

Flypaper and Fungibility: Evidence from the Tobacco Master Settlement

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Introduction

How should local governments spend intergovernmental grants? Standard economic models suggest that if governments are acting in the best interests of voters, they should spend an additional dollar of grant funds exactly as voters would choose to spend an additional dollar of income. This means that if individuals choose to spend 5 percent of income on local government services, the government should spend 5 percent of the grant and return the remainder of funds to voters in the form of lower taxes. Governments should also examine budgets as a whole, and spend additional dollars where they are most valuable; the labeling of a particular grant should not determine overall spending behavior. In other words, funds should be fungible across spending categories.

In practice, governments often do not behave in this way. Money received by local governments tends to remain in government coffers, and money received for particular programs tends to result in disproportionate increases in spending on those programs. In the economics literature, this phenomenon is referred to as the “flypaper effect,” because money sticks where it hits. Numerous empirical studies have

documented the existence of flypaper effects, but the reason why flypaper effects occur has remained less clear.

The Role of Special Interest Groups

Flypaper effects can be understood in the context of an interest group model of grants. In a federal system, interest groups may have an important role to play in influencing the allocation of grants to local government. If an interest group exerts effort to procure funds for a particular purpose, it expects that the government will spend the funds for that purpose. The government has incentives to take these preferences into account in its spending decisions in order to ensure that interest groups will continue to raise funds. The intuition behind this model of government spending can be illustrated with a simple example: Suppose the local government takes health care funds, procured by the health lobby, and spends these funds on highways. The health lobby then has no incentive to raise funds, because the funds are not being spent on its preferred projects.

More generally, the government must build a reputation for paying back interest groups by spending funds on their preferred programs in order to provide incentives for these groups to

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Table 1: Settlement Revenues (FY 2002)

	Dollars (000s)	Dollars Per Capita	Dollars Per 1998 Smoker
Minimum	13,800	10.25	56.74
Median	68,300	21.55	89.90
Mean	101,000	21.97	98.26
Maximum	361,000	37.20	172.13
N	46	46	46

Notes: All figures in 2002 dollars. Settlement revenue figures include both annual and initial payments. Tobacco control spending data for fiscal years 1998 and 1999 compiled by author; data for fiscal years 2001 and 2002 come from CDC.

raise funds in the future. This “paying back” results in flypaper effects in spending patterns. The government cares about its general reputation with all interest groups; repeated interaction with a particular group is not necessary for flypaper effects to occur.

The Tobacco Settlement

The predictions of this model can be tested by examining state spending responses to windfalls received by states under a 1998 settlement with the tobacco industry. In the 1990s, a number of states sued the tobacco industry, charging that tobacco companies had violated consumer protection and antitrust laws, concealed information about their products, manipulated nicotine levels in cigarettes to increase their addictiveness, and conspired to keep less addictive products off the market. Four states (Florida, Minnesota, Mississippi, and Texas) negotiated independent agreements with the industry, and the remaining 46 states settled jointly under the Tobacco Master Settlement Agreement in 1998.

As part of this agreement, the industry is required to pay states annual amounts in perpetuity. The total annual payment was negotiated in the settlement, and each state receives a fixed percentage of this amount. This percentage is determined by a formula reflecting historical smoking related healthcare costs, with some minor adjustments. States

received their first payments in the middle of the 2000 fiscal year. Settlement windfalls are quite substantial (Table 1). In fiscal year 2002, the average state received \$100 million in settlement funds. This corresponds to almost \$22 per capita and \$100 per smoker.

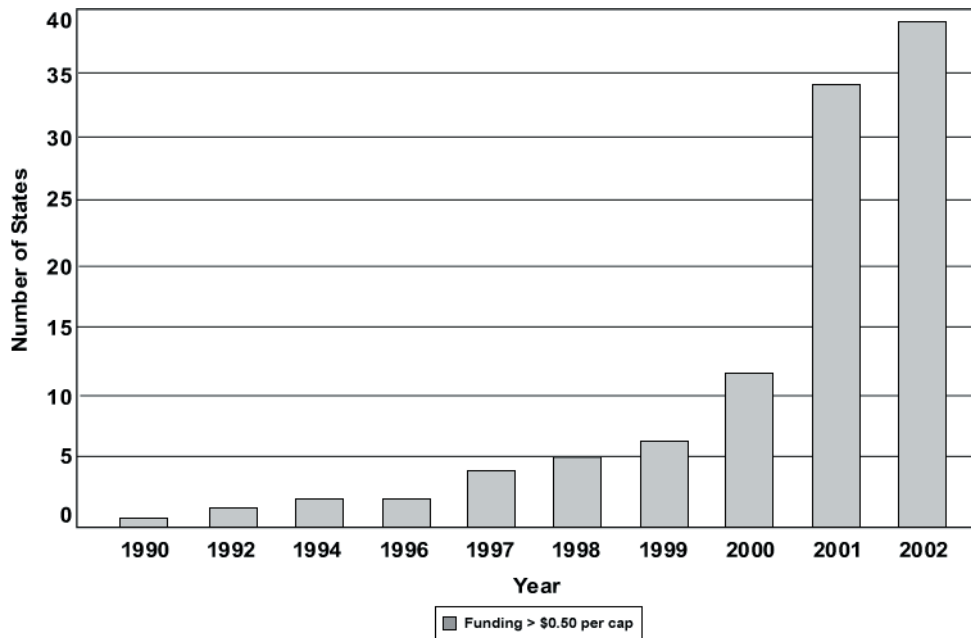
Settlement funds were unrestricted, and spending decisions were left to the discretion of individual states. However, although funds were legally unconstrained, a number of groups, particularly anti-smoking and public health organizations involved in the settlement lawsuits, felt that funds should be spent on tobacco prevention and control programs.

Settlement Windfalls and Spending on Tobacco Prevention

State spending on tobacco prevention and control programs did respond strongly to the receipt of settlement windfalls. Figure 1 shows the number of settlement states allocating funds toward tobacco prevention and control programs over time. States first received funds in the middle of the 2000 fiscal year, and the number of states spending more than \$0.50 per capita increased almost six fold from fiscal year 1999 to fiscal year 2001.

The five states with substantial programs prior to the settlement (Arizona, California, Maine, Massachusetts, and Oregon) financed their programs primarily through cigarette excise taxes. The remainder of states allocated

Figure 1: Settlement States Allocating Funds for Tobacco Control



Notes: This figure illustrates spending for the 46 states that were involved in the settlement. Data for 1990, 1992, and 1994 come from surveys conducted by the American State and Territorial Health Officials (ASTHO). Data for 1996-2000 were collected by the author. Data for 2001-2002 come from the CDC.

virtually no state funds to these programs prior to the settlement (Figure 2). These states increased spending from \$0.04 per capita on average in 1999 to \$2.78 per capita in 2001. The states with large pre-existing programs also increased spending, from \$4.15 to \$7.67 on average.

States that received more settlement funds under the allocation formula also spent more on tobacco prevention and control programs in the post-settlement period. An additional dollar per capita of settlement money results in a \$0.20 per capita increase in tobacco control spending. The effects are strongly persistent, at least into the fifth year of revenue receipt.

While spending on such programs may be beneficial, it is not clear why states' spending decisions should be tied specifically to the receipt and magnitude of settlement windfalls. In the standard framework, states should consider only the benefits of spending on tobacco prevention and control programs

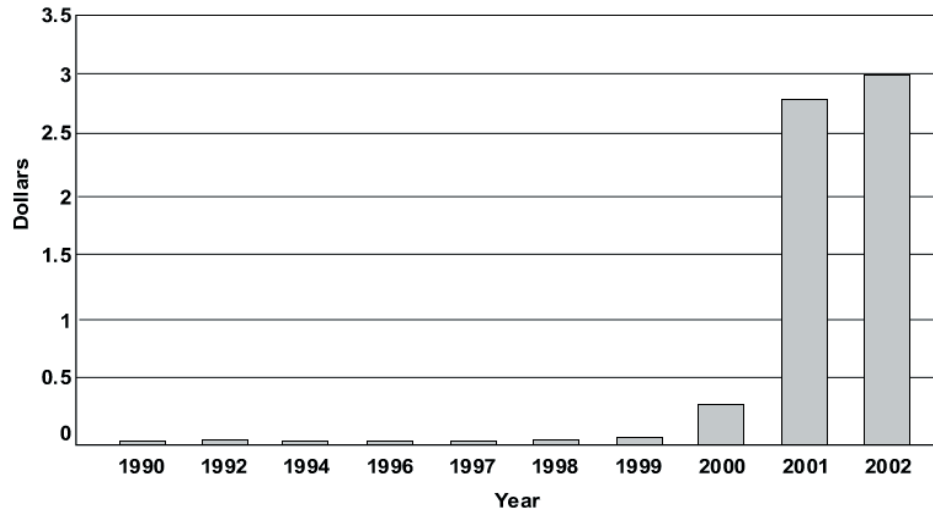
relative to the benefits of alternative uses of funds. The lack of spending on such programs prior to the receipt of settlement funds cannot be explained by budget constraints, since most states experienced substantial budget surpluses during the late 1990s. In addition, factors which measure the objective need for such programs, such as the state smoking rate, youth smoking rate, and CDC minimum spending guidelines, have no effect on spending.

Rewarding Interest Group Effort

In contrast to the standard model, if states are expected to pay back groups involved in procuring the funds, spending the funds elsewhere is seen as a violation of an implicit contract. In this framework, apparent flypaper effects are rational and optimal for voters in the long run.

In the tobacco settlement, interest groups in some states were involved in state lawsuits prior to the settlement. Anti-smoking and public

**Figure 2: Mean Per Capita Spending on Tobacco Control Programs
(excluding states with large pre-existing programs)**



Notes: All figures given in 2002 dollars. Excludes Arizona, California, Maine, Massachusetts, and Oregon. Data for 1990, 1992, and 1994 come from surveys conducted by the American State and Territorial Health Officials (ASTHO). Data for 1996-2000 were collected by the author. Data for 2001-2002 come from the CDC.

health groups produced reports, provided expert testimony, and supported the lawsuits in other ways. Other states simply signed on to the final settlement, receiving settlement funds without interest group effort.

According to the interest group model, states should “pay back” interest groups only if these groups exerted effort to procure the funds. Consistent with this prediction, states that did not file lawsuits spend less on tobacco control programs once settlement funds are received.

Conclusion

Although tobacco settlement funds were legally unrestricted, there is strong evidence that governments did not treat these funds as fungible. The findings provide support for a new model of government in which interactions between interest groups and government create implicit contractual obligations over funds which appear unconstrained.

This model of government spending decisions is more generally applicable to grants from federal to local government. We might even expect the links between interest groups and local governments to be stronger in the case of intergovernmental grants. Such interactions may also be relevant in explaining apparent flypaper effects in local government spending from grants from international aid agencies and non-governmental organizations. These flypaper effects in spending are optimal for constituents given long run incentives.

RELATED PUBLICATIONS

“Special Interest Groups and the Allocation of Public Funds,”

by Monica Singhal, *Journal of Public Economics*, forthcoming.