

Do Expiring Budgets Lead to Wasteful Year-End Spending?

Evidence from Federal Procurement

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This paper examines the quantitative importance of wasteful year-end spending in the U.S. federal government—and calculates the efficiency gains from policies that could be used to address this issue. We present a dynamic stochastic model of the annual budget process for a single government agency with expiring budget authority. At the beginning of each year, Congress chooses a budget for the agency. In each sub-year period, the agency draws a parameter that determines the marginal value of expenditure and chooses a level of spending to maximize an objective with decreasing returns.

We show that the combination of uncertainty and decreasing returns leads the agency to engage in precautionary savings over the first part of the year. At the end of the year, the prospect of expiring funds leads the agency to spend all of its remaining resources even if the marginal value is below the social costs of funds (our definition of wasteful spending). As a result, there is a spike in the volume of spending and a drop-off in quality at the end of the year.

We test these predictions using data on procurement spending by the U.S. federal government. Using data on all federal contracts from 2004 through 2009, we document that spending spikes in all major federal agencies during the 52nd week of the fiscal year as the agencies rush to exhaust expiring budget authority. Spending in the last week of the year is 4.9 times higher than the rest-of-the-year weekly average.

We examine the relative quality of year-end spending using a newly available dataset that tracks the quality of \$130 billion in information technology (I.T.) projects made by federal agencies. Consistent with the model, average project quality falls at the end of the year. Quality scores in the last week of the year are 2.2 to 5.6 times more likely to be below the central value.

A natural solution to the problem of wasteful spending is to allow agencies to roll over unused funding into the subsequent year—that is, to save. We calibrate the dynamic stochastic model to fit the within-year pattern of spending and simulate the welfare gains from rollover and other counterfactual policies. When we allow for rollover with full Congressional commitment, we estimate a compensating variation to the agency of 13 percent. In other words, Congress could provide the agency 87 cents on the dollar and the value of spending would be the same as in the no-rollover regime.

We also use the model to examine welfare gains from a number of intermediate policies. We examine scenarios in which Congress can commit with only some probability or roll over funds for only a few-month grace period. In general, we find relatively large welfare gains from even these partial policy changes. A 50 percent commitment probability and a 3-month rollover period generate welfare gains of almost three-quarters of the full rollover value.