David Wildasin's paper offers an informative and thoughtful overview of policies for intergovernmental grants to local governments in the United States. Vertical fiscal imbalance — defined as the share of transfers from higher levels in total revenues of local governments — is large, notwithstanding a degree of decentralization in the US that is high by international standards. In his survey, Wildasin devotes special attention to the role of grants in mitigating fiscal shocks to local governments. In this sense, grants not only help to maintain solvency of local governments in response to fiscal disturbances, they serve a broader role in insuring local residents against shocks, as the strong rise in federal transfers in response to regional disasters like the 9/11 attacks and Hurricane Katrina attest (Chernick, 2005).

Wildasin’s remarks on the topic are thought-provoking, and in this short discussion I choose to focus on the effects of grants on recipient decisions in an environment of uncertainty. This is a theme raised in the paper that — while a long-standing part of the academic literature on fiscal federalism — may take on special resonance in the current atmosphere of fiscal and economic crisis.

Grants may not only mitigate fiscal risks — for local governments, they are risky revenue streams themselves. How recipients respond to unanticipated increases in grants — whether by increasing or reallocating spending, changing revenues, or by other budgetary changes — is therefore a complex and interesting topic. In the current year, governments in federations like the US and Canada are enlisting lower-level governments to help deliver “fiscal stimulus,” especially through grants for state and municipal capital (infrastructure) projects. Are such grants likely to be effective in delivering incremental spending ultimately to the private economy? Higher transfers would only provide economic stimulus if funds were spent or used to reduce taxes rather than to lower provincial deficits. (To the extent that they are used to reduce taxes, the stimulative impact would depend on whether the tax savings are spent by consumers.)

There should be reasonable confidence that grants can be effective in stimulating local spending, given the long literature on the flypaper effect — the notion that “money sticks where it hits,” in the sense that grants cause incremental spending within the functional category to which they are earmarked, rather than merely crowding out spending that would otherwise have been undertaken by the recipient government (see Inman, 2008, and Gamkhar and Shah, 2006, for recent surveys.) But it is not clear how closely this evidence applies to the current situation, particularly given the difficult fiscal circumstances facing many state and local governments, and given that grants in the stimulus package are by nature transitory. What is more, a key question is how quickly grants will spur additional spending at the local level.

To illustrate the issues involved, I report in Figure 1 new evidence on the response of Canadian provincial governments to grant shocks. The figure shows innovations in federal grants, defined as

---

1 The data are for the “core” five provinces that have received fiscal Equalization transfers in every year since the inception of the program, and so that are more highly dependent on (variable) transfers. They are Prince Edward Island, Nova Scotia, New Brunswick, Quebec, and Manitoba. The results are qualitatively similar, though not as clear, if all provinces are included.
the deviation of aggregate grants on a cash basis from their linear trend growth rate in each year since 1989-90, graphed along with the aggregate budget balances of the recipient provinces in the following fiscal year.\textsuperscript{2}

It is clear that, in the short run at least, transfer increases have been saved by recipient governments, not spent. Table 1 reports analogous estimates of the effect for the pooled cross-section of the five provinces. Based on the tax-smoothing model of government fiscal policy due to Barro (1979), the regression includes, as well as the unanticipated grant shock variable, controls for the deviations of provincial GDP from trend, and for provincial fixed effects. According to the estimates, each dollar in unanticipated grant increases is associated with a budget surplus for the recipient government in the subsequent year of 72 cents. Furthermore, the estimated coefficient on shocks to GDP is 14 cents per dollar, suggesting that provincial fiscal policies typically have relatively little counter-cyclical effect.

Making sense of these results requires context. With a few notable exceptions, the empirical literature on the flypaper effect adopts a static framework that does not lend itself naturally to these questions. Buettner and Wildasin (2006) however study the “dynamics of municipal fiscal adjustment” – in particular, the way US municipalities respond over time to shocks to grants and own-source revenues. The evidence is that spending adjusts comparatively slowly, especially to changes in grants.

One possible explanation for this and related results (Gramlich and Galper, 1973; Gordon 2004) is that changes to spending programs simply take time – or that recipients follow partial adjustment strategies for other reasons. Local governments with access to limited fiscal instruments or facing legal borrowing constraints may find it hard to adjust to shocks in the short run,\textsuperscript{3} implying that the bulk of adjustment in the short run is borne by the capital budget (Rattso, 2004) or in the funding of implicit liabilities. Another factor not explored here is the extent to which grant shocks are correlated with shocks to own-source revenues or other factors in provincial fiscal environments, which could in principle explain the observed correlations.

Another, more intriguing explanation for the evidence in Figure 1 is that it may reflect the optimal intertemporal response of governments to transitory shocks to grant revenues. Decision-makers in subnational governments have incentives to be forward-looking; they may borrow or save in order to balance their budgets;\textsuperscript{4} and, as observed by Barro (1979), they may have incentives to “smooth” rates of taxation and spending over time. As such, the spending response to a transitory shock to grants, such as is envisaged by the current national stimulus programs, is apt to be considerably smaller than for the relatively persistent changes in grant policies that are usually studied in the empirical literature on the flypaper effect. What is more, with the fiscal problems currently facing many US cities, the future marginal cost of public funds must appear high to many governments, suggesting even more of the stimulus will be saved than in “normal” circumstances.

The ultimate effects of increased transfers this year will depend on how effective the “strings” grantor governments attach to them, such as maintenance of effort provisions in the US and requirements for matching funds in Canada, and on how dire the fiscal environment facing cities proves to be. The broader issues of uncertainty and intertemporal responses to grants will doubtless continue to engage researchers long after the current crisis has passed.

\textsuperscript{2} The transfer data are lagged to avoid any mechanical correlation between the two series.
\textsuperscript{3} This does not however apply to Canadian provinces, which tax most things the federal government does and face no constitutional borrowing constraints.
\textsuperscript{4} Of course, the importance of intertemporal considerations is limited where governments are restricted by law from borrowing freely. But all governments have future obligations, whether market debt or unfunded liabilities, and the issue in current situation is what proportion of grants will be saved to meet these future obligations.
References


Table 1: Estimates of the determinants of budget surpluses  
Core Equalization-receiving provinces, 1989-2007

<table>
<thead>
<tr>
<th>Variable</th>
<th>Impact on Budget Surplus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfers</td>
<td>0.72</td>
</tr>
<tr>
<td>GDP</td>
<td>0.14</td>
</tr>
<tr>
<td>Net Debt</td>
<td>0.17</td>
</tr>
</tbody>
</table>

R-squared = 0.55 Number of Observations = 80

1. Transfers and GDP are differences from trend. Transfers and Net debt are lagged by one year. All variables are real and per capita.