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Economic and Monetary Union in Europe and Constraints on National Budgetary Policies

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Abstract

This paper reviews the pros and cons of institutionalized constraints limiting the freedom of national budgetary policies within an Economic and Monetary Union (EMU) in Europe. The issue is approached from three angles: the influence of EMU on (i) budget discipline; (ii) intergenerational equity and intertemporal efficiency; and (iii) macroeconomic stabilization. The desirability of constraints on budgetary policy is related to the arrangements for EMU-wide monetary policy, the credibility of a no-bailout clause among member states, and progress in the area of supply-side policies.

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I. Introduction

The process leading the European Community toward Economic and Monetary Union (EMU) gained considerable momentum with the publication of the Delors Report in early 1989 and the subsequent decision to begin before the end of 1990 an Inter-Governmental Conference to frame the EMU within the EC Treaty. Two cornerstones of the EMU are, first, the free movement of persons, goods, services, and capital within the EC internal market, and, second, a monetary union. Completion of the internal market is far advanced with the steady progress on the "1992" project. 1/ Thanks in part to the convergence of monetary policies within the European Monetary System (EMS), a fair degree of consensus has emerged on the contours of monetary policy in the EMU. The principal remaining issue of contention is whether the EMU will necessitate institutionalized constraints on national budgetary policies.

The Delors Report (1989), prepared by a committee including the Central Bank Governors of the EC member states, saw a need to institutionalize binding rules for member states' government budget deficits in order to ensure that the common monetary policy can effectively maintain price stability. Some have also argued that constraints on public deficits or debt are necessary in order to exclude the possibility that excessive accumulation of public debt by an EMU member might force a bailout by fellow member states. More recently, the EC Commission (1990) came to the view that the adoption of binding budget rules institutionalized at the EC level would be undesirable for both economic and practical reasons, and that such rules would violate the principle of subsidiarity, namely, that no more powers should be transferred to the Community level than strictly necessary for the EMU. Instead, the Commission recommended rules or guidelines anchoring the requirement of budget discipline at the national level, in combination with binding procedures at the EC level for enforcing those rules or guidelines. This paper takes stock of the arguments bearing on the discussion by analyzing the various interactions between monetary union and budget discipline. The paper does not consider the (undoubtedly difficult) transition to monetary union.

The challenge at hand is to find a practical arrangement that constrains budgetary policies to satisfy the requirements of budget discipline--defined to entail control of the budget that avoids pressures for monetary accommodation or bailout by other EMU member states--while, at the same time, not forcing those policies into a straightjacket that is suboptimal from a more general point of view. Budgetary policies play an important role in providing public goods, and, more generally, in affecting intergenerational equity and intertemporal efficiency. Budgetary policies have a further role of stabilizing the economy in the face of disturbances. Automatic stabilizers help to counterbalance short-run economic cycles, but

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1/ As of May 10, 1990, the Euopean Council had accepted 158 of the 284 total of directives. Still, many of the accepted directives have yet to be incorporated in the national legislations of member states.

in some circumstances discretionary policy changes may also be desirable. Though not an effective instrument for fine-tuning short-run fluctuations in the economy, budgetary policy has some value as an instrument for facilitating the adjustment of an economy to certain shocks (provided of course that the shocks are correctly identified). This implies that the international coordination of budgetary policies and the mix of these policies with the EC monetary policy are non-trivial issues.

The rest of the paper is structured as follows. Section II summarizes what EMU will imply for the environment of budgetary policy (monetary union, internal market, and related aspects, such as tax harmonization). Against that background, Section III discusses how EMU will affect the prospects for budget discipline and the adverse external effects on other EC countries associated with undisciplined budgetary policies. It also mentions a few measures, short of specific rules for deficits and debt, that could enhance the policymakers' incentives for discipline. The implications of the EMU for budget discipline are examined from the perspective of intergenerational equity and intertemporal efficiency in Section IV. The stabilization role of budgetary policy is considered in Section V, followed by concluding comments in Section VI.

II. EMU: A New Environment for Budgetary Policy

A fair degree of consensus seems to have emerged that, should the EC proceed to a monetary union, this will involve an operationally independent European Central Bank (ECB) with a mandate to maintain price stability. 1/ Subject to this priority, the ECB would support general economic policy in the EC. Such a setup would resemble the current situation in the Federal Republic of Germany and the Netherlands. Even though in those countries the central bank is quite independent and attaches great importance to price stability, a degree of sensitivity to broader economic developments has remained. Accordingly, under special circumstances, effective pressure might build up to temporarily compromise price stability. This paper assumes that a single EMU-wide monetary policy would be conducted by an independent ECB, in whose objective function price stability would carry the dominant weight and other economic variables, such as economic growth and employment, would carry relatively small weights (the ECB would thus be characterized as a relatively "conservative central banker"--see below). 2/ Intra-EC nominal exchange rates are assumed to be entirely credibly fixed, reflecting, presumably, the presence of a single European currency. It is assumed also that no member government would have

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1/ See both Delors Committee (1989) and EC Commission (1990).

2/ More precisely, it is assumed that the ECB would assign a large weight to price stability in the day-to-day conduct of monetary policy. Of course the underlying philosophy is that, in a longer time perspective, price stability is a necessary condition for a healthy development of the real economy.

automatic access to financing from the ECB or privileges in financial markets. Finally, the ECB is taken not to have any redistributive role. 1/

Monetary union would have a number of implications for budgetary policies. The move toward a single, independent monetary policy maintaining a low level of inflation within the context of an integrated, liberalized financial market implies that several member governments may face a loss of revenue from money seigniorage and from privileges in financial markets. 2/ The EMU would also affect the relationship between budget deficits and interest rates. Monetary union would facilitate increased financial integration, since financial assets would become closer substitutes with the elimination of intra-EC currency risk. By deepening the market for government paper, this would enable governments to finance public deficits without having to face sharply rising real interest rates. However, a monetary union might raise the required return on government bonds as domestic residents would have access to more alternatives for domestic government bonds. On balance, it is likely that borrowing costs would fall for governments with large borrowing needs as long as markets had confidence that the debt would be serviced, either by other member states through a bailout (Section III) or by future domestic governments (Section IV). Financial markets would enforce budget discipline by raising the cost of borrowing and differentiating credit ratings only if they feared that neither foreign nor future governments would honor debt obligations.

The internal market project is designed to enhance productivity by permitting rationalization of production through removal of physical, technical, and fiscal impediments to the free movement of goods, services, capital, and labor within the EC. Fixity of exchange rates would moreover reduce transaction costs within the EC. Completion of the internal market may substantially enhance the mobility of goods and services whose transportation costs are relatively small. Higher product mobility will in turn raise the sensitivity of direct investment with respect to such factors

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1/ In practice, various activities of the ECB may entail redistributions between member countries, e.g. the distribution of profits due to money seigniorage.

2/ See e.g. Grilli (1988) and Gros (1989) for estimates of the size of government revenue from money seigniorage in European countries, and Gaspar and Braga de Macedo (1990) for estimates of the size of revenue from financial privileges accruing to the government of Portugal. It is true that, depending on the demand for the European currency (or currencies) inside and outside the EC, the overall revenue from seigniorage in the EMU may remain significant. An unchanged distribution could shield some member states from the loss of revenue mentioned above. However, this would tolerate or even encourage inefficient systems of taxation because it would favor countries where inefficiencies in tax collection currently make revenue from seigniorage and financial privileges seem relatively attractive.

as present and prospective labor costs, tax rates, and the availability of public services (e.g., infrastructure, education). 1/

It is therefore generally expected that the internal market will enhance the intra-EC mobility of financial and physical capital, both directly as a result of the removal of barriers to such movements and indirectly as a result of trade integration. Similar forces will influence the mobility of labor, but significant differences in socio-economic factors such as language and culture as well as significant "transportation" costs of labor will probably continue to limit mobility in large segments of the labor market. Indeed, Molle and van Mourik (1988) present empirical results indicating that labor migration in the EC is stimulated by trade integration and income differentials, but restrained by cultural differences and distance.

Hence it is likely that a discrepancy will remain between, on the one hand, relatively high goods and capital mobility, and, on the other hand, relatively low labor mobility. As discussed more fully in Section V, limited labor mobility (together with price and wage rigidities) implies that the loss of the instrument of intra-EMU exchange rates may require some flexibility in budgetary policies to deal with macroeconomic shocks.

The tendency toward greater mobility of products, production factors, incomes and assets in the internal market will have implications for government revenues and expenditures. Given the considerations advanced above, it is likely that particularly the base for capital taxation, and probably to a lesser extent also the bases for labor taxation and for commodity taxation (VAT and excises), will become more sensitive to intra-EC differences in tax rates, reducing the freedom of governments to set rates at levels significantly exceeding those in other EC countries. Similar influences may exert pressures on the expenditure side (e.g., public expenditures for infrastructure and education). In fact, governments will find it increasingly difficult to levy "non-benefit" taxes, that is, taxes that do not correspond to benefits associated with public services (see, e.g., Tanzi and Bovenberg (1990)). It has yet to be decided by EC governments to what extent these developments call for concerted harmonization of certain non-benefit tax rates and tax bases. Nevertheless, whether harmonization is achieved by negotiation or through market forces, the internal market will reduce margins for manoeuvre of national budgetary policies. This implies that servicing public debt by running a primary surplus will be increasingly difficult, because the taxes levied to create this surplus would cause factors to leave the country.

1/ The influence of budgetary policy on international direct investment in the EMU is highlighted by Isard (1989).

III. Monetary Union and Prospects for Budget Discipline

Two aspects of budget discipline associated with EMU seem especially relevant. First, the EMU may exacerbate the adverse external effects that any EC country would impose on its EC partners if it pursued undisciplined budgetary policies (Subsection III.1). This may reduce the incentives to pursue disciplined policies because part of the benefits are absorbed by other countries. Second, even a government with the right incentives for budget discipline faces margins within which the public deficit and debt must be kept for the budget to remain controllable (Subsection III.2); by limiting the scope for varying public revenues and expenditures, the EMU may narrow these margins, thus raising the risk that, due to some shock, the budget would move beyond the margins and thus become difficult to control.

1. Adverse international spillovers associated with undisciplined budgetary policies

a. Effects on the credibility of monetary policy

Undisciplined budgetary policies might threaten price stability in the EMU at large because they would increase pressures on the ECB to pursue more accommodative monetary policies. The proposed arrangements for an independent ECB, whose primary responsibility would be to achieve a stable price level (see Section II), are aimed at reducing the vulnerability of monetary policy to these pressures. Despite these arrangements, however, undisciplined budgetary policies might still compromise price stability because they increase the incentives facing the ECB to engineer a surprise monetary expansion. Lax budgetary policy, therefore, might reduce the credibility of the ECB's commitment to price stability unless a mechanism existed for the monetary authorities to sustain behavior which is optimal but time inconsistent. 1/

The sources of time inconsistency facing the ECB are associated with the existence of nominal contracts. For example, high levels of nominal public debt increase the incentive for the ECB to renege on its commitment to price stability through a surprise inflation tax; by reducing the real value of member governments' nominal liabilities, the ECB would implicitly bail out the public sector. Tabellini (1988) stresses that the existence of nominal external liabilities in domestic currency associated with expansionary budgetary policies would alter the incentives facing the authorities in favor of more accommodative monetary policies. 2/

1/ Policies are time inconsistent when incentives exist for the government or central bank to depart from previously announced plans.

2/ In the EMU, the Ministers of Finance rather than the ECB may have the primary responsibility for setting the exchange rate policy. They may find it less straightforward to resist pressures for a surprise devaluation tax than an independent ECB would.

Lack of budget discipline in financially weak member countries increases the pressures on the ECB to levy a surprise inflation tax on money balances to ease the financing of deficits in these countries. 1/ Higher interest rates associated with large budget deficits may also put pressures on the ECB to relax monetary policy in order to shield interest-sensitive sectors, such as the construction industry, from crowding out pressures associated with expansionary budgetary policies. 2/ Furthermore, if sizable budget imbalances have been allowed to occur in individual member states, their eventual correction may lead these countries to advocate more permissive monetary policies in order to offset the deflationary effect of the needed large primary budget surpluses and to facilitate the adjustment of real wages needed for the maintenance of full employment. 3/

These pressures may be especially serious in the EMU because the EC consists of countries with a rather diverse history of budget discipline. With independent monetary policies in each of the various EC member states, each country would to a large extent internalize the cost of public debt in terms of a reduced credibility of its own anti-inflation commitment. In the EMU, in contrast, these costs would be shifted to other countries. The adverse effect of increased public borrowing on the credibility of the commitment to price stability of the ECB would in principle justify a tax on public borrowing in order to internalize the cost of the reduced anti-inflation credibility. 4/ Other features, such as a surveillance procedure with an element of publicity, could be helpful as well (see also Section IV).

However, the first-best solution to deal with these externalities would be to eliminate the source of the externality by giving the ECB sufficient precommitment and discipline not to renege on its commitment to price stability. Accordingly, rather than designing budget rules, formulating proper arrangements for monetary policy seems the most direct way to address these problems. Indeed, these considerations could favor monetary rules over discretion. However, strict rules for the conduct of EMU-wide monetary

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1/ This essentially amounts to a disagreement about the optimal tax structure. See also van der Ploeg (1990).

2/ An appreciating real exchange rate vis-à-vis other major currencies may also cause tradable sectors to call for accommodative monetary policies.

3/ A certain degree of stability in relative prices, and especially in real exchange rates, may be valued as an international public good because it tends to avoid pressures on monetary authorities to bring these relative price changes about through nominal price increases, which may threaten the credibility of anti-inflation policies. Under some circumstances, expansionary budgetary policies can contribute to stable real exchange rates. Expansionary budgetary policies may thus yield positive rather than negative externalities. Hence, ceilings on public debts or deficits are not always appropriate. See also Section V.

4/ However, setting the appropriate tax rate would be very difficult in practice. See also Section VI.

policy may be neither feasible nor desirable because they are likely to unduly restrict the ability of monetary policy to react to various occasionally experienced shocks.

If rules are not feasible, appointing "conservative central bankers" who place a very high priority on price stability may contribute to maintaining the credibility of anti-inflation policies (see, e.g., Rogoff (1985)). Thus, the creation of an independent ECB with a primary mandate to maintain price stability would help to reduce the adverse effect of public borrowing on the credibility of the anti-inflation commitment. Persson and Tabellini (1990) examine several other institutional arrangements that might help to increase the credibility of the commitment to price stability. For example, government issuance of indexed debt or foreign currency debt might help to reduce the temptation for the ECB to levy a surprise inflation tax, by shrinking the tax base. Still, even a credible and independent ECB may in practice not be capable of fully offsetting inflationary pressures emanating from excessive public deficits. In any case, the need for and the nature of budgetary rules would depend on the credibility and nature of the monetary institutions in the EMU.

b. Bailouts through budgetary transfers between EMU members

The creation of the monetary union may increase pressures to bail out member countries not only through accommodative monetary policies but also through budgetary transfers. By eliminating currency risk, a monetary union would encourage EMU residents to invest in debt instruments issued by governments of other member countries. The increased exposure of their residents would increase the pressures on EMU governments to bail out a member in financial distress. More generally, the increased political and economic integration associated with the move towards the EMU strengthens the solidarity and mutual interdependencies among member countries. This makes it more difficult to resist bailing out a member country facing financial problems. Hence, a no-bailout clause would not be fully credible, in part because resource transfers through the structural funds or other indirect channels would effectively amount to a bailout. 1/ Thus, the costs of undisciplined budgetary policies would be shifted to other EMU countries in the form of either higher taxes or a higher risk premium on

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1/ Moreover, it may be hard to distinguish between financial difficulties due to undisciplined behavior, which would not justify financial assistance, and financial distress on account of an adverse shock that is difficult to hedge (such as a decline in the terms of trade)--especially when increased economic and financial integration reduces the margins for controlling budgetary imbalances that originate from unfavorable shocks (see Subsection III.2).

their public debt. 1/ In essence, bailout pressures would make the debt instruments issued by various EMU governments closer substitutes to the extent that increased borrowing by any one government would raise the risk premium paid by the other EMU members.

The effect of increased public borrowing on the probability of a budgetary bailout constitutes an argument in principle for either a tax on public borrowing or subjecting budgetary policies to strict surveillance by the other member countries (as it does in the case of pressure for monetary bailout, discussed in Subsection III.1.a). Some commentators have instead argued that a credible no-bailout clause together with complete information on the creditworthiness of governments (facilitated by standardized accounting), free movement of capital, and, more generally, increased efficiency of international capital markets would adequately descipline budgetary policies (see, for example, Bishop et al. (1989)). It is also argued that governments should be encouraged to insure themselves against unfavorable shocks, thereby reducing the pressures for bailout. Since the management of the portfolio and open market operations of the ECB could result in an implicit bailout, constraints might have to be imposed on the operations of the ECB as well. 2/

c. Other adverse externalities: implicit bailouts by other EMU countries

The creation of a monetary union, by reinforcing several adverse spillover effects associated with expansionary budgetary policies, would allow EC countries to shift part of the costs of their deficit financing to their EC partners. 3/ The mechanisms discussed below can be interpreted as alternative, less visible (than explicit budgetary transfers), channels through which EC countries may bail out a partner country that pursues lax budgetary policies.

These channels involve the existence of tax and other distortions in partner countries, which are exacerbated by expansionary budgetary policies at home. For example, the creation of the EMU would enhance intra-EC capital mobility. Therefore, higher interest rates due to higher public borrowing in any particular EMU member state would increasingly spread to

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1/ The issues of budgetary bailout are related to the questions of monetary bailout discussed above. The reason is that the interest pressures generated by a budgetary bailout may lead to monetary accommodation and thus reduce the credibility of the commitment to price stability.

2/ It should be noted that the no-bailout clause applies only to other EC governments. Current governments can still shift the burden to future governments of the same country as long as the latter honor the debt obligations inherited from previous governments (see Section IV).

3/ Depending on the nature of the shock hitting the system, expansionary budget policies may also exert positive externalities that are associated with the stabilization role of budgetary policy (Section V).

other EMU countries. This would tend to raise the costs of debt servicing facing other EMU governments because public sectors are generally net debtors. Moreover, tax bases may shrink as investment in other countries is crowded out. Hence, other governments would be forced to raise rates of distortionary taxation. Furthermore, higher interest rates might worsen the distortions associated with real wage and other labor market rigidities because higher interest rates often require lower real wages and a reallocation of labor in order to maintain economic activity and employment, as demand for nontradables contracts and capital moves to other countries.

2. The margins for budget control in the EMU

Drawing on Blanchard (1984), the notion that there exist margins for controllable budgetary policy can be explained through the following expression for the annual change in the debt/GNP ratio (derived in a straightforward manner from the government budget constraint):

$$(1) \quad b_t - b_{t-1} = ((r-g)/(1+g))b_{t-1} - x_t \ ,$$

where b is the year-end debt/GNP ratio, x the primary budget surplus (revenue minus non-interest expenditure) relative to GNP, r the nominal rate of interest on public debt, and g the nominal rate of GNP growth. 1/ From (1) it is clear that a stable debt/GNP ratio requires that the primary balance equals:

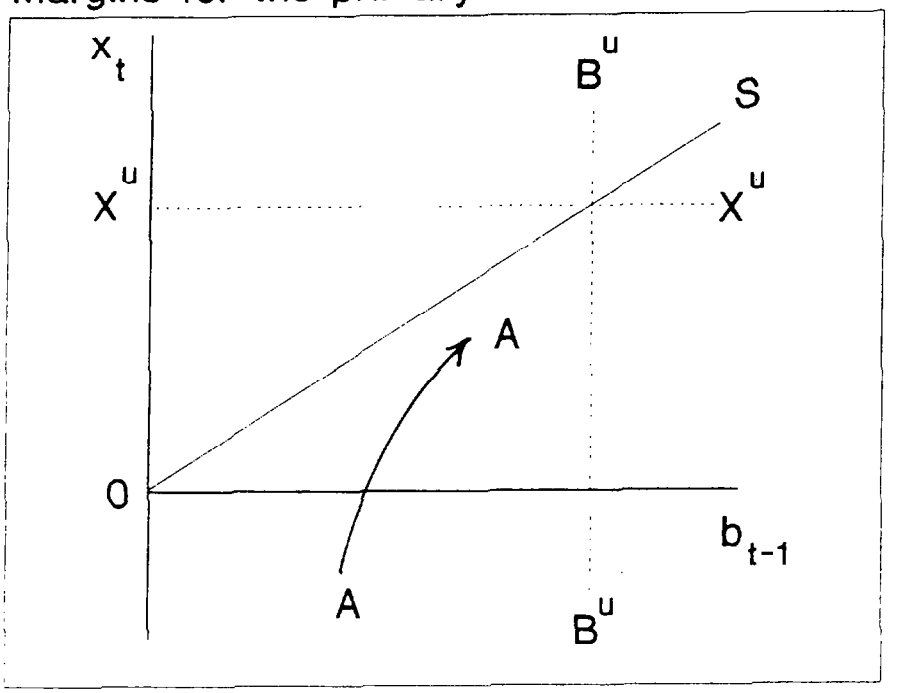
$$(2) \quad x_t = ((r-g)/(1+g))b_t \ .$$

Thus, stabilization at a positive value of the debt/GNP ratio, 2/ requires that the primary balance be in surplus. The higher the debt ratio, the larger the surplus needed for stabilization. However, given that an upper limit exists on feasible government revenues and a lower limit on government expenditures (both relative to GNP), it is obvious that the primary balance can be adjusted only within certain margins. It is therefore imperative for controllability that the debt/GNP ratio not move beyond the limit compatible with the margins on revenues and expenditures. This is illustrated in the Figure, where the line OS represents combinations of the primary balance and the debt/GNP ratio at which according to (2) the latter is stabilized (the ratio rises in the area below this line, and falls above it), the area below X^uX^u represents the range of feasible primary balances, and hence the area to the left of B^uB^u represents the range of feasible debt/GNP ratios.

1/ In reality the rates r and g are of course not necessarily constant over time--see below for further discussion.

2/ Assuming a positive interest/growth differential; see Abel et al. (1989) for theoretical and empirical discussion.

Figure
Margins for the primary deficit and the debt



Note: The symbols are explained in the text.

In practice the speed at which government revenues and expenditures can be adjusted over time is limited as well. This implies that, from a starting position where the debt/GNP ratio is rising, it may take a few years to move the primary balance toward a surplus sufficient for stabilization of the ratio; a typical adjustment path is represented in the Figure by AA. Moreover, the budget adjustment process may have an impact on the rate of interest and the rate of growth, rotating the line OS counter-clockwise (if the differential between the rate of interest and the rate of growth turns out to rise, due to, say, demand effects) or clockwise (if the opposite happens, due to, say, credibility effects). For a given feasible margin for the primary balance, these effects may narrow or widen the feasible margin for the debt/GNP ratio. The general conclusion is that a controllable policy must probably remain well within both of these margins. Policies forcing the public budget into the "grey regions" close to the margins will generate pressures for bailout, either by fellow EC member states or through higher inflation (i.e., higher revenue from money seigniorage, raising the primary surplus). 1/

1/ Revenues from money seigniorage and from privileges in financial markets are included with tax and non-tax revenue rather than with borrowing, and hence entered "above the line."

Consequences of the EMU for these margins may operate through (i) changes in the maximum feasible level of government revenues and the minimum feasible level of government expenditures as well as the government's ability to vary revenues and expenditures independently, and (ii) the endogeneity of the rate of interest and the rate of growth (the slope of OS).

(i) As argued in the previous section, the enhanced mobility of tax bases in the EMU will probably reduce member countries' scope for maintaining widely divergent non-benefit tax levels. This would unambiguously narrow the budget margins for countries where for economic and other reasons the maximum permissible taxes are currently relatively high or the minimum permissible government expenditures are currently relatively low. Furthermore, factor mobility is likely to force governments to rely more heavily on benefit taxes that are related to specific expenditures, making it more difficult to increase revenues while at the same time keeping constant or reducing spending. As a consequence, it will become more difficult in an EMU to absorb shocks to the budget by discretionary variations in other expenditure or revenue items.

(ii) It is not clear a priori whether the EMU would raise or lower the sensitivity of the rate of interest on government debt and the rate of economic growth to changes in budgetary policy. It depends on the balance of several opposing forces (discussed above) whether in the EMU a process of, say, budget consolidation would have a relatively small or a relatively large tendency to rotate counter-clockwise the line OS (along which the debt/GNP ratio is stabilized).

IV. Monetary Union and Optimal Budgetary Policy: Intergenerational Equity and Intertemporal Efficiency

This section explores how establishing a monetary union may affect the incentives to pursue budgetary policies that are excessively expansionary from the standpoint of intertemporal efficiency and intergenerational equity. It concludes that the monetary union may, on balance, worsen political distortions that give rise to a deficit bias, and, therefore, burden future generations. Thus, some constraints on budgetary policy may be desirable to protect not only other EC countries (Section III) but also future generations (and future governments) domestically. 1/

The basic factor in this context is that monetary union may reduce the cost of borrowing as perceived by the government in power, as growing financial integration allows governments to borrow increasing amounts without having to face sharply rising interest rates (Section II). In a

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1/ This section assumes that governments honor the debt obligations incurred by their predecessors. Section III discussed issues associated with debt repudiation, default, and bailouts by EMU partners.

model in which political distortions result in a short-run bias of political decision makers, lower borrowing costs tend to exacerbate a political distortion in favor of current generations.

The "political" discount rate may exceed the social discount rate for various reasons. Alesina and Tabellini (1987), for example, argue that governments feature short time horizons because they face a probability of being voted out of office and replaced by a government pursuing different objectives. According to their model, the deficit bias becomes more serious if the probability that the current government is not reappointed rises, if the polarization in the political process becomes larger, or if government spending becomes more rigid (i.e., the government has to provide a minimum level of certain public services).

Roubini and Sachs (1988) identify additional reasons for a deficit bias, including the difficulty of reaching cooperative agreements in coalition governments--especially if governments turn over rapidly. Other models of public choice also suggest that asymmetric information and other imperfections in the political process may result in a short-term bias of political decision making. For example, bureaucrats may succeed in raising current spending and borrowing at the expense of the welfare of the private sector (see, e.g., Mueller (1979), Brennan and Buchanan (1980), and van Winden (1983)).

Another channel through which a monetary union that credibly fixes the intra-EMU nominal exchange rates would increase the political incentives to run large budget deficits is the removal of an external constraint in the form of the publicly very visible sanction of an exchange rate depreciation. Speculative attacks in foreign exchange markets constitute a powerful disciplining device for governments that are tempted to pursue lax budgetary policies. If each country is free to set its own monetary policy, larger public deficits are often accompanied by a weaker exchange rate because financial markets expect that governments will eventually succumb to the temptation to monetize public deficits. 1/ Indeed, lax budgetary policies increase the incentives for governments to implement more expansionary monetary policies (see Subsection III.1.a.). A monetary union, however, reduces the ability of any one government to monetize its budget deficits, and, therefore, offers a technology for each individual EC country

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1/ Increased public borrowing would appreciate the (nominal) exchange rate if financial markets expected that monetary authorities would resist this temptation. In the United States and the Netherlands, for example, large budget deficits have at times been accompanied by exchange rate appreciation.

to make commitments with respect to monetary policy. 1/ The removal of the external constraint results in a lower inflation tax on current generations but is likely to enhance the incentives facing governments to shift the burden of taxation intertemporally to future generations. Thus, in a classic second-best result, a monetary union may well reduce (properly discounted) social welfare by exacerbating political distortions, although it strengthens the credibility of the commitment of each individual government to refrain from monetary financing.

Policymakers may find expansionary budgetary policies more attractive in a monetary union because such policies may become more effective in stimulating employment and economic activity in the short run. In particular, in an environment of sticky prices and high capital mobility, a fixed exchange rate regime gives rise to larger positive short-run effects of expansionary budgetary policies on domestic aggregate demand and employment than does a floating exchange rate regime. However, this argument should become less valid to the extent that the internal market increases the share of domestic demand that falls on imports from other EC countries and thus budgetary expansion fails to boost domestic output and employment. 2/

The danger that the monetary union might result in less budget discipline argues in favor of directly addressing the political distortions that give rise to the deficit bias. However, it may not be feasible to reform the political process or to design institutions aimed at strengthening the incentives for governments to take the welfare of future generations into account. In that case, surveillance by the EC and ceilings on public borrowing or debt imposed by the EMU as a whole might benefit social welfare in each country because such constraints would help to protect the interests of future governments and generations at home. In this connection, Tabellini (1987) argues that international institutions and rules of conduct can correct domestic political distortions originating from alternating governments because these institutions provide a mechanism for binding the choices of future governments. While international cooperation on discretionary policies might be undesirable because it excludes future policymakers, cooperation around general rules of conduct could be desirable because it would also be binding for future governments.

1/ In the terminology of Masciandaro and Tabellini (1988), monetary policy becomes more "dominant", that is, budgetary rather than monetary policy takes on the burden of repaying public debt. However, as Section III pointed out, lax budgetary policies may heighten the pressure on the ECB to pursue more expansionary policies. Therefore, depending on the arrangements for the conduct of EMU-wide monetary policy, budgetary laxity may compromise the credibility of the commitment of the EMU to price stability.

2/ Of course, it is also true that there is already a considerable degree of fixity of exchange rates between countries participating in the exchange rate mechanism of the EMS.

V. Stabilization Policy

In this section, the costs and benefits of budgetary flexibility are examined from the point of view of influencing aggregate demand and employment. The benefits involve the ability to offset shocks that hit member nations (subsection V.1). This ability may substitute for a system of intra-EC transfers at the Community level (subsection V.2). The costs of budgetary flexibility involve the dangers of fine-tuning and the possibility that activist budgetary policies may impose negative spillover effects on other countries. A concern to avoid fine-tuning would argue for (possibly contingent) rules rather than pure discretion (subsection V.3). Negative spillover effects would be minimized by international coordination of budgetary policies (subsection V.4). It is a question considered below as to whether deficit ceilings, though not a fully optimal solution either to the tendency to fine-tune or to the coordination problem, might nevertheless serve to attain a better solution than budgetary policies that are set independently.

1. Advantages of budgetary flexibility

Broadly speaking, the role of macroeconomic stabilization policy is to respond to exogenous shocks that push the economy away from the objectives of adequate growth, full employment, and price stability. The emphasis in recent years has shifted away from the former two objectives toward the latter, with the recognition that macroeconomic policies are less effective than was thought earlier in durably stimulating output and employment. Instead, setting appropriate structural policies and letting the private sector operate in an environment of predictable, rigorous government financial policies are seen as the best way for achieving these objectives. The emphasis on price stability has also given more prominence to monetary policy. In these circumstances, limiting budgetary flexibility might not involve much in the way of costs. Nevertheless, there might be value in retaining the ability to influence aggregate domestic demand and the real exchange rate, and thereby to achieve macroeconomic objectives. Use of budgetary policy to influence aggregate demand might become more relevant in a monetary union because the monetary policy/exchange rate policy tool would no longer be available to national policymakers. This would be especially so if the EMU were to feature serious price and wage rigidities and limited international labor mobility. In those circumstances, adjustment to shocks may be prolonged and unnecessarily costly in terms of welfare.

Budgetary flexibility is likely to be most important when countries are hit by asymmetric shocks, which by their nature cannot be neutralized by community-wide monetary policy, or when shocks are symmetric but there are differences in either national preferences or initial conditions. Illustrations of these possibilities are given in Masson and Mélitz (1990). Since monetary union might not involve far-reaching political union, at least not for the foreseeable future, it is quite conceivable that national authorities would continue to feature different preferences--for instance, a

primary concern in the short run for full employment in France but for price stability in the Federal Republic of Germany. Community-wide monetary policy would not be under the control of either country, so each might try to use budgetary policy to attain its own short-run objectives, subject to longer-run convergence to a common (low) inflation rate. In addition, starting from quite different situations with respect to the current account--for example, in the EMU a situation with a small deficit for France and a large surplus for Germany might arise again, as might the reverse--desired policy responses would likely be quite different. It is argued in Masson and Mélitz (1990) that, in response to a dollar shock or an inflation shock, constraints on budgetary flexibility would lead to significantly lower welfare compared to a situation where each country could respond flexibly.

2. Optimal currency areas and budgetary transfers

Budgetary flexibility of national governments can act as a substitute for a system of transfers at the Community-wide level. It has long been recognized that in the absence of labor mobility or of price and wage flexibility, a system of budgetary transfers that redistributes income to areas experiencing a fall in demand and high unemployment may be desirable, since it would have a stabilizing effect. 1/ Labor mobility is lower in the EC than in existing federal states, such as Canada and the United States; real wage flexibility is also estimated to be quite low in Europe compared with North America (Bruno and Sachs (1985)). The need for budgetary transfers and/or budgetary flexibility in the EMU would depend on the extent to which the EMU raised labor mobility and real wage flexibility.

In the absence of transfers, or of other policy tools to cushion shocks, it has been argued that monetary unions would not survive, since severe shocks would lead to defections (Sachs and Sala-i-Martin (1989)). Though the EC already has a system of transfer payments, transfers are of a much smaller scale than in monetary unions such as the United States; moreover, existing transfer payments are geared to structural differences, not stabilization objectives. As Sachs and Sala-i-Martin (1989) show, in the United States, the Federal income tax serves a major function of absorbing shocks, since tax receipts are higher in favorably-affected regions and lower in unfavorably-affected regions. The Community will not have a similar system of taxation for the foreseeable future, as national authorities will retain almost all revenues collected within their jurisdiction.

In such circumstances, the ability to run national deficits may substitute for receiving transfer payments from other member countries. Provided the shocks are temporary, occasional borrowing should be possible without affecting solvency. The existence of a Community-wide capital market in a common currency may make it easier than in the past to smooth

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1/ See Mundell (1961) and Kenen (1969). There may also be equity and efficiency reasons for such transfers; see Boadway and Flatters (1982).

shocks by borrowing, making it less necessary that monetary union be accompanied by an enhanced system of transfers. Deficit ceilings, if they prevented borrowing in these circumstances, would restrict the use of an instrument for cushioning shocks. 1/

It may be difficult to distinguish optimal cushioning of temporary shocks from delaying the needed adjustment to permanent shocks, however. The effects of even temporary shocks may exist for years if not decades, and legitimate doubts may persist about their ultimate effects and about the ability of governments to take a long view. In practice, governments have sometimes fostered market rigidities because budgetary measures are perceived as a substitute for real adjustment; this would apply to transfers as well as national stabilization policies.

3. Dangers of fine-tuning

It is now widely accepted that there are advantages to running macroeconomic policy in a context of stable rules, rather than leaving policy to the complete discretion of the authorities. Simple, easily understandable rules should enhance the predictability of policy actions, thereby providing a stable environment for the private sector to make informed resource allocation decisions. In contrast, policy that is unfettered by rules may attempt to "fine-tune" target variables, and this may have several undesirable effects. First, policymakers may unwittingly destabilize the economy, if the dynamic response of policy is not gauged and implemented correctly--as is likely in practice. Second, discretionary policy setting may be myopic for the reasons discussed in Section IV. Budgetary policy could be framed in a medium-term context to offset this tendency. Third, use of budgetary flexibility to "bail out" firms, sectors, or regions may have unfavorable effects on private sector behavior, since the efficiency that accompanies market discipline could be impaired. In particular, discretion may encourage rent-seeking behavior and impair real adjustment to shocks by fostering market rigidities. Deficit, or debt, ceilings would prevent the unconstrained use of budgetary flexibility, and avoid some of the problems experienced in the 1970s and 1980s, when the cumulative effects of budgetary stimulus were sometimes ignored (see also Section IV).

The mere announcement of policy rules would not however ensure that they are carried out. In general, there is a time-inconsistency problem for budgetary as well as for monetary policy, which implies that the passage of time creates incentives for the authorities to abandon a policy which was optimal when announced. For instance, the commitment not to bail out

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1/ Of course, to the extent that shocks produced transitional costs because of inflexibility in labor and product markets, it would be worthwhile to approach the first-best solution by reducing or, if possible and desirable from a broader social perspective, eliminating this inflexibility.

inefficient firms may be difficult to honor when massive unemployment threatens and the costs of a one-time bailout seem small. Ceilings imposed from outside, i.e. at the Community level, might reduce the time-inconsistency problem by putting constraints on national governments. The Community as a whole would not face the same incentives to renege on the deficit ceilings--unless all the member countries faced the same difficulties at the same time.

4. Need for international coordination of stabilization policies

In one of the scenarios presented in Masson and Mélitz (1990)--simulation of an oil price shock--it was argued that the outcome might be much worse without coordination, because with different preferences each country would worsen the situation facing the other, leading to a possibly unstable circle of tightening policies. It is well known that the existence of spillovers constitutes a prima facie case for policy coordination. With fixed exchange rates among the countries of the monetary union and floating exchange rates vis-à-vis the rest of the world, there may be externalities that reinforce the case for such policy coordination. Cohen and Wyplosz (1989) argue that trade balance externalities would lead to an over-activist use of budgetary policy in response to an asymmetric, temporary supply shock. Therefore, coordination of the two countries' policies would make both better off. However, it is not clear that the externalities related to stabilization policy that are present under monetary union are more serious than those that prevail in its absence; indeed, the opposite case could be made (Bredenkamp and Deppler (1989)).

These externalities must be considered jointly with other externalities involving budget discipline and the credibility of monetary policy, discussed in Section III above. Because of the nature of stabilization policies, namely the use of budgetary instruments to offset shocks, the nature of the distortion or externality generally depends on the actual shock. For instance, for a positive oil price shock, spillovers between countries may lead to overcontractionary aggregate demand policies, while the example of Cohen and Wyplosz (1989) involves overexpansionary policies. In contrast, the distortions discussed in Sections III and IV are structural, and imply in most cases a persistent bias toward excessive deficits, depending on the arrangements for conducting monetary policy and for bailing out member states.

Coordination of discretionary macro policy may not always increase welfare. 1/ Tabellini (1987) has shown that coordination between governments may lower welfare, because the private sector and future policymakers are excluded from the coordination agreements. In particular, coordination may worsen a deficit bias. There are also costs to negotiating agreements and difficulties in enforcing compliance. With lack of

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1/ See Horne and Masson (1988) for a discussion of some of the issues. Feldstein (1988) and Tanzi (1988) caution on various grounds against international coordination of macro policies.

information about the precise effects of policies, coordination may in some cases make things worse (see Frankel and Rockett (1988), but also Ghosh and Masson (1988)).

Assuming coordination is desirable, could deficit ceilings also lead to a better outcome? Starting from a position close to the ceiling, countries that would be inclined to stimulative budgetary policy would be constrained from doing so. However, excessive budgetary contraction would in no way be limited by such ceilings. It therefore seems unlikely that constraints on budgetary policy of the kind advocated in the Delors report would consistently help to reach the coordinated solution, unless the net effect of the various distortions is always to lead to overexpansionary policies. For some shocks requiring coordination, constraints would either not be binding or they would likely involve welfare losses from the point of view of macroeconomic stabilization. The same would apply to debt ceilings and other constraints that are not symmetric with respect to positive and negative deviations from optimal policies. Though in principle rules might be designed that allowed for a degree of flexibility (Buiter (1981)) inside bands fixed by some supranational authority, it seems unlikely that they could be specified in a simple and transparent way that took into account all eventualities. What such constraints on budgetary policy would achieve is convergence, not coordination, and this might be seriously suboptimal in some circumstances. Moreover, if these constraints were to reduce the stabilization role of budgetary policy, pressures on EMU monetary policy to shoulder the stabilization role might increase, at the cost in some circumstances of higher inflation. In these circumstances, monetary policy might result in suboptimal outcomes, because of inappropriately stimulative targets (Barro and Gordon (1983)).

VI. Concluding Comments

This paper considered, at an analytical level, whether the EMU will make it desirable to institutionalize constraints limiting the freedom of national budgetary policies. The issue was approached from three angles: the influence of the EMU on (i) budget discipline; (ii) intergenerational equity and intertemporal efficiency; and (iii) macroeconomic stabilization.

The EMU may reinforce several adverse externalities that any particular EC country can impose on fellow member states by pursuing an expansionary budgetary policy. In a monetary union, excessive budget deficits incurred by any country may compromise the credibility of the union's monetary policy with respect to price stability, and raise pressure on other member states to bail it out. Also, the monetary union may increase the temptation to shift the burden of an expansionary budgetary stance to future generations at home.

The first-best solution to the problem of monetary credibility would be to appoint "conservative central bankers" with an unassailable commitment to price stability to run monetary policy (with operational independence from political authorities). As regards the bail-out problem, an effective

mechanism to rule out the possibility of a bailout should be designed. The first-best solution to the tendency to shift burdens onto future generations would be somehow better to represent their interests in the political process. However, this issue goes well beyond the scope of this paper.

Given that it will be difficult to attain these first-best solutions, the question remains what contribution constraints on budgetary policy institutionalized at the EC level can make. Given the dangers of a deficit bias, it is tempting to conclude that constraints on deficits and debts or a tax on public borrowing would be desirable. However, practical arguments would caution against such a conclusion.

In order to be neither too tight nor too lax, such budgetary rules would need to be attuned to the targeted externalities and to the specific circumstances of member states. For example, they would have to take account of contingent liabilities of governments and the structure of tax and expenditure systems. Furthermore, it would be very difficult to design rules that would allow member countries to use macroeconomic policy to offset shocks and at the same time would internalize international externalities associated with the use of stabilization policies. In addition, "creative accounting" at the implementation stage might enable governments that are committed to the formalities but not the underlying spirit of the rules largely to circumvent them (e.g., Gramm-Rudman-Hollings, use of state enterprises in Italy, and the experience of New York State--see Bishop et al. (1989)). Practical difficulties in formulating clear and unambiguous rules would also make it hard to enforce them, which in turn would undermine their credibility and disciplining force.

Given these practical aspects and taking heed of the subsidiarity principle, the following considerations seem especially relevant for the design of EMU. First, the firm institutionalization of the ECB's commitment to price stability and of the no-bailout clause would be a move in the direction of the first-best solutions. Second, policies that, in the context of the internal market or otherwise, enhanced the supply-side flexibility of EC economies (flexibility of relative prices and wages), would reduce the temptation to use expansionary policies to boost domestic output and employment. Flexibility of relative prices and wages would also temper the need for demand management, facilitate adjustment to both temporary and permanent shocks, and reduce the need for an intra-EC transfer mechanism. Third, an intra-EC surveillance process for budgetary policies would provide a mechanism for internalizing the externalities associated with undisciplined budgetary policy; the negative spillovers of excessive deficits on future generations at home and abroad would become more visible. It might also include binding procedures for forcing efficient adjustment upon countries with excessive deficits and debt. The surveillance process could be grounded on common principles and accounting frameworks, thereby reinforcing the awareness of policymakers, financial markets, and the electorate, that the EMU is oriented toward policy discipline not only in the monetary but also in the budgetary field.

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