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Fiscal stringency and fiscal sustainability: Panel evidence from the American state and local governments

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Abstract

Most state (and local) governments in the U.S. operate under formal fiscal rules which limit their ability to run budget deficits and resort to debt financing. A priori, one would expect to find evidence in favor of an intertemporally balanced budget, or fiscal sustainability, for these states, especially those characterized by a relatively high degree of fiscal stringency. We test this hypothesis for a panel of 47 state–local government units (1961–2006) using four budget balance definitions and several subsamples defined based on regional classifications, or presence of certain balanced budget requirements (BBRs). Our results, obtained from panel estimation techniques that allow for general forms of serial and cross-sectional dependence, suggest that a sufficient condition for "strong" sustainability is consistently satisfied for the full sample and all subsamples in relation to balances that include special funds and/or federal grants. However, we find evidence consistent with the "weak" version of sustainability for the full sample and some regional subsamples (particularly Far West dominated by California) in at least one of the two balances that exclude these items. Finally, the BBRs seem to matter only in relation to the sustainability of the more narrowly defined balances. We discuss the implications of these findings for the role of fiscal rules and federal grant policies.

JEL classification: H71; H72; C33

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1. Introduction

Like the federal government, state government revenues and expenditures are affected by cyclical fluctuations in the level of economic activity. State fiscal balances, however, are influenced

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by two additional factors: federal (unfunded) spending mandates and (statutory or constitutional) balanced budget requirements/rules/provisions (BBRs) and debt limits under which most states formally operate. Thus, while revenue losses and/or expenditure increases during economic downturns may lead to large state budget deficits in the short term, BBRs will presumably force subsequent fiscal adjustments to restore fiscal balance in the long term. If so, then the state budget is expected to be intertemporally balanced, or sustainable.

Our review of the literature identifies two major strands of research on this subject. The first strand builds on a study conducted by the US Advisory Commission on Intergovernmental Relations, or ACIR (1987). A common objective of the studies of this strand (see, for example, Bohn & Inman, 1996; Poterba, 1994) is to determine whether BBRs affect state deficits. Their results suggest that fiscal adjustments in the form of tax increases and/or spending cuts tend to be larger or quicker and debt measures lower in states with relatively stringent anti-deficit rules; especially where a no-deficit-carryover rule is accompanied by debt limit. More recently, Hou and Smith (2010) present evidence indicating that relatively straightforward and rigid "technical provisions" are more effective in curbing state spending and deficits than "political provisions."

The second research strand focuses on deriving the conditions for fiscal sustainability within an intertemporal budget constraint (IBC) framework and testing them by examining the unit root and/or cointegration properties of fiscal variables. Almost all U.S. studies in this strand use time series data at the federal government level (see, for example, Martin, 2000; Quintos, 1995 and studies cited therein). With a few exceptions, their results support fiscal sustainability.[1]

In this paper, we extend the literature by synthesizing some aspects of the two strands of research reviewed above to provide answers to two major research questions: (a) have state and local government (SLG) revenue and expenditure variables behaved in a way that satisfies a sufficient condition for fiscal sustainability, and (b) has the evidence in favor of fiscal sustainability been more pronounced in states that are characterized by a relatively high degree of fiscal stringency? Our sample consists of a panel of 47 SLG units over the period 1961–2006. To the best of our knowledge, this is the first panel study that investigates the question of fiscal sustainability and explores its link to fiscal stringency at the U.S. subnational level.

Several features of our empirical analysis are worth noting. Firstly, we use panel data to address the problem of the poor precision of statistical tests common to many previous time series studies of sustainability. Secondly, we employ some recently developed panel cointegration estimation techniques that allow for serial and cross-sectional dependence, as well as ample heterogeneity among SLG units. This is crucial to drawing correct statistical inferences because, for example, state economies may experience common shocks that would affect SLG fiscal condition. Thirdly, we examine the sensitivity of our results to regional variations, alternative fiscal balance definitions and different anti-deficit rules in place.

The unprecedented fiscal stress SLGs have experienced since the onset of the "Great Repression" in the 2007 has been accompanied by a heightened level of public concern about the fiscal health of these governments. Our results may shed light on the ability of SLG to bring fiscal deficits under control in the long term by looking at their pre-recession performance. The results can also be informative as to whether fiscal institutions in the form of BBRs matter in achieving fiscal sustainability. The rest of this paper proceeds as follows. Section 2 presents an outline of the IBC framework for testing fiscal sustainability. Section 3 briefly discusses components of BBRs.

[1] See also Goyal et al. (2004) and Kia (2008) for some recent country level studies.