

## Fiscal policy in the EMU and outside

Torben M. Andersen\*

### Summary

Fiscal policy becomes an issue in the EMU when fiscal policy decisions remain decentralized at a national level, while monetary policy becomes centralized. Accordingly, the Maastricht Treaty stresses the need for budgetary discipline and includes norms for fiscal policy, which are also part of the convergence criteria.

Decentralized fiscal policy decisions may bias the policy mix toward an expansionary fiscal policy and a contractionary monetary policy. The basic mechanism is that a high, overall level of public debt tends to increase interest rates. This provides an argument for a debt norm—while the deficit norm is less relevant for this problem. But a debt norm does not deal with all international externalities in fiscal policy. And it interferes with the effective exploitation of the possibilities for inter-temporal substitution and risk sharing offered by capital markets.

The deficit norm is not directly related to any externalities in fiscal policy, but it reduces the room for an active stabilization policy and the possibilities for risk sharing via capital markets. To fulfill this norm, many countries will have to make the public budget less sensitive to business cycle fluctuations thereby reducing the insurance function performed by the public sector.

The fiscal norms of the EMU are thus too tight, but it is not obvious that more freedom in fiscal policy is gained by staying outside. Any deviation from the norms of the EMU would be interpreted as if the option to change the exchange rate may be used and thus, severe credibility problems are likely to arise.

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## Fiscal policy in the EMU and outside

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The debate on the Economic and Monetary Union (EMU) has primarily focused on the direct implications for monetary policy and exchange-rate policy. Although an obvious starting point, it should also be recognized that the EMU has implications for economic policy, in general, both by changing monetary and exchange rate policies and by constraining the use of other policy instruments.

This paper considers the implications of the EMU for fiscal policy and raises the following two questions:

- Is it necessary to constrain fiscal policy to make the EMU work efficiently? Or should one aim at the largest possible degrees of freedom in fiscal policy since it becomes the only remaining macroeconomic policy instrument?
- If some constraints on fiscal policy are needed, will it necessarily imply less room for an active stabilization policy? Or is it possible by other means to enhance the possibilities for stabilizing the economy and ensure full employment?

To address these questions, the way in which fiscal policy is affected by moving to a situation with an irrevocably fixed exchange rate and a common monetary policy must be evaluated:

- Will that necessarily lead to more expansionary fiscal policies and a stronger tendency for governments to run deficits?
- If so, will that have important consequences within the EMU and will it be difficult to manage monetary policy without restraints on fiscal policy?
- Are there important negative externalities in fiscal policy across countries that can justify restraints on fiscal policy?

This paper addresses these questions and discusses the consequences for countries joining the EMU and for countries—voluntarily or involuntarily—staying outside the EMU.

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That fiscal policy will remain a national domain within the EMU must be stressed from the start. In 1995, the EU fiscal budget amounted to only 1.2 percent of total GDP in the member states. Hence this budget is only of marginal macroeconomic importance. Because it is unlikely that the common fiscal budget of the EU will increase significantly within the near future, the analysis proceeds under the assumption that the EMU will be characterized by a centralized monetary policy and a decentralized fiscal policy.<sup>1</sup>

This paper is organized like this: Section 1 reviews the parts of the Maastricht Treaty that deal with fiscal policy. Section 2 briefly reviews the current levels of public debts and deficits. Section 3 addresses the solvency problem. Section 4 considers the international interrelationships in fiscal policy. Section 5 considers the role of fiscal policy as a stabilizer of business-cycle fluctuations. Section 6 discusses the need for coordination of fiscal policy and the appropriateness of the fiscal norms—in light of the discussion in section 4 and 5. Section 6 also considers whether there is a need to extend restraints to other areas such as the labor market to ensure high-level employment and living standards. Section 7 discusses the immediate fiscal policy implications and the situation for countries that voluntarily or involuntarily stay outside the EMU.

## 1. Fiscal policy in the Maastricht Treaty

The Maastricht Treaty (Council of the European Communities, 1992) includes general guidelines for economic policy beyond the specific details related to the single currency and the conduct of monetary policy. After stating that the “member states shall conduct their economic policies with a view to contributing to the achievement of the objectives of the Community” (article 102A) and outlining some surveillance mechanisms (article 103), the Treaty provides more specific guidelines for fiscal policy in the EMU.

Article 104 precludes any overdraft facility or any other type of automatic credit facility to member states with the European Central Bank (ECB) and central banks of the member states. This rules out monetary financing of public deficits and effectively means that any

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<sup>1</sup> Earlier proposals for a monetary union in Europe have been accompanied by proposals to centralize fiscal policy decisions as in the Werner report launched in 1970 and to develop a federal fiscal system as in the MacDougall report from 1977 (Gros and Thygesen, 1992).

deficit must be financed on market terms by issuance of securities and bonds.

A *no-bailout* clause in article 104b clarifies that the debt of a member state is neither a liability nor implies any commitments on the part of the community nor any other member state.

To ensure *budgetary discipline* in member states, article 104 stipulates that the commission shall monitor whether the ratio of:

- (a) the planned or actual government deficit to gross domestic product exceeds a reference value, unless:
  - either the ratio has declined substantially and continuously and reached a level that comes close to the reference value;
  - or, alternatively, the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value;
- (b) government debt to gross domestic product exceeds a reference value, unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace.

The reference values are given in a protocol to the Treaty and are 3 percent for the deficit-to-GDP ratio<sup>2</sup> and 60 percent for the debt-to-GDP ratio.<sup>3</sup> The figures apply to the consolidated public sector. There is no explicit definition of exceptional and temporary deviations from the reference values although it is implicit that normal business-cycle fluctuations do not justify deviations from the norms. Likewise, it is not precisely specified at which speed the reference values should be approached for the process to be satisfactory. Another protocol makes these budgetary norms part of the convergence criteria.

<sup>2</sup> This is roughly equal to the average share of public investment in GDP. The rule thus permits so-called *golden rule* investments in the public sector, which means that the deficit spending is allowed for public investments.

<sup>3</sup> Obviously, these values are arbitrary and reflect the budgetary situation at the time of writing the Maastricht Treaty when the average debt-to-GDP ratio was slightly above 60 percent and the deficit-to-GDP ratio about 4 percent. Note that period  $t$  debt can be written  $D_t = B_t + D_{t-1}$ , where  $D$  is the debt level and  $B$  is the budget deficit including debt service. The debt-to-GDP ratio  $D_t/Y_t = d_t$  can be written  $d_t = b_t + (1+g_t)d_{t-1}$ , where  $b_t = B_t/Y_t$  and  $g_t$  is the growth rate of  $Y$ . For a stable debt-to-GDP ratio, we must have  $d = ((1+g)/g) b$ . It follows that a target value of 60 percent for the debt-to-GDP ratio requires (about) a deficit-to-GDP ratio of 3 percent if the growth in nominal GDP is 5 percent.

Article 104c also outlines possible sanctions toward countries not fulfilling the budgetary norms. The Commission surveys the situation and prepares a report in case a country violates the norms. If the Council decides by qualified majority that the budgetary norms were violated, it must make recommendations on how to bring the situation to an end. Here, if the country does not take actions, these recommendations can be made public. If a member state does not take sufficient action, the Council may decide to prepare proposals for specific measures to be undertaken. If the member state fails to comply with such a decision, the Treaty stipulates that the Council may:

- (i) require the member state to publish additional information before issuing bonds and securities;
- (ii) invite the European Investment Bank to reconsider its lending policy;
- (iii) require a non-interest bearing deposit of an appropriate size until the excessive deficit has been corrected; and
- (iv) impose fines of an appropriate size.

These sanctions have an optional character because it is not explicitly stated under which conditions these actions should be undertaken.

These criteria for public deficits and debts have been vividly debated with some arguing that they primarily serve a role in the transition period as convergence requirements. While others stress that they are important to make the EMU work. The Stability and Growth Pact agreed on by the European Council meeting in Dublin, December 1996, makes clear that the fiscal norms also apply in Stage Three of the EMU. The pact stipulates that member states should commit themselves to a "medium-term budget position close to balance or in surplus." Member countries should present "stability programs" that specify medium-term budget objectives. The Pact also specifies monitoring and surveillance procedures. Events allowing member states to deviate from the fiscal norms are defined to be unusual events outside the control of the relevant member state. As an operational target, it is stipulated that an excess over the reference value is considered to be exceptional only if the annual fall of real GDP is at least 2 per cent. In case of deviations from the norm, sanctions in the form of non-interest bearing deposits are imposed. And they will be converted into a fine if the deviation has not been brought to an end after two years. The deposit has a fixed component equal to 0.2 per cent of GDP and a variable component equal to one-tenth of the ex-

cess of the deficit over the 3 per cent norm. There is an upper limit of 0.5 per cent of GDP for the annual amount of deposits.

It is not productive to discuss whether these norms are optimal. They would be so only by chance. And who has enough information to determine the optimal rules for fiscal policy in the EMU? So the next section poses the more modest but pragmatic question of whether these norms are conducive for the functioning of the EMU or whether they restrain fiscal policy in a counterproductive way.

## 2. Developments in debt and deficits

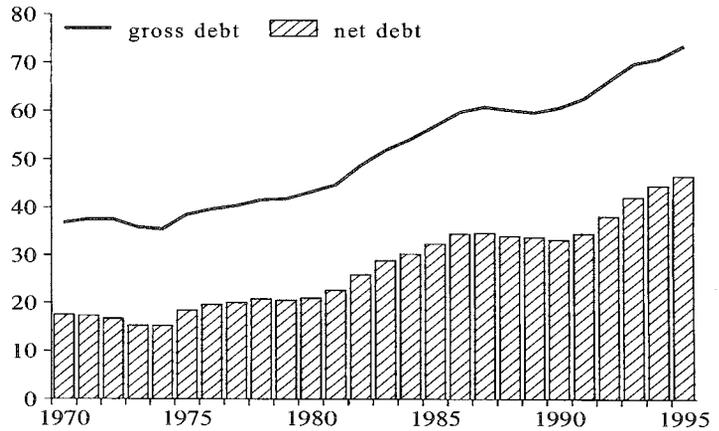
Before discussing budgetary norms of the EMU, it is useful to put these into perspectives by considering the actual development in public sector deficits and debt levels.

During the last few decades, most industrial countries have experienced increasing public-sector debt levels. Figure 1 shows this. Whereas this development was initiated by persistent primary budget deficits, the development during the last decade has been influenced by the fact that the real interest rate, corrected for the growth rate, has turned positive, which in itself accelerates debt accumulation.<sup>4</sup> Most of the deterioration in primary balances can be attributed to increases in public transfers rather than increases in public consumption (IMF, 1996). So it is obvious that the current debt situation calls for policy action especially when considering the burden on public finances, which will arise from an aging population in coming years. It is worth stressing that the issue of fiscal prudence is not one that arises with the proposal to establish EMU.<sup>5</sup>

<sup>4</sup> Changes in the debt-ratio can be written as  $d_t - d_{t-1} = p_t + (r_t - g_t)d_{t-1} + c_t$  where  $p$  is the primary budget deficit and  $c$  is debt corrections due to changes in the market value of outstanding debt.

<sup>5</sup> von Hagen (1992) and von Hagen and Harden (1995) argue that the budgetary process can influence the fiscal outcome, and hence institutional changes in the budgetary process can serve to induce fiscal discipline. This would be an alternative to external discipline in the form of budgetary restraints in the EU.

Figure 1. International development in the debt-to-GDP ratio



*Note:* Countries include Japan, Germany, France, Italy, Canada, Belgium, Sweden, Norway, Finland, the Netherlands, U.S., and UK. The countries are weighted by GDP shares.

*Source:* Danish Economics Council, 1996.

Figure 2 shows the development in the deficit-to-GDP and the debt-to-GDP ratios for the Nordic countries from 1970 to 1995. The diagram reveals that the fiscal situation has been according to the Maastricht budget norms most of the time.

Figure 2. Development in the public-sector debt levels

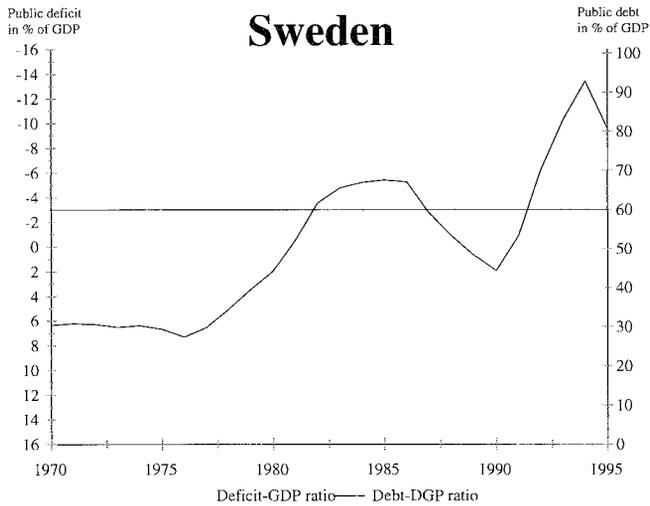
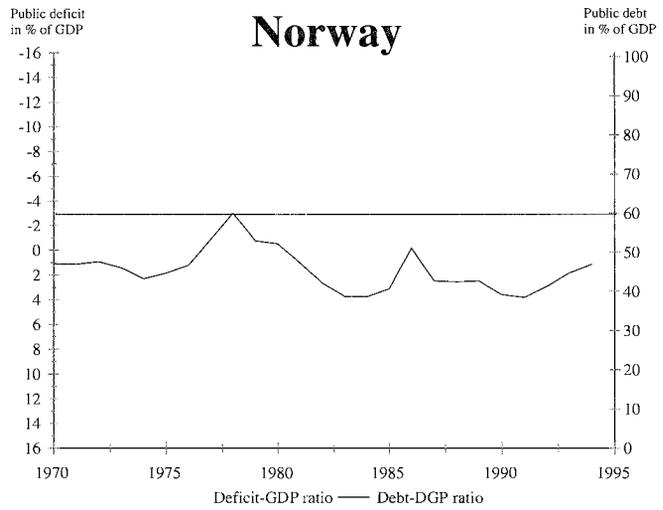
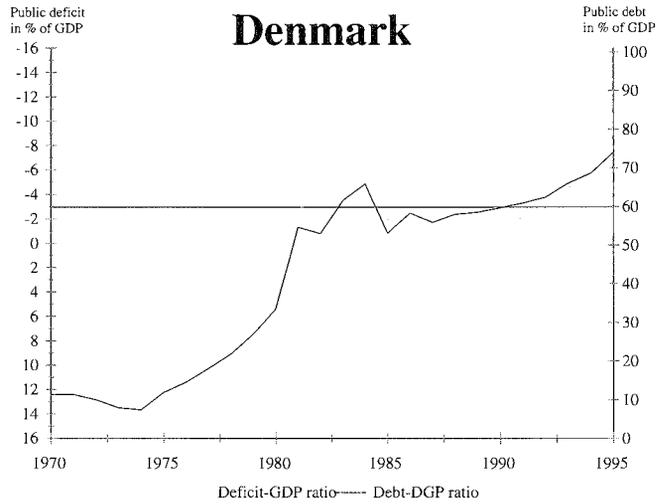


Figure 2 continued ...



But there have been violations, and recently there have been problems in fulfilling the norms. But note that past violations of these norms were temporary periods. That is, policy initiatives were taken to correct the situation even without explicit norms or commitments for the deficit and debt ratio. Although the current situation is characterized by high deficit and debt levels, it cannot be inferred from the historical development that there is a tendency for countries to be excessively ridden by public deficits and debts. The question is whether this situation changes when entering the EMU.

It is also noteworthy that there are several examples of recessions that, within a short span of time, have caused an increase in the deficit-to-GDP ratio of more than 3 percentage points for the Nordic countries (see Figure 2). So even if the budget is balanced initially, a recession easily deteriorates the budget to such an extent that the deficit norm would be violated.

### 3. Solvency

A problem with a centralized monetary policy and a decentralized fiscal policy arises if a member state can get a free ride on the other member states in financing its public expenditures.

One possibility of free riding arises because of the possibility that public expenditures can be money financed. The single government that expands expenditures will reap the full benefits hereof, but only bear a fraction of the costs of increasing inflation because the financing burden is shared among all member states in the EMU. Such a situation is clearly not tenable. But the Maastricht Treaty effectively precludes automatic credit facilities, and thereby monetization of public deficits are ruled out. So governments must finance expenditures by raising taxes or issuing bonds and securities. Countries that have relied on monetary financing (*seigniorage*) as an important source of public revenue must turn to other sources of revenue or adjust the level of public expenditures (Alesina and Tabellini, 1987). Because *seigniorage* revenue has been of little importance in northern Europe, this issue is not discussed further.

But the problem might remain regarding who will be ultimately responsible for the debt. In the extreme case where a member state may default its debt, the ECB or other member states may be expected to bail out the debt to protect the EMU by avoiding costs associated with domino effects in the financial sector. If so, member

states may not take enough precaution to avoid the default possibility. Such negative externalities associated with solvency problems can justify restraints on public-sector debt levels. The *no-bailout* clause aims at this problem. Obviously a credibility problem remains: will the clause be adhered to if a member state is brought into a situation where it will default on its debt? The *no-bailout* clause would have little credibility in the absence of the debt norm.

The possibility of free riding in a currency union is often exaggerated. Even though different member states issue debts in the same currency, this does not imply that, for example, bonds must carry the same return. Bonds issued by different debtors will generally have different returns if different risks are involved. So bonds issued by different member states are not necessarily perfect substitutes even though they are issued in the same currency. To the extent that a country is perceived to be approaching a default situation, it will face increasing default *prima* on its bonds and credit constraints, both of which will serve to discipline a potential irresponsible borrower. So if capital markets work reasonably efficiently, that would in itself provide discipline that prevents irresponsible borrowing. Empirical evidence indicates that this mechanism works, although it sometimes involves delayed and abrupt changes. A recent study by Bayoumi *et al.* (1995) considered how effective this market disciplinary device has been for single states in the U.S. They consider yields on municipal bonds issued by different states and find strong support in favor of the market discipline hypothesis.

Another problem is the indirect pressure that may arise if many member states have a large outstanding (nominal) debt and therefore put pressure on the ECB to pursue a more inflationary policy that will reduce the real debt burden. The best precaution against this possibility is to ensure independence of the central bank and make it adhere strictly to the goal of price stability. The current design of the ECB addresses these problems effectively.

To conclude, the norms on debt levels effectively preclude these solvency problems from arising. The Maastricht Treaty has effectively solved the solvency problem. But this may be accomplished in a too rigid way because debt levels that violate the norms can be sustainable (Buiter *et al.*, 1993). And this may have been achieved by imposing restraints that have other negative side effects.

#### **4. International interdependencies in fiscal policy**

An important reason why restraints on fiscal policy are needed, in the case of a move to a monetary union, is that they help ensure that the policy mix does not become biased toward an expansionary fiscal policy and a contractionary monetary policy. Such a policy mix will have substantial long-run costs by lowering investment and thus productivity growth. The presumption that fiscal policies would tend to be more expansionary is usually based on the Mundell-Fleming model, where fiscal policy is effective for an economy with liberalized capital movements if it has a fixed exchange rate but is ineffective in the case of a flexible exchange rate. Accordingly, entering a monetary cooperation that ensures credibility of a fixed exchange-rate policy would make fiscal policy more effective. This may lead to a more extensive use of fiscal policy instruments. Expansionary fiscal policies could cause problems for the common monetary policy because inflationary pressures could arise. The monetary policy response to this will probably be a more contractionary monetary policy stance that implies higher real interest rates.

The problem of interactions between fiscal and monetary policy is particularly relevant for the EMU given that monetary policy will be centralized while fiscal policy remains decentralized. But a case for restrictions on fiscal policy must rely on the presence of international externalities in fiscal policy. This section discusses the channels through which fiscal policy has international linkages and thus can be affected by the EMU, and the extent to which these externalities are targeted by the norms for fiscal policy in the EMU. Section 5 considers the domestic implications of fiscal policy in its role as a stabilization instrument. Section 6 evaluates the extent to which restrictions on fiscal policy are needed for the EMU to work efficiently and evaluates the implications of the norms.

##### **4.1. Interest rate interdependencies**

With liberalized capital markets, interest-rate determination is, to a large extent, determined by international developments. This implies an interdependency in fiscal policy if, for example, there is a positive link between fiscal deficits/debts and interest rates. An increase in the deficit/debt level in one country will thus tend to raise interest rates in international capital markets with consequences for other coun-

tries. The crowding out mechanism becomes international in a setting with fully liberalized capital markets.

Is it the case that public deficits (debts)—other things being equal—lead to higher interest rates? Is this mechanism reinforced when monetary policy is centralized while fiscal policy remains decentralized?

The theoretical literature does not predict a tight link between budget deficits/debts and interest rates. Thinking of world interest-rate determination as equilibrating worldwide savings and investments, it follows that the net borrowing requirement (current account balance) is the channel through which a given country affects world interest rates. Increasing net-borrowing requirements by a country is going to lead to higher interest rates worldwide—under plausible assumptions.

But there is no tight link between net external-borrowing requirements and public-sector deficits. To see this, start with the extreme case where the Ricardian equivalence hypothesis suggests that changes in government net savings are matched by one-to-one changes in private-sector net savings.<sup>6</sup> Here, the current account and thus the world capital market is unaffected by changes in the fiscal deficit in an individual country. Even if the Ricardian equivalence hypothesis does not hold, there is not a tight relationship between the budget deficit and the current account (refer, for example to Frenkel and Razin, 1987). The fact that the effects of budget deficits critically depend on the specifically changed instrument (expenditure or tax instruments) implies that no unambiguous theoretical predictions can be made on how budget deficits affect world interest rates. An empirical analysis of international spill-overs in fiscal restructuring also illustrates this (Bartolini *et al.*, 1995).

Turning to the empirical evidence, many empirical analyses have attempted to discern whether there is a positive relationship between the level of public debt and interest rates. Whereas the crowding out from public debts via interest rates is straightforward in a closed economy, it is more complicated in open economies with liberalized capital movements. Here, one should not necessarily expect any relationship between the level of interest rates and public debt in a given

<sup>6</sup> See Seater (1993) for a discussion of Ricardian equivalence and the available empirical evidence.

country because interest rates are determined in international capital markets. So single country studies are of little value. Recently, some multi-country studies were done (Tanzi and Fanizza, 1995; Ford and Laxton, 1995; Jenkinson, 1996) to analyze whether there is an international relationship between the level of public debt and interest rates. Indeed such an effect is found. An increase in the debt-to-GDP ratio by one percentage point appears to raise the real interest rate by between 7 (Tanzi and Fanizza, 1995) and 25 basis points (Ford and Laxton, 1995).<sup>7</sup> According to these estimates, the upward international trend in the debt-GDP ratio from the early 1980s to the early 1990s has caused an increase in real interest rates by between 150 and 450 basis points. These findings should be interpreted with some care because little effort is spent to control for other factors that influence interest rates and to deal with problems of reverse causality.<sup>8</sup>

Recent empirical evidence thus supports the hypothesis that an increase in public debt leads to higher demand for capital and thus higher interest rates. But note that this international spill-over arises from capital market liberalizations and the resulting capital-market integration. The mechanism thus works globally. So the international interest rate interdependency is not intimately linked to the EMU. The debt position of a single country has only a marginal effect on global real interest rates.

Moreover, the interest rate effect is an equilibrium response of the interest rate to changes in net savings. That changes in the public deficit in one country affect equilibrium interest rates, which cause interdependency among countries, is not evidence that externalities are involved. Rather it may be the response of the price mechanism to changes in the supply and demand for capital. So a positive link between interest rates and budget deficits/debts is not sufficient to warrant restrictions on deficit/debt levels. For this to be the case, there

<sup>7</sup> Nunes-Correia and Stemitsiotis (1993) also find that a one percentage point increase in the deficit-to-GDP ratio during a one-year period raises long-term interest rates by 17 to 72 basis points.

<sup>8</sup> If the real interest rate increases for some reason unrelated to public finances, it may lead to an increase in the debt-GDP ratio as debt servicing increases, while the primary deficit increases as GDP decreases due to the recessionary effects of higher real interest rates. So a positive correlation between interest rates and debt-to-GDP ratios does not prove a causal link from debt levels to interest rates.

must be effects that are not fully reflected in interest rates.<sup>9</sup> Chang (1990) develops a model with capital market imperfections and shows that a situation with decentralized fiscal policy may produce inefficiently large fiscal deficits and that this inefficiency is greater the larger the number of countries. But the case for imperfections in international capital markets as a cause for externalities in fiscal policy seems weak. And this argument does not provide a strong case for restraints on public deficits/ debt levels. Moreover, it is not at all clear that the EMU strengthens these mechanisms in such a way that it leads to excessive deficit and debt levels.

Inefficiencies may also arise due to the different decision structure in fiscal and monetary policy. A centralized or cooperative decision on both types of policies would consider the interrelationship between the two policy instruments and the objectives of fiscal and monetary authorities. But with decentralized fiscal policy and centralized monetary policy, inefficiencies may arise to the extent that the authorities pursue different objectives and the fiscal authorities do not consider the side effects on monetary policy. This may provide a tendency for fiscal deficits and debts levels to be higher because the decentralized fiscal authorities do not consider the implications of the induced increase in the interest rate (refer, for example, to Persson and Tabellini, 1995). In a second-best context where fiscal policy coordination is not feasible, restraints on fiscal policy regarding deficit and debt norms may be justified to avoid a policy mix where fiscal policy is expansionary and monetary policy is contractionary.

So it can be concluded that a more expansionary fiscal policy will probably put upward pressure on interest rates and therefore potentially cause an undesired policy mix. But the expansionary stance of fiscal policy cannot be evaluated by considering the public sector deficit level (nor the structural deficit). The reason is that international interdependencies also arise under fully financed changes in fiscal policy. That is, they are not intimately related to debts/deficits.

<sup>9</sup> The link between fiscal policy and interest rates may be associated with externalities in the case of credibility problems related to a fixed exchange-rate policy. An increase in the interest rate will have contractionary effects that may lower exchange-rate credibility and thus worsen the situation for countries facing an unemployment problem. The repercussions in the European exchange market after the German unification illustrate an example of this mechanism.

Limiting fiscal deficits/debts is not a precise way to target this externality. But a debt norm is a safeguard against a biased policy mix.

#### 4.2. Exchange rates

One important consequence of the EMU is that it implies a move from a unilateral fixed exchange-rate regime with credibility problems to a multilateral fixed exchange-rate regime without credibility problems (among participating countries).<sup>10</sup> Do credibility problems and the need to sustain a fixed exchange-rate policy induce fiscal restraint? And will the removal of credibility problems lead to more lax fiscal policies? If so, it may lead to problems of managing the euro exchange rate and thereby inducing a biased policy mix if a contractionary monetary policy must be pursued to counteract the effects of too expansionary fiscal policies.

The theoretical literature points to different channels through which fiscal policy can affect exchange-rate policies. According to the so-called *balance-of-payments* crisis literature (see Agénor and Flood, 1994, for a recent survey) an inconsistency between fiscal policy and a fixed exchange-rate policy may arise if a persistent budget deficit is money financed. With liberalized capital movements and a fixed exchange rate, it follows that the interest rate is given by the international level of interest rates and therefore that the money supply will be demand determined. A continuous increase in the domestic credit component caused by a budget deficit will thus lead to an erosion of foreign reserves. If there is a lower limit to reserves, the government could not sustain the fixed exchange rate. This may induce fiscal restraint to make the exchange-rate policy tenable. Joining the EMU may remove this constraint and lead to more expansionary fiscal policies. But the financing rule of the EMU precludes monetary financing, so this possibility is ruled out.

Even with bond financing, problems may arise to the extent that bonds are issued in domestic currencies.<sup>11</sup> The larger the outstanding

<sup>10</sup> Although the ERM of the EMS was a multilateral cooperation, it was a target zone with a possibility to realign central parities and not a fixed exchange-rate system in the strict sense.

<sup>11</sup> It remains a paradox why countries with credibility problems keep issuing bonds in domestic currencies rather than in foreign currency, especially when credibility problems are causing large interest-rate spreads and the government in different ways is trying to gain credibility for a fixed exchange-rate policy (Andersen, 1995). For an account of actual debt management policies, see Fontenay *et al.* (1995).

debt in domestic currency, the larger the potential reduction in real debt obtained by a devaluation. So increasing public debts can put the credibility of the fixed exchange rate in doubt (Calvo, 1988; Calvo and Guidotti, 1990; Giavazzi and Pagano, 1990). Fiscal restraint to reduce public debt can thus be a way to sustain a fixed exchange-rate policy. In the EMU, no single country issues debt in a currency that it has a unilateral power to change in value. But the problem may translate to the EMU, as a whole, to the extent that an increase in the overall public debt level within the EMU financed by bonds issued in euro may bring the credibility of the currency at stake. This gives a rationale for an asymmetric restraint on public-debt levels for the region as a whole. If this is the major cause of credibility problems, a more direct way to overcome the problem is an institutional setup with an independent central bank that aims at price stability—as is the case for the ECB. This can eventually be supplemented by a debt-management policy of issuing a larger proportion of the debt in an indexed form or in foreign currency. In this way, the governments signal that they trust the announced exchange-rate policy.

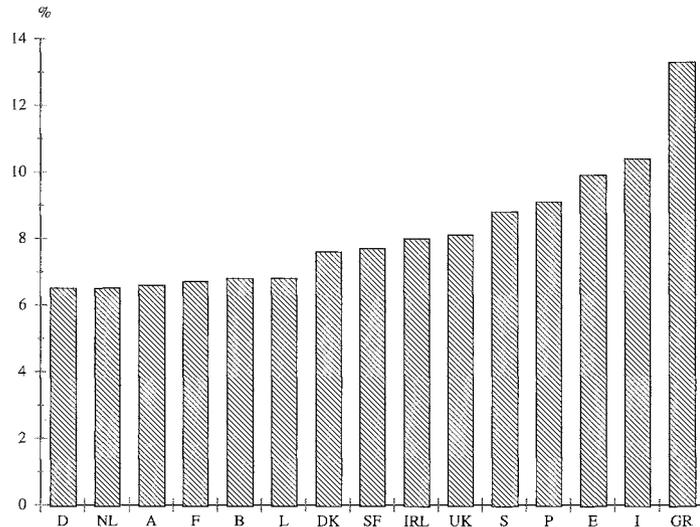
Fiscal policy will also affect the credibility of the exchange rate via its effects on the terms of trade. An expansionary demand-management policy may lead to a deterioration in competitiveness. And because a devaluation in the short run may mitigate this consequence, it may be difficult to sustain credibility of a fixed exchange-rate policy. It follows that the government can signal a willingness to stick to the announced fixed exchange-rate policy by a restrictive fiscal policy and thereby gain credibility. As a result, fiscal policy may purposely be too restrictive (Andersen, 1996a). Accordingly, with the credibility problem removed in EMU, a possibility exists that fiscal policies will be more expansionary. But note that this argument applies to the effects fiscal policy have on the terms of trade. Because this is not tightly related to the level of public deficits and debt, it does not give a straightforward argument in support of restraints on public deficits and debt levels.

Entering the EMU means that the time-inconsistency problem related to a unilateral peg of the exchange rate is ultimately solved. Because time-inconsistency problems in fiscal policy might exist, the

choice of monetary regime might critically affect fiscal incentives.<sup>12</sup> Agell *et al.* (1996) consider a context, where the transmission effects of both monetary (exchange rate) and fiscal policies (budget deficits) to activity, run via unanticipated changes in prices. They argue that resolving the time-inconsistency problem of monetary policy by joining the EMU may reinforce the problem for fiscal policy that implies a tendency to larger deficits. The intuition is that a government, which is concerned about employment, is forced to attempt more expansive fiscal policy to boost employment when exchange-rate changes are no longer possible. In equilibrium, this incentive is perceived and the employment level is unaffected, but the budget deficit is likely to be larger. Accounting for the effects of distortionary taxation to finance public expenditures, Jensen (1992), however, finds that removal of the time-inconsistency problem in monetary policy may also reduce the problem for fiscal policy. Intuition indicates that when one revenue source (*seigniorage*) is tied, then wage setters realize that there will be higher costs—in terms of distortionary taxes—of alleviating employment consequences from aggressive wage demands. Accordingly, less accommodation is expected and therefore the employment situation improves. Although *seigniorage* revenue is not important for many countries, this argument also seems to generally apply when a nominal policy instrument such as the exchange rate is tied.

Considering the empirical evidence, the first observation to make is that most European countries that pursue a fixed exchange-rate policy were unable to establish credibility for these policies—as witnessed by substantial and persistent interest-rate spreads. Figure 3 illustrates this. The possibility to resolve the credibility problem and obtaining lower interest rates is perceived as one of the important benefits from joining the EMU. This will also reduce the debt-servicing costs and thereby lower deficits.

<sup>12</sup> Alesina and Tabellini (1987) argue that a monetary commitment is undesirable because it implies that *seigniorage* revenue is eliminated, which forces the government to resort to other (more) distortionary taxes.

**Figure 3. Average long-term interest rates, 1995**

Note: Ten-year government bond yield.

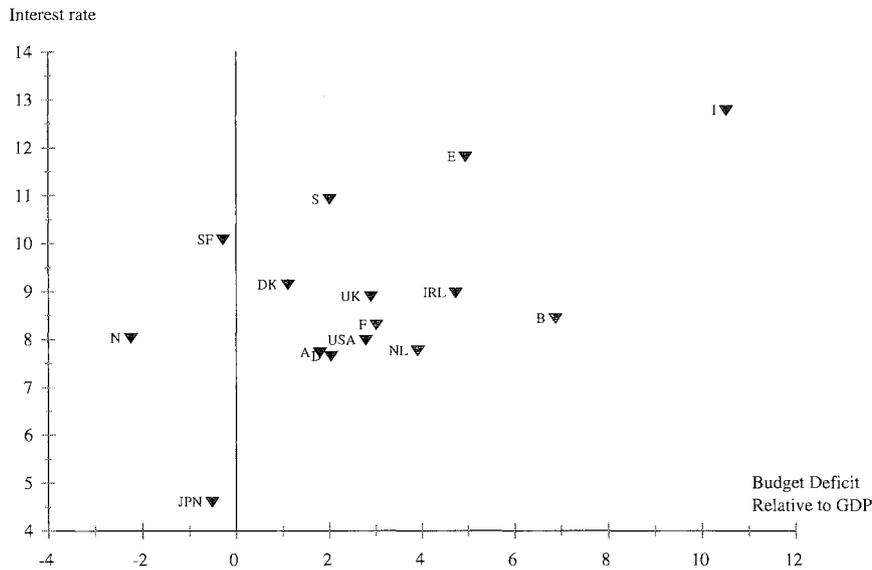
Source: IMF, *World Economic Outlook*, 1996.

A lot of empirical literature analyzes the determinants of interest-rate spreads and therefore the factors that determine how the market prices the expectations and risks associated with possible exchange-rate changes. Generally, neither unilateral nor multilateral fixed exchange-rate policies have been fully credible, and accordingly there have been persistent and fluctuating devaluation expectations (Svensson, 1993; Chen and Giovannini, 1993; Edin and Vredin, 1993; Holden and Vikøren, 1994).<sup>13</sup> Attempts were made to relate these findings to macroeconomic fundamentals. And despite that many macro variables have been suggested, it has been impossible to explain interest-rate spreads satisfactorily in this way (Rose and Svensson, 1994; Lindberg *et al.*, 1991; Caramazzo, 1993; Thomas, 1994). But there is indication that inflation differentials have explanatory power (Figure 4a) and some indications that the current account

<sup>13</sup> Most studies assume uncovered interest parity and obtain a measure of expected devaluations (realignments of central parity) by adjusting interest-rate spreads for *within the band expectations* of exchange-rate movements.

(Figure 4b) as well as the borrowing requirements of the central government are positively related to interest-rate spreads (Figure 4c).

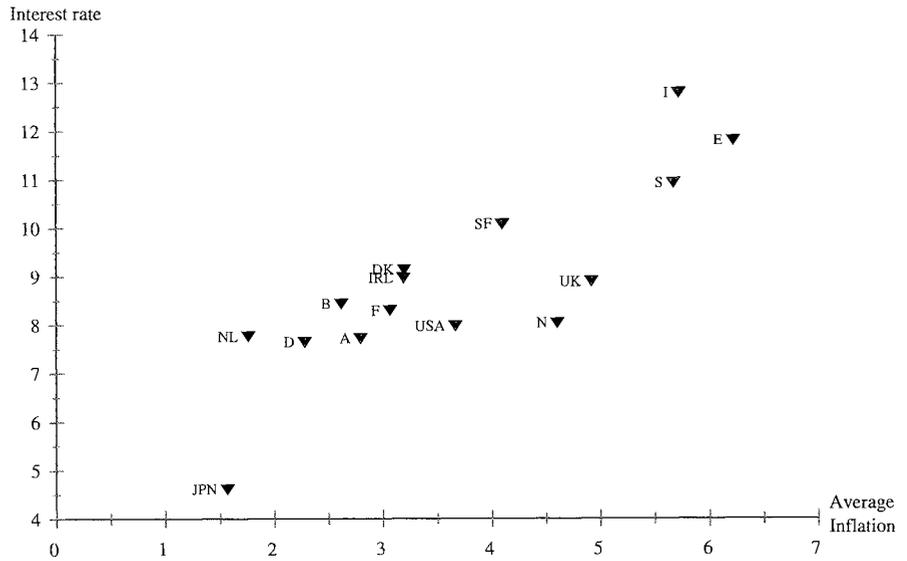
**Figure 4a. Interest rates ultimo 1994 and average yearly inflation, 1985-94.**



*Note:* Ten-year government bond yield.

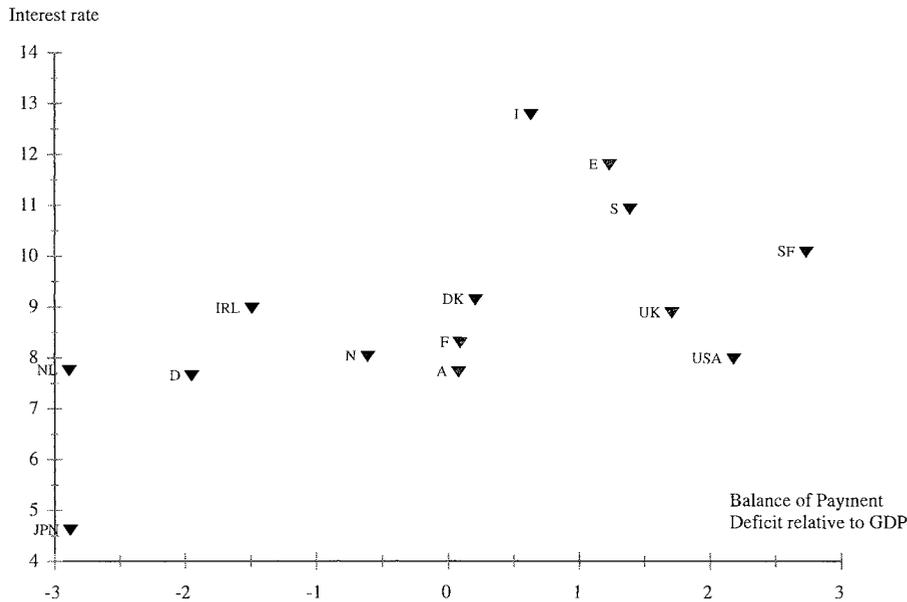
*Source:* Hansen (1995).

Figure 4b. Interest rates ultimo 1994 and average budget deficit relative to GDP, 1985-94.



Note: Ten-year government bond yield.  
Source: Hansen (1995).

**Figure 4c. Interest rates and average balance-of-payment deficit relative to GDP 1985-94**



Note: Ten-year government bond yield.

Source: Hansen (1995).

Theory does not predict a tight relationship between government borrowing requirements and interest-rate spreads. But this does not imply that fiscal policy is of no importance for exchange-rate credibility and thus interest-rate spreads. The channel may go through different mechanisms that affect the willingness and the ability to maintain an announced exchange-rate policy. Because control of domestic demand via demand-management policies is a way to control domestic inflation and thus the inflation differential, it follows already from this channel that fiscal policy is important for exchange-rate credibility and interest-rate determination.

Note that even if changes in fiscal deficits and debts are reflected in changing interest-rate spreads, this does not eliminate the international interdependency in interest rates that the previous section discusses. Even though assets are also distinguished by the currency in which they are issued, an increase in the rate of return on one asset

would also raise the average rate of return on other assets under the plausible assumption that they are gross substitutes in the international capital market.

There is some indication that credible exchange-rate pegs must be accompanied by fiscal restraints. Other things being equal, policy-makers may thus tend to pursue more expansionary fiscal policies, with the credibility problem removed, by entering the EMU. This may bring problems for the management of the euro exchange rate and thus gives an argument for restrictions on fiscal policy. But such restrictions are an imperfect substitute for an institutional setup with an independent monetary authority with low inflation (price stability) as its primary objective. This would make it credible that expansionary fiscal policies are not followed by loose exchange-rate policies. The planned structure and objectives of the ECB seem to address this problem adequately.

#### 4.3. Terms of trade

Generally, fiscal policy will have implications for relative prices and thus the terms of trade (Marston, 1985). This applies both for changes in taxation and expenditures. This has motivated many policy initiatives including a type of demand-management policy often pursued in the past in the Nordic countries, which has aimed at reducing the trade deficit and improving the employment situation by decreasing private demand via increased taxation and by using the proceeds to expand public demand. The net effect of such a policy is to increase demand for domestic-produced goods and decrease demand for foreign-produced goods. As a consequence, the price of domestic-produced goods will rise relative to the prices of foreign-produced goods—either directly due to the shift in the demand or indirectly due to wage increases released by expanding employment. So the terms of trade will tend to increase and the real exchange rate to appreciate.

The terms of trade effect of fiscal policy has several important implications (Andersen, 1996b). Because fiscal policy can affect relative prices, there is a possibility of permanently affecting the terms of trade by a permanent shift in fiscal policy. So generally, fiscal policy is effective, which leaves room for an active stabilization policy (see section 5). This holds even if stock adjustments running via the current account are considered. Although the quantitative effects of fiscal policy may depend on whether they are under-financed, the qualitative finding is that fiscal policy matters survive even with a balanced

budget. So the terms of trade effects of fiscal policy are not intimately related to the budget position.

Because fiscal policy can affect the real exchange rate, it has some relation to exchange-rate policy. Provided there are some nominal rigidities, a nominal exchange rate will affect the terms of trade, but the effect will normally be temporary because nominal rigidities are a short-term phenomenon.<sup>14</sup> In the short run, the real exchange rate may thus be affected by both a nominal exchange-rate change and certain fiscal policy changes, for example, changes in pay-roll taxes, which are often labeled *internal exchange-rate changes* (see Calmfors, 1993). Despite the similar effects on the real exchange rate of external and internal devaluations, important differences exist between the two types of policy instruments regarding the dynamic implications and the decision lags. Nonetheless, it is clear that although the possibility of using the exchange rate as part of economic policy disappears in the EMU, the possibility remains to make an internal devaluation by means of fiscal policy instruments. So to some extent, fiscal policy actions can be a substitute for an active exchange-rate policy.

The fact that fiscal policy can affect the terms of trade creates an externality in fiscal policy. Even though product markets may be competitive, the policy-maker can affect relative prices and thus real allocations. Effectively, the policy-maker comes to act as a monopolist *vis-à-vis* the outside world that controls the supply of the domestically produced goods. Because the real exchange rate (the terms of trade) matters for other countries, this creates an international externality in fiscal policy.

As an example of the implications of this externality, consider the case where the level of activity and thus employment is inefficiently low due to imperfections in product or labor markets. Here, the policy-maker has an incentive to expand domestic production. And this can be done by an expenditure-switching policy by which private demand is reduced via increased income taxation, the proceeds of which are used to expand public demand directed toward domestically produced goods. Such a policy will be successful provided private demand is not too sensitive to changes in the terms of trade.<sup>15</sup> The pol-

<sup>14</sup> There may be long-run effects if there are *hysteresis* mechanisms or multiple equilibria. These will also reinforce the effects of fiscal policy.

<sup>15</sup> If private demand is very sensitive to the relative price, there may be a shift in private demand away from domestically produced goods, which exceed the increase

icy will have consequences for other countries since net demand and thus employment falls, that is, there is a negative externality. So the fiscal policy has a kind of beggar-thy-neighbor effect.

But other countries may face the same incentives and thus try to induce an expenditure switch to expand domestic activity. In (symmetric) equilibrium, the countries will not succeed in this endeavor, and the end result may be that activity and employment is unaffected but the public sector has been expanded too much. So non-cooperative fiscal policies may be too expansionary. This effect may be muted, but it will not disappear by restricting deficit-financed policies.

It is also possible that fiscal policies have a positive spill-over effect on foreign activity and employment in the short run—via a deteriorating trade balance (Andersen, 1996b; Dixon and Santoni, 1996). Here, non-cooperative fiscal policies may be too restrictive and policy cooperation would entail more expansionary policies.

So the externalities in fiscal policy can be positive and negative. And without specific information on the structure of the economies, it is impossible to assess which one dominates. Accordingly, it cannot be concluded in what direction fiscal policy coordination for the EMU should go. So there is a high risk that rigid budget norms may constrain fiscal policy in an arbitrary way.

## 5. Stabilization policy

Fiscal policy is an important instrument for macroeconomic stabilization. This role is potentially reinforced in the EMU, where national governments have no access to exchange rate or monetary policy instruments in their attempts to stabilize the economy.

In general, fiscal policy affects the allocation of economic resources. So a possibility exists for using fiscal policy to pursue a counter-cyclical economic policy to dampen business-cycle fluctuations. Moreover, fiscal policy has redistributive consequences that also serve an insurance function both across individuals and generations (primarily via budget deficits).

in public demand, that is, fiscal policy is contractionary. The result also holds in the case of distortionary taxation (Andersen and Sørensen, 1995; Andersen *et al.*, 1996).

The role of fiscal policy is further accentuated in a currency union such as the EMU—if labor-market flexibility or mobility is not sufficiently strong to ensure a speedy adjustment to shocks. Fiscal policy can thus potentially ensure an adjustment to shocks because it can affect the consequences of shocks and stabilize income. So flexibility in fiscal policy is essential to make the EMU work as *an optimal currency area* (De Grauwe, 1992; Kenen, 1995).

Access to international capital markets enhances the possibilities for governments to provide insurance. By borrowing in case of an adverse shock and lending in case of a favorable shock, the consumption possibilities can be smoothed and thereby the consequences of risk are diversified over time.<sup>16</sup> International capital market thus serve to diversify the risk associated with shocks. There is strong evidence that indicates that private agents, to an insufficient degree, exploit this possibility (refer, for example, to Obstfeld and Rogoff, 1994). The reason may be capital market imperfections. This strengthens the need for an active stabilization policy. In the case of idiosyncratic or reallocative country shocks, it is to be expected that some countries will run budget deficits and other surpluses. By restricting budget deficits, there is some interference with the use of international capital markets for the diversification of risk. In the case of aggregate shocks in Europe, all countries may want to run deficits as a result of risk diversification with countries outside Europe. Again, asymmetric budget norms may hamper the possibilities for national governments to use international capital markets in an effort to diversify risk.

It is undisputed that fiscal policy can have substantial effects for the level of activity and other important macro variables.<sup>17</sup> But there is less consensus on the extent to which this proves the case for an active fiscal policy. Recent developments in macroeconomic theory have identified several reasons why there may be a need for an active stabilization policy (refer, for example, to Blanchard and Fischer, 1989). But policy activism requires a substantial amount of informa-

<sup>16</sup> Gordon and Varian (1988) show how public deficits can serve an insurance role when capital markets are not perfect. Smoothing taxes over the business cycle may also serve to minimize distortions (Barro, 1979).

<sup>17</sup> This is obvious in the Keynesian literature. But even in real business cycle models, it is found that shocks to government demand and taxes help match empirical regularities better (Christiano and Eichenbaum, 1992).

tion on the structure and shocks of the economy and on an ability of the political system to act in the appropriate way. These requirements may provide arguments for restricting the freedom in economic policy if, for example, policy-makers are prone to budget deficits because they tend to transfer benefits to the present and costs to future generations.<sup>18</sup> This could motivate a rules-based policy precluding or restricting the possibilities of running budget deficits. But such institutional restrictions will reduce the possibilities for pursuing an active stabilization policy. The traditional trade-off between rules and discretion in economic policy is also present for fiscal policy. However, the arguments for restricting fiscal policy alluded to earlier are not intimately related to the working of the EMU and thus not required to make the EMU function efficiently.

Fiscal policy consists of discretionary changes in taxation and expenditures and automatic budgetary reactions to changes in the economic situation. The latter arise from the fact that revenues from taxation and expenditures on transfers (including unemployment benefits) are cyclically dependent. The automatic stabilizers are essentially a rules-based policy and therefore they preserve some stabilizing function while reducing the problems related to discretionary policies. Specifically, they have the advantage that they are demanding little information on the business-cycle situation. They also work independently of decisions lags in the political process because they adjust automatically to the business-cycle situation. So automatic stabilizers do not face the same risk of contributing to business cycles due to decision and implementation lags as discretionary fiscal policies.<sup>19</sup> If business cycles are regular, the automatic stabilizers can be designed to be consistent with budget balance over the cycle. Problems may arise if, for example, *hysteresis* in the labor market causes transitory shocks to have persistent effects. Here, transitory shocks can, via the

<sup>18</sup> See Alesina and Perotti (1995) for a survey on recent politico-based models of budget deficits.

<sup>19</sup> Actually, the expenditure side also has a built-in automatic stabilizer to the extent that the budgeting procedure is in nominal terms (this applies as long as the budgeting procedure does not allow full indexation). Bar-Ilan and Zanello (1994) show that the government by its choice of nominal budgeting procedure (degree of indexation), in general, can offset whatever rigidity of the contractual wage exists in the economy. This result holds as long as stabilization is ensured by stabilizing the real-wage rate. Although this is not generally the case, it causes a potential stabilizing effect of the budget even in relation to nominal shocks where exchange-rate changes are usually contemplated.

automatic stabilizers, produce a persistent budget deficit that requires a discretionary policy change to ensure a sustainable development of public finances. Recent experience in the Nordic countries and specifically Sweden, has shown that the strength of the mechanism can be rather strong.

The extent of fiscal policy activism differs among European countries. But note that all countries have a substantial degree of activism via the automatic stabilizers. The sensitivity of the public sector budget to the business cycle, measured by how much a reduction of GDP by 1 percent increases the borrowing requirement of the government relative to GDP, is between 0.3 and 0.8 percentage points for countries in Europe (OECD, 1993).

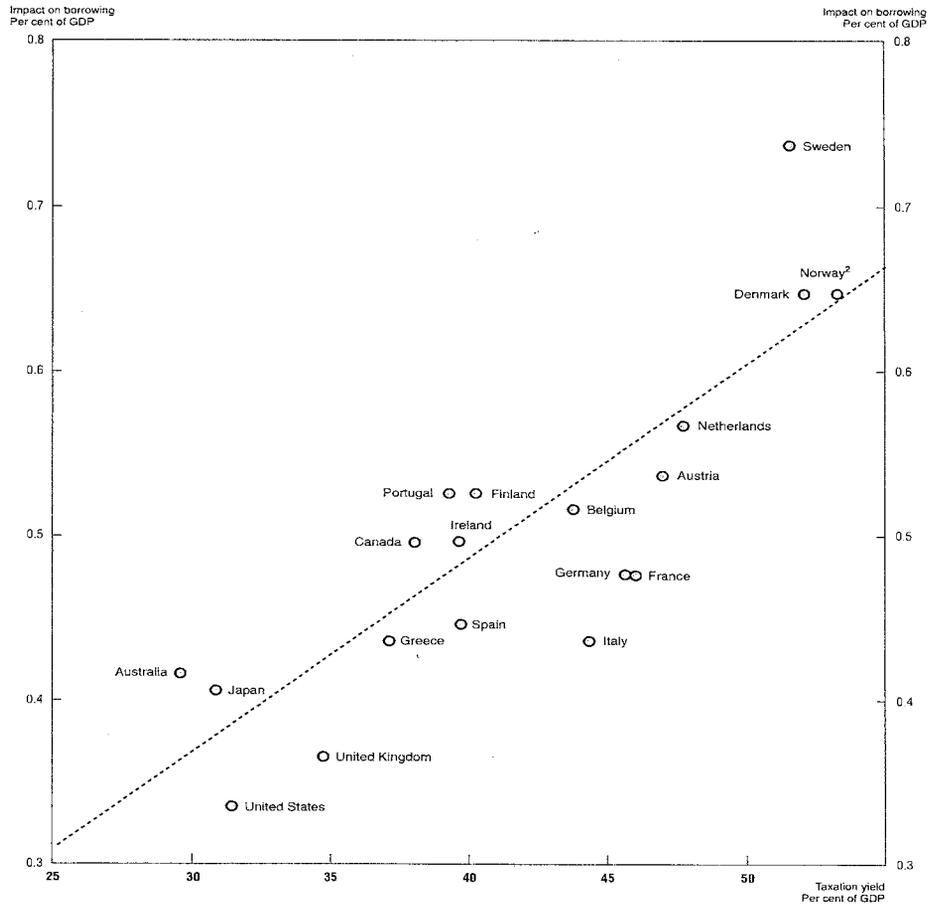
Figure 5 shows the sensitivity of the government borrowing requirements to GDP for several OECD countries cross-plotted with the size of the public sector measured by the proceeds from taxation relative to GDP. The diagram clearly shows a positive correlation between the sensitivity of the borrowing requirements and the size of the public sector. The larger the public sector, the larger the budget sensitivity and thus the automatic stabilizers.

Note that a recent empirical analysis finds that there is a negative correlation between government size and macroeconomic volatility (Gali, 1994). This can be interpreted as showing that a large public sector serves a stabilizing role, among other things, via the implied large automatic stabilizers. The analysis does not address whether this stability is bought at the price of a lower living-standard level.

A consequence of the automatic stabilizers is that business-cycle fluctuations can—even in the absence of discretionary policy changes—cause a deterioration of the public budget and thus create difficulties in meeting the fiscal norms in the EMU. The fiscal norms thus restrict not only the possibilities of governments to pursue a counter-cyclical discretionary stabilization policy, but they also affect the room for automatic stabilizers.

Obviously, a country with a very sensitive budget will experience a significant deterioration of the budget in the case of a recession, which implies difficulties in meeting the deficit norm. The country can quickly get into trouble with the debt norm. Table 1 illustrates a stylized experiment for a country with a large public sector (and sensitive public budget), which experiences a fall in the nominal growth rate for GDP.

**Figure 5. Cyclical budget sensitivity and tax pressure**



Source: OECD, *Economic Outlook*, 53, 1993

The country is assumed initially to be well within the fiscal norms in the EMU—by running a balanced budget and having a debt-to-GDP ratio of 40 percent. It is seen that even a fairly mild recession can easily bring a country into a situation with problems in meeting the budget and debt norms that may force the country to pursue a pro-cyclical discretionary fiscal policy.

**Table 1. Debt-to-GDP dynamics in case of a recession**

Year	Fall in nominal GDP growth rate	
	1 pct. point	2 pct. points
1	42.7	43.9
2	45.5	48.0
3	48.4	52.4
4	51.5	56.0
5	54.8	60.8

To avoid such a situation from developing, the public sector must be reformed so that it becomes less sensitive to the business cycle. This will require that taxation and expenditures are made less cyclically dependent. Obviously, this is difficult if not impossible if the basic insurance function of the welfare state should be maintained. So a risk exists that the welfare state must be reduced. Such institutional limitations may also have a cost regarding the implied reduction in the stabilizing powers of fiscal policy. In a study of the states in the U.S., Bayoumi and Eichengreen (1995) find that institutional restraints on the budget position limit the cyclical responsiveness of public finances and therefore potentially the automatic stabilizers. Building on the U.S. and on international evidence, Bayoumi and Eichengreen (1995) conclude—based on simulations with the MULTIMOD model—that fiscal restraints may have severe consequences for macroeconomic volatility in the case of demand shocks.

One way to ensure freedom for maneuver while fulfilling the budget norms would be to undertake a substantial fiscal consolidation that reduces debt levels and yields a budget surplus even in normal states of the business cycle. The stylized example in Table 1 suggests that this would entail a rather substantial fiscal consolidation for most countries, which would be very costly in the transition period.

The possibilities for risk diversification can be strengthened by the development of a redistributive scheme among participating countries in the EMU. Accordingly, it has been argued that a federal fiscal

budget would be needed to cushion shocks, because member states in the EMU are not able to use the exchange rate for that purpose. An appropriate fiscal policy might ensure that the EMU becomes an *optimal currency area*. This would require a very substantial enlargement of the current EU budget.

Empirical evidence indicates that national fiscal authorities in the EU create a level of stabilization across the EU similar to that provided by the U.S. and Canadian federal governments across regions in those countries (Bayoumi and Masson, 1995). This suggests that restricting the degrees of freedom in national fiscal policy creates a need for a federal fiscal system in the EU, of substantial size, to stabilize economic fluctuations.

If a federal fiscal policy is unlikely to develop, an alternative would be to establish a stabilization fund. It is difficult to assess the appropriate size of such a fund because it depends on the flexibility retained in national fiscal policies. As an example, suppose that national fiscal policies only play a marginal stabilizing role, and that the fund should be able to mitigate about one-third of output fluctuations. To mitigate the consequences of a recession, which lowers nominal GDP growth by 3 percentage points, the fund must be able to cover at least 1 percent of GDP in the EMU countries. This will probably be an underestimation—if the same stabilization as currently obtained by the prevailing automatic stabilizers should be attained. The stabilization fund must, moreover, be larger than the annual stabilization requirement because recessions usually last for more than one year.

Italiener and Vanheukelen (1993) assert that in case of asymmetric shocks, annual payments that amount to only 0.2 percent of GDP would be sufficient to allow inter-country transfers that could compensate for lack of national stabilization policies. Compared to the stabilization implied by automatic stabilizers, this seems to be an underestimation of the needed transfers. And it's based on the misleading assertion that stabilization and thus risk diversification are only needed in case of asymmetric shocks. Restricting public sector borrowing also means a constraint on the possibilities of risk diversification in the case of common (symmetric) shocks that hit all EMU countries. This is a further argument why the estimate by Italiener and Vanheukelen is clearly on the low side.

A redistributive system would imply a problem to the extent that not all EU countries participate in the EMU. One would have to build a fund to provide insurance for the EMU countries in addition

to the present EU budget, which is largely designed to achieve redistribution via regional and structural funds. The fund will have to rely on discretionary actions, which would imply a less efficient stabilization than that implied by automatic stabilizers. It is not clear whether this task is better solved at a centralized level than through decentralized automatic stabilizers.

## **6. Fiscal norms and the need for policy coordination in the EMU**

A need for international policy coordination arises if there are important externalities in economic policy among countries or if time-inconsistent problems can be credibly solved only by undertaking external commitments. Potential gains from international policy coordination could arise in many policy areas. There is a case for policy coordination within the EU if substantial parts of the international externalities thereby become internalized.

Given that coordination of monetary (and exchange-rate) policy follows by the establishment of the EMU, there is a question of whether this requires policy coordination or restrictions in other areas—to reap the benefits of the EMU or whether there are other reasons why they are beneficial even if they are not needed for the EMU to work appropriately.

One important reason why fiscal policy becomes an issue in connection with the EMU is the fact that fiscal policy remains decentralized while monetary and exchange-rate policy becomes centralized. So there is a possibility that the EMU may affect incentives underlying fiscal policy in such a way as to affect adversely the possibilities for pursuing monetary policy.

One problem with this decision structure is that it may create a *free-rider* problem in financing public expenditures. This problem is effectively solved in the Treaty by precluding monetary financing of public expenditures and the debt norm.

There is a risk that the policy mix will be biased toward a contractionary monetary policy and an expansionary fiscal policy due to the decentralized decision structure in fiscal policy. The interrelationship between fiscal and monetary policy runs primarily via the effect that public debt has on the level of interest rates. Because higher debt levels seem to be associated with higher levels of interest rates, there is an argument for restraining debt. But restricting the deficit level does

not seem to be directly relevant for targeting this problem. Moreover, only aggregate debt matters for the relationship between monetary and fiscal policy in the EMU, and hence identical restrictions for all countries may imply an interference with the effective exploitation of the possibilities for inter-temporal substitution and risk sharing offered by capital markets. To the extent that worldwide factors drive interest-rate determination, the EMU restrictions may only have a marginal influence on the international level of interest rates. Nonetheless there is a case for a debt norm in the EMU.

In the mid-term, it could be argued that the debt norm is superfluous because all European countries must address their debt problems and prepare for the consequences of an aging population independently of whether EMU is established. Here, the particular reference value for the debt-to-GDP ratio (60 percent) seems ambiguous and probably only reflects a desire for a marginal debt reduction relative to the debt level prevailing at the time of writing the Treaty. The debt norm may serve a political function by forcing politicians to put the debt problem higher on the political agenda, whereas its importance for the functioning of the EMU may be marginal.

As noted, it is less obvious why the deficit norm is needed to address the policy mix problem. It can be defended as ensuring that policy-makers, in the short-run, pursue policies according to a long-run debt target. This should be weighted against the costs of restricting access to capital markets and therefore restricting possibilities for risk sharing and inter-temporal substitution. Moreover, the deficit norm would restrain the possibilities of using fiscal policies as part of stabilization policy, and it may require reforms to make the public sector less vulnerable to business-cycle fluctuations. The latter may imply significant restraints on the functioning of the welfare state. And with some sensitivity of the budget, the deficit norm would require a budget surplus in normal phases of the business cycle. Although this may make sense in the current situation due to the need to reduce debt levels, there is nothing that makes this optimal in a long-run perspective.

Note that the fiscal norms of the EMU do not address all international externalities in fiscal policies. These do not solely arise from public deficits and debts but could arise even under a fully balanced budget. An important externality arises from the possibility of affecting the terms of trade to boost employment. This effectively works by

raising the home country's employment level at the cost of employment elsewhere.

This also raises issues concerning the need for coordination of labor market policy. To the extent that restraints on fiscal policy make it more difficult to pursue an employment-oriented policy, there is a possibility that labor market policies will be used more effectively. This has an advantage and a disadvantage.

The advantage is that policy-makers may be put under pressure to reform labor markets to make them more flexible (OECD, 1994). This has the double advantage of dealing with the employment problem and the debt problem, because the debt increase is largely caused by increasing transfers due to raising unemployment.

The disadvantage is the risk of social dumping when countries compete too aggressively for jobs.

Labor mobility among European countries is low and is expected to remain so (see, for example, Pedersen, 1993). At the same time, there are large differences in labor and social policies among European countries. So countries may have an incentive to undercut each other in an attempt to increase employment by lowering minimum wages, dismantling working rules, allowing children's work, abandon equal pay clauses, and so on. However, to the extent that all countries are doing this, it would have few consequences for the overall level of employment but would adversely affect the protection offered by such rules.

It has been suggested that these problems can be dealt with by making the employment objective more explicit in the EU. With the decentralized decision-making structure in the EU implied by the subsidiarity principle, this does not have much meaning. Although employment objectives could be formulated, they would not have credibility because there is no way by which they can be enforced in the EU. Even though some enforcement mechanisms could be envisaged, problems remain for defining targets on variables over which the governments only have indirect and imprecise control. The best way to ensure that employment-oriented economic policies can be pursued is to ensure freedom in the design of economic policy in combination with minimum rules within the EU—to avoid social dumping. But most externalities that arise from social dumping will not be internalized by coordination in the EU area.

Note that these arguments for policy coordination hold, irrespective of the EMU. Although the restraints implied by the EMU may

reinforce the problems related to these externalities. And there are other areas in which the need for policy coordination is pressing, for example, tax rules, which especially for highly mobile sources of taxation, constitute an important problem.

In article 103, the Treaty includes some general statements on the need for policy coordination in the Community that require countries to treat their economic policies "as a matter of common concern". The Council is given some possibilities to formulate broad guidelines for economic policies of the member states. But the formulations are vague and mechanisms for enforcing such policy proposals are not specified. It must be concluded that the scope for policy coordination is bleak except in the area of monetary policy.

### **7. The transition period and the option to stay out**

The fiscal norms of the EMU have immediate implications for economic policy. Their effects have been seen because they are part of the convergence criteria, and countries have taken actions to fulfill the norms. Despite that fiscal consolidation is needed in several countries, it is questionable whether it makes sense to make the adjustment in such a short time span as needed to fulfill the convergence criteria. It would hardly be according to standard principles of inter-temporal consumption smoothing—to undertake a major stock adjustment within a period of a couple of years. Given that the norms have been made a part of the process, countries find themselves in a situation where they cannot escape these norms. Any attempt to do so will be interpreted as a signal that loose policies are pursued and financial markets will probably react in such a way that interest-rate spreads will increase as long as national currencies exist. The debt norm is likely to be of importance only in the short to medium run because most countries are in a situation where fiscal consolidation is needed and will be undertaken with or without the EMU.

The fact that many countries, at the same time, attempt to undertake a fiscal consolidation may make it more difficult to attain the target because the recessionary consequences show up immediately. While the expansionary effects of the induced effects on monetary policy regarding lower real interest rates materialize later. So the convergence criteria can cause a recession in the period up to the establishment of the EMU, which in itself makes it more difficult to attain the convergence criteria.

Because most countries find it difficult to meet the debt and deficit norms, it may be conjectured that they will be interpreted more loosely to ensure that the convergence criteria can be met in time (it will be decided in early 1998, on the basis of 1997 data, which member states fulfill the conditions for participation in the EMU). This is an unlikely possibility. If the EMU is realized, it will probably be in a sequential procedure with a small group being in the EMU from the start and subsequently more and more countries will join. But it will not be politically acceptable to have different entrance criteria, which depend on the time of entrance. Because an enlargement of the EU is likely, there is an incentive to keep the entrance requirements fairly strict rather than to soften them to make the establishment of the EMU easier. The recently agreed Stability and Growth Pact makes it clear that the norms should also be taken seriously after EMU has been established. The circumstances defined to justify deviations from the norms underline that they should be seen as binding constraints.

A decision to stay outside the EMU may be perceived to provide more freedom in economic policy because the policy restrictions of the EMU are avoided. But it is far from obvious that this is the case. Staying outside the EMU will be interpreted as a desire to keep the option of changing the exchange rate even if the decision to stay outside was motivated by other considerations. The more economic policy deviates from the norms of the EMU, the more likely it may be that this option may be exercised. So substantial credibility problems will arise if the country deviates too much to the negative side from the norms of the EMU.

Obviously, the seriousness of these problems depends on the monetary arrangements between EMU countries and outside countries. Although countries staying outside the EMU can join an ERM system together with the euro area, it will effectively amount to a unilateral exchange-rate peg. The burden of supporting the peg will primarily lie on the outside country. For countries staying outside the EMU, the restraint following from the need to ensure credibility of the economic policy has been substituted for the fiscal restraints of the EMU. Consequently, it is not clear that staying outside the EMU generally provides more freedom in economic policy and specifically, in fiscal policy. Seen from a (small) single country perspective, it is not possible to overturn the consequences of a multilateral cooperation among important trading partners.

In case the EMU is not going to be established, a new situation arises. After the initial turmoil, it is likely that financial markets will focus less on fiscal consolidation although that does not mean that the problem disappears. As already noted, the issue of fiscal prudence is not one that has arisen with the prospect of creating EMU. But avoiding the need to reach specific values at certain points in time means that more room for maneuver is created. The risk of a process of competing devaluations will probably imply that financial markets will focus on the extent to which other policy measures are taken—to pave the way for an improvement in the employment situation and thus making inflationary policies changes less likely. Such policy initiatives will also create less strain on fiscal policy. Failure to address this problem may lead to severe credibility problems.

### References

- Agell, J., L. Calmfors and G. Jonsson (1996), Fiscal Policy when Monetary Policy is Tied to the Mast, *European Economic Review* 40, 1413-1440.
- Agénor, P.-R. and R. P. Flood (1994), Macroeconomic Policy, Speculative Attacks and Balance of Payments Crises, in F. van der Ploeg (ed.), *The Handbook of International Macroeconomics* (Blackwell Handbooks in Economics) Basil Blackwell.
- Alesina, A. and R. Perotti (1995), The Political Economy of Budget Deficits, *IMF Staff Papers*, 42, 1-31.
- Alesina, A. and G. Tabellini (1987), Rules and Discretion with Non-coordinated Monetary and Fiscal Policies, *Economic Inquiry* 25, 619-630.
- Andersen, T.M. (1995), Statsgældspolitik, *Nationaløkonomisk Tidsskrift* 133, 1-20
- Andersen, T.M. (1996a), Demand Management and the Credibility of a Fixed Exchange Rate Policy, Working Paper, University of Aarhus.
- Andersen, T.M. (1996b), Demand Management and Structural Employment in an Open Economy, Working Paper, University of Aarhus.
- Andersen, T.M. and J.R. Sørensen (1995), Unemployment and Fiscal Policy in an Economic and Monetary Union, *European Journal of Political Economy* 11, 27-43.
- Andersen, T.M., B.S. Rasmussen and J.R. Sørensen (1996), Optimal Fiscal Policy in Open Economies with Labour Market Distortions, *Journal of Public Economics* (to appear).
- Bar-Ilan, A. And A. Zanello (1994), Nominal Budgeting as a Stabilization Rule—The Optimal Degree of Indexation of Public Spending, *European Economic Review* 38, 69-85.

- Barro, R.J. (1979), On the Determination of Public Debt, *Journal of Political Economy* 87, 940-971.
- Bartolini, L., A. Razin and S. Symansky (1995), G7 Fiscal Restructuring in the 1990s: Macroeconomic Effects, *Economic Policy* 20, 109-146.
- Bayoumi, T. and B. Eichengreen (1995), Restraining Yourself: The Implications of Fiscal Rules for Economic Stabilization, *IMF Staff Papers* 42, 32-48.
- Bayoumi, T.M. Goldstein and G. Woglom (1995), Do Credit Markets Discipline Sovereign Borrowers? Evidence from U.S. States, *Journal of Money, Credit and Banking* 27, 1046-1059.
- Bayoumi, T. and P.R. Masson (1995), Fiscal Flows in the United States and Canada: Lessons for Monetary Union in Europe, *European Economic Review* 39, 253-274.
- Blanchard, O.J. and S. Fischer (1989), *Lectures on Macroeconomics* (The MIT Press).
- Buiter, W., G. Corsetti and N. Roubini (1993), Excessive Deficits: Sense and Non-Sense in the Treaty of Maastricht, *Economic Policy* 16, 57-100.
- Calmfors, L. (1993), Lessons from the Macroeconomic Experience of Sweden, *European Journal of Political Economy* 9, 25-72.
- Calvo, G.A. (1988), Servicing the Public Debt, *American Economic Review* 78, 647-661.
- Calvo, G.A. and P.E. Guidotti (1990), Indexation and Maturity of Government Bonds: An Exploratory Model, in R. Dornbusch and M. Draghi (eds.), *Public Debt Management: Theory and History* (Cambridge University Press).
- Caramazzo, F. (1993), French-German Interest Rate Differentials and Time-Varying Realignment Risk, *IMF Staff Papers* 40, 567-583.
- Chang, R. (1990), International Coordination of Fiscal Deficits, *Journal of Monetary Economics* 25, 347-366.
- Chen, Z. and A. Giovannini (1993), The Determinants of Realignment Expectations under the EMS: Some Empirical Regularities, NBER Working Paper 4291.
- Christiano, L.J. and M. Eichenbaum (1992), Current Real-Business-Cycle Theories and Aggregate Labour Market Fluctuations, *American Economic Review* 82, 430-450.
- Council of the European Communities (1992), *Treaty on European Union*.
- De Grauwe, P. (1992), *The Economics of Monetary Integration* (Oxford University Press).
- Dixon, H.D. and M. Santoni (1996), *Fiscal Policy Coordination with Demand Spillovers and Unionised Labour Markets*, Unpublished Discussion Paper, University of Warwick.

- Edin, P.-A. and A. Vredin (1993), Devaluation Risk in Target Zones: Evidence from the Nordic Countries, *Economic Journal* 103, 161-175.
- Fontenay, P. de, G.M. Milesi-Ferretti and H. Pill (1995), The Role of Foreign Currency Debt in Public Debt Management, IMF Working Paper 95-21.
- Ford, R. and D. Laxton (1995), World Public Debt and Real Interest Rates, IMF Working Paper 95-30.
- Frenkel, J.A. and Razin, A. (1987), *Fiscal Policies and the World Economy* (MIT Press, Cambridge).
- Gali, J. (1994), Government Size and Macroeconomic Stability, *European Economic Review* 38, 117-132.
- Giavazzi, F. and M. Pagano (1990), Confidence Crises and Public Debt Management, in R. Dornbusch and M. Draghi (eds.), *Public Debt Management: Theory and History* (Cambridge University Press).
- Gordon, R.H. and H. Varian (1988), Intergenerational Risk Sharing, *Journal of Public Economics* 37, 185-202.
- Gros, D. and N. Thygesen (1992), *European Monetary Integration*, New York (St. Martin's).
- Hansen, N.L. (1995), Nationale og internationale elementer i renteutviklingen i 1993-95, Danmarks Nationalbanks kvartalsoversigt, November 1995.
- Holden, S. and B. Vikøren (1994), Interest Rates in the Nordic Countries: Evidence based on Devaluation Expectations, *Scandinavian Journal of Economics* 96, 15-30.
- IMF (1996), *World Economic Outlook*.
- Italiener, A. and M. Vanheukelen (1993), Proposals for Community Stabilization Mechanisms: Some Historical Applications in the Economics of Community Public Finance, *European Economy, Reports and Studies No. 5*, Brussels.
- Jensen, H. (1992), Time-Consistency Problems and Commitments of Monetary and Fiscal Policies, *Journal of Economics* 3, 247-266.
- Kenen, P.B. (1995), *Economic and Monetary Union in Europe* (Cambridge University Press).
- Lindberg, H., L.E.O. Svensson and P. Söderlind (1991), Devaluation Expectations: The Swedish Krona 1982-1991, IIES Seminar Paper No. 495.
- Marston, R.C. (1985), Stabilization Policies in Open Economies, in R.W. Jones and P.B. Kenen (eds.): *Handbook of International Economics Vol. II* (North-Holland).
- Nunes-Correia, J. and L. Stemitsiotis (1993), Budget Deficit and Interest Rates: Is there a Link? - International Evidence, *Economic Paper*, Commission of the European Communities Directorate-General for Economic and Financial Affairs No. 105.

- Obstfeld, M. and K. Rogoff (1994), *The Intertemporal Approach to the Current Account*, NBER Working Paper No. 4893.
- OECD (1993), *Economic Outlook* No. 53, Paris.
- OECD (1994), *The OECD Job Study Part I + II*, Paris.
- Pedersen, P.J. (1993), *Intra-Nordic and Nordic-EC Labour Mobility*, in J. Fagerberg and L. Lundberg (eds.), *European Economic Integration: A Nordic Perspective* (Avebury).
- Persson, T. and G. Tabellini (1995), *Double-edged Institutions: Institutions and Policy Coordination*, in G. Grossman and K. Rogoff, *Handbook of Development Economics* Vol. III (North-Holland).
- Rose, A.K. and L.E.O. Svensson (1994), *European Exchange Rate Credibility before the Fall*, *European Economic Review* 38, 1185-1216.
- Seater, J.J. (1993), *Ricardian Equivalence*, *Journal of Economic Literature* XXXI, 142-190.
- Svensson, L.E.O (1993), *Assessing Target Zone Credibility: Mean Reversion and Devaluation Expectations in the ERM, 1979-1992*, *European Economic Review* 37, 763-793.
- Tanzi, V. and D. Fanizza (1995), *Fiscal Deficit and Public Debt in Industrial Countries, 1970-1994*, IMF Working Paper 95-49.
- Thomas, A.H. (1994), *Expected Devaluation and Economic Fundamentals*, IMF Staff Papers 41, 262-285.
- von Hagen, J. (1992), *Budgeting Procedures and Fiscal Performance in the EC*, *Economic Papers* No 96, European Commissions, Brussels.
- von Hagen, J. and I.J. Harden (1995), *Budget Processes and Commitment to Fiscal Discipline*, *European Economic Review* 39, 771-779.

