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Some Fiscal Budgetary Consequences of EMU

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Abstract

Economic and monetary unification of Europe has major implications for fiscal policy. As monetary union is characterised by the existence of a uniform real interest rate, the consequences of fiscal policies will no longer be based on exchange rate adjustments, but on changes in absolute price levels; all member countries will bear the effects on real interest rates. As long as there are price rigidities, it will be necessary to compensate for the loss of the exchange rate instrument, it will be necessary to coordinate budgetary policies in order to avoid instability and non-existent actions. But contrary to the recommendations of the Delors report, this does not generally imply the need to strengthen 'budgetary discipline' by setting ceilings on Member States' fiscal deficits. These aspects, together with the risks of tax competition between countries and the generalisation of externalities that should go hand in hand with the increasing integration of markets, argue in favour of a substantial increase in the Community budget.

One of the most controversial aspects of the Delors Report (EC, 1989) is the proposal to cap national budget deficits. This measure reflects the opinion frequently expressed, that a monetary union promotes the lack of fiscal discipline. This opinion is not unanimous. It is conceivable that monetary union should encourage, on the contrary, the strengthening of budgetary discipline: this is, for example, the opinion of Eichengreen (1990). One of the objectives of this paper is to explore this question, in particular by studying how the fiscal policies effects of are transmitted from one country to another according to the exchange rate regime.

Another theme, hidden in the Delors report, is the link between monetary union and the federal, national, regional or municipal level which exercises fiscal policies. This theme had already been the subject of considerable interest during the discussions of the Werner Plan (EC, 1970) and had been dealt with in the MacDougall Report (EC, 1977). Taken up and amplified in the Padoa-Schioppa report (EC, 1986), it gave birth to the principle of subsidiarity. This principle states that fiscal actions must be taken at the most decentralised level. This is obviously the case Community of policies regarding common agricultural market, research and scientific cooperation, etc. Recent work by Bean and associates (1989), Sachs and Sala-i-Martin (1989), Case, Hines and Rosen (1989), however, identify new externalities that suggest the value of greater fiscal federalisation. The second objective of this paper is to take stock of this subject, the importance of which should increase as Economic and Monetary Union is set up.

A preliminary remark is necessary. The theme is not new. But the state of knowledge about the role and effects of fiscal policy has changed considerably in recent years. Many certitudes have collapsed under the twofold evolution of macroeconomic theory (towards a reinforcement of microeconomic

foundations) and econometrics (towards a lesser tolerance of 'soft' specifications). As a result, analysts, as well as fiscal policy-makers, are now showing much greater caution with regard to the handling of fiscal policy, with less emphasis on its stabilising effects in the short-term. This is why this paper mainly considers the long-term aspects of fiscal policy. Although the voluntary omission of cyclical stabilisation aspects is a significant limitation in itself, it highlights a range of concerns close to the ongoing debates on the notion of fiscal federalism.

The following section presents a framework for analysis. Technical in nature, it prepares the second section, which deals with the effects of monetary union on national budgetary policies: can the discipline be reduced or increased? Is the pressure to harmonise inevitable? Should we change the budgetary rules or adapt the monetary constitution? The third section deals with a different topic, that of federalising national budgets. The conclusions are presented in the last section.

To focus the analysis on the long term, it is assumed that relative prices (and therefore real wages) are flexible and that it is thus in a situation of full employment. What distinguishes a monetary union from a regime such as the European Monetary System (EMS) is that in monetary union the full weight of relative price adjustments is carried over to prices (Kirrane 1990).

The key issue under these conditions is the adjustment to external imbalances and the link between budget deficit and current account. In both cases, an imbalance represents a time shift of expenditures relative to revenues. This naturally leads to an emphasis on savings choices and the inter-temporal budget constraint of public and private agents. In this type of model, it is essential to be clear on the question of Ricardian equivalence: when private agents are described as adopting an optimal programme of consumption and savings, and endowed with rational expectations, the way in which public expenditure is financed (taxes or borrowings) is indifferent. This proposal, however, does not seem to correspond to reality. To avoid this aspect without calling into question an approach based on rationality economic, it is convenient to admit, following Blanchard (1986), that economic agents adopt a finite horizon - because unlike the public sector, they are mortal - hence the possibility that the public debt is not fully repaid by the agents. Under these conditions, a part of the public debt represents private wealth and the method of financing expenditure escapes the assumption of Ricardian neutrality.

The underlying model was developed by Frenkel and Razin (1987); it makes it possible to separate the analysis between the present and the future. The present covers a long enough period for prices to have time to adjust and full employment to be restored. The future corresponds to a stationary equilibrium, that is to say that all stock variables (wealth, debt, etc.) are stabilised. The model allows analysis of the different channels through which the effects of fiscal policy are transmitted from one country to another.

What characterises a monetary union here is that nominal interest rates are identical everywhere within the zone. This does not always lead to equality of real rates. In fact, a change in relative prices between two countries, if anticipated, leads to different future inflation rates, and therefore to different real interest rates. Such relative price changes are, of course, possible and are discussed below. However, these can only be occasional variations, not different trends. In what follows, it will be assumed that

such relative price changes are considered exceptional and occur only in an unanticipated manner. Real rates are then also equalized within the monetary union. A first transmission channel for fiscal policies takes thus the form of real interest rate changes that affect the region as a whole. A temporary fiscal expansion results in a rising trend in real interest rates. In the perspective long-term adopted here, this effect is necessary to maintain the equilibrium in the goods and services market: the expansionary effect of fiscal policy must be accompanied by a decline in wealth private.

In a framework of fully an inter-temporal analysis, there is no permanent budgetary expansion since the budgetary constraint of the State requires that a deficit be offset by a surplus. The effect on the interest rate is ambiguous. As in the case of a temporary expansion, private wealth must fall. It is reduced by the discounted value of the tax increase and this reduction may exceed the decline in wealth required for the balance in the Goods and services market, in which case the real interest rates falls, while they rise in case of insufficient decline. These theoretical results have been the subject of many empirical analyses, sometimes very elaborate. The results are still very disappointing.

An important issue, but one based on completely different mechanisms, is the provision of empirical goods and services collective, and taxation. To what extent does economic integration increase competition between national systems? This problem is the subject of extensive literature in the United States. For example, Case, Hines and Rosen (1989) analyse and document the effect of 'contagion' between US states. Two externalities come into play: on the one hand, if a country provides more collective services, it tends to attract households and businesses from other countries and thus exerts pressure on its neighbours to increase spending; On the other hand, a lower tax burden exerts a similar pressure on the other countries to reduce the tax burden. Both effects are directly related to the mobility of labour and businesses. They are well known and are the subject of negotiations, explicit or implicit, in the context of the preparation of the large European market. What interests us here is the question of whether the monetary union will reinforce these externalities, and therefore the pressure for harmonisation.

'Budget discipline' is frequently used without its content being clear. In particular, and contrary to the reasoning underlying the Delors Report, the existence of deficits cannot be systematically interpreted as a sign of indiscipline. An attempt at clarification is offered in this section, in particular by reviewing the economic arguments in favour of deficits, even permanent ones.

Diamond (1956) had established the criterion of efficiency of capital stock and shown that in a functioning economy, ideally the reason for this situation is that any additional accumulation of capital requires a sacrifice of the t of the current generation, while the benefits will go to all subsequent generations. In principle, future generations could compensate the current generation while remaining in a preferable situation; but because there is no market mechanism for such inter-generational transfers to occur spontaneously, the suboptimal balance is perpetuated. So there is room for government intervention and Diamond has shown that a budget deficit can achieve the optimal situation.

A different argument has been advanced by Lucas and Stokey (1983). It is noted that the succession of different political views often leads governments to reverse a government tax policies of his predecessor. This type of change creates uncertainty and encourages the private sector to adopt precautionary measures that increase the distorting effect of taxation in general. Lucas and Stokey show that a government can issue, under certain conditions, a structure of debt and assets that lead its successors not to question the initial choices.

The case of credit rationing leads to another argument in favour of public debt issuance. An important literature, following the work of Stiglitz and Weiss (1981), demonstrated that the banks, which only imperfectly aware of the situation of potential borrowers are allowed to refuse credit to quality borrowers. The result is, again, suboptimal for the community. Under these conditions, the government can counter the negative effects of this banking behaviour by borrowing to finance the production of collective goods and services that would otherwise be acquired by the private sector.

In general, there are a large number of cases where market mechanisms cannot operate perfectly and for which public intervention, often in the form of a deficit, is desirable.

For any agent, public or private, the only real budgetary constraint is the inter-temporal constraint. The existence of deficits, even prolonged, absolutely does not indicate that this constraint be violated, which would be an indication of indiscipline. The only criterion in this respect is to determine whether the service of the accumulated debt can be ensured by the subsequent primary surpluses.

The analysis presented in the previous section allows us to review these various aspects in order to consider the effect that a monetary union could have on budgetary discipline. As has already been pointed out, the essential feature, in the long-term view adopted here, is that in monetary union the real interest rates are equal in the different member countries, at least for the assets of the same risk class.

The aspect most often mentioned in the current debate concerns externalities. For this reason, a detailed analysis of the interdependence channels of fiscal policies was presented in the previous section.

The first channel concerns the real interest rate. An increase in the fiscal deficit in one of the members of the union imposes an externality on its partners in the form of a rate hike (whereas in the case of floating currencies or adjustable exchange rates, at least some of this effect can be absorbed by an appreciation of the exchange rate of the country whose deficit increases). This externality implies that each member of the union will tend to ignore the cost imposed on its partners, which will result in the implementation of overly expansionary policies. This is the only justification for imposing a constraint on fiscal independence.

A second channel transits through the terms of exchange within the union. This effect is reinforced by the elimination of interest rate differentials. Its consequences are aggravated by the fact that relative price changes cannot operate through parity changes and must result in absolute price changes, resulting in an additional risk of inefficient adjustment by quantities. However, this externality is not

particularly related to an expansionary fiscal policy; it therefore appears that the guidelines differ between Member States of the Union. The appropriate response is therefore not a restriction of deficits or surpluses, but a strengthening of budget coordination.

The third channel is that of the terms of trade between the union as a whole and the rest of the world, which are affected - together with the current balance of the union - by any budgetary action of one of the members of the union. It is still an externality that requires more budget coordination, without, however, emphasising the need for more restrictive policies.

The most indisputable case of indiscipline is where the inter-temporal budget constraint is threatened. In the absence of the debt monetisation option, there are only three solutions: the first is a default, i.e. a tax on the holders of government securities; the second is to increase taxation, present and future; the last is a reduction in the state's present and future expenditures. The last two options allow avoiding outright default. If, however, the public does not know in advance and with certainty which of these solutions will ultimately be retained, it is entitled to associate with each of the three options a non-zero probability.

In these circumstances, it is possible to demonstrate that private wealth, defined as the discounted expectation of future income, decreases. The reason is obvious: the first two options lead to a reduction in future income net of taxes. The result is a drop in consumption and therefore in internal demand. In the long-term perspective adopted here, the equilibrium in the goods market requires a fall in the interest rate and a deterioration of the terms of exchange. These two channels first affect the country in question, of course, but also the rest of the union, in proportion to the size of the country in question.

This result is obtained under the assumption, implicit but not reasonable in this case, that private assets do not exist. If, on the contrary, the existence of private assets is admitted, their profitability is not directly affected, provided that there is no risk of taxation of these assets. In this case, the interest rates on the public debt must be increased to provide a risk premium corresponding to the possibility of a cancellation, at least partial, of the debt. The profitability of private assets, however, is indirectly affected by the same mechanism as the previous reasoning. The end result is a drop in private interest rates and a rise in public rates.

In an open economy, the situation is modified and then appears the specific role of monetary union. In this case, the private interest rate cannot fall much, since it is tied to the rate across the union. Consequently, most of the adjustment takes place according to the other channel, that of the terms of trade.

The conclusion is therefore that the formation of a monetary union introduces two main effects. The difficulty of practicing in one of the member countries tax rates that are very different from those prevailing elsewhere increases the risk of default and therefore the risk premium on public rates. Secondly, the terms of trade are deteriorating more strongly. In both cases, the situation is more difficult for the government. This is likely to imply a greater focus on the budget constraint, and thus more budget discipline.

It is always possible to restore a difficult situation, in terms of budget constraint, by resorting to inflation. In fact, this is the most commonly adopted solution. Membership in a monetary union can radically change this situation, but it depends on the monetary constitution of the union.

If independent central banks continue to coexist, it is clear that there is no monetary equilibrium. It is in the individual interest of each central bank to issue money in large quantities, expecting other central banks to absorb the excessive liquidity thus created. This process (of the 'free rider' type) cannot be stabilised, since the incentives are the same for each of the central banks. The result is a virtual disappearance of the budget constraint.

It should be noted that it is not monetary union per se that is a source of indiscipline. The proposal contained in the Delors Plan to set ceilings for budget deficits thus becomes understandable. However, this approach does not solve the fundamental budget problem of monetary instability. There is, in fact, a solution in every respect superior. It consists of establishing precise monetary creation rules or, better still, keeping only one central bank. From then on, the risk of inflation disappears and with it the question of fiscal indiscipline.

Constraints between successive governments: If the monetary union restricts the possibility of inflation, as suggested above, the need for a government, mentioned above, to limit the margin of manoeuvre of its successors diminishes. As a result, monetary union appears as a source of fiscal stability.

One of the most worrying aspects of economic and monetary integration is the risk of a downward competition between national taxes, competition all the more intense as the object taxable is more mobile. The liberalisation of capital movements, effective since 1 July 1990, is an important element of this problem. A Community agreement could appear as the appropriate response. It ignores the fact that capital can move to countries that do not belong to the EC. The only solution is a global agreement, which has never been done. Monetary union can, however, change the situation: the emergence of a new monetary zone of considerable size, allied with the other major zone - the United States - could allow an action more credible with tax havens for international finance. In the absence of such an agreement, the downward pressure on capital taxation is serious and could contribute to undermining fragile fiscal balances or constraining public spending cuts.

It is generally accepted that the loss of an instrument - here the exchange rate policy - increases the importance of the remaining instruments - here fiscal policy. In order to address this issue, it is useful to briefly recall the functions performed by the exchange rate: it allows the relative prices of goods and services to be changed immediately, as well as those of financial assets; the prices of the latter being perfectly flexible. Two important observations must however be made: firstly, this cost is transitory since price rigidity is only a temporary phenomenon; secondly, the exchange rate is not a good substitute for price flexibility, since it simultaneously affects a large number of relative prices.

In principle, there is always a combination of taxes and subsidies that allows relative prices to be allocated in the way you want. However, such actions are explicitly excluded by Community rules. Only the overall fiscal policy is available and it is clearly a very bad substitute. It follows that the monetary union will increase the role of prices and increase the cost associated with their rigidity. However, this is

asymmetrical: the downward rigidity - in case of insufficient demand - is in practice more important than the rigidity on the rise. For example, monetary union may exacerbate downward fluctuations in quantities relative to upward fluctuations, hence the increased risk of recessions and a clearer role for expansionary fiscal policies.

Indeed, insofar budget stabilisation actions will become more necessary, it seems natural to coordinate them at the federal level, and if we wanted to justify this need in terms of externalities, it is because this argument provides a reason for public intervention and passes the test of the principle of subsidiarity: this shift towards a federal budget worries in more ways than one. In such a complex subject, a number of principles can be identified.

The development of a federal budget must be explicitly justified on the basis of the costs imposed by the creation of the monetary union. It is essential to recognise explicitly that it is a question of compensating the economic agents (households, companies) affected by the existence of the monetary union. State-to-state transfers are not an appropriate response and are susceptible to capture by the best-organised lobbyists, who are not necessarily the most affected agents.

It is all about compensating agents for unpredictable losses. The corresponding mechanism must therefore be similar to an insurance system against the costs of monetary union at the level of the union as a whole. Like any insurance funds, this system does not need to have a balanced budget each year. It must simply satisfy its constraint of inter-temporal budget, so as to be solvent. Every insurance system must deal with a moral hazard problem: potential beneficiaries should not be encouraged to seek to increase the transfers they can expect to receive. Fortunately, there are various insurance organisations (unemployment, pension, health) in the EC countries that have developed expertise in this area. It is perfectly possible to use them for setting up the Community insurance system.

The evolution towards a federal budget is inevitable if the monetary union is to remain a stable organisation. Indeed, when inevitable negative shocks will inevitably occur here and there, it is essential to avoid a situation such as a member country concluding that the costs of the union exceed the benefits. However, it is not essential that the implementation of this system be done in conjunction with the creation of the monetary union, if only because its size represents a fundamental change in community structures.

The role of these federal budgets is illustrated by the recent study by Sachs and Sala-i-Martin (1989). They observe that in the United States, when a fiscal region sees its real GNP fall as a result of a negative shock, federal transfers offset 40% of this loss, thanks mainly to the progressive nature of income tax. These transfers represent about 2% of the GNP and on average 20% of the state budget of the union. This figure suggests that a doubling of the Community budget might suffice. But because of the low mobility of the workforce - which plays a much larger role in the United States than it can in Europe - the needs are significantly higher.

The creation of a monetary union will affect fiscal policies in many ways. So far, official thinking seems to be organised around the Delors report and the proposal to limit national budget deficits. In fact, there

are few economic arguments for such limits, while many arguments go in the opposite direction. What seems necessary is a strengthening of coordination between Member States.

Budget coordination is a particularly exercise difficult to organise. For this reason and because a community insurance system is needed to compensate for the loss of the currency instrument, the best solution is to move towards the establishment of a real federal budget. This, of course, is a long-term direction that will not fail to raise many difficulties: firstly economic difficulties, which require a certain number of clear principles to be stated and implemented; political difficulties as well, which concern the vision of the integrated Europe, and raise the question of the democratic control of a substantially enlarged budget.

References

BERNHEIM, B. D. (1987). "Ricardian Equivalence: An Evaluation of Theory and Evidence", NBER Macroeconomic Annuals, pp. 263-316. BISHOP, Graham, 1989:

BLANCHARD, O. (1986). "Debts, Deficits and Finite Horizons," *Journal of Political Economy*, April, pp. 223-47.

BLANCHARD, O., and SUMMER, L. (1984). "*Prospects on High Real Interest Rates*," Brookings Papers on Economic Activity, 2, Autumn

CASE, A., HINES, J.R., and ROSEN, H. (1989) "*Copycatting: Fiscal Policies of States and their Neighbors*," NBER Working Paper No. 3032, July. EC, 1970: Report on Economic and Monetary Union, "Werner Report", Brussels, EC. EC, 1977: Report of the think-tank on the role of public finances in European integration, "*MacDougall report*", Luxembourg, BPOCE.

EC, 1986: Efficiency, Stability and Equity, "*Padoa-Schioppa Report*", Luxembourg, BPOCE. EC, 1989: Report on Economy and Monetary Union in the European Community, "*Delors Report*", Luxembourg.

EICHENGREEN, B. (1990). "One Money for Europe? Lessons from the US Currency Union ", *Economic Policy*, 10, April.

FRENKEL, J., and RAZIN, A. (1987). *Fiscal Policies and the World Economy*, MIT Press.

KIRRANE, C. (1990 April). "*Why European monetary union?*" Paper presented at the International Conference on European Monetary Integration, Free University of Brussels, Belgium.

LUCAS, R., and Stokey, N. (1983). "Optimal Monetary and Fiscal Policy in an Economy without Capital," *Journal of Monetary Economics*, 12, July, pp. 55-93.

SACHS, J., and SALA-I-MARTIN, X. (1989). "Federal Fiscal Policy and Optimum Currency Areas," Mimeo, Harvard University.