INTERGOVERNMENTAL FISCAL RELATIONS AND THE SOFT BUDGET CONSTRAINT PROBLEM[1]

By

Marianne Vigneault
Department of Economics
Bishop's University

ABSTRACT
The soft budget constraint problem in intergovernmental fiscal relations arises when subnational governments' spending and borrowing decisions are influenced by the expectation of receiving additional resources from the central government. The paper describes the key determinants of soft budget constraints and surveys the theoretical and empirical literature on the topic. An assessment of the soft budget constraint problem is provided for selected developed, developing, and transition economies as reported in the case study literature. The paper concludes with a discussion of the methods that may be employed to mitigate the soft budget constraint problem.

I. INTRODUCTION

The problem of soft budget constraints in intergovernmental relations has generated interest recently in light of the movement towards decentralization in many countries throughout the world. This movement is motivated by the traditional argument that subnational governments are better able to allocate resources according to the preferences of their own citizens (see, for example, Oates

As von Hagen and Dahlberg (2002) point out, however, it is important to distinguish between a financial crisis brought on by strategic behaviour and one that results from factors beyond the subnational governments' control, such as adverse macroeconomic shocks. The soft budget constraint problem arises only when subnational governments *expect* the central government to provide additional resources, and this expectation affects subnational government behaviour.

The sequential game depicted in the previous paragraph highlights the two necessary conditions for the existence of soft budget constraints: (i) it must be in the interest of the subnational government to behave strategically governments. Furthermore, the excess government expenditure may crowd out private investment and consumption. All of these effects can undermine the central government's stabilization program.

III. DETERMINANTS OF SOFT BUDGET CONSTRAINTS

As described in the Introduction, two necessary conditions for soft budget constraints to arise are that (i) the subnational government has an incentive to behave strategically in order to extract additional funds from the central government and (ii) the central government finds it optimal to deviate from its originally stated policy and bail out the subnational government. Knowing (ii), the subnational government comes to expect a bailout, and this influences its behaviour. It is important to understand, therefore, that soft budget constraints do not arise out of direct policy choices on the part of the central government. Rather, to understand the soft budget constraint problem it is necessary to examine the fiscal and political institutions that create the expectation spending levels. First, the common pool problem is apparent in that the subnational government obtains the full benefit from excessive spending while shifting part of the burden onto future national taxpayers. The second incentive derives from the voting public's dislike for public debt. In particular, voters are able to remove both the subnational and national governments from office if debt levels are too high. The first incentive tends to induce excessive spending whereas the second incentive tends to dissuade it. When the second incentive dominates, the macroeconomic equilibrium is a cooperative one and debt levels remain low. A limited cooperative outcome occurs when the central government is able to adjust the fiscal allocation to the highest level that induces cooperation. A non-cooperative outcome occurs when the central government is unable to constrain the spending behaviour of subnational governments. Aizenman shows that adverse shocks can result in regime switches from cooperative to non-cooperative outcomes. More specifically, a negative adverse shock encourages opportunistic behaviour because the benefits of additional spending are increased due to diminishing marginal utility. An implication of this is that soft budget constraints should be more common during economic downturns.

(ii) Flexibility of Own Revenue Sources

In some federations (Germany for example), subnational governments have access to a large number of tax bases, but they have little autonomy in setting tax rates or in creating new bases. In such a setting, the subnational government may find it difficult to adjust its revenues in response to a financial crisis, and it may therefore expect to be bailed out by the central government. Here again, as in the case of VFIs, voters and creditors may not hold the subnational government accountable for a financial crisis if it has limited flexibility in securing additional revenues from own sources.

(iii) Types of Federal Transfers

Even with high levels of VFIs, the soft budget constraint problem may not arise if intergovernmental transfers are completely non-discretionary (Rodden (2001)). That is, if the level of transfers are determined by explicit formulae such as those based on the number of poor or the number of schoolchildren, then the central government would have little discretion in providing additional transfers in times of financial crises. By contrast, if the criteria for determining federal transfers are poorly defined or if the criteria are easily manipulated, then the subnational government may petition the central government to use its discretionary transfer powers in the event of a financial crisis (Rodden, Eskeland, and Litvack (2003)). In this setting, the central government cannot hide behind transfer rules that effectively tie its hands and enforce its no-bailout policy.

Rules can, however, have the opposite effect and help to enforce bail-out expectations. For example, the constitution may provide explicit rules for the central government to ensure equal opportunities for citizens across the country. These rules often are manifested in an explicit equalization program that compels the central government to redistribute funds across subnational governments. If financial difficulties mean that citizens in one region of the country may suffer a reduction in the provision of goods and services, then the central government may be obligated to bail out the subnational government. Two German Länder - Bremen and Saarland - recently received bailouts in this way.

(iv) Budget Transparency

Subnational government budgets are often exceedingly complex, which may confuse voters when attempting to identify the true costs and benefits of government policies. At least part of the complexity may be deliberate. For example, Alesina and Perotti (1999) explain that subnational governments may (i) overestimate the expected growth of the economy, (ii) overestimate the effects of government policies, (iii) overestimate the revenue effects of small changes in tax policy, and (iv) announce a multi-year budget where most of the difficult adjustments occur in the future. The confusion created by deliberate complexity in the budgeting process makes it difficult for voters to hold subnational governments accountable for financial difficulties experienced at the end of the fiscal year.

commitment to a no-bailout policy. The risk of a national financial crisis is a special case of the "too big to fail" argument proposed by Wildasin (1997), whereby the likelihood of a bailout is higher for large subnational governments that have the ability to borrow.

(vii) Political Federalism

In most federations, the central government faces some limitations in its ability to influence the expenditure and revenue-raising activities of the lower levels of government. Furthermore, the expenditure and revenue-raising responsibilities of subnational governments tend to be larger in federations than in unitary states. In addition, these responsibilities are often laid out in the constitution, which cannot be changed

becomes difficult to deny bailouts in the future.
As was mentioned in section (viii) above, the

performance and vertical fiscal imbalance is strongest when subnational governments depend on general-purpose and equalization transfers, (iii) countries with high levels of vertical fiscal imbalance tend to restrict borrowing by subnational governments, (iv) average subnational government deficits are much higher in countries with high levels of vertical fiscal imbalance and where subnational governments have borrowing autonomy, (v) federalism alone is not associated with fiscal indiscipline, (vi) subnational governments in federations tend to have a higher degree of borrowing autonomy, (vii) a positive relationship exists between

i(with high levels of vertical)-5.9(fi]TJT*0. -1 Tc0.021(8)Tj10balan9(, n)-7.4(.1.153 (y)393D0.0005 Tc(8)(0. -19.7605 0 -

average number of bailouts received by other subnational governments.

The aim of Petterson-Lidbom and Dahlberg’s empirical analysis is to determine how the expectation of bailouts affects

VAT revenues to the states according to population. Up to 25% of the remaining VAT revenue is redistributed to the states with the lowest revenues. The second stage involves a horizontal redistribution of revenues among the states so that all reach a tax capacity that is within 5% of the average national tax capacity. Note that this stage entails payments from the richer states to the poorer states. In the final stage, the Federal government provides supplementary grants to ensure that the poorer states receive at least 99.5% of the average national fiscal capacity and to compensate states for "special burdens".

Borrowing

In contrast to the centralized powers of taxation and the requirements for the uniform provision of public goods and services, the state governments in Germany face very little restrictions on borrowing. The central government has no power to restrict or review the borrowing activities of the states. The states have, however, introduced their own restrictions that prevent them from borrowing more that the amount required for investment purposes. These are called "golden rule" provisions and are detailed in the state constitutions. In practice, the states are often able to side-step these restrictions due to the ambiguous definition of "investment purposes". Furthermore, some states simply ignore these restrictions.

An important difference between the federal and state/local levels is the type of borrowing that is undertaken. The federal government finances its deficits through the issuance of bonds, whereas the state and local governments rely primarily on bank loans. The latter is more attractive to the state and local governments given that they have considerable political connections with the boards of the German commercial banks.

Implications for Soft Budget Constraints

From our discussion above, we can point to several factors in the German institutional structure that have the ability to generate soft

Intergovernmental Fiscal Relations

The United States federation has three levels of government: federal, state, and local. As is common with many federations, the United States exhibits an asymmetry between revenues and expenditures at the state and local levels. Revenue-raising is considerably centralized in the United States despite the fact that states have access to a wide variety of tax sources. At the same time, the state and local governments are responsible for the provision of most goods and services. Thus, transfers from the federal to the state governments and from the state to the local governments play a significant role in the financing of public goods and services. This being so, it is important to note, however, that the United States constitution does not prescribe intergovernmental transfers for the purpose of equalization, nor are there any constitutionally prescribed revenue-sharing arrangements.

The United States constitution specifies the responsibilities that are under the jurisdiction of the federal government, and leaves the residual responsibilities to the states. Local government powers, by contrast, are granted by the state governments and thus vary considerably across the United States. Despite the distinction in the constitution between federal and state responsibilities, the delegated powers of the Congress have been interpreted in a way that allows the federal government very few restrictions in the areas in which it can exercise its power. The primary methods by which the federal government influences the provision of goods and services are through categorical grants and conditional block grants. These comprise the bulk of intergovernmental transfers in the United States. These types of grants provide funding for specific programs or for expenditures incurred within a general area. Funding is often accompanied by provisions for adhering to national goals and standards.

Although the use of the federal government's spending power in areas of state jurisdiction suggests that the state government's spending autonomy is somewhat compromised, it should be noted that state representation in the national legislature has the effect of influencing the number and level of grants used to finance locally beneficial programs. In fact, a significant proportion of the growth in intergovernmental grants can be attributed to this. The only period in the United States' history where federal grants showed a significant decline was during the Reagan administration. During this period, President Reagan was able to use his popularity to carry through large cuts in the grant programs.

Borrowing

There is a great deal of variation in borrowing restrictions across state and local governments in the United States. For example, some states have constitutional debt limits, others restrict borrowing to capital expenditures, and others face essentially no borrowing restrictions. Despite some restricted access to capital markets, in the United States, unlike in Germany, capital markets discipline lower level governments with higher interest rates when they are fiscally irresponsible. This is further evidenced by the fact that states that have clear, enforceable balanced budget rules face lower interest rates. Note that the ability to discipline lower level governments requires a mature banking system and a competitive bond market, both of which are present in the United States.

Also important is the bankruptcy standard passed by the United States Congress in 1937. The standard specifies the formal procedures for debt repayment and in the case of municipal bankruptcy. In the event of bankruptcy, creditors have full access to the state or local government's tax revenues to ensure debt repayment. Thus, voters and creditors are fully aware that the state or local government is fully responsible for any excessive borrowing it undertakes.

Implications for Soft Budget Constraints

The vertical fiscal imbalances that exist at the state and local levels of government historical experience during state and local fiscal crises is perhaps the deciding factor in extinguishing bailout expectations. The states learned that the federal government would not bail them out during the 1840s when eight states defaulted. What was key to the federal government's no-bailout decision at that time was the fact that the economic costs of the defaults would be borne primarily by wealthy local landowners and by foreign investors. Thus, there were no significant externalities created by allowing the states to default. In the 1870s and the 1930s, the states in turn faced their own bailout decisions when a number of local governments defaulted. In response, some states imposed restrictions on local debt and passed no-bailout provisions in their constitutions. A consequence of the federal and state governments' no-bailout policies is that voters and creditors have come to hold subnational governments accountable for their fiscal performance. Moreover, many state governments have balanced budget rules and have adopted clear standards for debt repayment and formal procedures for declaring municipal bankruptcy.

There have been two exceptions to the no-bailout rules adopted by the federal and state governments. The first is the Washington, DC bailout in 1997. Here, the decision to bailout can be attributed to the externalities provided by the nation's capital and the fact that Washington, DC has no state government supervision and thus is responsible for many state functions. Note that the bailout was accompanied with reductions in the local government's autonomy, which can be interpreted as a significant cost to the local government. The second bailout was provided to the local government of Camden, New Jersey. Here, the decision to bailout can be attributed to distributional considerations given that Camden is very poor relative to other localities in New Jersey.

V. 3 Canada

Bird and Tassonyi (2003) examine the issue of soft budget constraints in the Canadian federation. Canada is an interesting study of the soft budget constraint problem because of the different institutional features that characterize intergovernmental relations between the federal government and the provinces on the one hand and between the provinces and the municipal governments on the other.

Intergovernmental Fiscal Relations

Federal and provincial powers are set out in the constitution, whereas municipal powers are determined by the provincial governments. The constitutional separation of powers has resulted in a federal-provincial relationship that is very decentralized. The provinces have access to most tax bases and have the right to adjust rates and bases as they see fit. They are also responsible for providing most public goods and services.

While the provinces face little constraints in raising revenues, they do rely on federal government transfers for financing part of their expenditures, although these transfers are largely unconditional. The two most important transfer programs are the Canada Health and Social Transfer and the equalization system. The former is a block grant intended to be used for expenditures on social assistance, health and postsecondary education. The latter is meant to equalize tax capacity across thirty-three different tax bases.

Borrowing

Like the United States and Germany, Canada has a mature banking system and competitive bond markets. The Canadian provinces face no borrowing restrictions whatsoever, and about half of provincial debt is owned by foreign investors. By contrast, municipal governments face strict limitations in their ability to borrow. They cannot, for example, incur long-term debt without the approval of the provincial government.

Implications for Soft Budget Constraints

The combination of fiscal autonomy, borrowing autonomy, and intergovernmental transfer programs such as the equalization system would seem to be the ideal conditions under which soft budget constraints would be created at the provincial level. This is not the case in Canada, however. It would seem to be the case that market mechanisms are working effectively in Canada in enforcing hard budget constraints at the provincial level. Both voters

Marianne Vigneault, *Intergovernmental Fiscal Relations an*

for the period where the Loan Council relaxed its restrictions and the states and semi-government authorities were able to increase borrowing, the restrictions on subnational borrowing have succeeded in keeping subnational debt at low levels.

V. 6 Italy

Case study analyses of the soft budget constraint problem in Italy have been undertaken by von Hagen et al (2000) and Bordignon (2000). As Bordignon describes, the Italian experience is a lesson in what should *not* be done to avoid bailouts and enforce fiscal discipline.

Intergovernmental Fiscal Relations: Reforms in the 1970s

There are four levels of government in Italy: central, regional, provincial, and municipal. During the 1970s the central government drastically reduced the fiscal autonomy of local governments in an attempt to reduce growth in local government expenditures and redistribute from the rich North to the poor South. This resulted in an increase in local governments' reliance on central government financing through transfers to the extent that regional governments were only able to raise less than 3% of revenues and relied on central transfers for almost 97% of their financing. At the same time, there existed an overlap of functions among the various levels of government and there was no consistent framework by which grants were allocated. Contrary to the goals of the central government, the result of the changes introduced in the 1970s was a rapid increase in local government expenditures, especially in the health care sector. The resulting deficits were ultimately financed by the central government and a continuous system of bailouts was created.

Implications of the 1970s Reforms for Soft Budget Constraints

The reforms introduced in the 1970s created soft budget constraints that resulted in a rapid deterioration in local finances. The reasons for the deterioration are easy to identify. First, because of the large central government responsibility for financing expenditure, local government authorities had no incentive to behave responsibly as they could not be held accountable for any financial difficulties that arose. The lack of accountability was compounded by the overlapping functions between the central and local levels of government. In addition, the central government failed to adopt a consistent framework that could deal with the deficits that resulted from excessive expenditure growth. Thus, bailouts were largely discretionary and tended to reward irresponsible government. Furthermore, Italy's

started a reform of intergovern7.6011mental fiscal relations that locainte sstrengthen local governments' budget constraints. In 1992, financial crises resulted in Italy leaving the Eudetean m-7.6(3(netary)-7.3(s)7.5(y)-7.3(TD% and dev auin)3.6(g fiscal contraction and introduced much-needed reduced considerably and the revenue autonomy of local govern15. t locaincreased. In addition, osoTmal and l2 Tc0.00

constraints7toblem hacanot been eliminated. Local government accountability still suffers from the overlapping responsibilities the importance of health care in the central government's priorities. Because of this, local governments have an incentive to use their revenue autonomy to finance other expenditures, knowing that the central government is more vulnerable to bailouts in the health sector. Italy is presently reevaluating its intergovernmental system in order to address these deficiencies.

V. 7. Argentina

Case study analyses of the soft budget constraint problem in Argentina have been undertaken by Nicolini et al (2002) and Webb (2003). Jones, Sanguinetti, and Tommasi (1999) also examine the common pool problem as a determinant of the fiscal outcomes of the Argentine provinces. Argentina's experience with soft budget constraints in the 1980s and its attempts to harden budget constraints in the 1990s offer an interesting example of the evolutionary process of intergovernmental reform.

Intergovernmental Fiscal Relations

Argentina has a relatively high degree of decentralization of public expenditures in comparison to other countries in Latin America. The provinces are responsible for approximately 50 percent of total public expenditures. By contrast, revenue-raising is highly centralized, with the central government responsible for all the major taxes. Thus, Argentina exhibits a relatively high degree of vertical fiscal imbalance, which as we have learned can give rise to the common pool problem and soft budget constraints. Intergovernmental transfers comprised over 60% of total provincial revenues in Argentina in the 1990s. The general revenue sharing program is the largest transfer program. The distribution of these revenues among the provinces is determined by law, which reduces the discretionary power of the central government.

Borrowing

Provincial governments in Argentina face little restrictions on borrowing. They have the ability to borrow both domestically and in foreign capital markets. Any restrictions they do face are the result of market discipline and self-imposed restraints. Prior to the reforms introduced in 1991, the provinces borrowed heavily from their own banks. However, when the Argentinian peso was fixed to the U.S. dollar in 1991, the central government effectively prevented the provincial banks from relying on the central bank as a lender of last resort. They then became more conservative in their lending behaviour, including with respect to loans to the provinces. The reforms after the 1994 Tequila crisis attempted to instill even greater market discipline on provincial governments. Provincial banks were privatized and they began deducting debt service payments from provincial shared revenues if these revenues were used as collateral for provincial borrowing.

Implications for Soft Budget Constraints

Argentina experienced severe economic upheavals during the 1980s and 1990s. Macroeconomic mismanagement resulted in hyperinflation by the end of the 1980s. Facing no restrictions on borrowing both domestically and in foreign capital markets, the provincial governments also borrowed heavily during this period. In addition, the provinces began accumulating arrears on wages and pensions, payments to suppliers, and debt service. The central government responded by providing funding to the provinces in order to prevent the collapse of the provincial banks. This funding was provided often and on a discretionary basis.

By 1990, the country was on the verge of financial collapse. In 1991, President Menem gained the political support necessary for radical reform of the economy. Under the direction of the economics minister, Domingo Cavallo, the exchange rate was fixed to the US dollar and the central bank was mandated to hold a100% reserve requirement for the issue of high-powered money. As a consequence of these measures, the sole role of monetary policy was to keep the exchange rate fixed. The central government's budget constraint was significantly hardened as a result, and this helped enforce its determination to harden provincial budget constraints. Furthermore, a new Ministry of Economy resolution was adopted that prohibited any federal agency from paying a creditor on behalf of a province. The economic situation improved greatly in the early 1990s as a result of these reforms. In particular, the rapid decline in inflation led to a rapid increase in tax revenues. However, some provinces responded by increasing expenditures more than the increase in revenues. Thus, the reforms enforcing hard budget constraints continued to lack credibility for some provinces.

Further reforms were introduced after the 1994 Tequila crisis where Argentina witnessed significant declines in tax revenues and GDP. During this crisis, Argentina's heavy reliance on foreign financing led to a run on provincial banks. The central bank refinanced the liabilities of the provincial banks through a project financed by the World Bank and the Inter-American Development Bank. However, the program was conditional on the provinces privatizing the provincial banks. As well, the central government took control of some of the provinces' pension systems, which had generated large deficits due to generous benefits and inadequate funding from a pay-as-you-go system. And, from 1992-1994, the central government provided special financial assistance to the seven provinces experiencing the most severe fiscal difficulties. The central government determined that the economic crisis in these provinces was severe enough to risk political and social instability. Note, however, that these funds were provided with conditions that included deficit reduction targets, freezing public employment levels, and borrowing restrictions.

The reforms of 1991 and 1994 helped harden provincial budget constraints. However, there are several factors remaining that still contribute to a soft budget constraint problem. First, the provinces are still dependent on federal transfers for a sizable proportion of the funding for their expenditures. Another factor is the effect of the provision that allows banks to deduct debt service payments from shared revenues. While this provision increases the province's borrowing costs and thus helps harden budget constraints, it has had the perverse effect of increasing the banks' desired lending to the provincial governments, and provincial debt has increased as a result. Furthermore, none of the reforms enforced central government restrictions on provincial borrowing. Thus, Argentina is still vulnerable to the soft budget constraint problem, especially during bad economic times.

V. 8 Brazil

Case study analyses of the soft budget constraint problem in Brazil have been undertaken by Bevilaqua (2002) and Rodden (2003b). Brazil presents an interesting case study because of its recent history with federal bailouts and its recent efforts to decentralize expenditure and revenue authority to the state governments.

Intergovernmental Fiscal Relations

There are three levels of government in the Brazil federation: federal, state, and municipal. Brazil exhibits a high degree of decentralization among developing countries. The 1988 constitution specifies some expenditure responsibilities that are exclusively federal and municipal, but importantly, many expenditure responsibilities are shared between the state and federal governments. This compromises the accountability of the state governments. In addition, the constitution restricts the ability of the states to alter some important expenditures. For example, it prohibits states from firing redundant public employees.

The state and local governments receive a high proportion of their revenues through shared taxes with the federal government. These shares are detailed in the constitution, and states therefore have little ability to create new taxes. Furthermore, changes to the tax bases and tax rates must be approved by the Committee of the Secretaries of Finance of the States. Despite the importance of tax revenues, transfers from the federal government are still important revenue sources for the state and local governments.

The political structure in Brazil also has important implications for soft budget constraints. The political autonomy of the states is protected by the constitution. States also have strong representation in the legislature. It is noteworthy that an average of three-quarters of senators are former or future state governors. Thus, the states have been able to influence many federal government decisions regarding state finances. Moreover, major reforms often require extensive negotiations and concessions to governors.

Borrowing

State governments have faced little restrictions in borrowing, both domestically and externally. As was the case for Argentina, the states have borrowed heavily from their own state banks. Although all public borrowing must be approved by the Senate, the Senate has consistently authorized state credit operations. Furthermore, federal government bailouts of state debts assured private creditors that the federal government was backing state debt. Thus, state governments have faced little discipline from private creditors and they have borrowed extensively in the past two decades.

Implications for Soft Budget Constraints

There have been three extreme fiscal crises at the state level in Brazil since the late 1980s. These crises were the result of a period of high inflation, the severe macroeconomic adjustments needed to reduce inflation, and Mexico's debt crisis. Each crisis involved the states' inability to service their debt. The fact that states have little discretion in altering tax revenues and expenditure levels meant that they responded to each crisis by incurring large amounts of debt. Borrowing was relatively easy since the Senate refused to restrict state borrowing and credit markets perceived (correctly) that state debt was backed by the federal government. The federal government responded to the states' debt crises by federalizing state debts. In doing so, the federal government considered that the costs of bailing out the state governments in terms of compromising fiscal discipline were lower that the risk of financial crisis and the political benefits of granting a bailout.

Significantly, the first two bailouts in 1989 and 1993 were not accompanied by any conditions for reforming state finances. Only the 1997 bailout under President Cardoso specificasince tg.2(iv)-6.n4is requirements specify that states are only permitted to borrow domestically. The states have been able to circumvent this rule because the development bank from which they borrow is permitted to borrow externally. Furthermore, subnational government borrowing is only permitted for investment projects. In practice, however, the development bank has allowed extensive borrowing for current expenditures. Until 1997, the states were able to use federal transfers as collateral, with the federal government deducing debt service payments from state transfers in the case of default. In the eyes of state governments, voters, and creditors, however, this provision lacked credibility because of the state governments' inflexibility in altering current expenditures and tax revenues in response to financial difficulty. In essence, state

Marianne Vigneault, *Intergovernmental Fiscal Relations an*

to immediately hold subnational governments accountable for financial difficulties. Moreover, newly industrializing countries may lack a sophisticated banking system and efficient capital markets that are necessary for market mechanisms to enforce fiscal discipline (Inman (2003)).

(iii) Internalizing the Costs of Spending and Borrowing

An essential feature of soft budget constraints is the common pool problem whereby part of the costs of excessive spending or borrowing on the part of subnational governments is borne by national taxpayers. Thus, subnational governments perceive the costs of additional spending or borrowing to be less than the benefits. The soft budget constraint problem would therefore be mitigated if subnational governments internalized the costs of their spending and borrowing decisions. As we have seen, decentralizing taxing authority is one way in which subnational governments would internalize these costs. Another method has been examined theoretically by Goodspeed (2001). Goodspeed develops a model where subnational government expenditure programs are funded both by borrowing and by a system of transfers from the central government. Central government transfers are financed by a tax levied on citizens in all regions. P0.0an0.04td7.1n7srowti0008(in)fersitizen-5.4n irnmesfersitizen-isol problem

The case study analyses of Canada's, Australia's, and Hungary's local governments illustrate that hierarchical mechanisms can be very successful in enforcing fiscal discipline on lower-level governments. In these countries, local governments exhibit high levels of vertical fiscal imbalances and are very dependent on intergovernmental transfers. Both countries learned from experience that allowing local governments the ability to borrow and spend without restriction led to soft budget constraints. Without the necessary fiscal autonomy that enables market mechanisms to discipline local governments' fiscal behaviour, the only recourse available to successfully enforce fiscal discipline was the implementation of strict controls on borrowing and spending. The experience of Argentina, Brazil, and India also illustrates that for hierarchical mechanisms to be effective, they must not be susceptible to lax enforcement by central government bodies that oversee these restrictions.

References

Aizenman, Joshua (1998), "Fiscal Discipline in a Union", in F. Sturzenegger and M. Tomassi (eds.), *The Political Economy of Reform*. Boston: MIT Press.

Alesina, Alberto, Ricardo Hausmann, Rudolph Hommes, Ernesto Stein (1999), "Budget Institutions and Fiscal Performance in Latin America", Inter-American Development Bank, Research Networking WorkingPaper #R-394.

Bevilaqua, A. (2000), "State Government Bailouts in Brazil." Working Paper, Catholic University of Rio de Janeiro.

Bird, Richard and Almos Tassonyi (2003), "Constraining Fiscal Behaviour in Canada: Different Approaches, Similar Results?", in Rodden, Jonathan, Gunnar Eskeland, and Jennie Litvack (eds), *Fiscal Decentralization and the Challenge of Hard Budget Constraints*. Cambridge: MIT Press.

Bordignon, Massimo (1999), "Problems of Soft Budget Constraints in Intergovernmental Relationships: The Case of Italy". Mimeo.

Buettner, Thiess (2003), "Municipal Fiscal Adjustment in Germany", Center for European Economic Research (ZEW) and Mannheim University.

Cariago, Maite and Barry Weingast (2000), "The Fiscal Pact With the Devil: A Positive Approach to Fiscal Federalism, Revenue Sharing, and Good Governance". Working paper, Stanford University.

Filgueira, Fernando, Herman Kamil, Fernando Lorenzo, Juan Andres Moraes, Andres Rius (2002), "Decentralization and Fiscal Discipline in Subnational Governments: The Bailout Problem in Uruguay", Inter-American Development Bank, Research Networking Working Paper #R-459.

Garcia-Mila, Teresa, Timothy J. Goodspeed, and Therese J. McGuire (2002), "Fiscal Decentralization Policies and Sub-National Government Debt in Evolving Federations". Unpublished paper.

Goodspeed, Timothy J. (2001) "Bailouts in a Federation". Unpublished paper. Hunter College and CUNY Graduate Center.

Grewal, Bhajan S. (2000), "Australian Loan Council: Arrangements and Experience with Bailouts", Inter-American Development Bank, Research Networking Working Paper #R-397.

Hall, Luis J. Goverto E. Arce, Alexander Monge N. (2002), "Bailouts in Costa Rica as a Result of government Centralization and Discretionary Transfers", Inter-American Development Bank, Research Networking Working Paper #R-475.

Inman, Robert. (1995), "How to Have a Fiscal Crisis: Lessons from Philadelphia", *American Economic Review* 85, 378-383.

Inman, Robert (2003), "Transfers and Bailouts: Enforcing Local Fiscal Discipline with

Marianne Vigneault,

Rodden, Jonathan (2001), "The Dilemma of Fiscal Federalism: Grants and Fiscal Performance Around the World." Mimo. Department of Political Studies, MIT.

Rodden, Jonathan (2003a), "Soft Budget Constraints and German Federalism", in Rodden, Jonathan, Gunnar Eskeland, and Jennie Litvack (eds), *Fiscal Decentralization and the Challenge of Hard Budget Constraints*. Cambridge: MIT Press.

Rodden, Jonathan (2003b), "Federalism and Bailouts in Brazil", in Rodden, Jonathan, Gunnar Eskeland, and Jennie Litvack (eds),

. . *BaMexico: Te Art Budget*