Discussion of "Intergovernmental Grants and Policy Competition: Concepts, Institutions, and Evidence"

Prepared for NBER Conference on "Policy Responses to Tax Competition" Brian Knight, Brown University and NBER

In response to the recent COVID pandemic, the federal government enacted an unprecedented fiscal stimulus program. This included substantial assistance to state and local governments, with federal grants to subnational governments increasing from 3.4 percent of GDP in fiscal year 2019 to 3.9 percent in 2020 and 5.5 percent in 2021, before dropping off again, back to 4.8 percent, in 2022.

Using this pandemic-induced shock to state and local budgets, this paper investigates the relationship between intergovernmental grants and state tax policy. The identification strategy in this paper involves the use of representatives in Congress per-capita as an instrument for federal grants and the authors document that states with more representatives per capita received more federal grants per capita. Based upon this first-stage, the authors then examine the relationship between federal grants and tax competition, finding that, if anything, state governments that received more funding were less likely to reduce state corporate income tax rates. Thus, federal grants were associated with higher tax rates, meaning that this federal grant program tended to dampen tax competition between states.

Overall, this paper contributes to three broad literatures in the areas of public economics and political economy: 1) tax competition, 2) the role of intergovernmental grants in federal systems, and 3) the role of representation of large states versus small states in Congress in terms of the distribution of federal funds.

Tax Competition

Dating back to Zodrow and Mieszkowski (1986) and Wilson (1986), a literature has focused on the idea that tax competition can lead to economic inefficiencies in models with mobile capital and immobile labor. In short, when one state increases their tax rate, all else equal, this increases capital flows to other states and hence increases their tax base. To the extent that this cross-state externality is not internalized by state policymakers, then tax rates on capital will be too low in equilibrium. This empirical analysis of corporate tax competition between states yields new insights into the role of federal grants, which shift state budget constraints, in terms of the intensity of tax competition between states. Tying this finding back to the normative implications identified in this literature suggests that this COVID-induced federal grant program, by mitigating tax competition, might have been efficiency enhancing, at least along this particular dimension.

While this analysis pushes forward the empirical literature in this area via the use of an instrumental variables analysis, more research using causal inference methods is needed on this link between federal grants and tax competition. That is, does a marginal dollar in federal grants exacerbate or mitigate tax competition between state governments? One possible strategy, based upon Gordon (2004), involves using decennial Census count shocks and their implications for federal grants distributed according to formulae, which typically include population.

The role of intergovernmental grants in federalism

A long-standing literature on the flypaper effect has investigated state policy responses to federal grants. According to the median voter theorem and other political economy models of state policy formation, recipient state governments should reduce taxes when receiving additional federal assistance as it relaxes their budget constraints and can be thus considered as a fungible resource to state policymakers. According to the flypaper effect, recipient states, by contrast, tend to not reduce their taxes and instead increase spending dollar for dollar when receiving external funds (Hines and Thaler, 1995).

Based upon this disconnect between theoretical predictions and empirical findings, the literature then branched off in two directions. In the first direction, new theoretical analyses have attempted to develop models in which state policymakers with different objectives, such as budget maximization, might increase spending when receiving federal grants. A second direction has argued that the original empirical findings in this literature were largely based upon correlational analysis and thus not well identified. This second direction has instead attempted to develop stronger identification strategies. Using political instruments based upon, for example, committee representation in Congress, Knight (2002) finds that, consistent with standard political economy models, such as the median voter theorem, the receipt of federal transportation funds does tend to reduce state contributions to highway spending and thus does not increase state budgets. Based upon shocks to Title 1 aid driven by Census counts, Gordon (2004) finds that the receipt of Title 1 aid by school districts leads to a reduction in property taxation and thus does not increase education spending. Likewise, Lutz (2010), in the context of direct democracy in New Hampshire town meetings, finds that changes in state aid

driven by school finance reform does not increase spending by local governments. In this paper on tax competition, by contrast, the authors document an even stronger flypaper effect, with increased federal funding leading to increases in state corporate taxation, meaning that state government spending increases more than dollar-for-dollar. Again, more work using methods from causal inference is needed to understand the differences between these results and these settings and other results and other settings and the extent to which this flypaper effect result is driven by the exceptional nature of the COVID-19 pandemic.

Another related literature on intergovernmental grants argues that federal grants (and progressive federal income taxation) can be used as a form of insurance against local business cycles. Asdrubali et. al. (1996), in particular, estimate that 13 percent of state-level shocks are smoothed by the federal government during their sample period of 1963-1990. This empirical analysis sheds light on this issue via the analysis of state-level support provided by the federal government during a particularly severe economic downturn. To the extent that states respond to this aid by increasing corporate tax rates and, to the extent that higher tax rates reduce private investment in the state, then this will reduce the role of the federal government in smoothing particularly severe business cycles. Additional work in this area could shed light on differences in federal policy over time; in particular, the role of the federal government in smoothing regional business cycles has presumably only increased since the 1963-1990 sample period examined in Asdrubali et. al. (1996) given subsequent growth in the size of the federal government.

Representation in Congress and the geographic allocation of federal funds

The authors provide convincing evidence that small states received more federal funding during the pandemic than large states on a per-capita basis. That is, the smallest states, such as Wyoming, Vermont, and Alaska, received an additional \$5,000-\$6,000 in grants per capita, whereas the largest states, such as New York, Florida, Texas, and California, received roughly half of that amount, again on a per-capita basis. The authors attribute this difference to, at least in part, Senate representation, under which every state has two Senators, meaning that small states are over-represented in the U.S. Senate. In the U.S. House, by contrast, representation is roughly proportional to state population. That is, while Wyoming, the smallest state, and California, the largest state, both have two Senators, California has 52 representatives in the U.S. House at current, whereas Wyoming has only one. While this empirical finding of more COVID funding to small states on a per-capita basis is certainly consistent with Senate representation driving federal funding, there are also other possible explanations. In particular, it is difficult to separate the effects of representation from the effects of population itself. If there are economies of scale in the state provision of public goods, for example, then it might be efficient for the federal government to provide more funding per capita to small states. Likewise, if there are spillovers across states due to, for example, the Interstate Highway System, then again it might be efficient for the federal government to provide more funding per capita to small states.

Two papers have attempted to separate the effects of representation from the effects of population on the geographic allocation of funds. Knight (2008) uses a database of projects that originated in House bills and projects that originated in Senate bills. Consistent with a small

state bias in Senate representation, larger states tend to fare better in projects originally appropriated in House bills, whereas small states tend to fare better in projects appropriated in Senate bills. Likewise, while focused on the allocation of state funds, Ansolabehere et al. (2002) document that, following Baker v. Carr, which required regular re-apportionment of state legislatures, previously underrepresented counties, which tended to be urban, witnessed an increase in state funding, whereas previously over-represented counties, which tended to be rural, witnessed a decrease in state funding. Additional research in this area could examine other reforms to representation, with a focus on causal methods, and link these reforms to the distribution of funding across geographic areas. References:

Ansolabehere, Stephen, Alan Gerber, and Jim Snyder. "Equal votes, equal money: Courtordered redistricting and public expenditures in the American states." American Political Science Review 96.4 (2002): 767-777.

Asdrubali, Pierfederico, Bent E. Sørensen, and Oved Yosha. "Channels of interstate risk sharing: United States 1963–1990." The Quarterly Journal of Economics 111.4 (1996): 1081-1110.

Gordon, Nora. "Do federal grants boost school spending? Evidence from Title I." Journal of Public Economics 88.9-10 (2004): 1771-1792.

Hines Jr, James R., and Richard H. Thaler. "Anomalies: The flypaper effect." Journal of economic perspectives 9.4 (1995): 217-226.

Knight, Brian. "Endogenous federal grants and crowd-out of state government spending: Theory and evidence from the federal highway aid program." American Economic Review 92.1 (2002): 71-92.

Knight, Brian. "Legislative representation, bargaining power and the distribution of federal funds: Evidence from the US congress." The Economic Journal 118.532 (2008): 1785-1803.

Lutz, Byron. "Taxation with representation: Intergovernmental grants in a plebiscite democracy." The Review of Economics and Statistics 92.2 (2010): 316-332.

Wilson, John D. "A theory of interregional tax competition." Journal of urban Economics 19.3 (1986): 296-315.

Zodrow, George R., and Peter Mieszkowski. "Pigou, Tiebout, property taxation, and the underprovision of local public goods." Journal of urban economics 19.3 (1986): 356-370.