

Testimony¹

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Chairman Oberstar, Ranking Member Mica, and Members of the Committee, thank you for inviting me to appear and for holding important hearings regarding progress on implementing the American Recovery and Reinvestment Act of 2009.

How government spending impacts the private economy is question economists and policymakers have struggled with for decades. The American Recovery and Reinvestment Act of 2009 provides an excellent example. At the time it was enacted, unemployment stood at around 8 percent. And now, with unemployment over 9.5%, many have argued that this is proof that the stimulus just didn't work. But proponents might argue that, in the absence of the spending, unemployment would be even higher. We just don't know what would have happened without the spending. And clearly some of the reason the spending occurred was precisely because a rise in unemployment was anticipated. The point is that because anticipated changes in the economy cause spending, we cannot just look at what happens to the economy and conclude that we are seeing the effect of the spending.

The way that researchers like to distinguish cause and effect is to run experiments. The good news is that we've actually been running these kinds of experiments with spending for many years at the state level. As I am sure you know, when senators and representatives ascend to the chairmanship of a powerful congressional committee, lots

¹ This testimony is based on a joint project with Professors Joshua Coval and Christopher Malloy of the Harvard Business School. A more extensive report on our findings, including tables and figures, can be found at <http://www.people.hbs.edu/lcohen/>.

of federal money is dropped on their state. And the precise timing of this is quite random -- you only become chairman if you are next in line and the current chairman retires or is defeated. And because both of these events depend almost entirely on political circumstances in *other* states, ascension to chairmanship is essentially unrelated to events or conditions in the new chairman's home state (e.g., a senator will often not even be up for election during the year of his or her ascension).² So we studied these randomly timed increases federal funds flowing to different states at different times over the past 42 years. And the results were quite surprising -- at least to us.

Our study focused specifically on the 232 instances where the senator or representative of a particular state ascends to the chairmanship of a powerful congressional committee. During the year that follows the appointment, the state experiences an increase of 40-50 percent in their share of federal earmark spending, and a 9-10 percent increase in total state-level government transfers. The funding increase persists throughout the chair's tenure and is gradually reversed upon his departure. Because these spending shocks are sufficiently numerous, are spread out across time and different locations, and are economically meaningful, they provide us with significant power to examine the impact of fiscal policy on the private sector in a way that properly distinguishes cause and effect.³

Our main findings examine the behavior of the public corporations headquartered in the congressman's state. Focusing on the investment (capital expenditure), employment, R&D, and payout decisions of these firms, we find strong and widespread evidence of corporate retrenchment in response to government spending shocks. In the year that follows a congressman's ascendency, the average firm in his state cuts back capital expenditures by roughly 15%. These firms also significantly reduce R&D expenditures and increase payouts to their investors. The magnitude of this private sector response is nontrivial: in the median state (which receives roughly \$200 million per year in

² In addition, over 10% of our cases of ascension to chairmanship result from the sitting chairman passing away. These cases are (obviously) exogenous to economic conditions in the ascending chairman's state.

³ In describing the impact of his Senate seniority on his home state of Pennsylvania, Arlen Specter recently remarked: "My senior position on appropriations has enabled me to bring a lot of jobs and a lot of federal funding to this state. Pennsylvania has a big interest in my seniority, a big interest."

increased earmarks and federal transfers as a result of a seniority shock), capex and R&D reductions total \$39 million and \$34 million per year, respectively, while payout increases total \$21 million per year. These changes in firm behavior persist throughout the chairmanship and begin to reverse after the congressman relinquishes the chairmanship. We also uncover some evidence suggesting that firms scale back their employment, and experience a decline in sales growth.

To explore the robustness of these findings, we verify that the patterns hold up under a wide variety of conditions and specifications. We employ panel regressions using state and time fixed effects and a range of controls. We also conduct state-level regressions, averaging coefficients across states, and other non-parametric tests, verifying that a powerful committee chair has a statistically and economically large impact on the decisions of firms in their state.

We also examine a variety of other predictions of how spending is likely to impact private sector firms. In particular, we find that our results are mainly found in firms with geographically concentrated operations – e.g., firms that operate in a single state, as well as firms with high capacity utilization (i.e., those with little slack in their capital stock). Also, consistent with Keynes’ view that crowding out should only occur under conditions of full employment, we find a less severe firm response to spending shocks when state-level employment is at or below its long-term historical average.

A unique feature of our approach is that we can rule out the standard interest rate channel as an explanation for how government spending crowds out private sector investment. Since our mechanism entails simply shifting the same government spending from the former chairman’s state to the new chairman’s state, no new government funds are implied; as a result, no increased taxation or increased borrowing costs are required. In addition, we conduct cross-state comparisons, thus abstracting from all national level effects. Thus, our approach identifies a distinct and alternative mechanism by which government spending deters corporate investment in physical capital, human capital, and intellectual capital. In particular, we provide evidence that crowding out occurs

through factors of production including the labor market and fixed industrial assets. These findings argue that tax and interest rate channels, while obviously important, may not account for all or even most of the costs imposed by government spending. Even in a setting in which government spending is “free” – that is, does not need to be financed with additional taxes or borrowing – its distortionary consequences may be nontrivial.

To summarize our findings:

- Committee chairs bring:
 - Significant increase in their state’s share of federal spending.
 - Economically significant changes to the corporations in their state (lower capex, lower R&D, higher payouts, lower employment, lower sales).
- Results show up robustly:
 - Across several committee and shock definitions
 - In large and small firms
 - In large and small states
 - In the Senate and the House
 - When we equally-weight firms or states
- The evidence suggests spending is *causing* corporate downsizing. Specifically, these effects are:
 - Stronger on more powerful committees
 - Reversed upon departure
 - Stronger when unemployment (cap utilization) is low (high)
 - Stronger in firms with geographically concentrated operations
 - Absent in the states in the years preceding shock (but the strong effect starts precisely following the shock)
 - Stronger in the industries actually receiving the earmarks

Overall, we provide a new empirical approach for identifying the impact of government spending on the private sector. Using changes in congressional committee chairmanship as a source of exogenous variation in state-level federal expenditures, we find that fiscal spending shocks appear to significantly dampen corporate sector investment activity. Specifically, we find statistically and economically significant evidence that firms respond to government spending shocks by: i.) reducing investments in new capital, ii.) reducing investments in intellectual capital (R&D), iii.) reducing investment in human capital (employees), and iv.) paying out more to shareholders in the face of reduced investment opportunities. Further, we find that when the spending shocks reverse (through a relinquishing of chairmanship), most of these patterns reverse.

To conclude, our findings demonstrate that new considerations – quite apart from the standard interest rate and tax channels – may limit the stimulative capabilities of government spending. Whether these additional forces are sufficient to materially lower the multiplier on fiscal stimulus in a large economy such as the US remains an open question. At a minimum, our research suggests that the retrenchment of corporations should be taken into account when considering the merits of future government spending.

Again, thank you for the opportunity to address this Committee and share our views. I would be pleased to take your questions.