

***‘Fiscal Decentralization: how to achieve a hard budget  
constraint’***

Massimo Bordignon (Catholic University of Milan)

Prepared for the workshop on  
**Fiscal Surveillance in EMU: New Issues and Challenges**  
Bruxelles: 12/11/2004

Preliminary and incomplete draft: 25 October 2004

## 1. Introduction

The title of the present paper is misleading. I am not sure, as I will try to argue in this same paper, that there are general solutions to the problem of the soft budget constraint in intergovernmental relationships, in the sense of ready-to-make recipes which work for any country and any period. There are some reasonable suggestions, which will be detailed in what follows and that an organization such as the European Commission may want to advocate across member countries. But at the end, each country will have to find its own way, on the bases of its own institutions. Also, international comparisons tend to be misleading and must be treated with care. What works in a country may not work in another, and what seems it could not possibly work, it may actually manage to function in some countries. I will discuss this point more explicitly with reference to the Italian case, because it is the one which I know best, but the problem is more general. Political institutions, especially those linked to intergovernmental relationships, are ripe with contradictions and hard-to-follow commitments. In this n-th best world, practical solutions are often very different from what one would like to advice in a first best world, where laws and political commitments are promptly followed by all the institutions involved.

But before entering into the details of the argument and in the structure of this work, let us step back and start by defining the problem we will discuss in this paper. Intergovernmental relationships around the world seem to be going through some common process. On the one hand, there is a clear and marked tendency toward the formation of international unions, or confederations, *across* countries. On the other hand, there is also a clear tendency toward decentralisation *within* national borders, which in some cases has gone so far to induce a dissolution of previously existing national communities. This double process, of upwards and downwards devolution, is so widespread to have led several authors to look for a common culprit, generally identified with the process of “globalisation” of the economy (e.g. Alesina and Spolaore, 1997, 2003).

In Europe, which is the focus of the present analysis, we have evidence of both tendencies. On the one hand, the last decade has witnessed the strengthening of the powers of the European Union, its enlargement to 10 new countries, the formation of a monetary Union and the draft of a new Constitution. On the other hand, all the main European countries have gone thorough some decentralisation process, strengthening the legislative and fiscal powers of sub-central jurisdictions. In some cases, this process has taken the form of a simple devolution of powers inside the existing

constitutional framework (UK); in other cases, it has also involved truly constitutional reforms, transforming previously unitary countries in decentralised or federal ones (e.g. Spain, Italy, Belgium, France). Even where the Constitution has not been changed, as in Germany, the traditional financial relationships among different levels of government are under strain and currently under review.

It is hard to find a common theme in this decentralization process and, as we will see, many important differences remain across European countries. Pre-existing linguistic and ethnic cleavages have played a role only in some limited cases (Belgium, Spain); in all other examples, these tendencies have more often represented an attempt to reach more efficient and more democratic decision making in the provision of some services and in the financing of local governments. Increased levels of competition have certainly played a role in this process. There is a large theoretical literature and some empirical evidence even in the European context which suggest that (a moderate degree of) decentralization increases economic growth (Thiessen, 2003). The European countries are just probably attempting to re-position themselves in the aftermath of the Common Market. Another important factor behind this process has been probably played by the European Union itself. With the increasing powers assumed by the Union with respect to planning, legislation and transfers to the sub-national territories, it has become important to create political organizations able to communicate directly with Brussels. Hence, the increased role assumed by regional and local governments.

Whatever the cause, this process has generated increased worries in observers and international institutions alike. Decentralization may erode national governments' traditional sovereignty and create a host of new problems to super national ones. Upwards devolution of powers raises new and serious issues of co-ordination, monitoring and control on the behavior of member countries; downward devolution may make it more difficult to ensure that these policies are effectively implemented. Fiscal discipline in the Euro zone is a clear example. With a common currency, fiscal policy of member countries must be somewhat harmonized and controlled to avoid negative externalities and contrast free-riding incentives; but national "stability pacts" can be made ineffective by the behavior of sub-central authorities. Nor is a simple transposition of stability pact at local levels necessarily a sufficient solution. For, pacts must be respected, which means that state authorities must have both the incentives and the powers to keep local finance in check. Devolution of powers may undermine both the ability and the incentive for central governments to perform this task effectively.

One reason why this may occur is the so-called “soft budget constraint” problem (SBC from now on), a term originally proposed by Janos Kornai for productive firms in transition economies (Hungary) and then extended to a number of different institutional settings (banks, financial markets, etc.), including intergovernmental relationships. According to this theory, the inability of a Principal to commit dynamically to a budget constraint may induce Agents to misbehave, distorting ex ante financial and productive choices, in expectations of a rescue by the Principal ex post in the case of trouble. In the context of intergovernmental relationships, the SBC disease may surface in the form of excessive expenditure at a local levels, distortions in local public expenditure, bailing out of local debts, excessive transfers, and rent seeking behavior by local politicians. As a result, the overall efficiency and financial stability of the community at large may be jeopardized. As the problem has come to be perceived as serious, a quite large literature has developed trying to determine causes and remedies of the SBC phenomenon. This literature now includes both theoretical and empirical works, ranging from detailed institutional case-studies to broad comparisons across countries and institutions (e.g. Eskeland et als, 2003). In spite of the variety of approaches, a common theme of these studies has been to find ways to harden the budget constraints of local governments, so as to reap the efficiency gains of decentralization without incurring in the costs of SBC problems.

When applied to the European context, this approach raises a number of questions. What does theory exactly suggest in terms of SBC problems in intergovernmental relationships? Is decentralization conducive to fiscal indiscipline? More on the point, is the current process of decentralization in Europe likely to increase the risk of SBC phenomena in the future? Is there hard evidence of SBC being at play in intergovernmental relationships, in particular in Europe? How well have the Euro-zone countries managed so far to decentralize the Stability Pact at local level? And if the local budget is soft, what can be done to harden it?

To answer these questions, the paper is organised as follows. We start by discussing the theory of SBC as applied to the intergovernmental context. This effort of clarification is important because I feel there is still some confusion going on in the literature concerning what SBC exactly is and which are its observable consequences. We then move to discuss the empirical evidence, or more exactly the very few attempts which has been made so far to attempt to carefully test the phenomena. We then briefly summarize the main elements of the decentralization process in Europe, asking if theory suggests that the SBC problem is likely to become more important in the

future. Finally, we briefly review the empirical evidence concerning the stability pact adopted in Europe, discussing their efficacy. In this context, a particular relevance is given to the Italian case, for the reasons already explained. In the last section, using the evidence accumulated in the previous chapters, we discuss of policy recommendations.

## 2. Theory

The aim of this section is not that of providing a complete, or even a partial, survey of the literature on SBC. Excellent surveys already exist (Kornai et alts), and there is even an entire book dedicated to the problem in the context of intergovernmental relationships (Rodden et al.). Rather, the aim of this section is to assess critically some general themes developed in the literature and try to use these general ideas as a guidance for the subsequent discussion. I believe this exercise is worth doing for at least two reasons. First, because the literature on SBC was originally developed in the context of nationalised firms and the banking system and only later has been extended to the intergovernmental context. But some crucial differences remain, and it is important to focus on them to understand the extent at which the SBC literature (and proposed remedies) can be applied to the intergovernmental context. Second, because I feel that there is still some confusion going on in the literature and an effort of clarification may be useful.

There are then at least three important questions one would wish to ask theory:

- \*What exactly constitutes a SBC's problem? When can we say that we are facing a genuine SBC problem and not some other problems linked to intergovernmental relationships?
- \*Which are the consequences of the SBC? How can we identify on empirical grounds the existence of a SBC phenomenon?
- \*Which are the motivations behind the problem and how we intervene to try to solve it? In particular, is decentralization bound to increase the likelihood of SBC's problems?

## 2.1 What does SBC mean?

For the first question, the literature makes it clear that there at least *three identifying elements* in any SBC kind of problem.

First, there have to be at least *two separate agents* or organizations with at least partly contrasting objectives and instruments. In an intergovernmental context, these two agents may be taken as being two levels of governments, a higher level and, one or more, lower levels of governments. To focus on the essential, from now on I will discuss the issue as if there were only two levels of governments, a central and a local one, without considering more complex institutional structure. Notice that typically, there is also a hierarchical structure between these two levels of governments, with the central being able to come to rescue the lower level in case of financial difficulties, say, because the former can rely on a larger pool of resources than the latter.

Second, there has to be a *dynamic structure* to the problem. The SBC's disease is fundamentally a *time inconsistency* problem; the central government may not wish to take some actions *ex ante* (say, rescuing the local level), but *ex post*, after some other actions have been taken by the local level (say, running a high level of debt), he might find himself unable to resist (it is not any longer in his interest to do so). The central government thus may be forced to take some actions that he wanted to avoid in the first place. Understanding why the central government cannot commit *ex ante*, and why his incentives *ex post* are different from his incentives *ex ante*, so as to make it optimal for the central government to rescue the lower level *ex post*, it is the real crux of the matter.

Third, this behaviour on the part of the central level must be *expected* by the local government. The latter has to know that at least with some positive probability by taking some actions he may force the central government to come to his rescue. These expectations are precisely the heart of the problem. It is exactly because the local government knows that by taking some actions he can change the behaviour of the central government, that the local government has incentives to distort his own behaviour, taking actions which are generally inefficient (i.e. say, running a too high level of debt or distorting his spending pattern) in the first place. If the local government believed that central government's actions would not be affected by his behaviour, there would not be perverse incentives for the local government, and therefore there would not be a SBC problem.

## 2.2 Empirical consequences

This simple list of necessary characteristics for the existence of the SBC problem is enough to show how difficult is to answer the second question, the empirically observable consequences of the SBC problem. We will discuss these issues in more details in the next section, but here is a first taste of these difficulties. First, clearly not all ex post interventions by the central government (say, bailing out of local governments debts or extra funding) are examples of SBC problems. For example, if these ex post actions by the central government depend by circumstances outside the control of the local government (say, an earthquake or some other natural disasters), then clearly ex post financing does not constitute evidence of a SBC problem. *But even if these ex post interventions are a consequence of actions taken at a local level, this does not imply that we are facing a SBC problem.* The local government may simply have been unlucky (and then ex post financing is just an example of a proper fiscal co-insurance role of governments), or there may be some other aspects of intergovernmental relationships which do not work properly.

To illustrate. In Italy, most of the debts accumulated by the regions in the provision of health services are routinely bailed out by the central government. But this cannot be taken as conclusive evidence of the existence of a SBC problem in the health sector in Italy. It might well be, as Italian regions have always claimed, that the ex ante funding attributed by the central government to regions to finance health care, which in turn is largely mandated by the central government, is not enough to finance health services. Regions might then run in deficits simply because they do not have enough funding. In order to conclude that there is a SBC problem in the health care sector in Italy, one needs to show something more; namely, that regions have accumulated those debts (or at least part of them), *exactly* because they were expecting a bailing out from the national government, and that they would not have done so otherwise.

In other words, the SBC problem is the result of *expectations*; to show that a SBC problem is in place, one needs to show that expectations have played a role in determining local government behaviour. But since expectations can not in general be observed, this creates a very difficult problem for any attempt of serious empirical analysis. Section 3 discusses these aspects in more details, and also explain how we managed to conclude in our own empirical analysis that a SBC problem is actually in place in the Italian health sector.

But there is more. A typical problem in the existing empirical and theoretical analysis of the SBC disease is the persistent confusion which is made between bailing out of local debts (or

more generally, ex post funding to local governments) and the existence of a SBC problem. We have just argued that the presence of a bail-out episode does not necessarily imply the existence of a SBC problem; we now claim that *the converse is also true*. One might well have a serious SBC problem in intergovernmental relationships, without no ex-post intervention or bailing out episodes from the center.

The reason is simple. In any country around the world, local and central governments are linked together by a complex web of legislative and financial relationships. Legislative decisions taken at the central level affect the tax bases of local taxes and more generally the financial conditions of local governments; local and regional governments are also typically financed at least partly through grants by higher levels of government. Having a SBC problem in the intergovernmental context basically means that local governments receive, directly or through some generous act of national legislation, more funding than they would need according to some efficiency criterion. But this does not imply that this extra funding necessarily takes place ex post, say as a consequence of an excessive accumulation of debts at local level. Knowing it will be forced to give up ex post if it does not offer extra funding to local governments, the central government may simply decide to give up immediately rather than wait until a later date. For example, because an explicit bailing out of local debts may be more damaging for the credibility of the country than an increase in ex ante funding through transfers. Hence, the SBC problem may surface into the form of excessive transfers ex ante, rather than in explicit bailing out ex post.

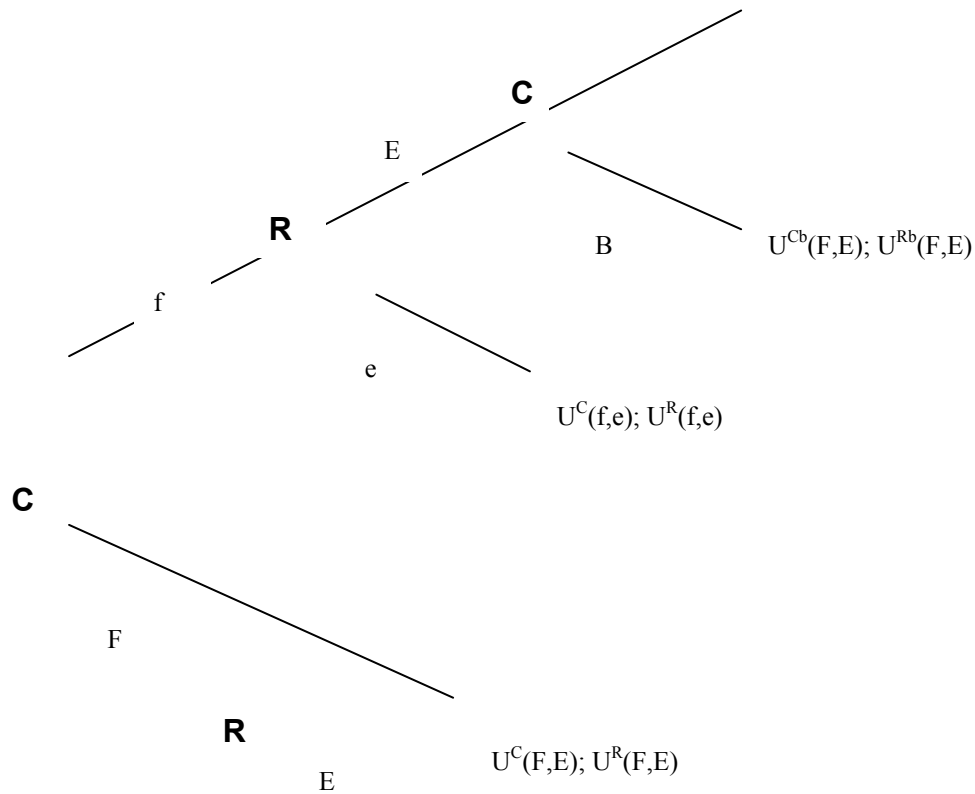
The model in BOX 1, in itself a variation of a model in Inman (2003) and in Bordignon et alts. (2002) makes this point formally. But even leaving aside the model, the general intuition is clear. The SBC disease introduces inefficiencies in the financial relationships across different levels of government; these inefficiencies may appear in many different forms and not necessarily only as bailing-out episodes or ex post financing. Unfortunately, most of these forms are not clearly discernible on empirical grounds, which further adds to the difficulties of seriously detecting SBC problems in the empirical analysis.

On a more optimistic note, this point is at least useful to clarify some bits of the theoretical discussion. For example, in a very well known paper written for the IMF, Pisauro (.) presents a model of SBC and “common pool”, where to avoid a bailing out ex post, the central government “buys” the local government ex ante, by giving it more transfers. The result is taken to imply that to avoid SBC problems, one should maintain a robust role to central government in the financing of local jurisdictions. But Pisauro’s solution does not really solve the SBC problem; it simply moves it up one step of the ladder, by providing local governments with more ex ante



financing than they would need on efficiency grounds. SBC problems cannot be solved so easily.

### BOX 1 A simple model of bailing out



**Figure 4.1: A simple model of bailing out**

Consider an economy with two governments, a central government and a regional one. Central government moves first and sets the financing level to be given to the region for the next period,  $f$ . For simplicity, central government can only decide between two levels of financing, low or high,  $f = \{f, F\}$ , where  $F > f > 0$ . It is then region's turn to move by choosing an expenditure level,  $e$ . The region too can only choose between two levels of expenditure, low or high,  $e = \{e, E\}$ , where  $E > e > 0$ . These levels are such that if the region responds with the appropriate level of expenditure to the financing set by the central government, the regional budget is in equilibrium:  $(F - E) = (f - e) = 0$ . If the central government sets  $F$  at the beginning of the game, we assume that the region can only answer by setting  $E$  (i.e. the regional government cannot cash the difference between expenditure and

financing). Hence, if the central government sets  $F$  to begin with, regional expenditure is  $E$ , and central government and regional government payoffs are respectively  $U^C(F,E)$  and  $U^R(F,E)$ .

Suppose instead central government sets  $f$  at the first stage of the game. If the region reacts by setting  $e$ , the game is over and the two agents receive respectively  $U^C(f,e)$  and  $U^R(f,e)$ . However, the region may also choose to select  $E$  and run a deficit. In this case, it is again central government's turn to move. It can do two things. It can refuse to accommodate the increased expenditure by region, letting the region itself take care of the deficit: in this case the utility levels of the two agents are respectively  $U^C(f,E)$  and  $U^R(f,E)$ . Or it can accommodate, partly or fully, this increased regional expenditure by increasing transfers, in which case the utility levels of the two agents become  $U^{Cb}(F,E)$  and  $U^{Rb}(F,E)$  (suffix  $b$  is a mnemonic for "bailing out"). We make the obvious assumptions that  $U^C(f,e) > U^C(F,E)$  and  $U^C(f,e) > U^{Cb}(F,E)$ , and that  $U^R(F,E) \geq U^{Rb}(F,E) > U^R(f,e) > U^R(f,E)$ . We also assume that  $(U^C(f,e) + U^R(f,e)) > \max(U^C(F,E) + U^R(F,E); U^{Cb}(F,E) + U^{Rb}(F,E))$  so that it is indeed Pareto efficient to constraint financing and expenditure at the low level.

The equilibrium of this game depends on the assumptions we make on the payoffs of the central government. If  $U^C(f,E) > U^{Cb}(F,E)$  central government would not accommodate the increased expenditure of region. Knowing this, and given our assumptions above, region will then choose to select  $e$  if central government selects  $f$  in the first period, and expecting this, central government will actually choose  $f$  in the first period. The Pareto efficient equilibrium can then be enforced.

On the other hand, if  $U^C(f,E) < U^{Cb}(F,E)$  the central government cannot commit to enforce a low level of financing at local level; if the region runs a deficit, the centre will find it convenient to step in and rescue the region. Expecting this, the regional government will certainly select  $E$  if the central government sets  $f$  in the first period. Which equilibrium occurs, it again depends on the payoffs of central government.

If  $U^C(F,E) > U^{Cb}(F,E)$ , the central government, expecting to end up with utility level  $U^{Cb}(F,E)$  if it attempts to set a low level of financing in the first period, prefers to give in immediately and sets  $F$  in the first place. *In this case, there is no official bailing out, although there is a soft budget problem.* Since it cannot enforce  $e$ , the central government simply gives up any attempt to control the regional expenditure, setting up for an inefficiently high level of regional expenditure in the first stage. Soft budget constraints problems here appear in the form of excessive financing and excessive expenditure.

On the other hand, if  $U^{Cb}(F,E) > U^C(F,E)$  the central government may actually find it convenient to set things so as to end up with a bailing out. Central government may still suffer from the bailing out in the long run (say, in a dynamic version of this model with incomplete information, because of reputation losses), but if there are short time gains from setting  $f$  in the first period, these gains may overcome the losses. Notice that there are still soft-budget problems, in the sense that if central government could commit not to bail out regional expenditure, it would still prefer to reach an equilibrium with low expenditure and low financing. On the other hand, central government is not really trying to enforce a hard budget constraint at local level; bailing out of regional deficit is simply a more convenient way of financing local expenditure than setting up a high level of transfer in the first place. Notice that this equilibrium may well be a third-best equilibrium; if the region itself suffers from the bailing out (because the bailing out is incomplete or because the time elapsing between the setting up of a higher expenditure and the increased transfer puts the region in financial stress), it may well happen that this loss overcomes the advantage to the central government from playing the bailing out strategy:  $U^C(F,E) + U^R(F,E) > U^{Cb}(F,E) + U^{Rb}(F,E)$ .

### *2.3 Motivations and the technology of committing*

We have then reached the third question, the most important of all; why there should be a SBC problem in intergovernmental relationships? As Kornai et als. (2003) rightly argue “you need two to make tango’s”. If there is a SBC problem, there has to be at least two agents willing to participate to the SBC game; some organisations willing to receive the extra money and some other organisations willing or forced to give this extra funding. Understanding the motivations behind these acts is then the most important issue to address in our context.

#### *2.3.1 The Local government*

As for the local government (the receiving organisation in our context), these motivations are not too difficult to understand. Receiving extra funding from the center, either in the form of ex post bailing out of local debts or in the form of extra transfers, basically means footing (part or all) the bills of local services at the expense of the residents of some other jurisdictions. As these residents do not vote for the local government, while local residents do vote and are presumably happy to receive public services without having to pay for them, a local government should only be happy to engage in the SBC game. It then follows that if by taking some actions the local government perceives that it can force the center to give more money, it will take them.

Still, even this intuitive explanation is too simple, for at least two reasons. First, local politicians may have national ambitions; and forcing the hand of the center in providing extra money may not be the best way to pursue these ambitions. A local politician who damages his party at the central level may find it more difficult to be promoted at the national level. *Ceteris paribus*, one would then expect that the tendency to misbehave for the local government would be the higher the more adversary is perceived the national government to be, that is, the less likely is for the local politician to pursue his national ambitions under the present political system. And indeed, it is interesting to note that in our analysis of the SBC problem in the Italian context, we found out that regional governments of the same political orientation of the national government received more transfers *ex ante* and produced less problems *ex post* (they run less health deficits) than regional governments of different political orientation.

Second, the advantages for local governments to misbehave strongly depend on the reactions of their own citizens. Running a high deficit and being bailed out by the central government, even if it does not imply any other sanctions by the central level, may attach a negative stigma on the

local administrator. If local residents perceive the financial difficulties of the local community as an indicator of a lack of competence on the part of the local politician, the latter may be jeopardising his future political carrier by running in financial trouble. He will then refrain from doing so. And indeed, casual observations and empirical evidence (Rodden et alts, 2003) show that in those countries where local communities have a strong notion of independence from the center and a strong feeling of identity, episodes of bailing out are more rare and local public finances are more in order.

### *2.3.2 The Central government*

Understanding why the center may instead be willing to participate to the SBC game, offering extra funding to local governments who misbehave, is more difficult. It is useful at this stage to distinguish between two different sources of the problem. As we noticed above, the SBC syndrome is fundamentally a *dynamic* problem. The ex ante incentives of central government are different from the ex post incentives; that is, the incentives after than some actions have been taken at the local level (or we would not have a SBC problem to start with). But since ex ante the Central government knows that he would have these different incentives ex post, a natural question to ask is why the central government does not take actions ex ante to force himself not to accompany the behaviour of local governments in the case the latter misbehave. Indeed, there is a huge economic literature (including a Nobel prize to the proponents) which focuses on the possibility for public authorities to pursue “tie own hands” strategies; the literature on the conservative central banker is probably the best known example of this approach. In our context, this means that if we have a SBC problem in intergovernmental relationships, this may only be the result of a failure in the *technology of commitment* of the central government. Either the central government is not fully employing its technology to commit ex ante, or this technology is not available to him. Hence, the first part of the problem of understanding why central government may want to play the SBC game concerns the technology of commitment.

The second part concerns instead the incentives of central government ex post. Why is that ex ante and ex post incentives are different for the central government? Why is that when faced with a local government in trouble, the central government wishes to step in and rescue it?

#### *2.3.2.1 The technology of commitment*

Let us begin with the first part of the question. Here there is an important difference which needs to be stressed between the usual SBC games in the private sector, the financial and banking sector, and the context we are discussing here. The private sector generally can commit *ex ante*, although there may be problems (generally induced by the incompleteness of contracts and the lack of verifiability of contingencies by a third part) which may make this difficult in practice. The private sector has access to this technology exactly because there is a public sector which offers the services which allow the private sector to commit; the juridical system and the sanctions for the agents who break the contracts.

A government, and in particular the central government, finds it much more difficult to commit<sup>1</sup>. This, for the same nature of governments, the fact that they are sovereign political bodies. The very idea of sovereignty has to do with the possibility of changing pre-existing rules. Hence, it is difficult to introduce rules which cannot be broken *ex post*, if the central government changes his mind and wishes to do so. For example, laws can be passed *ex ante* which forbids the central government from helping local governments; but the same laws can also be changed *ex post*. External technical bodies to monitor and control the behaviour of local governments can be introduced; but these bodies can also be overruled if there is the political willingness to do so. Sanctions may be threatened and written down in official documents; but they may not be applied *ex post* (see below). The story of local finance in Italy, and undoubtedly in many other countries, offers plenty of these examples of commitment failures.

In this light, an extreme form of commitment device are represented by *constitutional rules*, that is, rules that regulate the financial relationship between different level of governments directly at the constitutional level. The new Italian Constitution, approved in 2001, for example, explicitly forbids (art.119, *comma* 5) the central government from helping the local governments in case of financial trouble.

The debate on constitutional rules in the economic literature is very large, and this is not the place to enter in this debate. In a nutshell, the trade-off the literature usually focuses on is that between rules and discretion. In principle, constitutional rules offer the advantage of making it

---

<sup>1</sup> For simplicity, we do not discuss here the case where central government cannot commit, because it has not a coherent preferences structure which allows it to behave consistently as an single agent. Even leaving aside political turns out, it is a fact that governments seem to change opinions along the way, in dependence of the changing political equilibria inside the ruling parties or the ruling coalitions. This might also affect the positions of the central government vis a vis the local ones. Also, for simplicity, we do not distinguish here between the executive and the legislative branch of the central government, and we do not discuss the role of Senate or regional chambers in affecting central government's decisions, although these are all important features of the real world. See for instance Rodden (.) on the role played by the Bundesrat in the German bail-outs cases, and Bordignon and Brosio (2004) on the newly introduced federal Senate in Italy.

more difficult for the current government to change his mind. Voting rules and procedurals to change constitutional laws are usually more restrictive than rules and procedurals to change ordinary legislation, and this adds to the commitment ability of governments. In contrast, on the minus side, constitutional rules also reduce flexibility, and a political discretion which may turn out to be useful ex post.

This, in principle. In practise, at least for the case at hand, intergovernmental relationships, one can be rather sceptical that these constitutional rules may play a very important role. The reason is simple. Constitutions are very incomplete contracts: the contingencies upon which the constitutional rules apply are only very vaguely described, and there is a fundamental problem of lack of verifiability of the explicit contract written at the constitutional level. Furthermore, constitutional laws need to be interpreted; and as no constitution forbids the possibility for a central government to help local communities and their citizens in trouble because of external factors (this insurance role of governments is one of the fundamental reason for being part of the same country), constitutional rules can be easily circumvented. The empirical evidence on constitutional rules at the budget level (i.e. Von Hagen ) adds fuel to this scepticism.

Finally, in the context of the technology for commitment, one should also raise the issue of *sanctions*. Here is another important difference with SBC problems as applied to private context. In the case of a firm or a bank, the ultimate sanction is the “exit” option. Government or other giving institutions may threaten the receiving institutions with the possibility of bankruptcy and exit from the market, if they do not fulfil some obligations in exchange of extra money (see Kornai et. als., 2003). And “exit” may play an efficiency role in a market economy, as it frees resources which can be used more effectively in other sectors of the economy. Indeed, the true problem with the SBC disease in the private contest is often that private firms are not let fail, while they should be for the sake of efficiency.

But a region, or a town, cannot “exit” from the market. The most serious sanction which can be imposed on a local government, in exchange of the financial rescue, is a temporary suspension of local sovereignty. That is, the substitution of local politicians and local administrators with central government officials to take care of the finance of the local community. Similar rules (e.g. bankruptcy procedural) exist in any country and local governments are routinely threatened by the center with a strengthening of these sanctions. However, in practise, at least in democratic countries, these sanctions are very rarely used and always only as extreme solutions.



The reason has to do with politics. Local governments are democratic bodies elected by citizens; and suspension of the sovereignty of political bodies democratically elected is a delicate matter in any democracy. It may create alarm in the media and in the public opinion, it might raise suspicions on the true motivations of the central government, especially if this is of a different political orientation of the local government, and so on. It is not an option that any central government would take easily, whatever the law says. But this also means that some of the options to harden the budget constraints in the private sector are not really available in the public one.

In practise, as will see in the next section, different countries use different strategies for committing, with different degrees of success. As we will also see, the extent to which that these commitment devices work largely depend on the legal and political tradition of a country and cannot be easily exported in other countries.

#### *2.3.2.2 The difference between ex ante and ex post incentives*

The second part of the question concerns the motivations for the central government to help the local government ex post, that is, the source of the difference between ex ante and ex post incentives. Here, the literature offers two basic insights.

First, central government may be forced to intervene ex post because of the presence of *externalities*. Financial troubles in a community, say, may affect the welfare of individuals living in other jurisdictions; and as the central government is interested in the welfare of the national community at large, he must be worried about these spillover effects. Hence, if the cost of the intervention for the central government is lower than the welfare loss on the communities at large, then the central government is induced to intervene to rescue the local community in trouble. But knowing this in advance, the local community under question has no incentives in preventing the trouble in the first place. In equilibrium, then, the situation is sub-optimal with respect to the first best case in which the central government can commit not to intervene ex post.

In a nutshell, this is the fundamental insight of the seminal model by Wildasin (.). Wildasin in reality does not consider financial issues; in his model, there is unspecified locally provided good (Local transportations? Water cleaning?) with spillover effects to other jurisdictions. Furthermore, he only considers welfarist governments. That is, both local and national

governments are only interested in maximizing the utility of citizens, with the only difference that local governments are interested in the utility of the residents of their jurisdictions, whereas central government maximises the welfare of the residents in all jurisdictions. But the model could be easily extended to take into account political considerations (governments presumably take into account the welfare of citizens also because they also want to be re-elected) and be extended to different types of goods, including financial ones. This is also to say that one of the central prediction of his model, that large communities should more easily get help from the central government as they may produce larger welfare costs on the residents of other jurisdictions (the usual “too big to fail” argument), should not be taken too seriously. Larger communities presumably also carry a larger part of the extra cost the central government needs to finance his intervention; and the importance of spillover effects does not necessarily depends on the size of the community producing the trouble. It clearly depends on the type of the local public good under consideration. A small community which controls the provision of a good which is very important for the rest of society (say, Water cleaning) may be able to blackmail the central government in offering financial help much more than a large community which offers local goods which only affect its own residents.

The importance of Wildasin’s argument depends then on the existence and the magnitude of these spillover effects across jurisdictions. Financial markets are taken to be a good example at hand. If a financial crises at the local level has the potentiality of affecting the general credibility of a country, say, by increasing the risk of default of national debt and therefore raising the risk premium investors ask the country to hold the national debt, then central government may be forced to intervene to rescue local governments to avoid further troubles. This, in turn, justifies the introduction of ex ante rules aiming at reducing the probability that a financial crisis occurs at the local level. Say, a ceiling on the debts raised at local levels, or the introduction of specific procedurals to borrow at local level (Ter-Minassian and Craig, 1997). We will come back to this later.

Another point to be noted about Wildasin’s argument is that it implicitly points to, or takes for granted, the existence of some serious mis-allocation of functions across governments. According to normative fiscal federalism theory, the optimal allocation of functions to the different levels of government should reflect a “correspondence principle”; local government should only be assigned the responsibility of the provision of goods and services that only affect their own residents and not the residents of other jurisdictions. Of course, we know that this principle can never be fully respected in practise. To apply it properly, we would basically need

a different level of government for any different service being offered, with exponentially increasing administrative and coordination costs. Furthermore, the actual organization of territorial governments in any country reflects more history and geography than abstract economic reasoning (e.g. Oates, 2002).

Still, for the argument of Wildasin to carry some force in the real world, one must presume the existence of some very serious violation of the correspondence principle. Going back to our example above, the solution to the problem of the small community being able to blackmail larger communities does not lie in introducing ex ante committing devices on the central level; it lies in avoiding giving this power to the local community in the first place, assigning the responsibility of the provision of that key service to some larger community, possibly to the central government itself.

To put it differently, the fundamental issue that Wildasin's argument raises, concerns the constitutional allocation of functions to different levels of government. To ask if there is a SBC problem lurking forwards, it means asking if the attribution of powers to different levels of government is properly done.

This takes us directly to the second argument offered in the literature to justify the existence of a difference between ex ante and ex post incentives for central government. This is an argument which has not been yet fully developed in the formal literature (but see Goodspeed (.) for a beginning), but which I believe to be important, surely more important, at least for the case of Italy, than the externality argument.

Another reason why the central government may not allow a local governments to run in serious trouble is that *the central government itself (and not only the local government) may be blamed for the trouble*. Even though there are no externalities of any sort at play, if the central government itself suffers politically for the difficulties of the local government, this may offer a powerful argument for ex ante, or ex post, financial intervention. There may be many different reasons why this could happen. Perhaps, the political colour of the local government is the same of the political colour of the central government, and the inability of the local government to cope with local finances may be taken by voters at large as a signal of the incompetence of the national government, thus threatening the latter's chances of re-election. Perhaps, the local jurisdiction in trouble belongs to some important marginal electoral district for national elections, and the lack of satisfaction of the voters in that district may undermine the political fortunes of the national government if this fails to intervene. Mostly important, the *political*

*responsibilities of the different levels of government may not be clearly assigned in some of the key functions done by local governments*, so that local voters do not know whom to blame for the financial difficulties, as local and central governments keep blaming each other for the responsibility of the trouble.

This is, for example, the situation for health care supply in Italy (but also in Spain and in several other European countries). Italian regions are in charge of administering the supply of services and of running public hospitals; but the standard of the health services are defined at the central level, who also partly finances the services. In general, health care (like education) is too important an issue for the cultural identity of a nation, for national parliaments and national governments to accept to leave it entirely in the hands of regional or local governments. It does not happen anywhere, not even in old and consolidated federations such as the US, Canada or Australia, where in principle health care and education are exclusive competencies of local and regional states. In all these cases, standard for services are somewhat contracted at the central level, which also attempt to influence the characteristics of these services through the “power of the purse”, that is, by transferring ear-marked money to regions and local communities in exchange of the meeting of some standards. Clearly, however, these effects tend to blur the allocation of responsibility across different levels of governments in the eyes of citizens and make easier the formation of SBC problems.

Again, this also points toward the constitutional allocation of functions to different levels of government as one of main possible “cause” of the insurgence of SBC problems. Notice further that this may become an important issue in future Europe. As we will discuss in section 4, several European countries are in the process of decentralising responsibility to local levels in exactly these functions, in the search of administrative efficiency and more accountability in the supply of services. But because these are also examples of shared responsibility, they raise the issue of creating potential for the insurgence of SBC phenomena.

### *2.3 Other issues*

The previous paragraphs lied out some of the theoretical reasons and characteristics of SBC problems in the intergovernmental context. But there are at least two other aspects which are worth pointing out briefly, as they are specific to this context. One of these is the presence of *vertical imbalance* across different levels of government (Eichengreen and Von Hagen, 1996). If local governments are not financed by local money, they might not perceive the existence of a

binding budget constraint, and this in turn may push them to attempt to increase public expenditure (one possible version of the “fly-paper effect”). Moreover, if local governments do not have enough tax resources of their own to meet unexpected shocks in cost or demand conditions, they do not have any way to adjust their resources so as to keep their budget in equilibrium. Hence, any budget constraint set up *ex ante* is *a-fortiori* not credible and may foster expectations of future intervention by the central government. This suggests that a *necessary* condition to reduce SBC problems is that local governments have some flexibility in the use of their resources, including tax autonomy.

It is not a *sufficient* condition, though. In the presence of SBC problems, local governments may simply decide not to use these resources or to divert them to other uses. We have examples of both types in behaviour in Italy. Even when equipped with tax resources of their own, after the decentralisation process of the beginning of the 90’s and in spite of their mounting health deficits, Italian regions preferred not to use these tax resources, waiting instead for government intervention. And even when they actually increased their regional taxes, they used only part of these resources to finance health expenditure, preferring to use most of them for financing other services, where central government’s *ex post* financing was less likely.

This is also worth noting, because it shows that SBC problems may not only induce excess expenditure or excess transfers but also a *diversion of resources*. Local governments may prefer to invest their revenues in the provision of the services which are politically rewarding for them, if they expect the central government will take care of the other services where the reputation of the central government is also at stake ( see below).

Second, *transparent and objective rules for determining transfers* to local authorities may help to create a climate which reduces the likelihood of the insurgence of SBC problems. For the reasons we have already stressed above, and in particular, the political difficulties to implement harsh sanctions on mis-behaving local governments, the financial stability of local finance largely depends upon the existence of consensual *ex ante* relationships between different levels of government. In a consensual equilibrium, the central government finances properly the local governments, and the latter reciprocate by avoiding to create unnecessary financial problems to the former. In order to create this consensual climate, it is important that transfers are given to local governments according to clear-cut and fully understandable rules, rules which are as much as possible perceived as fair by the local levels themselves. To this aim, the *availability and reliability of the data* upon which transfers are computed are also an important component of the building up of this consensual climate.

## 2.4 Is decentralisation more conducive to SBC problems?

Let us then finally consider the question of the relationship between decentralization and the insurgence of SBC problems. Clearly, the ultimate answer to this question must be sought on empirical grounds; it will have to be seen, for example, if the decentralisation process in Europe will produce more or less SBC problems in the future. But since an implicit affirmative answer is what lies behind the worries I referred to in the Introduction, it is worth to investigate on what theory has to say on the question. Thus, is decentralisation a possible cause of SBC problems in the intergovernmental context?

At a first glance, the answer would seem to be affirmative. Delegating functions to local levels means creating a new organisation that takes decisions on its own, and for the reasons I have already stressed, it is much more difficult for the central government to control the behaviour of politically elected bodies than say, his own administrative offices, which presumably were in charge of those services before the decentralisation process took place<sup>2</sup>. But it is also important to stress that decentralisation itself produces effects which may work in the opposite direction of *hardening* the local budget constraint.

In an interesting recent theoretical analysis, Treisman (2004) explores two of these effects. First, decentralisation may reduce the willingness of the central government to offer financial support to local governments in trouble, because it makes more likely that the extra resources given to local governments may be used for the financing of services the center is not interested in. To understand this argument, consider again the picture in figure 1. That model was developed having in mind the Italian situation in the provision of health care services. And the implicit hypothesis in the picture is that in the case of a bailing out, the extra resources given (through ex post financing) by the center to regions are only employed in the financing of health care; that is, in the financing of a national public good the center particularly cares about. But now suppose we add to the picture an extra move for regions after the bailing out has taken place. Suppose that regions can now decide to divert at least part of the extra resources given by the center to the financing of other services (say, Tourism) which the regions care about, but which are not perceived as particularly important by the center. Anticipating this move, the center would now be less and not more willing to give extra resources to regions, because his political

---

<sup>2</sup> Rodden et alts (2003:11) make the opposite point that “...only as the municipality becomes a body of its own...the central government might credibly commit to let it face the consequences of its actions”. However this argument, while

returns from the extra financing would be reduced. As a consequence, the regional budget would be hardened, not softened, by decentralisation, if decentralisation also implies more autonomy on the spending side for regions. On this grounds, and somewhat paradoxically with respect to received wisdom, *unconditional grants would be more useful to avoid SBC problems than conditional grants*, because they would maximise the spending autonomy of local governments.

Second, decentralisation may also increase *the role of the local governments themselves in deciding about the likelihood of a bailing out*. In turn, as the objectives of the different local governments are partly conflicting, this may harden and not soften the local budget constraint. In other words, if the local governments themselves are asked to participate to the decision about if bailing out or not another local government, and if this means that directly, or indirectly through the national budget constraint, the other local governments are also asked to finance the bailing out of a particular government, they may oppose it more than the central government alone would do<sup>3</sup>.

Notice that this argument would not work, or it would work less strongly, if the reason for the difference between ex ante and ex post incentives were in terms of negative externalities, as suggested by Wildasin's analysis. In that case, in fact, the other local governments, or at least a part of them, would also directly benefit from the bailing out. The argument makes very much sense instead if, as we argued above, one of the cause of the discrepancy between ex ante and ex post incentives lies in the fact that rescuing a particular local government gives direct political benefits to the central government but not to the other local governments.

It is interesting to note that there is at least some anecdotal evidence which suggests that this second feature of decentralisation may have actually played an important role in establishing hard budget constraint in the real world. In the US, for example, the decision taken by the States in XX not to help XXX is said to have lied the bases for the persistence of expectations of hard budget constraints at local level in that country (Wildasin, 2004). Thanks to that decision, the

---

still pointing towards a negative relationship between decentralization and SBC problems, does not consider the different capacity of the central government to punish an administrative staff vis a vis a local politician.

<sup>3</sup> Notice that this also depends on how local governments are financed; some of the possible structures for financing local governments may have the opposite and perverse effect to make these more willingly to support a bail-out, as the bail-out would *increase* and not reduce their own resources. For instance, Kohlscheen (2003) makes the important point that in Brazil, where regional states are financed with tax sharing of national taxes, bail-outs interventions are supported by a coalition of high debt states and of states who are over represented in the tax sharing rules. The point is that to finance a bail out, the central government needs to raise national tax revenue; in turn this implies an increase in the revenue share of all regional states and in particularly of those states who are more advantaged by the sharing rule. The problem is further exacerbated by the fact that regional states, while benefiting from the increase in the tax revenue, do not carry any political responsibility for the increase in the national tax rates.

center has gained a reputation for being “tough”, and this has curbed States’ expectations of future interventions. In Italy, there have been proposals to change the regional redistribution system from “vertical” to “horizontal” (that is, from a situation where transfers to the poor regions are financed by the central government to a situation where transfers are directly paid by the rich regions, although in the context of formula jointly decided with the central government) exactly on the grounds that this would have made the regional budget constraint “harder” (Bordignon et alts, 1997). Not having a direct political return from the bailing out, regions would have been less willing to accommodate additional expenditure by some regions with extra transfers than the central government itself. These ideas were instrumental for the introduction of the new redistribute system for the Italian regions in 2000 (Bordignon and Emiliani, 1999) and for the drafting of the new Constitution in 2001 (Bordignon and Cerniglia, 2004).

### *2.5 Concluding remarks*

In this section, we have made an attempt to clarify the issues concerning the SBC problems in an intergovernmental context. Summing up the main points, we have tried to show that there some fundamental differences between SBC as studied in the private sector and as applied to the present context. For fundamental reasons, the central government has access to a poorer technology for committing ex ante than the private sector, and there are more problems in enforcing sanctions on mis-behaving bodies than there are in the private sector. Furthermore, the empirical consequences of the SBC disease in intergovernmental relationships are less clear cut than most of literature would have us to believe, and the key element in the SBC model, expectations, are not directly observable. As we will see, this raises serious doubts about most of the empirical literature which has purposely found evidence of the problem. Concerning decentralisation, we have tried to make the point that there is no necessary link between the SBC problem and decentralisation, and indeed that there are plausible cases where decentralisation may harden rather than soften the local budget constraints. Rather, one can say that a badly done decentralisation may increase the risk of the insurgence of SBC phenomena. In particular, we have tried to stress the problem of the correct allocation of functions and financing at the different levels of government. If functions are badly allocated, so that a particular local government can easily blackmail the center or the other local governments, or if there is no clear allocation of responsibility between the center and the local levels, the likelihood of the insurgence of SBC phenomena is bound to rise. Finally, the financing side should also be considered. Situations where local governments are largely financed by transfers



(rather than own taxes) and where transfers are allocated through obscure and discretionary ways are more likely to produce SBC problems. Tax sharing rules may also produce perverse incentives, say, by giving incentives to all regions to support a bail-out for a single region. Let us now give a look at the empirical side of the problem.

### 3. Empirical evidence<sup>4</sup>

The SBC problem in intergovernmental relationship is like other important economic phenomena, such as for example tax evasion: we suspect a lot, but convincing evidence is hard to come by. The best work on the subject, the book by Rodden et al. (2003) is a clear example of these difficulties. The book is a collection of very interesting case studies (ten, to be precise), tied up together by a general framework. But there is no serious attempt to test if in the various countries the SBC disease finds confirmation in the data. At several stages in the work, the different authors say that there is, or there has been, a SBC problem in the intergovernmental relationship in the country under analysis, quoting anecdotal examples, but no formal model which stresses the empirical observable implications of the theory, or any serious attempt to test that theory, is actually produced. Those claims, therefore, leave the reader somewhat perplexed.

If anything, the book impresses for the variety of solutions and mechanisms employed in the different countries to keep local governments' finance in check, and also by the variety of results. Some countries use *hierarchical* mechanisms; strict regulations, decided by the central government, which constraint the behaviour of local governments, in particularly for what concerns access to the credit markets, but also expenditure caps, hiring constraints, ear-marked transfers and the like. Others use instead more *market* oriented mechanisms; local governments are left free to borrow and spend, but the ratings attributed by national and international agencies to debt issues from local governments are used as a disciplining device. Some others use *constitutional* mechanisms; various forms of constraints on the amount of current deficits or debts which can be run at local levels or various forms of budget balanced rules ("golden rules", typically) written in the federal or state constitutions. Even larger is the variance in the financing and spending side, ranging from situations where local governments are basically free to do what they want, with little transfers from the center (e.g. the American States) to situations where regional governments have no autonomy whatsoever on the financing side (e.g. Germany), or are largely financed by the center with transfers (Argentina). In general, countries where local governments are largely financed by the center also

---

<sup>4</sup> This section builds upon a joint work in progress with Gilberto Turati, my usual co-author on these issues.

impose stricter constraints on the spending autonomy of local governments (e.g. transfers are conditional to the finance of particular services).

But even more impressive is the variance in results. Canadian Provinces are basically free to do what they wish, with no hierarchical control from the center and no hierarchical or constitutional limits to borrow (Bird and Tassonyi, 2003); yet, there is no evidence of SBC problems being in place. On the contrary, strict hierarchical regulations are in place, and seem to work, in Norway. There are pressures to increase public expenditure, but not bailing out or risks of financial crisis. Similar mechanisms are in place, but do not seem to work in Brazil or India or Argentina, all countries which present an uninterrupted history of financial instability at local level (e.g. the case studies chapters in Rodden et als., 2003). In Germany, the main problem has not to do with intergovernmental relationships *per se*, but with the Constitution (and more precisely with the provision of strong equalisation of services across individual citizens, which was instrumental in the decision to bail out of the debts of the two Laender, Bremen and Saarland in the 90's (Roddan, 2003; see also Seitz, 2002). The US presents a larger variety of instruments (market and constitutional tools) at the state and cities levels; interestingly, with the exception of some very well known cases referring to important cities, everything seems to work, and SBC problems are basically unknown (Inman, 2003). So, perhaps the best way to read the book is in terms of a healthy warning on the difficulties of exporting mechanisms to control local finance across countries. The relationships between different levels of government are deeply ingrained with the history and the tradition of the country, and simple comparisons of instruments may be misleading.

### *3.1 Econometric studies*

So let us move to consider some more structural attempts to test the existence of SBC problems. Basically all the literature (including our own attempt for the Italian case) has focussed on episodes of local governments' bailing out, although, as we stressed above, this is by no means the only, or the necessary, implication of the existence of SBC problems. Even in this more limited framework, the key problem in testing the existence of SBC problems has to do with measuring expectations at local level. As we argued above, expectations are central to the SBC story, and any empirical measure of the "softness" of budget constraint should then capture the *expectations of future* Central Government intervention, rather than his actual policy (see also Djankov and Murrell, 2002).

To put it down a bit more formally, let  $S$  be some *observed* measure of the financial activity of regional or local government; this would then become a measure of financial distress for some

abnormal levels of  $S$ . In the literature, different specifications for  $S$  have been used, such as for example, the level of debt, the level of expenditure, or the level of deficit. Following the notation in Petterson-Lidbom and Dahlberg (2003), let us assume that  $S$  is a function of “structural” variables  $X$  and bailout expectations  $B^e$ :

$$S_{it} = \beta_0 + \alpha B_{it}^e + \sum_j \beta_j X_{jit} + u_{it} \quad (1)$$

We can then say that we have a SBC problem whenever expectations of future bailout  $B^e$  affects  $S$ ; that is, whenever  $\alpha$  is statistically different from zero in (1). The problem is of course that  $B^e$  cannot be observed.

There two basic ways in which one can try to account for this problem on empirical grounds. One is to use (if available), or to construct, *survey measures* of expectations; the other is to attempt to use *proxy measures* for expectations, using economic theory as a guidance for the selection of the proxies. As for SBC problems, very few examples of papers based on *survey measures* of expectations can be found in the literature, and none with reference to the intergovernmental context.

The best example of the survey approach in the SBC framework is probably a work by Anderson *et al.* (2000). They consider Mongolian enterprises and ask enterprise officials the following question: “*Suppose that unfortunate market conditions resulted in a sudden drop in your enterprise’s revenues, so that you might have to lay off workers. How likely is that the government (either national or local) would help your enterprise out, so that it would not be forced by its financial situation to lay off workers? Please indicate your expectation of the likely government reaction by choosing a point on a scale from 0 to 10 – a “0” means that you think that the government would do absolutely nothing to help out and a “10” means that you think that the government would completely make up for the decline in revenues in some way, and a “5” means the government would make up half the decline in revenues. Choose any number between 0 and 10, indicating your expectation concerning the extent to which government would help out*”.

Answers to this type of questions provide *direct* measures of expectations of future bailouts, contingent to the enterprise running in financial distress; they offer therefore direct measures of the (perceived) softness of budget constraints. There are some drawbacks, too. As for all survey data, the measure has to be considered as affected by severe measurement errors (in this sense Bertrand and Mullainathan, 2001), and this brings about a number of econometric problems that need to be

handled by applied researchers. Moreover, as the measure is based on a purposely built survey, it is very difficult to obtain data for a long time span. This makes it difficult to explore the dynamic structure that characterises the SBC problem.

Given the difficulties in building survey measures, most empirical papers on SBC problems in intergovernmental context are based on proxy measures of expectations. The main idea is that expectations are a function of some vector of predetermined observed variables  $Z$ , that is  $B^e = \Sigma\pi Z$ . We can here distinguish two basic approaches in the literature: one that, with a little of abuse of language, we could define as based on “past expectations”, the other more explicitly building on “rational expectations”. The work by Petterson-Lidbom and Dahlberg (2003) is mostly an example of the former approach (although they are also using rational expectations) in the sense that their working hypothesis is that  $RG$  base their expectations on what will happen in the future by considering what happened in the past. The papers by Bordignon and Turati (2003) and Rodden (2000) are more examples of the latter approach, since rational expectations imply that  $RG$  form their expectations by using all available information, including changes in the general regime, in order to make the optimal forecast.

In particular, Petterson-Lidbom and Dahlberg (2003), in analysing the level of debt of local Swedish governments, assume the following formula for expectations’ formation:

$$B_{it} = B_{it}^e + v_{it} = \sum_j \pi_j Z_{jit} + v_{it} \quad (2)$$

where  $B$  are observed bailouts. Estimates of (2) imply that the proxy measures for expectations are based on bailouts only: we observe how central government behaved in the past to forecast its future behaviour. In order to enrich their perspective, the authors also consider bailouts observed in local neighbouring communities, what they call “collective experience” as an additional determinant of expectations formation (the more I observe neighbouring local governments receiving a bailout, the more I expect to receive a bailout myself), but the main message remains unchanged. Their paper also does not consider explicitly the strategic interaction between levels of government which is at the heart of the SBC phenomenon; in particular, the behaviour of central government is not modelled in their paper. Central government acts passively, and both the timing and the extent of bailouts are independent of the behaviour of the regional government. In other words, the approach of Petterson-Lidbom and Dahlberg (2003) seems appropriate for a very static environment where little changes across periods, as possibly is the Swedish case; it would make less sense in situations where expectations were rapidly changing because of a shift of regimes, as was Italy in the middle of the 90’s. However, Petterson-Lidbom and Dahlberg (2003) find evidence of

the existence of SBC problems in the Swedish case; the parameter  $a$  in (1) is different from zero, and both past and “close” bailing out affect the level of current debt of local governments.

Bordignon and Turati (2003), instead, consider the case of Italian regions and health care spending, in a situation where one can suppose that regional expectations were changing quickly, the 90’s. At the beginning of the ‘90’s the country was facing a severe financial crisis and had started the long process to meet the Maastricht criteria in 1997. Hence, the central government had stronger motivations than in the past to impose financial discipline on local governments<sup>5</sup>. A different approach was then needed. We proceed as follows. We first estimate the expected ex ante funding for health care for each region  $F$  from the central government, including as explanatory variables, those variables that according to SBC theory would make less or more likely for the central government to bail out the regions in the future. In particular, we consider as proxies dummies which take into account the financial situation of the country with respect to its external obligations (a dummy for 1997, an index of the tightness of public budget ect.), and proxies for the flexibility of the regional budget (regional tax bases, ect.), in addition to a number of controls. In keeping with the notation above, we basically assume:

$$F_{it} = B_{it}^e + v_{it} = \sum_j \pi_j Z_{jit} + v_{it} \quad (3)$$

Expected financing, in other words, captures already the likelihood of future bailing outs. Differently from Petterson-Lidbom and Dahlberg (2003), this formulation assumes that regional government uses all available information in order to get the optimal forecast of *future* funding by the central government. In a strategic game, regions should be able to predict how the external constraints would affect central government’s behaviour. Indeed, estimates of (3) imply that the proxy measure for expectations is based on future bailouts implicit in the level of funding. Note also that, contrary to Petterson-Lidbom and Dahlberg (2003), in the present framework, the behaviour of central government is modelled explicitly. In the strategic game between regions and the central government, the moves of the central government depends on what he believes the regions would do (in terms of expenditure choice) following his ex ante financing choice; and (3) indeed suggests that the central government’s choice of  $F$  is influenced by regional expectations. Finally, note that

---

<sup>5</sup> The formal model used to generated testable hypotheses is an incomplete information version of the simple model in Box 1. Regions no longer know with precision the utility function of the central government. The latter can be “tough” (and so does not offer bails out ex post) or “weak” (and so offers bails out), and regions only have some expectations (ex ante probability) about the type of central government. In Perfect Bayesian Equilibria of the game, there are now situations in which even a weak central government chooses the low level of ex ante financing (at least with some probability) and the regions optimally answer with the low level of health expenditure, because they interpret the low level of financing as a credible signal that the central government is actually “tough”. The empirical model discussed below attempts to capture these features of the formal model.

estimated residuals represent unexpected shocks; hence, according to our formulation, they should not influence regional behaviour.

Having captured regional expectations in this way, we then study an equation like (1), where the dependent variable is regional expenditure. Theory would predict that there is a positive relationship between expected financing (not actual financing) and expenditure. Our results show that expected financing is positively linked to expenditure, and that this coefficient remains positive even in the intermediate period 1992-1997, when *ex ante* health care financing (actual and expected) was dramatically reduced, not only in real, but also in nominal terms. That is, regions reduced health expenditure in spite of sharply reducing transfers, in contrast to everything had happened before. Our conclusion is that expectations matter for behaviour and that the strict external constraints in that period made credible the implicit threat by the Italian central government not to finance excessive health expenditure by regions with future bailouts.

A very similar exercise is proposed by Rodden (2000), who analyses the case of the relationships between the German Länder and the federal Bund. The author distinguishes two ways to separate the expected component of revenues from the unexpected one. The first is to compare actual values with budget forecasts; the second is to build a “forecasting model” to estimate expected values. He concentrates on the latter and estimates an equation like (3). However, differently from Bordignon and Turati (2003), the author assumes that is the unexpected component in (3) which represents the best proxy for future bailouts: “if governments are attempting to smooth expenditures over time, changes in the permanent values of revenues should be contained in the unexpected components, and their “expected” counterparts should provide no additional explanatory power”.

However, rational expectations would imply that the Laender considers all available information to obtain the best possible forecast about future central government’s behaviour. Rodden’s formulation suggests instead that the central government behaviour is not observed, and it could only be inferred by looking at shocks in revenues. Technically, this would however imply that (3) is not correctly specified, and the error term  $v_{it}$  includes also central government actions that should be used by the regional government (Laender) to form expectations on future bailing outs. However, Rodden also finds evidence of the existence of a SBC problem; Laender which are hit by a negative shock on revenues (an in particularly poorer and smaller Laender) do not reduce expenditure, they actually increase it in anticipation of future interventions by the center.

## Box 2 Technicalities

Another technical problem which is discussed at length in this literature is how to take into account of the estimates of (2) or (3) to estimate (1). There are two possibilities: the direct substitution method (SM), or the error-in-variables method (EVM) (see Petterson-Lidbom and Dahlberg, 2003). With the former, we simply substitute for  $B^e$  in (1) with the (best) forecast obtained from (2) or (3), that is  $\hat{B}$  or  $\hat{F}$  (or  $\hat{v}$ , in Rodden's approach). With the EVM, we replace  $B^e$  in (1) with observed bailout  $B$  (or observed funding  $F$ ) and use the vector of variables  $Z$  as instruments for  $B$ . Petterson-Lidbom and Dahlberg (2003) argue that EVM should be preferred to the SM because it requires only correct instruments, whilst SM would also need (2) or (3) to be correctly specified. In other words EVM allows to obtain consistent estimates of  $\alpha$  even if the functional form of (2) or (3) is not correctly specified. However, the choice of correct instruments is not an easy task. If  $Z$  is the vector of Instrumental Variables used it must be true that  $Cov(Z_{it}, B_{it}) \neq 0$  and  $Cov(Z_{it}, v_{it}) = 0$ : instruments must be relevant to explain observed bailout, but must be also truly exogenous. In their paper, Petterson-Lidbom and Dahlberg (2003) consider valid instruments variables dated at  $t-1$ . They support their choice by observing that, since they *postulated* that expectations are formed rationally, this hypothesis rules out *theoretically* the possibility of any relationship between the prediction error and the regional government's information set. However, if the hypothesis of rational expectations is not correct, this is not necessarily true, and there are aspects in Petterson-Lidbom and Dahlberg (2003) results which suggest this may be the case. Both Rodden (2003) and Bordignon and Turati (2003) use instead direct substitution methods.

### 3.2 Concluding remarks

This is pretty much what is available in the literature in terms of serious attempts to estimate SBC problems in intergovernmental context<sup>6</sup>. Anecdotal evidence is instead plenty, but rather confuse. The more sophisticated econometric evidence is clearly too weak and the methodology still too unsettled to allow one to draw robust conclusions. Most authors seem to find evidence of SBC problems being in place in their respective case-studies, but that is very much what is in it. In particular, the difference in the institutional setting between Spain, Germany, Italy and Sweden is such that is difficult to find support for any of the contrasting suggestions received by theory and summarised in section 2. Bordignon and Turati (2003)'s work suggests that is in political sensible fields such as health care that one is most likely to find SBC problems, but also that a sudden change in regime, as that due to the Maastricht external constraints in mid 90's Italy, may do marvels to eradicate SBC expectations. Petterson-Lidbom and Dahlberg (2003), on the contrary, suggest that is the history of past bailing outs which is most determinant in shaping expectations of future bailing out. However, the difference in the results may simply be due to the more stable economic and political environment of the Swedish case. Both Rodden (2003) and Bordignon and Turati (2003) find some circumstantial evidence that increasing vertical imbalance matters in increasing expectations of SBC. As already mentioned, Bordignon and Turati (2002) also finds some support to the idea that *political affinity* between central and local governments matters in determining SBC behaviour, although in the opposite direction from what is usually assumed. *Ceteris paribus*, local governments of the same political colour of the central government received more ex ante transfers, but controlled more their expenditure ex post, than local government of different political orientation. However, it is hard to say if this result can be extended to other countries. Finally, Rodden (2003) (see also Stein ) results suggest that "too small to fail" may be more relevant than "too big too fail" for SBC expectations, contrary to one of the possible interpretations of Wildasin (.) model (see above). Bordignon and Turati (2003), on the contrary, did not find any evidence that size matters for SBC problems.

## 4. European decentralization processes

Having made some steps forwards in trying to clarify theory and empirical evidence, let us now then turn our attention to Europe, our main case study. We want to ask the question if the on going

---

<sup>6</sup> One should also mention the attempt by Lago-Penas (2003), who takes a short cut. Rather than explicitly estimating a model of SBC, he analyses the behaviour of a number of financial variables relative to Spanish regions, summarises a number of predictions from SBC theory, and then compare these predictions with an alternative model. His conclusions are that there are financial problems in intergovernmental relationships in Spain, but that these problems are better explained by the alternative model than by the SBC approach.



decentralization process is increasing the likelihood of SBC problems. In this section, in search for an answer, we briefly review the main characteristics of the European decentralization process (see OECD, 2003 and the interesting recent review of Bernardi and Gandullia, 2004). In the next, we briefly review the experience with the internal stability pacts, to see if there is any evidence that the decentralization process is already causing troubles, in the sense of an increasing difficulty by national governments to control the financial behaviour of the local ones.

European countries, even considering only the largest countries, are characterised by a large variety of political setting. Austria, Germany and Belgium (since 1993) are political federal countries; Italy, Spain, and certainly France after the recent constitutional reform (2003) are decentralized countries; Denmark, Sweden, Finland, Netherlands and Norway are unitary countries, but with a long tradition of strong local governments (municipalities, not regions); the UK and Ireland are strongly unitary countries. These political differences are only partly reflected in the data. As a percentage of GDP, expenditure of local governments<sup>7</sup> (pooling together regional and local levels; there are no more disaggregated data for unitary countries) at the end of the '90's ranged from 30% in Denmark and 23% in Sweden, to 9-10% in France and the UK, with Italy, Spain, Belgium and Germany in a middle range, two or three points above or below 15%. As a percentage of total public expenditure, the range was from 59% in Denmark to 20% in France, with an average around 35%. That is, in terms of expenditure levels Nordic unitary countries are more decentralised than both federal and unitary countries of continental Europe and the UK.

Attribution of functions to local government also varies enormously, reflecting the different national stories: Italy and Sweden are peculiar in the sense of assigning to local governments most of the administrative responsibility on health care; 68% and 87% respectively of the total expenditure of the sub-national levels are devoted to this function. In contrast, (so far) Italian regions had only limited competence on Education, which instead is the bulk of sub-national expenditure in Belgium (35%), France (20%), UK (29%) and Spain (19%). Social welfare covers 57% of the total sub-national expenditure in Denmark, but much lower shares in other countries, ranging from the 33% in the UK to approximately zero in Italy. Local transportations and communication covers a reasonable share in most countries (around 5%), and so does Housing (25% in France and Netherlands, much lower in the other countries) and Agriculture (4-5% on average). Interestingly, (at least in view of the current Italian proposals of further constitutional

---

<sup>7</sup> These data and the following ones used in this section are taken by Bernardi and Gandulia (2004), who pool together various sources, mainly IMF, OECD and World Bank.

devolution), only in the UK a significant share of local expenditure is devoted to Policy (13%; 4% in Spain), it is approximately zero in all other countries.

Of course, these numbers do not mean much. In particular, they do not say how much real autonomy local governments do actually have in performing these functions. At least in continental Europe the common experience is that of an overlapping of competences between different levels of governments, rather than a clear cut attribution of legislative and political responsibility. An extreme example is Germany, where shared responsibility between the Laender and the Bund in all functions is pervasive, but most other countries present varying degrees of overlapping. Again, local governments are probably more autonomous in the Nordic countries than elsewhere.

Similar differences appear on the financing side. According to OECD (2002), in the year 2000, transfers from central government covered on average about 45% of all sub-national resources, but again with large differences across countries. In Sweden, own tax revenues (including tax shares of national taxes) covered 75% of total local governments' resources, but only 10% in the Netherlands and 14% in the UK. In terms of the ratio of sub-national (state + local level) tax revenues to national tax revenues, the figure ranged from 50% of Germany to 5% in the UK, with an average figure around 15% (but around 25% in the Nordic countries). But again, these numbers do not mean much, because they pool together tax sharing of national taxes, with own taxes, that is tax instruments where local governments have at least some autonomy in the determination of tax rates (although usually not of the tax bases). For example, taking into account that German Laenders are exclusively financed with tax shares, the level of tax autonomy of local governments in Germany and in the UK is approximately the same.

To sum up, in France and the UK local governments spend relatively little, but in France they enjoy much more tax autonomy than in the UK; in the Nordic countries, they spend a lot, and have considerable resources of their own; the other countries are somewhat in the middle, with Germany a special case, where Laender spend a lot, but have with little tax autonomy of their own.

These differences in tax autonomy, in turn, reflect the way in which sources for local taxation are allocated in the different countries. Taxes on Houses (wealth or services) are a common source of revenue for municipalities in all countries, but are almost exclusively so for the UK, which explain the low level of own financing of its local governments. On the contrary, local governments are almost exclusively financed with large ad valorem taxes such as the income taxes in the Nordic

countries, who also enjoy a large autonomy on the tax rates<sup>8</sup>, and Spain is now going in the same direction. Local governments are financed with a combination of tax shares to the income tax and the VAT in Belgium, Germany, and since 2000 in Italy, with some tax autonomy in Belgium and (less so) in Italy on the income tax. Italy, France (and less so, Germany) also use taxes on different definitions of business activity (the “*taxe professionnelle*” in France, *Irap* in Italy), which explain, for example, why French local governments show a higher tax autonomy<sup>9</sup>.

Yet, in spite of all these differences across European countries, there seems to be some underlying common trends going on. First, during the ‘90’s, decentralization has been in the raise almost everywhere, involving in some cases truly constitutional changes (Belgium, Spain), and in others, a devolution of functions and / or of tax resources in substitution of transfers. To quote just the extreme case, in terms of the percentage of regional and local taxes on total tax revenue, Italy moved from slightly above 3% in 1985, to 16% in 2000. Second, decentralization and more generally the search of new equilibria between the center and the periphery, is still on the political agenda everywhere, except perhaps in the more stable Nordic countries and in the Netherlands. In Spain, the process of devolution of competencies (health care and social welfare) to the Autonomous Communities has been recently completed (2003), and their system of financing has also been changed, substituting transfers with taxes, either autonomous or shared. In France, a new Constitution has been approved (2003), and although its main characteristics are still unclear, it purportedly plans to transfer to regional departments and regions competencies in functions such health, education, infrastructure, local development etc. In the UK a devolution process of functions to Scotland, Wales and Ulster has started, and now the debate is how to accompany this process on the financing side, giving also more own resources. In Italy, the constitution has been reformed in 2001 (although it has yet to be applied), giving shared competencies to regions in a number of subjects (above all, education) as well as new exclusive competencies in others, and the constitutional change is still going on. In Germany, the strong redistributive system across regions has been reviewed, by reducing the amount of horizontal redistribution and by introducing a system of incentives for Laender who manage to increase their tax revenues.

How are these processes going to affect future SBC incentives? Answering the question would require detailed country-cases analyses which are well beyond the aims of this work. However, one

---

<sup>8</sup> Where the *dual income tax model* is in use, meaning that the income tax base only considers labor income.

<sup>9</sup> In Italy, regions gained tax autonomy on *Irap* (a tax with a very large tax base, close to 50% of GDP) in 2001, to have it blocked in 2003 by the central government. Regions and municipalities also gained a surcharge tax on the income tax (in addition to the tax share) in 2001, to have it again blocked by the central government in 2003.

can at least point out some elements. First, most of this decentralization process is taking place in (nationally) politically sensible fields, such as education, health care or social welfare. In Italy, for instance, the most important function which is going to be transferred to regions following the 2001 constitutional reform is education, and there is some risk that the same SBC problems we still have with health care supply may spread to this field too (Bordignon et alts, 2002). Similar processes are taking place in Spain and perhaps, they will in France. Second, such a profound decentralisation process on the expenditure side may also create some problems on the financing side, and in particular to the amount of tax autonomy which can be given to regions and other local governments.

The reason is simple. When the amount of decentralization is limited, one can cope with specific taxes, tariffs and some fantasy (e.g. the Italian Irap). But when it goes beyond a given threshold, one needs to link local expenditure to some more robust tax bases, typically large ad valorem national taxes such as the income tax or the VAT (corporate and capital taxation being out of question for obvious reasons). The problem is that the degree of local tax autonomy which can be offered on these tax bases looks rather limited. It is currently none for the VAT, subject to strict European rules (pending VIVAT type of innovations, see Keen (.)), and looks problematic for the income tax, at least in the densely inhabited countries of continental and southern Europe. First, because over some thresholds, varying regional and local governments rates on the personal income tax may induce inefficient fiscal allocation of labour and of place of residence. Second, because in these countries (differently from the Nordic ones), the personal income tax is still playing an important redistributive role at the individual level, which could be jeopardised by different regional tax rates. It is then quite likely, as indeed the available empirical evidence suggests, that these forms of financing will mainly take the form of tax sharing, with limited or zero tax autonomy for local governments.

But tax sharing, as the main form of financing, is problematic under several respects. First, it may sever the perceived link between expenditure and financing at the local level, reducing accountability and responsibility for local politicians. Second, it may make the revenues of local governments dependent of choices made by another level (a decision taken at the central level to reduce the national tax rates or to change in the tax base, say, will affect local governments' revenues without the latter carrying any responsibilities for this change), again weakening accountability at local level. Third, it may induce the perverse incentives we discussed above concerning the advantage to other local governments for a single bail out, as in the Brazilian case.

Fourth, sharing of taxes such as the VAT or the income tax tend to make the regional budget strongly pro-cyclical. Revenues fall in a recession, while expenditure (being concentrated in issues such as social welfare, education and health) increases, or stays constant. When accompanied to limits to borrowing capacities, this may make difficult for the regions to keep a balanced budget over the cycle, so undermining the credibility of balanced budget rules at local level.

Finally, it should also be noted that regional autonomy in fields such as health, education, social welfare do not go very well together with unconditional transfers and interregional redistribution system based on the fiscal capacity of regions. So far in Europe we have seen a continuous substitution of conditional transfers with unconditional ones (or block grants). But the process could be reversed, and there are signs that this may be happening in Italy. Conditional or ear-marked grants reduce accountability at local level and make it easier the intergovernmental responsibility shifting games which are conducive to SBC problems.

Hence, while strong conclusions are difficult to reach, this analysis confirms that there are some worrying signals in Europe, in particular in some countries, such as Italy, Spain, and possible France in the future. Perhaps, on efficiency grounds and in particular to avoid SBC kind of problems, a more limited, but more focussed process of decentralisation might have been more desirable.

## **5. Internal stability pacts**

But are there true signals of a loss of control of local finances in Europe? Here, the answer is more doubtful. Several scholars, for example, have noticed the potential conflict from the European Stability Pact for the countries in the Euro area and the decentralisation process which is actually taking place. This conflict is due to an asymmetry in the Pact: the fulfilment of the Stability Pact at national level depends on the fiscal behaviour of the *general* government (including therefore both central and local levels), but only the central level is legally responsible for deviations from the Pact and may be sanctioned as a consequence. There are therefore fears that this asymmetry may jeopardise the fulfilment of the Pact, inducing free-riding behaviour on local levels.

Reacting to these fears, several Euro countries have made attempts to decentralise the European Pact at the local level<sup>10</sup>, reinforcing hierarchical controls on local finance which in most of the cases

---

<sup>10</sup> Strictly speaking, this is not actually true. First, because the European Stability Pact makes reference to cycle-adjusted public finance figures, while these information are usually not available and difficult to compute at local level. Second, because there are differences in accountancy rules between local and national budgets on the one side, and the

were already in place. This process has taken mainly two forms. In countries such as Austria, Belgium, Germany the approach has been mainly co-operative, the attempt being that of finding an agreement between different levels of government which would be conducive to a general fiscal behaviour in line with the requirements of the Pact. In other cases, such as Italy, France, and Spain, the approach has been mainly that of the *fiscal rule*, requirements imposed by law by the central government on local governments' fiscal behaviour, usually obligations not to run current deficits supported by various incentives and sanctions (see for instance, OECD, 2003, Balassone et alts, 2002; European Commission, 2003). Spain, with the recent approval of General Law of Budgetary Stability, has also moved towards a more co-operative approach, based on an agreement reached by all levels of governments to maintain a balanced budget over a multi-annual framework, a time setting consistent with the European Pact.



In all these cases, the ability of the central government to effectively decentralise sanctions to local level has appeared problematic. In Germany, for example, for several years the attempts to introduce an internal Stability Pact by the Bund has been blocked by Laender (whose consensus is necessary for constitutional reasons), who did not want sanctions to be imposed on them in case of failures to satisfy the national pact. But even in Austria, the country where the European Stability Pact has been probably more successfully decentralised, the imposition of sanctions (detailed in the Internal Pact) requires the unanimity of all governments, including the sanctioned ones. In many other cases, sanctions appear vague and open to various disclaimers.

Yet, it does not appear that at least so far this has been conducive to fiscal irresponsibility at local level. The evidence of the 90's, for example, tell us that the fiscal consolidation process in Belgium, Italy and Spain has not been hampered by the decentralisation process. With the possible exceptions of Germany, the recent problems to meet the Maastricht rules by several European countries too do not seem to depend on the behaviour of local governments. Italy is a good example at hand<sup>11</sup>. In Italy, Internal Stability Pacts were firstly introduced in 1999, and have been applied, at least apparently, very poorly since. The definition of the objectives to be followed by local governments have been changed basically all years, moving from debt figures and expenditure levels to reach a

---

European accounting rules, on the other. As far as I know, only Austria has made a serious attempt to decentralise the Pact in this sense, changing the way in which deficits and debts are computed at the regional level, so as to make them directly comparable with the European accounting rules.

<sup>11</sup> In the Italian language, a detailed discussion of the experience of the Internal Stability Pact in Italy in the period from 1999 to 2004 is contained in Ambrosanio, Bordignon and Etro (2004) and in Ambrosanio and Bordignon (2004) for the Budget Law for 2005. See also Giarda and Goretti (2002) for an analysis of the first two years of application of the Internal Pact.

definition of balanced local budget, computed net of some items of expenditure (in particular, interests payments and capital outlays) and revenues (basically, transfers from other levels of governments), to go back to a ceiling on expenditure levels (including investments) in 2005. The requirement of the Internal Pact has generally been that of improving the objective on a yearly base, reducing current deficits or increasing current surplus, without considering the effect of the economic cycle on local government finances. However, monitoring has been poor, and sanctions, while draconian on paper (including limits to the hiring by local governments and on borrowing), has never been applied in practise.

Yet, the general results of the National Internal Pact appear broadly satisfactory. With the exception of health expenditure (which has been taken away from the regional side of the Pact since the year 2000), all other items of local expenditure and the local budgets have more or less met the objectives. For instance, according to “Corte dei Conti”, the technical body which is in charge of assessing the ex post fiscal performance of the local governments and verify the fulfilment of the Pact, all Regions, and between 80 to 90% of all Provinces and Cities have respected the National Internal Pact or its main elements in its various versions during the last 5 years. The result is even more impressive if one considers that in the last three years, transfers to local governments (again, putting aside health care transfers) have been tightly controlled by the central government.

Of course, one possible explanation is that the Internal Pact was too generous to start with, so that most local governments would have reached the same results even without the Pact. But this seems unlikely. More probably, even a weak fiscal rule such as the Italian national pact has played a role in co-ordinating local governments efforts to meet and maintain a balanced budget. Indeed, intergovernmental consulting bodies, such as the “Conferenza Stato Regioni” and the “Conferenza Stato Autonomie Locali” have been directly involved in the writing and the monitoring of the Pact. Conflicts among governments in the setting up of the Pact have appeared and have been somewhat solved in this interactive process. Thus, in spite of its legal form, the Italian national pact has worked more as an instrument of “moral suasion” on local governments than anything else. Indeed, in the last few years, the Italian central government has been much more successful in controlling local governments finance than his own expenditure.

## **6. Concluding remarks**

So let me sum up some of main points raised in this work, trying to reach some policy conclusions. Soft budget constraints problems in intergovernmental context are potentially a serious threat for

the financial stability of a country. Theory singles out a number of factors which may be less or more conducive to SBC phenomena. However, the likelihood of SBC problems to emerge in the real world depends on a host of factors, which are often embedded in the cultural, political and institutional characteristics of a country. It is then difficult to produce general statements or general recipes. Robust comparative empirical evidence is scant and the available econometric evidence is rather weak, producing interesting but still somewhat contradictory results. Possibly, in addition to still unsolved methodology issues, this may also be due to institutional differences across countries, which make meaningful comparisons difficult.

Hardening the local budget constraint, and maintaining it hard, is thus the result of a complex set of political and legislative rules. The first rule has certainly to do with a correct allocation of tasks and means of financing to the different levels of government, including functions, taxes and transfers. Precise allocation of political responsibility across levels of governments in the provision of public services, some flexibility in the local budget due to the presence of autonomous own tax resources, clear-cut and fair rules for transfers based on reliable and transparent data, may do a lot for hardening the local budget constraints. Since *ex ante* commitments are difficult to maintain in the public sector, these elements all work in the direction of reducing the difference between *ex ante* and *ex post* incentives for central governments, so making it more likely to avoid expectations of future intervention. If there is something worrying about the current decentralisation process in Europe is that this desirable allocation appears somewhat endangered by the actual process, especially in new decentralised countries such as Italy and Spain. Decentralisation is taking place in (nationally) politically sensible fields and local financing may not be up to its new task. However, our cursory glance to data suggests that there is no at the moment evidence of a loss of control at local finance in Europe, not even in Italy.

At least in the economically developed countries of Western Europe, too strict hierarchical controls on local governments (e.g. expenditure ceiling, conditional transfers, hiring limitations etc.) should as far as possible be avoided. This not only because they often do not work *ex post*, but also because they might undermine the efficiency advantages of decentralisation, including the effects in terms of an hardening of the local budget constraints. Hierarchical controls reduce the responsibility of local governments about their expenditure levels and composition, and make it more likely to force central government to intervene *ex post*. A partial exception to this prescription may be in terms of the imposition of rules to manage sub-national borrowing, although it should be remembered that in Europe (with the partial exception of Germany and exactly because these rules are already in place in many countries) local debts constitute only a small part of outstanding



national debts (see for instance, European Commission, 2003) and that in most of these countries local governments are also in charge of most public capital expenditure. This is so, because of the strong externality effects which may be caused by a loss of control of borrowing at local level, especially in countries such as Italy with still unsettled public finances and huge levels of pre-existing debts (Ter-Minassian and Craig, 1997).

Moreover, because this is also a field where reliable alternatives seem to be rather poor. For example, despite the fact that they seem to work in countries with sophisticated financial markets such as Canada or the US, one should rather be sceptical that market controls may be very useful in controlling local finances. First, because the controls imposed by the financial markets on local finances tend to be sudden and abrupt, rather than smooth and continuous as one would wish. Adjustments in the financial markets tend to occur with a time lag and dramatically, imposing costs on citizens which would be desirable to avoid. Second, because one often wonders about the quality of these controls. For example, in Italy, large cities and regions customarily have their financial issues been rated by international agencies. In some cases, rich Northern regions have obtained a more favourable rating for their debt issues than the same central government. Frankly, I do not understand what these figures mean. Probably, they are based on a mis-understanding or a mis-reading of the actual constitution. Simply, local governments in Italy do not have enough tax autonomy and are not enough constitutionally protected to deserve a different rating from that of the national government. The more favourable financial situation of some regions, especially “special” Northern regions would disappear in a minute, if the central government so wished.

Finally, one should also consider that sanctions on democratically elected bodies are difficult to impose. Fiscal rules and draconian punishments written on paper are ex post difficult to apply in practise. As the experience of national stability pact in Europe proves, often the search of a consensual approach is the only workable solution, however time consuming it might appear.

**References**

(To be added)