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Fiscal decentralization, regional inequality and bail-outs: Lessons from Brazil's debt crisis

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Abstract

This paper develops a simple two-period model of public good provision within a federation. A national public good is provided to both states by the federal government, while a local public good is supplied by each state government. The federal government levies a proportional income tax, and in each period the state governments receive a share of the revenues collected equal to the amount needed to finance the first best provision of the local public good. In the first period the local governments can also use borrowing to finance the provision of the public good, but any debt contracted must be repaid in the second period. We show that when the states face a hard budget constraint, they do not find it optimal to increase the provision of the local public good above the first best level guaranteed by the federal grant. However, if the federal government cannot credibly commit not to bail-out the states, then the local governments may find it optimal to borrow in order to increase the provision of the public good above the first best in the first period. Furthermore, we show that the commitment problem is more likely to arise vis-á-vis states whose default results in a negative externality on the federation. Hence, those states are more likely to carry on budget deficits and benefit from a federal bail-out.

JEL classification: H72; H74; O54

Keywords: Fiscal federalism; State government debt; Default; Soft budget constraint

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1. Introduction

Brazil is a federal country characterized by highly decentralized spending and taxation decisions. The authority of the federal government, states and municipalities on budgetary matters is strictly regulated by the constitution. States enjoy a substantial autonomy, but in an attempt to control sub-national budget deficit, the 1988 constitution restricts their borrowing ability which is scrutinized by the Senate. Despite these provisions, state deficits have been a persistent concern throughout the post 1988 period. The last state debt crisis of the mid 1990s, triggered by the soaring interest rates following the implementation of the "Plano Real" in 1994, exposed the serious macroeconomic threat posed by the risk of default of the four major debtor states of Sao Paulo, Rio de Janeiro, Minas Gerais and Rio Grande do Sul, and ended up requiring a bail-out by the central government. With the so called "troca" agreement, the federal government authorized in fact the exchange of state bonds for federal and central bank bonds and thus relieved the states from the burden of servicing their debt.

While forcing the major debtor states into default might have damaged the macroeconomic stability of the entire country, the softening of their budget constraint has undesirable implications both in terms of future incentives to borrow and of regional inequality. First, as the cost of borrowing by a state can be shared with the other members via the mechanism of federal bail-out, a so called "common pool" problem can arise, whereby states that are not liable for the entire repayment of their debt tend to borrow in excess of what would be optimal. Second, by threatening the economic stability of the entire country, the biggest and richest states acquire a bargaining power that limits the ability of the federal government to redistribute income towards the poorer states. This aspect of the federal budget is particularly problematic in a country like Brazil, where regional inequality is a severe problem (Azzoni, 2001; Milanovic, 2005). As documented by Rodden (2003), the average per capita GDP of the wealthiest states during the 1990–2000 period is five times bigger than that of the poorest states. At the same time, the dependence of Brazilian states on intergovernmental transfers varies enormously, with Sao Paulo receiving only 7% of its revenue from the federal government while Acre and Amazonas depend for more than 70% of their revenue from intergovernmental transfers. The 1988 constitution prescribes a very detailed system of intergovernmental transfers that should have addressed the issue of regional disparities, but according to Shankar and Shah (2000), revenue sharing agreements mandated by the constitution had no effect on regional income inequality in Brazil. This is perhaps not surprising if one considers that the wealthiest and most fiscally independent states, holding the majority of the total sub-national debt,[1] were the main beneficiaries of a large federal bail-out.

In this paper we propose a theoretical framework where the incentives to borrow within a federation of heterogenous states are explicitly modeled. In a two-period setting, a large and a small state, belonging to the federation, are the recipients of federal funds used to finance the provision of a general and local public good. Federal funds are raised through a proportional income tax that is in part directly spent by the federal government to provide the general public good, and in part allocated to the state government in the form of a grant that must be spent to supply a local public good. The first period provision of the local public good can also be financed by borrowing at the current interest rate, however in the second period the entire debt must be repaid. The amount of the national public good and the federal transfer are set in each period as to maximize the total welfare of the federation (first best provision). Furthermore, the transfer

[1] See Section 2 for detail.