Intergovernmental Relations and Fiscal Discipline: Between Commons and Soft Budget Constraints

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Abstract

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Fiscal decentralization is likely to entail a bias in the budget process toward higher public expenses and deficits. The paper reviews lessons drawn from the theoretical literature and international experience on the design of intergovernmental relations. The institutional setup should address the dual problem of "common tax resources" and "soft" budget constraints, where policies devised to correct one problem may exacerbate the other. An approach based on full tax autonomy of lower-tier governments and reliance on market discipline, not supplemented by self-imposed constitutional limits, is not advisable. More effective seems to be a cooperative approach with some preeminence granted to the central government.

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I. INTRODUCTION

The last decades have witnessed a general trend toward fiscal decentralization—the devolution of spending and revenue responsibilities to subnational levels of government both in developed and developing countries (OECD 1997, Ter-Minassian 1997b, Wildasin 1997b). The main rationale behind this trend is based on the wide acceptance of the subsidiarity principle and on the traditional argument of the public finance literature that views local governments as being at advantage in dealing with the allocative function of the public budget. Following the Musgravian taxonomy, the public finance literature maintains (with some exceptions, see e.g., Sewell 1996) that, conversely, the redistributive and the stabilization functions would better remain in the domain of central governments. When Musgrave (1959) wrote his classic analysis, macroeconomic policy (the stabilization function) was just about counter-cyclical action. A particular facet of the stabilization function that was not prominent then, but has become since, is the need to maintain fiscal restraint and avoid structural public budget deficits. Some authors (Prud'homme, 1995; Tanzi, 1996) have stressed that to decentralize fiscal responsibilities may be inconsistent with fiscal discipline. As noted by Tanzi (1996), there are mainly three channels through which fiscal decentralization may aggravate structural fiscal problems: the assignment of major tax bases to subnational governments, the sharing of major tax bases, and the ability of borrowing by subnational governments.

The problem of fiscal coordination between different levels of government has become critical in the EU along the road toward monetary union. The so-called Maastricht criteria on public deficit and debt reflect that concern. The EMU fiscal targets while addressing the coordination problem at the level of the relationship among countries leave it unresolved within national governments. In fact, the EMU Stability and Growth Pact sets limits to the level of deficit (and debt) with reference to the general government (which includes lower-tier governments). However, in each member country, regardless of the degree of fiscal decentralization, the central government has the sole responsibility for formulating the yearly Stability and Growth Plans, for their implementation and for remedial action in cases where any sanctions are to be applied.² In many countries, subnational governments enjoy enough fiscal autonomy to determine with their actions whether the EU rule is respected, but they are not accountable for the final outcome. There is clearly a potential free-rider problem that should be addressed within each country. Indeed, the EMU Treaty envisages the possible need for a change in budgetary procedures in order to meet the obligation when it says (Protocol 5): "The Member States shall ensure that national procedures in the budgetary area enable them to meet their obligations in this area deriving from this Treaty." Since then the need of developing some "internal stability pact"—a legal or procedural framework for ensuring that the fiscal behavior of subnational entities is consistent with the

² The *Protocol* number 5 on the excessive deficit procedure says: "In order to ensure the effectiveness of the excessive deficit procedure, the governments of the Member States shall be responsible under this procedure for the deficits of general government."

commitments arising from the Maastricht treaty—features highly in the agenda of many EMU countries. In principle, the problems that a domestic equivalent of the Stability and Growth Pact should tackle are quite diverse: the extent to which binding deficit allocations are required; the distribution of the total public sector deficit between central and subnational governments, and among single subnational entities; the distribution of fines, in case of failure to meet the Pact's targets. Different institutional responses have been given by the various countries, including budget rules, cooperative or hierarchical approaches, multilateral and bilateral negotiations (see Section V). Of course, these are among the methods employed to conduct intergovernmental fiscal relations not only in European countries.

The purpose of this paper is to investigate what kind of institutional arrangements are more likely to be successful in ensuring that fiscal decentralization is consistent with fiscal discipline. In our analysis, while sometimes mentioning as a reference point the unitary centralized model of state, we will concentrate on the case of decentralized (federal or regional) states, for which the issues we discuss are especially relevant. In that context, we will not question the assignment of expenditure responsibilities (the expenditure *items*) to subnational governments, taking it for granted that some devolution is desirable and it has been designed optimally from the point of view of economic efficiency. We will rather focus on the budgeting process that determines expenditure *levels* and financing means (own revenues, central government grants, and borrowing). In the set of incentives facing subnational governments, there are two potential sources of distortion: (i) a common pool problem, arising from the fact that the opportunity cost of public revenues as perceived by subnational governments is lower than the true social cost; and (ii) a moral hazard problem, associated with the implicit insurance provided by the central government that it would bailout a subnational government which was unable to meet its financial commitments.

Two strands of the economic literature seem relevant to our purposes. The first one is that on budgetary institutions (e.g., Poterba and von Haghen, 1999), which views the set of rules and regulations according to which budgets are drafted, approved, and implemented as an important determinant of public sector deficits and debts. The second strand is that on the soft budget constraint (e.g., Muskin, 1999), a syndrome arising when an economic agent (for example, a public sector firm) is not held to a fixed budget but finds its budget constraint softened by the infusion of additional credit (or guarantees) when it is on the verge of failure.

The common pool problem is clearly exacerbated by a larger vertical fiscal gap: subnational governments have every incentive to overspend when a large share of financing is raised by the central government.³ An obvious answer would then be to reduce as much as possible the

³ To be more precise, what really matters is the financing of *marginal* expenditure. In a number of local government regimes, transfers from the center finance the local government only up to some target level expenditure. Thereafter, the local government is able to spend resources—but only if it can raise from its own local tax regime, including fees, charges and any borrowing. This may attenuate the common pool problem, but arguably leaves still open the soft budget constraint problem (see below). I thank Barry H. Potter for drawing my attention on this point.

fiscal gap. If local sources of tax revenues were sufficiently large to enable subnational governments to finance their expenditure tasks without having to rely on central government's support, the divergence between private (local) and social (national) opportunity costs of public funds would disappear, and with that also any incentive to local overspending. This line of reasoning, however, overlooks the moral hazard problem: subnational governments may rationally decide not to raise the revenue required to finance their expenditure—even though they have enough fiscal autonomy to do that—since they may believe they have the option of being bailed out by the central government and then of financing local expenditure with national revenues (whose opportunity cost, again, is lower than that of local revenues from the point of view of subnational governments).

If it is accepted that the moral hazard problem implies that the divergence between opportunity costs of tax revenues as perceived by central and subnational governments cannot be eradicated, one is left with the option of designing proper institutional arrangements to address that problem. On this, some insights can come from the literature on budget procedures that indicate as effective those arrangements that involve either a delegation of authority to a "fiscal entrepreneur," or a credible commitment by actors to a set of fiscal targets collectively negotiated. As we will see, the experience of some federal countries seems to indicate that it is possible to transfer, with proper adjustments, this recipe to intergovernmental relations.

The paper is organized as follows. In Section II, we examine the common pool problem in intergovernmental fiscal relations, and discuss the implications of a strategy focused exclusively on that issue. Section III is devoted to the issue of the soft budget constraint. Section IV analyzes the incentives facing central and lower-tier governments in the prospect of a bailout. Section V comments on the implications of the previous analysis for the design of intergovernmental relations. Some concluding remarks are in Section VI.

II. THE COMMON POOL PROBLEM

The idea that a common pool problem is intrinsically rooted in the typical public budget process can be traced back to the paper by Weingast, Shepsle, and Johnsen (1981). Focusing on the parliamentary stage of the budget process, they consider a legislature made up by representatives with a geographically based constituency and explain why a cooperative legislature would stand for policies that are Pareto dominated. The legislature will oversupply those programs that concentrate the benefits in geographically specific constituency, while spreading their costs across all constituencies through generalized taxation. In other words, each representative will fail to internalize the full cost, in terms of deployment of the common pool of national tax revenues, of financing expenditure programs

⁴ The possibility that legislatures may be captured by local interests, owing to different concentration of benefits and costs, is reminiscent of Olson's (1965) logic of collective action, on which it is also based the early theory of regulatory capture developed by the Chicago school, starting with Stigler (1971).

that benefit mainly his constituency. The divergence between real and perceived costs will be wider, and hence the commons problem more serious, the more fragmented is the legislation (that is, the higher is the number of districts for a given total population).

Taken at its face value, this model explains nothing more than the tendency for a parliamentary determined budget to exhibit a level of expenditure on "pork barrel" projects higher than is economically warranted. In fact, the more recent literature has built on the same basic idea to provide a representation of the government stage of the budget process and to generate a bias toward excess deficits as well as excess public spending. One can reasonably replace the geographically based constituency of a representative in the legislature with the special-interest based constituency of a spending ministry in the government. A good example is von Hagen and Harden (1995), who consider a government consisting of n spending ministers. The budget allocates public funds, raised through distorting taxation, to spending ministers, each of them pursuing its policy target. Collectively, the cabinet would wish to minimize the divergence between policy targets and actually allocated funds and, at the same time, to minimize the excess burden of taxation. The common pool problem arises, as in Weingast et al. (1981), from the fact that each spending minister takes into account only a share of that excess burden; the portion that falls on his constituency. From this premise, the budget released by the cabinet is going to depend critically on the decision-making procedure. If the procedure entails collecting each minister's bid and taking a vote on the resulting budget, we are in the reign of what Weingast et al. (1981) labeled as "universalism" and "reciprocity" (any spending unit will get some funds and a process of mutual support and logrolling will be established). Each minister will make his bid taking the others as given and the final budget will exhibit a spending bias for n > 1.

As noted in several evaluations of the literature on budget institutions (e.g., Alesina and Perotti, 1995; Milesi-Ferretti, 1997), early models with government resources as "common property" explain how budget procedures can have an implicit bias toward overspending and then excess budget size, but they do not say anything about the budget deficit. More recent models (Hallerberg and von Hagen, 1999; Velasco, 1999, 2000) show that the "common property" approach is able to generate excess deficits as well. For example, Hallerberg and von Hagen (1999) propose an extension to two periods of the model of budgeting within government by von Hagen and Harden (1995). The budgeting decision now involves not only allocating funds among the spending ministers but also setting taxes endogenously in order to meet the intertemporal budget constraint. Again, individual spending ministers would disregard the externality arising from their expenditure decision, and hence in a completely decentralized budget process both spending and borrowing (in the first period) would be inefficiently high.

There are two ways of reducing the spending and deficit bias arising from the coordination problem in the budget process: either delegation of authority to a "fiscal entrepreneur" (the finance minister, without portfolio) or commitment by the whole government to a set of binding limits on expenditure allocations collectively negotiated at the beginning of the budgeting process. The larger the finance minister's agenda-setting power, the closer the

deficit comes to the collectively optimal outcome. Under the commitment approach, the multilateral nature of the negotiations on fiscal targets implicitly forces all participants to consider the full cost in terms of tax burden associated with additional spending. Hallerberg and von Hagen (1999) note that both approaches require that the finance minister is vested with enforcement powers in the implementation phase of the budget (in short, there is an efficient system of public expenditure control and management), in order to neutralize the incentive that single spending ministers will have to defect from the approved budget.

What is the relevance of the common property model of budgeting for intergovernmental fiscal relations in a federal state? Alesina and Perotti (1995, p. 21) see a clear analogy: if spending decisions are taken at the local level and are financed with transfers by the national government, which raises taxes, the same mechanism operates under fiscal federalism as in the case of geographically elected representatives and dispersed interests. If the problem were just a common resource one, however, the answer would be almost trivial (at least conceptually): make local authorities responsible for both taxing and spending decisions; in other words, reduce as much as possible any vertical fiscal gap between the central state and subnational governments. There are conceivably practical difficulties in finding proper taxes to be assigned to subnational governments: as noted by Tanzi (1996), local governments are seriously limited to the tax revenue they can raise on their own, if they restrict themselves to taxes that possess those characteristics commonly regarded as desirable (efficiency, ease to administer, and being of a benefit-received nature). Yet, the general prescription would be clear: try as much as possible to match the sizes of tax and expenditure assignments to local governments.

Unfortunately, this "easy" solution misses something. To see why, consider the limiting situation where all local expenses are financed through local taxation. Then the common pool problem is clearly resolved: we would be left with a set of fiscally quasi-independent states (with possibly a residual role left for a federal government, consisting in the provision of national public goods). As stressed by Keen (1998, p. 471) in the context of tax competition "there is a fundamental distinction between issues of fiscal federalism and of international taxation: the presence or absence of an overarching federal government." In our case, the

⁵Another possible free rider problem in fiscal federalism is that noted by Bruce (1995). In his model, households have a short-run attachment to a particular region but are free to migrate between regions in the long run. The Nash equilibrium of regional fiscal policies is one where regional governments issue too much debt relative to the level that would be issued under a coordinated policy. The reason behind this result is that the benefit from increased regional borrowing is concentrated on regional residents, owing to regional attachment, whereas the future cost of this borrowing is diluted by migration.

⁶Another practical difficulty in closing any vertical fiscal gap derives from the unequal distribution of tax bases among local jurisdictions, which calls for equalization schemes and for more financial support to poorer local governments. Here we neglect these considerations. In the real world, the argument for closing the fiscal gap needs to be qualified, as limited to the richer localities. Thus, the Canadian province of Alberta is fully autonomous fiscally (Courchene, 1999); the same will happen in Italy for Lombardy under the 1999 reform of regional finances.

presence of the federal government makes a basic difference: it makes it conceivable that subnational governments will eventually be bailed out. In other words, the mere presence of a federal government introduces an insurance element that will affect the budgeting decisions of subnational governments, exposing intergovernmental fiscal relations to a moral hazard problem.

Among modern federations, the Canadian provinces represent, perhaps on par with the Swiss cantons, the case that more closely resembles the theoretical situation of subnational governments enjoying a complete fiscal autonomy. The vertical fiscal gap is very low by international standards: the ratio of federal transfers to provinces' own revenues is on average around 20 percent, but only slightly higher than 10 percent in the three major provinces (Courchene, 1999). Provinces can borrow funds for capital and current purposes with no formal constitutional or federal government restrictions. As far as debt control is concerned, the Canadian system treats provinces as the federal government, relying on market discipline, with rating by international investment firms being the only checking device. The recent experience seems to indicate that even in a well-developed financial market as in Canada, market discipline has not been fully effective, and has started to work only after a "recognition lag" (Ter-Minassian and Craig, 1997): provincial debt increased from 4.9 percent of GDP in 1980 to 22.7 percent in 1994, and only in the second half of 1990s have provinces begun to implement fiscal consolidation programs (Krelove, Stotsky and Vehorn, 1997). In this regard, Courchene (1999) uses the case of Ontario (which accounts for 40 percent of Canada's GDP) as an illustrative example of "the problems that can arise in a highly decentralized federation with effective fiscal autonomy at both levels of government." In the face of the early 1990s' recession, while the federal government was committed to a policy deficit reduction, Ontario's deficit spending made that province's debt to GDP ratio rocket from 14.2 percent in 1989-90 to 31.3 percent in 1995-96. Debt-rating agencies dropped Ontario's rating progressively in 1991, 1992, and 1993, yet the province was able to float \$60 billion in new bonds over a five-year period, what Courchene (1999) remarks being "a record for a subnational government, anywhere, anytime."

One can argue that this only proves that market discipline works well: the downgrading of Canadian provinces debt, which forced them to adopt fiscal consolidation programs, is there to show that financial markets ruled out the possibility that the federal government would eventually bailout provinces (Blondal, 1998). However, one should note that in the same period also the federal government built up a heavy debt (from 45.9 percent of GDP in 1985 to 70.8 percent in 1994), hence the downgrading of provinces might simply be a reflection of a change in the market's evaluation of federal government perspectives.

Those who are more confident in the effectiveness of market discipline point as evidence to the interest rate spreads reflecting differences in credit risk associated with dissimilar budgetary policies. In fact, there tend to be significant spreads among bonds issued by different Canadian provinces, but it is not clear whether these are large enough to affect fiscal policies (Bredenkamp and Deppler, 1989; Lane, 1993). Actually, financial market signals sometimes are not very clear: in the well-known case of New York City in the mid-1970s, a major credit agency upgraded the city's rating just on the eve of a major financial crisis

(Gramlich, 1976). In fact, it may be the case that market discipline works only intermittently. Lemmen (1999), starting from the observation that the development of yield differentials in subnational government debt with respect to the central government debt is remarkably similar across federal states, presents some empirical evidence that markets only tend to bite during periods when there is a low "appetite for credit risk" in world financial markets (measured by the ratio of an index of emerging markets sovereign debt and an index of G7 countries sovereign debt).

Even if market signals are clear, for market discipline to be effective, it is still necessary that the borrower respond to market signals (Lane 1993): as noted before, this happened in Canada though with a lag. On the whole, it is perhaps safer to suggest that the Canadian case may indicate that fiscal discipline could be at risk when subnational governments are granted a strong tax autonomy, there is no coordination of fiscal policies, and there are neither self-imposed constitutional limits nor central-government imposed controls on subnational governments borrowing. In short, the recommendations drawn from the literature on the budget process at the central government level, reviewed above, seem to maintain their validity also in the context of intergovernmental fiscal relations

III. SOFT BUDGET CONSTRAINTS AND BUDGET INSTITUTIONS

Even if the common pool problem in intergovernmental fiscal relations could be solved by closing any vertical tax imbalance, fiscal discipline could not be taken for granted. When subnational governments finance their expenditure through national revenues, they will not take into account the true social marginal cost of taxation and will choose an excessive level of expenditure. On the other hand, even if local expenditure was, in principle, to be entirely financed by local taxation, a subnational government will still be able to gain access to the common pool of national tax resources when its budget constraint is "soft." In other words, if there is an implicit guarantee that the central government will come to rescue a subnational government that faces financial difficulties, there is always a chance that the latter will behave in such a way to elicit that intervention.

In a sense, the soft budget constraint disease is just another version of the common pool problem: a subnational government does not perceive the full social cost of national tax resources used for bailing it out. However, we will see that institutional arrangements designed to ameliorate the common pool problem can turn out to exacerbate the problem of bailouts. Before discussing possible solutions to the latter problem, it is important to

⁷ Lemmen (1999) finds evidence for Australia, Canada, and Germany that his index of the world's appetite for credit risk accounts for an important part of the cross-sectional variation in yield differentials and that, when that index is included in the analysis, the effects of both market discipline and fiscal rules are less important.

⁸ For the U.S. states, where in most of the cases fiscal policy is subject to constitutional balanced budget rules, market discipline seems to be more effective (see Section V below).

determine what we expect from a "solution." A possible answer is a credible commitment of the central government that will not bailout any lower-tier governments in financial difficulty. Whereas this may be quite possible in the area where the theory of soft budget constraint originated (Kornai, 1986), that of state-owned enterprises producing private goods, one should be more skeptical that such a "solution" is usually feasible in the area of fiscal federalism.

In the recent international history of intergovernmental fiscal relations, there are no examples of subnational governments allowed to go bankrupt (which would involve default on their debt) in the more advanced federal states. The often cited case of Orange County, California, is not, strictly speaking, an example of irresponsible fiscal behavior eventually leading to debt default. Orange County declared bankruptcy on December 1994, after its \$20 billion investment pool had experienced \$1.7 billion losses, mainly coming from derivative securities that fluctuated inversely with interest rates. As noted by Kearns (1995), the Orange County case originates from the attempt of diversifying budget revenues that followed the approval of Proposition 13, capping property tax revenues; the new legislation, while limiting public authorities' discretion in tax policy, had the opposite effect in the area of investment management. ¹⁰

On the contrary, we have seen many cases, both in developed and developing countries, in countries with more and less mature financial markets, with more and less established federalist structures where financial crisis of local governments have been resolved through the intervention of the central state, which sometimes involved taking over temporarily the management of the provision of local services. The most famous is perhaps that of New York City in 1975, when the municipality was on the verge of bankruptcy with banks unwilling to lend the city money, following a period of fifteen years during which the city borrowed to cover current accounts deficits continuously (Gramlich, 1975). The default was avoided thanks to the intervention of both the federal government and the state of New York, that provided financial assistance; a Municipal Assistance Corporation was created to restructure the city's debt and to monitor the city's spending. For a period, the city lost control over its finances, but eventually, in 1979, New York City was again able to access the credit market. It

⁹ However, something can be done to reduce the moral hazard. Central government can signal the limits of its intervention and make clear that there will be significant pain for subnational governments that fail. On ways for limiting and dealing with implicit contingent liabilities, including uncovered losses and defaults on nonguaranteed debt by a subnational government, see Polackova (1998).

¹⁰ For more detailed accounts of the Orange County case, see Kearns (1995), Jorion (1995).

¹¹ Gramlich (1976) provides an overview of the causes of the New York City crisis. For other cases of local fiscal crisis of local governments in the United States, see Inman (1983) on Philadelphia in 1976 and Cleveland in 1978; Inman (1995) on Philadelphia in 1990. Other recent examples throughout the world include Naples (Italy) and Sao Paulo (Brazil).

If one accepts the idea that it is very difficult to rule out any chance of bailouts in fiscal federalism, the task required from a "solution" will then be more complex: in an environment where it is an inherent fact of life that the central government would eventually provide some financial assistance, this means setting a system of controls and incentives, such as to harden the budget constraint of lower-tier governments. This leads us to the quality of the institutional framework (Tanzi, 2000) and, in particular, to the issue of coordination of public expenditure management systems between central and lower-tier governments.

There is not much literature on these issues, some notable exceptions being Tanzi (1996) and Potter (1997a); here, we heavily draw from those sources—to which we refer the reader for a more complete treatment—and from the recommendations contained in the IMF's Manual of Fiscal Transparency (IMF 1999). A first point, regarding the distribution of policy responsibilities among different levels of government, is of fundamental importance. Any system with some degree of decentralization entails a dual responsibility in the allocative sphere. Unitary states may devolute to lower-tier authorities the administration of central policies where regional organization has efficiency benefits; in federal states, the central government may prescribe uniform or minimum standards to local authorities or require them to undertake national policies (Potter 1997a). The involvement of central government in the allocative decisions of regional authorities may make the latter feel that the former shares some responsibility in their financial equilibrium, with obvious negative consequences on the (perceived) hardness of their budget constraint (below, we consider some examples to illustrate this point). Thus, a pre-requisite for a good institutional framework for intergovernmental fiscal relations is that powers and responsibilities are based "on stable principles and/or agreed formulae and that they should be clearly stated" (IMF 1999, § 26). Financial resources assigned in various forms (own revenues, shared revenues, grants) to subnational entities should be sufficient to match the expenditure assignments. The size of own revenues should be such as to grant subnational governments some degree of maneuverability of their budget. On the expense side, one should avoid too detailed federal mandates—in the choice of both the output mix and the techniques of production that may curb local ability to effectively managing expenditure. In short, the contract between central and subnational governments should be feasible and clear both on the revenue and the expenditure side (Tanzi, 1996).

Turning to the budgetary system, the main objective should be shifting the focus of fiscal policy to general government, by building a framework for the coordination of budget plans. The economic costs of poor coordination are potentially very important, and may derive from poor timing of borrowing, implying an excessive cost of the debt service; reliance of subnational governments on expensive off-budget transactions as a device for evading expenditures or borrowing limits dictated by the central government; disruption of expenditure programmes when emergency action is required to maintain the overall fiscal balance; inefficient resource allocation determined by duplications or gaps in provision between different tiers of government (Potter, 1997a). A pre-requisite for budget coordination is a system of public accounts with a comprehensive coverage. In federal states, it should be stressed the importance of providing information on "general government"

revenue, expenditure, and borrowing at the time the central government budget is presented" (IMF, 1999, § 64). This requires an effort to standardize statistical presentation, by using common assumptions on macro variables, and adopting common revenue and expenditure classifications. Coordination in budget plans should be based on guidelines provided by the central government on the level of borrowing by lower-tier governments or, in the case of unitary states, directly on expenditure and revenue levels (Potter, 1997a). On the other hand, local authorities should be able to plan their budgets in a context of reasonable certainty on the amount and the timing of resource transfers from central government; rules for the payment of grants, and tax sharing arrangements should be transparent and unambiguous.

Finally, good practices in the areas of budget execution and reporting are essential for fiscal stabilization. Timely and comprehensive reporting of budget implementation is a requisite for enabling the central government to monitor the financial position of lower-tier governments, in order to be able to detect individual authorities in trouble and call for remedial actions. According to the Manual of Fiscal Transparency, "ideally, quarterly or mid-year reports would cover the general government fiscal position and provide a basis for assessing whether or not fiscal targets set in the budget can be achieved." In cases where the central government cannot provide full coverage of lower levels of government and where the fiscal responsibilities of lower levels of government are significant, "an aggregate summary statement of their fiscal position should also be provided where practicable, if necessary using indicators of their fiscal position such as bank borrowing or bond issues" (IMF 1999, §144). Potter (1997a) points out that this information may not be sufficient, since any off-budget financing would not be revealed by the borrowing data, and additional borrowing needs may come from the management of asset holding by subnational governments (e.g., the case of Orange County recalled above); this calls for supplementing borrowing data with information on the stocks of debt and of assets held.

In Section V we will return on the issue of budget institutions. Before we want to understand better the incentive problems that arise in fiscal federalism when the possibility of a bailout cannot be credibly ruled out.

IV. BAILOUTS AND THE FISCAL AUTONOMY OF SUBNATIONAL GOVERNMENTS

The basic question we address in this section is whether it is possible to set a system of incentives such as to induce local governments not to follow the kind of behavior that would elicit a bailout. In this spirit, two recent papers, Wildasin (1997c) and Carlsen (1998), propose formal models of bailouts in fiscal federalism. Both papers model intergovernmental fiscal relations as a game where firstly the central government chooses a bailout policy, i.e., a set of conditions under which it will provide financial assistance to local governments; the possibility of a bailout brings about a nonlinear budget constraint for the local government that will decide whether or not to trigger a bailout, according to its objective function, after taking into account the costs associated with being bailed out, consisting in loss of autonomy and disruption of local activities.

In Wildasin (1997c), there is a fixed total population of identical households, partitioned into several local jurisdictions, each of the same size. The central government provides a pure public good, localities a quasi-private local good. The crucial assumption is that consumption of the local good generates a positive externality: each household cares about the total consumption of that good by all other households. Both tiers of government finance their expenditure through lump-sum taxation; in addition, localities receive matching grants from the central government. The first-best allocation of resources in this economy is characterized by the usual Samuelson conditions; following standard Pigouvian principles, it is then possible to use matching grants to achieve an efficient Nash equilibrium where all localities maximize the utility of a representative household and the budget constraints of both tiers of government are satisfied. In practice, however, the central government may not be able to enforce a commitment to its announced grant policy, so actually softening the budget constraint of the localities: if a locality chooses to provide a very low level of its local good (exerting a very low local tax effort), it will damage other localities, given the postulated positive externality. It may then be in the interest of the central government to intervene and bailout that locality by providing a conditional lump-sum grant, financed by reducing the level of expenditure on the national public good. The single locality now faces the alternative of either providing the level of the local good entailed by the Nash equilibrium with a hard budget constraint or exploiting the soft constraint option and triggering a bailout. The actual choice will depend on the intensity of the externality (that determines the generosity of the bailout) and on the preferences of the locality, given the cost of a bailout for the locality, represented by the lower consumption of the national public good.

This model has two important implications. The first one is that, under fairly general conditions, larger localities can extract larger bailouts from the central government than smaller ones, and small localities may not be able to extract any bailout from the center at all. The reason for this is that the local good provided by larger localities generates a larger positive externality. In other words, incentives for a bailout can be especially strong when subnational governments are considered "too big to fail." Wildasin (1997c) interprets this result as an indication that problems of fiscal discipline may result not because there is too much decentralization, but because there is too little: it may make sense to carry out more thorough decentralization, devolving fiscal authorities to smaller jurisdictions. There is, however, another way of looking at this point that is worth noting: for a given population size, the bailout problem becomes less serious, the higher the number of localities. This contrasts sharply with the standard result in the common pool model (e.g., Weingast et al., 1981), according to which that problem becomes more serious the higher is the number of geographical districts. Thus, if decentralization is pushed further to a point where incentives for a bailout become very weak, it may be the case that this will exacerbate the commons problem.

The second interesting implication of Wildasin (1997c) is that one way of making bailouts less attractive to localities may be to raise the matching rate of central government grants above the efficient level. This would involve overprovision of local goods, but since also equilibria with bailouts are inefficient, "excessively generous matching grants may be

welfare-superior to matching grants set at first-best rates" (p. 30). We will comment on this point after a brief illustration of another model that reaches a similar conclusion.

Carlsen (1998) describes intergovernmental fiscal relations as a two-period game between a representative local government and the central government. Local finances come from local taxation, assumed to be fixed, and grants from the center, whose level is decided endogenously. The two levels of government agree on the preferred composition and intertemporal distribution of spending, but they disagree on spending levels, since the local government does not perceive that central government grants have an opportunity cost. At the beginning of the first period, the central government grants an unconditional transfer, then the local government sets preliminary budgets to two local goods. If the central government could credibly commit itself not to bailout, the local government would be able to do nothing but to set a budget that coincides with the one preferred by the central government. However, the local government can elicit a bailout by distorting its preliminary budget: the central government will provide supplementary finance if the cost of the distortion is higher than the opportunity cost of tax revenues. In practice, a bailout may arise either because the central government wants to correct the composition of local spending or because the local government runs a deficit in the first period. In the former case, the bailout involves a supplementary conditional grant (to the expenditure item that the local government decided to underfund); in the latter, the central government will concede a general grant also in the second period.

As in Wildasin (1997c), to follow a policy aimed at eliciting a bailout is not without costs for the local government: in Carlsen (1998), such cost is represented by the distortion in the composition, and in the intertemporal distribution, of spending. The local government will be willing to incur this cost when local spending is low, which implies that the marginal benefit of additional transfers is high. One way for the central government to avoid this outcome is to "bribe" the local government to abstain from budget distortions by raising the first-period unconditional grant. Indeed, Carlsen (1998) shows that in equilibrium the central government wants to follow exactly this line of conduct, local expenditure will then be higher than what it would be socially efficient but the local government will not distort its budget in order to elicit a bailout.

The models by Wildasin (1997c) and Carlsen (1998) do not address all the dimensions of the problem of intergovernmental fiscal relations. An ideal model would entail both endogeneity of local taxes and divergence between the perceived marginal costs of public funds (the common pool problem) as well as the possibility of a bailout. Clearly, this topic requires further research. However, two important lessons can be drawn from these models. The first is that even if central government cannot commit to abstain from providing financial support to lower-tier governments in the event of a crisis, a bailout will not automatically occur. A point often neglected is that a bailout may be costly for local governments too, as it normally implies disruption of local activities and a loss of autonomy.

The second lesson is that policies designed to correct the common pool problem may exacerbate the moral hazard problem associated with bailouts. We have already noted how

more decentralization (fragmentation) may make less likely a bailout since no local government will be "too big to fail," but at the same time it may also widen the gap between social and private costs of public funds. A similar trade-off concerns the size of the vertical fiscal imbalance between central and local governments. While assigning to local governments enough tax-raising autonomy to finance their expenditure seems an obvious recipe for increasing political accountability and attenuating the common pool problem, it may render more likely the occurrence of a bailout. In both Wildasin (1997c) and Carlsen (1998), it may be in the interest of the central government to grant a transfer higher than warranted by economic efficiency, in order to incentive the local government not to engage in policies that would force the center to intervene with a bailout. This result has not received much attention, but it seems quite important. In fact, it has a straightforward interpretation that so far has not been noted and that can throw light on the problem of intergovernmental fiscal relations. The existence of a vertical fiscal gap in a federation implies that subnational governments have access to the common pool of national tax resources. But closing the gap does not necessarily mean closing the access to the pool, as in a house locking the front door does not prevent strangers from entering in, if there is an open backdoor. A bailout is precisely a backdoor to the common pool of tax resources. If it is not possible to keep that backdoor locked, the central government by allowing some access through the front door (financing part of local expenditure through grants) can better control the deployment of the pool and avoid the more disruptive access through the back door.¹²

There is some empirical evidence that a vertical fiscal gap is not necessarily associated with less fiscal restraint. De Mello (1999) estimates the effect of some decentralization indicators (subnational government spending, subnational tax autonomy, and subnational dependency on intergovernmental transfers, or vertical imbalances) on the central government's budget balance for two separate samples, seventeen OECD countries, and thirteen non-OECD (Latin American and Asian) countries. The results are quite contrasting for the two samples: in the OECD sample less subnational tax autonomy and larger vertical imbalances tend to improve fiscal outcomes; for non-OECD countries, tax autonomy does not seem to affect the government deficit, whereas dependency on intergovernmental transfers tends to worsen it. De Mello (1999) interprets these results as evidence that common pool problems are more serious in non-OECD countries, whereas in the OECD sample "vertical imbalances, rather than measuring the extent of common pool problems, may provide evidence of the ability of central governments to put a cap on subnational spending by increasing their dependency on intergovernmental transfers." It is also plausible that what really makes the difference is the quality of budget institutions, which, on average, is higher in OECD countries.

The case of Australia is a good illustration of the fact that a wide vertical fiscal gap is not necessarily a premise to fiscal disaster in a federal state. There the central government (Commonwealth) raises 70 percent of total public sector revenue but undertakes only

 $^{^{12}}$ Needless to say that a good public expenditure management system (see Section III) can play an important role in guarding the back door.

50 percent of public expenditure (Craig, 1997). Australia represents the polar extreme opposite to Canada in modern, mature federations (Courchene, 1999): states have no access to broad-based taxation and suffer from a wide vertical fiscal imbalance, with Commonwealth grants exceeding their own revenue (grants are 106 percent of subnational own revenues, compared to 21 percent in Canada). But what makes the Australian case really peculiar is its cooperative approach to intergovernmental fiscal relations. A fiscal institution, the Loan Council, was set up as early as 1929 to coordinate the borrowings of the Commonwealth and the states. The entire public sector budget process hinges on the modern version of the Loan Council, reconstituted in 1993, a ministerial council chaired by the Commonwealth treasurer and comprising the premier or treasurer of each state. The Council is the forum where the financing requirements of both states and Commonwealth are analyzed and a planned total public borrowing is allocated among the same participants (interestingly enough, this decision is taken at the same time as that on Commonwealth transfers to states, see Courchene, 1999). The Loan Council is also in charge of expost monitoring, and a member exceeding its endorsed loan allocation must provide an explanation to the Council (Craig, 1997). On the basis of the experience in the 1990s, this approach seems to work well, if we judge it from the point of view of subnational fiscal discipline: after the increase in general government deficit caused by the recession in the early 1990s, the states have succeeded in stabilizing their financial position well in advance respect to the Commonwealth. On the whole, the Australian case indicates the merits of a cooperative approach to the problem of fiscal discipline in a federal environment. Arguably the apparent success of that experience owes much to the strong leadership of the central government, to which the presence of a relevant vertical fiscal gap has clearly been expedient.

A quite different point of view on the relationship between vertical fiscal gap and bailouts is that in von Hagen and Eichengreen (1996). They consider two stylized situations: one in which all taxes are raised by a central government that provides grants to subcentral governments to permit the latter to carry out their functions, and another in which subcentral governments control taxes sufficient to finance their own expenditures. In the first case, a subcentral government does not possess any fiscal power to cope with the effects of region-specific shocks, small though they may be. The central government will then face the alternative of either allowing the subcentral government to go bankrupt or bailing it out. If the first choice is precluded, bailout is the only remaining option. As a consequence the moral hazard problem is exacerbated. In contrast, when there is enough local tax autonomy, the central government has the further option of demanding subcentral governments that they increase their own tax revenues to service the debt.

Indeed von Hagen and Eichengreen (1996) compare only two corner solutions: either full or no tax autonomy at all. We have supported the idea that *some* degree of fiscal dependence may be desirable; investigating the optimal degree of tax autonomy from the point of view of fiscal discipline is an interesting direction for future research. It is certainly true that a local authority with no own tax revenues will not have any instrument to offset the effects of a shock on its budget balance and will have to rely on assistance from the center (indeed, it will also have scarce incentives to follow efficient expenditure policies). However, even in a

corner solution context, to assert the superiority of the full tax autonomy solution one still has to prove that subcentral governments will agree to increase local taxes instead of asking for supplementary transfers from the central government.

The crucial question is, again, whether there are costs to subnational governments associated with a bailout. If there are no such costs, one would expect that, even though in principle other options are possible, they will not be pursued. Italy can provide a good illustration of this point. In 1978, a major health care reform established a national health service, assigning the responsibility for its management to regions. Since the tax autonomy possessed by regions was near zero, the expenditure was financed by a national fund from the state budget, distributed among regions on the basis of population. That system has never worked: regions (which under Italian law are subject to strict limits to their borrowing) tended to substantially overspend their allocated grant and to make up the difference by building hidden debt (borrowing from commercial banks and from private providers), periodically—say each two or three years—the state will take over the burden of regions' debt and issue bonds in order to repay the creditors, without imposing any penalty on regions. To worsen things, progressively a perverse practice tended to be established in budget making: the state. expecting that regions would overspend in any case, was setting the amount of the National Health Care Fund at unrealistically low levels. At the beginning of 1990s, the common view was that the separation of revenue raising and expenditure responsibilities was at the roots of the predicament. Correctly, a commons problem was identified as the main culprit. In 1992, payroll contributions earmarked for health care, so far collected by the central government, were transferred to regions (on the whole around 50 percent of health care expenditure), giving them the freedom of rising rates. Now regions had enough tax autonomy not to resort to state assistance should an overspending in health care finance ever materialize. Since then, the system has unfortunately continued to work exactly as in the past: Regions have built up hidden debts, eventually to be taken over by the state. None of the twenty-one regions has ever used the option of increasing payroll contributions. The question, more than being the state unable to abstain from bailing out regions, is that regions knew that they would not have to pay any cost if they forced the state to intervene, and quite rationally they chose to do so. 13

V. IMPLICATIONS FOR THE DESIGN OF SAFER INTERGOVERNMENTAL FISCAL RELATIONS

The main insight of the literature on budget procedures is that a fragmented process is likely to be conducive to higher levels of expenditure and deficit. Fiscal decentralization makes budgeting in the public sector a more fragmented process, so less fiscal discipline is to be expected. However, the benefits of decentralization in terms of allocative efficiency can be

¹³ The reform enacted in 1999 will deeply change intergovernmental fiscal relations in Italy. Regions will enjoy more tax autonomy and carmarking of revenues will be phased out. Besides, starting in 1999 there has been a first attempt to cope with the problem of subnational fiscal discipline, through an "internal stability pact" (see Section V).

so substantial that is worth looking for budget institutions and procedures able to bring us as near as possible to the goal of fiscal discipline even in a decentralized environment.

We have seen how the difficulty of making certain that local governments face a hard budget constraint renders it unlikely that full decentralization, involving the assignment to local entities of own tax resources sufficient to finance their functions and reliance on the financial market as a discipline device, will work. There is a number of conditions that need to be satisfied for financial markets to exert effective discipline on the local government, nonexistence of a perceived chance of bailout being only one of them, although arguably the most important (Lane, 1993). The choice of the degree of local tax autonomy is likely to face a trade-off, since institutional arrangements designed to address the common pool problem may exacerbate the soft budget constraint syndrome. A second trade-off concerns how far decentralization should be pushed. More fragmentation of government is likely to make more credible any central government commitment to abstain from bailing out subnational entities: none of those will be "too big to fail." On the other hand, more fragmentation would exacerbate the common pool problem of public sector budgeting, so jeopardizing fiscal discipline.

In our search for safer intergovernmental fiscal relations, hence we are left with the two broad solutions identified by the literature on budgeting institutions: those involving delegation of authority (a hierarchical approach), and those relying on commitment to a set of fiscal rules.

The first, natural method of ensuring fiscal discipline in a hierarchical manner is that based on administrative controls on borrowing, and, perhaps, on the expenditure mix and the level of local revenues. The experience of the UK is an illustration of this approach: a high vertical fiscal imbalance, the power of central government of capping local taxes, strict administrative controls on borrowing (Potter, 1997b). But of course, this is more proper of unitary, strongly centralized states. The same idea of administrative controls might be at odds with the notion of fiscal federalism. Therefore, it seems safer to assume that in a context of wide decentralization, one cannot rely much on administrative controls as the main instrument to ensure fiscal discipline. This is not to say that the administrative aspects of intergovernmental relations are not important: the transparency of budget institutions and the existence of a good public expenditure management system can make a big difference in monitoring the actual financial behavior of subnational governments and in issuing early warnings of dangerous trends in public finances (Section III).

Assuming as a pre-requisite the obvious need of good budget institutions, if we look for hierarchical approaches in a federal environment, we should explore ways of achieving a less fragmented budget process, through assignment of agenda setting powers to a "fiscal entrepreneur." This cannot be but the central government, the actor who in intergovernmental fiscal relations would not suffer from misperception of the opportunity cost of public revenues. Thus, our search can be rephrased as looking for ways of attributing a clear leadership to central government in general government budgeting. The approach followed, among others, in Australia and Germany seems the most fruitful. It is based on the attribution

of a coordinating role to a fiscal council, whose members are the finance ministers of both the central and local governments, with the former having a position of preeminence. ¹⁴ Some financial dependence of subnational governments from the center may help in ensuring the supremacy of the latter, as it happens in the Australian case. Efforts of granting subnational governments enough tax raising autonomy to reach self-sufficiency in financing their expenditures may, therefore, be displaced. As we have discussed in Section IV, while a closer matching of tax and expenditure responsibilities appears an obvious way of attenuating the common pool problem inherent in decentralized budgeting, it may exacerbate the moral hazard problem associated with a soft budget constraint.

Besides the hierarchical approach, that implies a clear leadership of the central government, the literature on budgetary institutions proposes commitment to a set of fiscal rules, as a way to ensure fiscal restraint in a decentralized budget process. On the whole the available evidence seems to confirm that subnational governments constitutional rules can be effective in ensuring some fiscal restraint.

In the last decade a substantial body of empirical evidence on the effectiveness of subnational government budget rules (von Hagen, 1991; Alt and Lowry, 1994; Poterba, 1994, 1995, 1996a, 1996b; Bohn and Inman, 1996; Inman, 1996; Alesina and Bayoumi, 1996) has been developed with reference to the U.S. states. From an econometric point of view, the sample formed by the U.S. states presents several advantages: the availability of a relatively large data set, the presence of some variation across states in the strictness of the budget rules, and the pre-existence of the rules with respect to the time period analyzed. 15 As mentioned above. the nature and the scope of balanced budget requirements vary widely across states. In most cases, limits apply only to part of the state budget, notably the operating budget (general fund), with the exclusion of special funds (capital-spending funds, social insurance trust funds, etc.). In some cases the rule is enshrined in the state constitution, in others it is contained in an ordinary law. To give an idea of the different degree of strictness; out of the 49 states with limits, 6 states have only prospective constraints (requiring either that the governor submits or that the state legislature passes a balanced budget), so they are allowed to run deficits at the end of the year; in 7 states outturn expenses can exceed outturn revenues, but there is a requirement to explicitly budget for that deficit in the next year (thus,

¹⁴ It is debatable whether a collegial negotiation is to be preferred to a series of bilateral bargaining between single local governments and the center, provided that the latter enjoys some preeminence. Alesina and Perotti (1995) discuss this issue in the context of the budget process in the executive. With bilateral negotiations, it is possible that a series of bilateral deals accumulates to inflate the budget, since no spending minister has the opportunity to attack another spending minister's deal. On the other hand, multilateral negotiations create an opportunity for universalism and reciprocity.

¹⁵ A serious problem in the analysis of the effect of budget rules on actual fiscal performances is the potential endogencity of budget institutions (Poterba 1996a). Present budget regulations in U.S. states were often already included in the original state constitution, in any case they were all in place prior to 1970 (Bohn and Inman, 1996).

the deficit never has to be actually eliminated); 36 states cannot carryover a deficit to the next fiscal year, that is any deficit must be eliminated by the end of the period in which it materializes.¹⁶

In the above-mentioned literature, there is a substantial consensus that these rules enforce some budget discipline in US states, in terms of lower deficits and quicker reaction to negative fiscal shocks. Most studies rely on synthetic indexes of the strictness of the rules. only few attempt to disentangle the various dimensions of budget regulations. An example is the paper by Bohn and Inman (1996) according to which balanced budget rules requiring an ex post (opposed to a prospective) balanced budget, constitutionally based (more difficult to amend than legislature based) and enforced by directly elected supreme courts (opposed to governor appointed) seem more effective. A second interesting result of this literature is that budget rules appear to interact with market discipline, in the sense that states with stricter rules faces lower interest rates on their borrowing, for given level of indebtedness and deficit (Poterba, 1996b). Finally, one should remember that the main drawback of budget rules is the lost flexibility in fiscal policy associated with them, which makes more difficult to pursue anticyclical or tax smoothing objectives. Arguably, this is more important for national governments than for subnational entities, since at the local level the stabilizing role of fiscal policy is less significant (Alesina and Bayoumi, 1996). One may, therefore, conclude that balanced budget rules are to be recommended at the local level more than at the national level. Yet, the potential costs in terms of the macrostabilization function also at the local level may be such to suggest the introduction of some coordinating mechanism to supplement the rule based approach (see below).

As we mentioned in Section I, the issue of intergovernmental fiscal relations is topical in the context of the EMU Stability and Growth Pact. There is an inherent contrast between, on one hand, the imposition on each member country of targets on public deficit and debt, and, on the other hand, the relatively high, and in some cases increasing, degree of fiscal decentralization that characterizes public finances in several countries. This calls for developing some legal or procedural framework (an "internal stability pact") for ensuring that the fiscal behavior of subnational entities is consistent with the European commitments. Single countries, among those with decentralized government, have given different institutional responses, that fall within the two broad classes we have identified: delegation of authority and commitment to a set of fiscal rules.

Reactions to the new European context depend also on the pre-existence of some established machinery for coordinating fiscal policy across the various tiers of governments. Thus, Germany, although debating the need for working out a formal "internal stability pact" (Wurzel, 1999), so far has simply relied on its well-established cooperative approach to intergovernmental relations; in this respect, the key institution in the German system is the

¹⁶ Bohn and Inman (1996). A slightly different account is given in Poterba (1996) who draws from a different source.

Financial Planning Council, chaired by the Federal Minister of Finance, that makes recommendations on the co-ordination of budgets and financial plans of the federal, Länder, and local governments (although it cannot make any binding decisions). Among countries that have been pushed by the EMU process to develop new institutions, Belgium has adopted a mechanism based on multilateral negotiations, which resembles the German approach, creating a High Financial Council to supervise the budgetary policies of Regions and Communities. Spain has relied since 1992 (in the context of the convergence program) on bilateral negotiations leading to a set of agreements between the central government and each individual subnational government where targets are set for deficit and debt. Other countries follow a line of attack based on statutory rules. In Austria, a special law has fixed the distribution among levels of government of the Maastricht limit on public deficit. In Italy, the 1999 Finance Law has set the objective of a reduction in regions and municipalities total deficit by 0.1 percent of GDP in 1999 and of maintenance of that reduced level in the two following years.

It should be stressed that institutional solutions under the two broad approaches—delegation and rules—need to be qualified under many respects. Thus, the approach based on rules does not dispense from some cooperation of all levels of government in formulating and implementing medium-term fiscal programs (Ter-Minassian and Craig, 1997); again, a strong case can be made for a multilateral forum where the contribution of each level of government to the overall fiscal policy are made consistent. Rules do not solve the problem of budget coordination and have costs in terms of the stabilization function. Indeed, there is a trade-off between output stabilization, requiring strong automatic stabilizers, and fiscal stabilization,

¹⁷ The High Financial Council (established by a special law amendable with the same procedure required for constitutional amendments) sets out recommendations for the budget balances of the subsectors of general government; in 1999, these recommendations (involving a gradual move toward balanced budgets) were accepted as policy targets, through consultations between the federal government, the three regions and the three communities. Borrowing by local entities is conditional on approval by the federal Finance Minister. There are sanctions in case of noncompliance: the Financial Council may issue a statement on the opportunity to constrain the capacity to borrow of the entity concerned for a maximum period of two years. This sanction is adopted by the Council of Ministers, on the initiative of the Finance Minister, and after hearing the entity involved.

¹⁸ Targets have been met in recent years (since 1992). In case of noncompliance, there are no formal sanctions, but issuance of debt is subject to authorization of the central government.

¹⁹ The distribution of the limit serves only the purpose of apportioning any fine in case the Maastricht limit was breached (there is no provision in the law for deficits below 3 percent of GDP). In practice, 10 percent of the overall 3 percent limit is assigned to subnational entities (0.9 percent of GDP to Wien, 0.11 percent to other Lander, 0.10 to local authorities, totaling 0.3 percent of GDP). Currently these entities are running surpluses.

²⁰ The deficit is defined as the difference between outlays net of investments and interest payments and own revenues (with the exclusion of transfers from the central government); there are no sanctions in case of non compliance, a part from the provision that in case any fine for excessive deficit should be imposed on the country, it would be distributed across those entities which did not comply with their commitments. The 2000 Finance Law has substantially confirmed these provisions with only slight modifications.

easier if the cyclical sensitivity of the budget is reduced (Cangiano and Mottu, 1998). As we will see below, this has some implications for the institutional design of the EU itself.

Even under the hierarchical approach, where some preeminence is granted to central government, a fiscal council is not destined to work properly if the contract between central and subnational governments underlying fiscal decentralization "is not spelled out precisely in all its details and implications" (Tanzi, 1996). In this regard, it is very important that the local governments are given access to the necessary resources, either in the form of grants or own tax revenues. The issue of unfunded mandates has become most pronounced in the last decade. Examples include the United States, where in 1995 passed the Unfunded Mandates Reform legislation (1995), which restricts the ability of Congress to impose costly mandates on subnational governments and requires assessment of those costs (OECD 1997). Assigning to subnational governments expenditure responsibilities without the corresponding resources can actually soften local budget constraints. The case of Italy, discussed above, was in part determined by the tendency of the state to underfund the Health Care Fund transferred to regions; in the face of that practice, it was easy for regions to claim that ex post financial support from the center was due (and when the central government challenged that view, the Constitutional Court would agree with the regions). Another example is Germany, where, based on a ruling of the Federal Constitutional Court in 1992, two states (Saarland and Bremen) are receiving federal supplementary transfers for their debt service (Wurzel, 1999; Seitz, 2000). Both states argued that given their high public debt it was impossible for them to carry out their constitutional obligations (under the German Constitution, fiscal federalism aims at establishing equalization of living standards throughout the country); besides that. major expenditure cuts were not possible, being the bulk of state expenditures fixed by federal laws. 21

In the framework of the theoretical literature surveyed in Section IV, one can view unfunded mandates as an incentive for local governments to trigger a bailout: for a "poor" local government a bailout may become so attractive as to overcome the costs associated with it. This brings us to the issue of enforcing the outcome of the budget process, which in the context of intergovernmental relations means essentially to ensure a hard budget constraint. Even though the central government cannot credibly commit that it will not eventually come to rescue subnational governments, bailouts do not represent inevitable outcomes. It is the balance between costs and benefits to the local government that will determine whether a bailout will occur. Thus, bailouts should be made as much costly as possible for subnational governments to induce them. One way may be to impose a penalty in terms of loss of

²¹ Seitz (2000), evaluating the German experience, makes a case for smallness being one important factor determining the likelihood of bailouts (in terms of population, Saarland and Bremen are the two smallest German states), contrary to the conventional wisdom encapsulated into the "too big to fail" aphorism. He argues that small regions are more exposed to adverse shocks (since their industry structure is less diversified), have local policy makers much closer to the public, are cheaper to support. One could contend that smallness makes at the same time less costly for the central government to abstain from intervention. Anyway, this issue seems to deserve more research.

autonomy, with the central government taking over and restructuring the local activities. Another, arguably more difficult to implement, involves defining standards of fiscal responsibility and holding local officials personally liable for failure to meet them (Wildasin, 1997c).

Federal mandates on expenditure can be a source of problem even when they are (ex ante) funded. Especially for sectors like health care or education, often the characteristics of the services to be provided are dictated by national laws, and the prices of inputs are centrally determined (e.g., a national contract for teachers or for hospital consultants), even though the responsibility for service provision is assigned to subnational governments. In terms of political accountability, this lack of actual expenditure autonomy may be a more serious problem than that of tax raising autonomy. Subnational governments will have no room for effectively managing expenditure and they may feel that the actual responsibility of doing that is not their own; what is worse, a third party (e.g., a constitutional court) may share the same impression. This state of things may eventually open the door to the kind of discreet bailouts, virtually costless for subnational governments, experienced in Italy and Germany and recalled above.

A final question deserves at least a mention. In this paper, we have limited our attention to well-established political entities, where even in a widely decentralized context there is a center entitled to make fiscal policy decisions over lower-tier levels of government. Thus, we have not considered the case of the European Union, where the role of the center in fiscal policy is quite limited. Fiscal discipline in the EU is to be ensured by the targets on public deficit and debt set in the Stability and Growth Pact, and by the no-bailout rule that prohibits the European Central Bank from purchasing public debt directly from the issuer. One can also argue that the small size of the EU budget would prevent the emergence of a soft budget constraint problem at the country level.

However, at least part of our analysis is relevant also for the case of EU. We have seen that an approach based on fiscal rules might be sufficient to ensure budget discipline, but it does not dispense from some cooperation of the various levels of government. The adoption of a decentralized approach, even though supplemented by the check of a budget rule and with coordination carried out through a multilateral forum (the ECOFIN Council), may not constitute the best design for conducting the EU fiscal policy. There are indications in the recent theory of fiscal federalism in favour of assigning a clear leadership role to a central fiscal authority (Wilson, 1999); when the leadership is decentralized, as it is in the EU. expanding the set of fiscal instruments available to the center turns out to be welfareenhancing (Caplan, Cornes and Silva, 2000). As remarked in Cangiano and Mottu (1998), as the spatial incidence of public goods widens and new externalities emerge (through increased tax competition and factor mobility) along with economic integration, there is a case for a central fiscal authority, endowed with a larger budget than the current EU. This solution is likely to be superior to the current set-up from the point of view of the stabilization function and, more in general, of the coordination of budgetary policies. However, its benefits need to be carefully assessed against potential costs in terms of fiscal discipline: the virtual absence of an overarching federal government with an own budget makes the EU more similar to a

collection of fiscally independent states than to a federation, hence less prone to the common pool and soft budget constraint problems that characterize intergovernmental fiscal relations.²²

VI. CONCLUDING REMARKS

In the literature, a wide consensus has emerged that a centralized budget process is more conducive to fiscal restraint. Thus, decentralization of revenue and expenditure responsibilities is likely to entail a bias toward higher public expenses and deficits. However, there are lessons to be drawn both from the theoretical literature and the international experience on how to design safer intergovernmental relations in a decentralized context.

- A prerequisite is the quality of the budgetary system. In particular, it seems crucial that: (i) the coverage of public accounts is as comprehensive as possible, in order "to allow a consolidated financial position for the general government to be presented" (IMF, 1999); and that (ii) debt obligations and commitments of subnational governments are monitored through a good public expenditure management system (Tanzi, 1996).
- Tax powers and expenditure responsibilities should be distributed according to "stable principles and/or agreed formulae" (IMF, 1999). Financial resources assigned in various forms (own revenues, shared revenues, grants) to subnational entities should be sufficient to match the expenditure assignments. The size of own revenues should be such as to grant subnational governments some degree of maneuverability of their budget. On the expense side, one should avoid too detailed federal mandates—in the choice of both the output mix and the techniques of production—that may curb local ability to effectively managing expenditure. In short, the contract between central and subnational governments should be feasible and clear both on the revenue and the expenditure side.
- The design of intergovernmental fiscal relations should address the dual problem of "common tax resources" and "soft" budget constraints. Policies devised to correct the common pool problem may exacerbate the moral hazard problem associated with bailouts. Thus whereas more decentralization (fragmentation) may make a bailout less likely, since no local government will be "too big to fail," at the same time it may also widen the gap between social and private costs of public funds.
- A similar trade-off concerns the presence of a vertical fiscal imbalance between central and local governments. While assigning to local governments enough tax

²² A different coordinating device, whose implementability is worth exploring, is that proposed by Casella (1999): the development of a market for deficit permits, borrowing from the experience of environmental markets.

raising autonomy to finance their expenditure seems an obvious recipe for increasing political accountability and attenuating the common pool problem, it may render more likely that local governments follow the kind of behavior intended to trigger a bailout. Indeed, some vertical imbalance may be expedient to a strong leadership of the central government in the budgetary process. Furthermore, it may actually be in the interest of the central government to grant a transfer higher than warranted by economic efficiency, in order to lower the marginal benefit to the local government of engaging in policies that would force supplementary financial help from the center.

- The previous argument does not mean that a very large vertical imbalance is desirable. Any bailout or, more generally, central government financial assistance during or after the execution of the budget should be made costly for subnational governments to obtain, and some actual tax (and expenditure) autonomy and effective maneuverability in local budgets is a prerequisite for making this threat credible. Penalties may range from reduction in future transfers to the loss of local autonomy, with the central government taking over local activities or imposing increases in local taxes.
- The inherent interrelations between central and local public finances make not advisable an approach to intergovernmental fiscal relations based solely on market discipline. Fiscal discipline is in danger when subnational governments are granted a strong tax autonomy, there is no coordination of fiscal policies, and there are neither self-imposed constitutional limits nor central-government imposed controls on subnational governments borrowing.
- Two other approaches seem more promising. The first one envisages a key role in the budget process for a fiscal council, where the contributions of each level of government to the overall fiscal policy are made consistent. Under this approach, it is crucial that some preeminence is granted to the central government, and for that purpose it may be expedient to keep some degree of financial dependence of subnational entities on transfers from the center. Also, the task of enforcing the decisions of the council should be assigned to the central government.
- The second approach is a combination of self-imposed rules of fiscal restraint for subnational governments and reliance on market discipline. Here, it is crucial that the budget rules are well formulated (they should be referred to outturns and not to prospective budgets, should be difficult to amend, and enforceable by an independent authority) and that there is a credible commitment of the central government to abstain from bailouts, at least from those of the discreet and costless (for the subnational governments) variety.
- However effective in insuring budget discipline, reliance on fiscal rules does not
 dispense from some cooperation of the various level of government, especially with
 regard to the macro-stabilization function. When considered in the context of the EU,

this may constitute an argument in favor of a central fiscal authority endowed with a budget larger than the present one.

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