economic inefficiency. See Buiter, Corsetti, and Roubini (1993). Furthermore, it should be remembered that these effects would be spread over the whole global capital market, not just the EMU members.

- ³⁶ While private financial markets clearly can provide useful discipline, recent experience ranging from the EMS crisis of the early 1990s to the Mexican crisis of the mid 1990s to the Thailand crisis of 1997 suggests that the private market typically provides graduated pressures in a much less continuous form than would be ideal. The early warning pressures are often too weak and the post crisis pressures are sometimes too strong. See the analysis and references in Buiter et al. (1998) and Willett (1998).
- ³⁷ Of course, with strict budget deficit limitations the level of interest rates would matter as they would directly affect the amount of government interest expenses. In this regard credibility considerations had an important affect on the difficulty of meeting the Maastricht convergence criteria. See, for example, De Grauwe (1997).

- ³⁹ See, for example, the analysis and references in Dubaskas, Wihlborg and Willett (1998) and Westbrook and Willett (1998).
- ⁴⁰ The three-percent deficit limit also corresponds roughly to the golden rule of public finance that budget deficits equal capital expenditures.
- ⁴¹ For a proposal to loosen the EDP by applying it to full employment rather than actual deficits, see Eichengreen (1997). Brandner, Diebalck and Schuberth (1998) argue that for assessing short-term fiscal stances, focus on cyclically adjusted balance would be preferable, while for evaluating the medium term sustainability of budget deficits, structural primary gaps would give a better indicator.

³⁴ See also Corsetti and Roubini (1995).

³⁵ See, for example, Andrews and Willett (1997).

³⁸ See Burdekin and Laney (1988) and Parkin (1993).

⁴² On the importance of including a strong element of automaticity, see Gros (1996).

⁴³ See, for example, Solomon (1982) and Williamson (1977).

⁴⁴ See Corsetti and Roubini (1993). This has also been proposed by Gros (1996). Note that this would not be appropriate for the ECB since the members of the decision-making board are not supposed to act as national representatives.

⁴⁵ As an anonymous reviewer pointed out, such forces will be much more powerful if there are only a few potential violators. If most countries are in this position, then the deficit criteria would likely go the way of debt criteria during the convergence period.

⁴⁸ Von Hagen and Harden (1995;775) describe a procedure-oriented approach as reforms in the budget process which "vests the minister without portfolio with special strategic powers...[in order to] strengthen the collective interests of the government over the individual incentives of the spending minister."

⁴⁶ See the analysis and references in Andrews and Willett (1997).

⁴⁷ See Ageil, Calmfors and Jonsson (1995) and McKinnon (1997).

⁴⁹ See also Perotti (1996).

⁵⁰ For evidence on this issue, see the analysis and references in Willett (1998b).

⁵¹ On the importance of domestic reforms of the budgetary process, see von Hagen and Harden (1994).

⁵² On the concept of a national Debt Board, see von Hagen and Harden (1994) and von Hagen (1998). See also the proposal by Blinder (1997).

⁵³ See, for example, Bayoumi et al. (1997) and Obstfeld and Peri (1998).

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